Northrop Grumman

2025 Annual Operation, Maintenance and Monitoring Report

Operable Unit 3 - RW-21 Area Groundwater
Bethpage, New York
NYSDEC ID # 1-30-003A

December 17, 2025

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Acronyms and Abbreviations

AOP	Advanced Oxidation Process
Arcadis	Arcadis of New York, Inc.
Arcadis Groundwater Model	NYSDEC-accepted groundwater flow and transport model
The Park	Bethpage Community Park
Building 109	OU3 RW-21 Area Groundwater Treatment Building
BWD	Bethpage Water District
Cis-1,2-DCE	Cis-1,2-dichloroethene
DCE	Dichloroethene
DER	Division of Environmental Remediation
DMRs	Discharge Monitoring Reports
EDD	Electronic Data Deliverable
ft bls	feet below land surface
ft/ft	feet per feet
gpm	gallons per minute
HDPE	High Density Polyethylene
Hp	horsepower
lbs	pounds
LPGAC	Liquid phase granular activated carbon
LTMP	Long Term Monitoring Plan
MW	Monitoring Well
NWIRP	Naval Weapons Industrial Reserve Plant
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NWIRP Site	Northrop Grumman, Bethpage, New York facility and the former Naval Weapons Industrial Reserve Plant (NWIRP), Bethpage, New York
OM&M	Operation, Maintenance and Monitoring

ONCT	On-Site Containment and Treatment
OU2	Operable Unit 2
OU3	Operable Unit 3
QAPP	Quality Assurance Project Plan
RAOs	Remedial Action Objectives
Reporting Period	August 2, 2024 through September 30, 2025
RI	Remedial Investigation
ROD	Record of Decision
RW(s)	Remedial Well(s)
RW-21 Area	Offsite area within OU3 plume where remediation is occurring
SCADA	Supervisory Control and Data Acquisition
SCGs	Standards, criteria, and guidance values
SRB	South Recharge Basins
SPDES	State Pollutant Discharge Elimination System
TCE	Trichloroethene
TCL	Target Compound List
TOC	Total organic carbon
Town	Town of Oyster Bay
TSS	Total suspended solids
µg/L	micrograms per liter
USEPA	United States Environmental Protection Agency
TVOC(s)	Total Volatile Organic Compound
VOC	Volatile Organic Compound

1 Introduction

Arcadis of New York, Inc. (Arcadis), on behalf of Northrop Grumman, has prepared this Annual Operation, Maintenance and Monitoring (OM&M) Report to document OM&M activities conducted for the RW-21 groundwater remedy (also referred to as the RW-21 System) as part of the area designated as Operable Unit 3 (OU3) by the New York State Department of Environmental Conservation (NYSDEC). To align reporting periods with calendar quarters, starting with Year 3 of operation, this Report covers an adjusted 5-month quarterly period of May 2, 2025 through September 30, 2025 and an adjusted 14-month annual period of August 2, 2024 through September 30, 2025 (referred to herein as the reporting period).

Volatile organic compounds (VOCs), predominantly trichloroethene (TCE) and cis-1,2-dichloroethene (cis-1,2-DCE), along with lower concentrations of 1,4-dioxane and iron, were detected in groundwater within the OU3 plume. The OU3 plume is oriented north-northwest to south-southeast, and is located downgradient (i.e., generally south) of the Bethpage Community Park (Park) and upgradient (i.e., generally north) of Bethpage Water District (BWD) Plant 5. The OU3 plume extends laterally west of Stewart Avenue to the area of Northrop Grumman Remedial Well 19 and laterally east to slightly beyond the Seaford-Oyster Bay Expressway (Route 135) at depths exceeding 600 feet below land surface (ft bls). The RW-21 System is remediating the offsite portion of the OU3 plume within the area generally between Remedial Wells RW-21 (north) and RW-22 (south), upgradient of Well RW-21 to the north, and approximately 500 ft downgradient of RW-22. This remediation area is referred to as the RW-21 Area (offsite area within OU3 plume where remediation is occurring). The RW-21 System process flow is described in Section 4 and generally consists of groundwater extraction via three remedial wells designated as Remedial Wells RW-20, RW-21, and RW-22, removal of VOCs and 1,4-dioxane in groundwater using an advanced oxidation process (AOP), filtration of iron and other solids, and liquid phase granular activated carbon (LPGAC) polishing to remove residual concentrations of VOCs. The treated water is then returned to the aquifer via discharge to the Northrop Grumman South Basins.

This Annual OM&M report presents the following:

- Evaluation of the RW-21 System operational performance and compliance through the implementation of the RW-21 Area OM&M Manual (Arcadis 2023b) (currently under review by the NYSDEC) (Section 5).
- Evaluation of the effectiveness of the RW-21 System through the sampling and measurement of monitoring wells conducted in conformance with the RW-21 Area Long Term Groundwater Monitoring Plan (LTMP) and additional sampling at a frequency higher than that specified in the LTMP for selected wells (RW-21_MW-13, RW-21_MW-15 and RW-21_MW-16) located upgradient (generally north) of BWD Well 5-1. The evaluation utilized groundwater sampling and water-level measurements conducted during the reporting period, as well as evaluation of water quality and groundwater flow supported by use of the NYSDEC-accepted groundwater flow and solute transport model (Arcadis Groundwater Model, 2019) (Sections 6 and 7).

2 Northrop Grumman/NWIRP Site Description and History

The Grumman Aerospace Corporation (now Northrop Grumman) (NYSDEC Site # 1-30-003A) formerly occupied approximately 638 acres in east-central Nassau County, in the Hamlet of Bethpage, Town of Oyster Bay (Town), New York; within this area, the former Naval Weapons Industrial Reserve Plant (NWIRP) (NYSDEC Site # 1-30-

003B) occupied approximately 105 acres (Northrop Grumman-NWIRP Site). The Northrop Grumman-NWIRP Site is bounded by Stewart Avenue to the north, South Oyster Bay Road to the west, Route 107 to the southwest, Central Avenue to the south and various residential and commercial areas to the east. **Figure 1** depicts the former property boundaries of the Northrop Grumman-NWIRP Site proximal to the RW-21 Area.

The land comprising the Park was purchased by a predecessor of Northrop Grumman in 1941 and used to some extent to support Grumman's manufacturing operations that were conducted at the main facility until 1962, when it was donated to the Town. The present-day Park is owned and operated by the Town and is comprised of approximately 18 acres. The adjoining Former Grumman Plant 24 Access Road Property is owned by Northrop Grumman. The Former Grumman Plant 24 Access Road Property is a partially asphalt-paved/partially grassed industrial property that runs east-west along the Park's southern boundary and north-south to the west of the Park's western boundary (now called McKay Field Access Road). The locations of the Park and access road are shown on **Figure 2**.

2.1 Groundwater Flow and Hydrogeologic Zonation

Within the RW-21 area, groundwater generally flows to the south-southeast, consistent with the regional flow direction, but is locally influenced by the pumping of remedial and public supply wells. The horizontal hydraulic gradient in the area was measured at 0.003 feet/feet (ft/ft) (Arcadis 2011). The direction of groundwater flow prior to the August 2023 RW-21 System startup is shown on **Figure 7**. Groundwater sampling and water-level measurement logs for each sampling event in the reporting period are provided in **Appendix A.**

Evaluation of groundwater flow and groundwater quality in this report is organized by hydrogeologic zones, using a vertical groundwater zonation approach that is based on depth intervals below the land surface. This methodology aligns with the approach described in the Operable Unit 2 (OU2) Year 2022 Annual OM&M Report (Arcadis 2023a) as well as the methodology utilized by the U.S. Navy and categorizes the groundwater into four depth intervals or zones, as follows:

- Zone 1: 0 to 300 ft bls
- Zone 2: 300 to 500 ft bls
- Zone 3: 500 to 700 ft bls
- Zone 4: Greater than 700 ft bls

This zonation provides a structured means of evaluating groundwater quality changes at various depths, which is critical for understanding contaminant migration and the effectiveness of remedial measures.

3 Remedial Objectives

The remedial objectives for the RW-21 System, as described in the March 2013 Record of Decision (ROD) (NYSDEC 2013), are as follows:

- *"one or more groundwater extraction well(s) along with the necessary treatment will be installed in the groundwater plume emanating from OU3 (the exact number to be determined during the design phase). The wells will be located downgradient of the area(s) of elevated contaminant levels identified upgradient of Bethpage Water District Plant 4. This system will be designed to capture and treat the "hot spot" area of the plume to the maximum extent practicable, at a minimum capturing and treating 90 percent of the*

[VOC] (sic) mass of groundwater migrating from the elevated "hotspot area" (the recommendation by the Technical Team for Optimization of the Bethpage Plume Remedy in their June 15, 2011 report)".

This "hot spot area of the plume" is depicted on Cross Sections D-D' upgradient of BWD Plant 4 and S-S' upgradient of BWD Plant 5 (**Figures 1 and 2** of **Appendix B**). The extent to which the "hot spot area of the plume" is captured was evaluated using the groundwater flow model to depict capture zones of the local groundwater extraction wells (**Appendix B**). It is important to note that in 2020, after the execution of the ROD, BWD Plant 4 was shut down and no longer operated.

4 RW-21 System Description

The RW-21 Area remedial program includes the OM&M of the RW-21 System, which generally consists of groundwater remedial wells, subgrade dual-walled conveyance piping, a groundwater treatment building (i.e., Building 109) and controls, a discharge point (South Recharge Basins), and a monitoring well network (see details below). The remedial and monitoring wells and conveyance piping are situated in residential streets and portions of Nassau County roadways in Bethpage to a terminus at Northrop Grumman-owned land where the Building 109 groundwater treatment plant is located **(Figure 2**). Groundwater is treated to drinking water standards for VOCs and 1,4-dioxane through an AOP system followed by polishing via LPGAC. Treated groundwater is recharged to the existing recharge basin infrastructure (South Recharge Basins) at Northrop Grumman property adjacent to the treatment plant.

The three remedial wells (designated as RW-20, RW-21, and RW-22), typically operate at approximately 575, 575, and 700 gallons per minute (gpm), respectively for a total system treatment flow of approximately 1,850 gpm. The three RW-21 System remedial wells began initial startup in May 2023 with full scale operation beginning in early August 2023. A summary of the major components of the RW-21 System is as follows:

- Three remedial wells (RWs), designated as RW-20, RW-21, and RW-22.
- Over 2 miles of subgrade, dual-walled, high-density polyethylene (HDPE) influent conveyance lines on public and Northrop Grumman property. Conveyance lines are equipped with leak detection and 21 total leak detection access ports.
- An AOP treatment system, including ozone generators and associated liquid oxygen, sodium hydroxide, and hydrogen peroxide storage tanks.
- Solids handling equipment that includes two horizontal pressure filters operating in parallel, two cartridge filters operating in parallel, a clarifier, and dewatering volutes.
- Eight LPGAC vessels that operate in four parallel configurations with lead and lag units for each configuration.
- Discharge conveyance piping that recharges groundwater to the three existing Northrop Grumman South Basins.

The process flow diagram for the treatment system is shown on **Figure 3.** A comprehensive monitoring program is in place to evaluate the system's operational performance and environmental effectiveness. The performance monitoring program includes monitoring of the system components to evaluate operational effectiveness. The environmental effectiveness monitoring program includes monitoring of the well network to ensure compliance with the remedial action objectives (RAOs). The monitoring well network is shown on **Figure 4.**

5 Operation and Maintenance

The following subsections summarize the RW-21 System performance data, operational data, routine/non-routine maintenance activities, and compliance sampling completed during the reporting period in accordance with the Draft RW-21 System Operations, Maintenance, and Monitoring Manual (Arcadis 2023b).

5.1 RW-21 System Performance

The RW-21 System has maintained an average operational flow of 1,379 gpm during the full annual reporting period. The average operational flow accounts for system downtime from both routine and non-routine shut down events (see description of the December 14, 2024 non-routine system shut down below), which resulted in an average run time of 76 percent during the reporting period. After the shutdown issues were resolved, the RW-21 system returned to full-scale, full-time operation. When operating full-time, the system maintained an average operational flow of approximately 1,850 gpm. The Year 2 annual operational data are summarized in **Table 1** and the Year 2 Fourth Quarter operational data is summarized in **Table 2.**

Over the annual reporting period, the RW-21 System treated approximately 850 million gallons of water containing approximately 8,570 pounds (lbs) of VOCs and 85 lbs of 1,4-dioxane. Well RW-21 accounted for approximately 41 percent of VOC and 1,4-dioxane mass brought into the system and subsequently treated (i.e., 3,492 lbs and 32 lbs, respectively). Mass removed from all three remedial wells decreased from the previous annual reporting period due to a decrease in uptime from the remedial wells following the shutdown in December 2024. From the Year 2 Third Quarter to Year 2 Fourth Quarter, the mass removal rate increased as pumping rates and remedial well uptimes increased. Sampling results from each of the remedial wells are summarized in **Table 3**. Mass removal rates and cumulative mass removed over the reporting period from the remedial wells are presented on **Figures 5** and **6**, respectively. Based on the average influent and effluent VOC and 1,4-dioxane concentrations across the reporting period, the system achieved a treatment efficiency of greater than 99.9 percent **(Table 1)**.

On December 14, 2024, water from Well RW-21 was pumped to Building 109 while the treatment system was shut down. This resulted in inadvertent discharge of some untreated groundwater. Arcadis, on behalf of Northrop Grumman, submitted a closure report on April 21, 2025 which summarizes the incident, data collected, and corrective actions completed and in progress by Northrop Grumman and its contractors. The OU3 RW-21 System temporarily resumed 12-hour daily operation on December 20, 2024 and returned to 24-hour daily operation on May 29, 2025. System controls diagnostics and system resiliency improvements have been implemented, such as the addition of an actuator valve programmed to close at the T-200 Influent tank that receives and equalizes untreated waters from the remedial wells. Programming was added to close the actuator valve via a failsafe spring loaded release when high-high water level alarms are activated via manual float switches at T-200 influent tank and in the building sump pits. Programming upgrades were also made to the fiber optic communications to the wells, and well high pressure setpoints and alarms have also been adjusted to shut down the pumping wells and treatment system in the event of dead-head pressures (e.g. pumping against closed actuator valve at T-200 influent tank).

5.2 RW-21 System Operations, Maintenance, and Monitoring

RW-21 System Operations, Maintenance, and Monitoring consisted of continuous system monitoring performed by the Supervisory Control and Data Acquisition (SCADA) system, periodic monitoring and maintenance by the system operator, monthly system performance analytical sampling, and compliance monitoring. These activities are summarized in the following subsections.

5.2.1 Operations and Maintenance

Routine operation and maintenance activities for the RW-21 System include daily and weekly inspections performed by the site operator and periodic inspection and/or maintenance of remedial system components. Maintenance activities are either determined by observed operational parameters or vendor recommended schedules. Vendor recommended inspection/maintenance activities are managed through a Maximo asset management platform via generated work orders. System operator inspection and maintenance reports are included in **Appendix C**. During the reporting period the remedial wells, AOP system, horizontal pressure filters, cartridge filters, and LPGAC vessels were observed to perform within acceptable operating ranges.

Certain routine system maintenance tasks performed during the reporting period generated non-hazardous material that was disposed of off-site by Northrop Grumman, including:

- Cartridge filter replacement that generated spent, iron-impacted cartridge filters,
- LPGAC changeout in lead carbon vessels when mid-train sampling indicated breakthrough had occurred, the generated spent LPGAC and
- Horizontal filter backwash that generated an associated iron sludge.

Spent iron-impacted cartridge filters and iron sludge generated from backwash activities were taken off-site and disposed of as non-hazardous waste. Waste manifests for these materials are included in **Appendix D.** Spent LPGAC was removed from the site by the vendor (Calgon Carbon) for regeneration and re-use.

Non-routine equipment and system component maintenance was performed by plant operator(s) and Northrop Grumman subcontractors in response to sudden equipment, programming, or telemetry failures triggering alarm conditions or otherwise shutdown of the treatment plant. Outside of the work conducted in response to the December 2024 shutdown, noteworthy repairs and/or equipment replacements performed in the reporting period included:

- Replacement of a 75 Horsepower (Hp) filter feed pump
- Replacement of oxidizer system tubing and peristaltic tubing at sodium hydroxide pumps

5.2.2 Compliance and Performance Monitoring

In accordance with the Draft OM&M Manual (Arcadis 2023b) which is currently under review with NYSDEC, the following performance and compliance monitoring activities were conducted during the reporting period:

- 12 monthly sampling events to collect 156 system performance samples
- Monthly State Pollutant Discharge Elimination System (SPDES) monitoring

Results of the system performance monitoring events are summarized in **Table 4**. Treatment system influent concentrations have generally remained consistent throughout the reporting period, from 1,126 micrograms per liter (µg/L) of total VOCs and 13.0 µg/L of 1,4 dioxane in August 2024 to 866 µg/L of total VOCs and 11.1 µg/L of 1,4-dioxane in September 2025. Effluent sample results across all 12 monthly performance sampling events showed no detections of VOCs or 1,4-dioxane. Treatment system influent concentrations of total manganese and total iron were below their respective standards, criteria, and guidance values (SCGs).

Monthly SPDES monitoring was completed to verify that water discharged to the South Basins (i.e., Outfall 005) met permit equivalency discharge requirements. Monitoring was performed in accordance with the terms and conditions of Northrop Grumman's SPDES Permit Equivalent No. NY0096792, most recently amended on March 23, 2023, and transmitted by the NYSDEC to Northrop Grumman on April 18, 2023. This amendment incorporated treated water discharge from the RW-21 System to the South Basins (Outfall 005). As such, the South Basins received treated water discharge from both Building 102 (also referred to as OU2 Tower 102 and is treatment for the OU2 ONCT system) and the Building 109 treatment system after RW-21 System start-up was initiated in May 2023 and continued with full-scale operation beginning in August 2023. SPDES discharge monitoring data are documented monthly by Northrop Grumman in Discharge Monitoring Reports (DMRs) that are transmitted to the NYSDEC under separate cover. DMRs completed during this reporting period are provided in **Appendix D.**

Outfall 005 met interim SPDES permit equivalent limits during the reporting period, with measured concentrations of individual VOCs, nitrogen, and pH levels in the treated effluent below/within applicable discharge limits. There were two instances of iron exceedance in 2024 at concentrations of 851 ug/L and 807 ug/L (limit 600 ug/L). With iron sample concentrations typically found to be non-detect, it was surmised that these results were anomalous and that accumulated particulates in equipment sample taps may have affected water samples. Arcadis initiated a procedure in January 2025 to briefly "flush" the sample tap prior to sample collection; since then there have been no further iron exceedances or detections. Results of the SPDES compliance sampling are presented in **Table 5.**

6 Remedial System Environmental Effectiveness

This section evaluates groundwater monitoring data during the reporting period in support of the determination whether the RW-21 System is meeting its remedial objectives, as described in Section 3. Hydraulic (water level) and groundwater quality monitoring were performed in accordance with the LTMP. Monitoring well locations are shown on **Figure 4**. Furthermore, the Arcadis Groundwater model (accepted in 2019 by NYSDEC) was used to aid and substantiate the environmental effectiveness evaluations performed. Based on the data and interpretations described in this section, the RW-21 System has exceeded its remedial objectives.

Results are summarized below with further detail given in the following subsections.

- Over the reporting period, the RW-21 System operational flow was approximately 1,379 gpm (92 percent of the target flow of 1,500 gpm) as summarized in **Table 1.**
- The RW-21 System pumping generates "zones of capture" (i.e., an area of lowered groundwater levels within which groundwater moves to and is withdrawn by one of the remedial wells creating the capture zone), which occur and are most evident in Zone 3, where the remedial pumping wells are screened. The zones of capture generated resulted in the RW-21 System that exceeds the remedial objective of a minimum of 90 percent mass removal of VOCs along with concurrent extraction and removal of 1,4-dioxane in the OU3 plume as summarized in **Table 6-1** (below).

- The zones of capture have created a groundwater divide inferred to be located south of RW-22 and north of BWD 5-1 as shown on **Figure 8**.
- Creation of vertical hydraulic gradients results in shallower impacted groundwater migrating deeper and ultimately being captured by the remedial wells.
- The South Basins are receiving treated water discharge from the OU2 On-Site Containment and Treatment (ONCT) and RW-21 System. The resulting, localized mounding of the water table has been well below the basement level of nearby residences.

6.1 Summary of Completed Monitoring

The following summarizes the remedial system environmental effectiveness monitoring program performed during the reporting period:

- Quarterly groundwater hydraulic (water-level) and quarterly groundwater quality monitoring per the LTMP.
- Request and review of monthly water quality data for untreated water samples collected from BWD Well 5-1 (data were provided by New York State Department of Health [NYSDOH] and by BWD upon request).
- Groundwater quality monitoring of Monitoring Wells RW-21_MW-13, RW-21_MW-15, and RW-21_MW-16 was conducted at increased frequencies early in the reporting period because they are screened within or just above the screen zone of BWD Well 5-1, are hydraulically upgradient, and have historically shown increasing concentrations of total Volatile Organic Compounds (TVOCs) and 1,4-dioxane. The schedule for monitoring these wells during the reporting period is summarized below:
    - **Monthly**: July 30, 2024 to December 17, 2024.
    - **Weekly:** December 18, 2024 to January 23, 2025, (this weekly monitoring period during December 2024 and January 2025 was requested by NYSDEC on behalf of BWD to provide water quality trends upgradient of Well 5-1 and in response to the RW-21 remedial system temporary shutdown [Section 5.1]).
    - **Quarterly**: January 24, 2025 to September 30, 2025 to assess VOC and 1,4-dioxane concentrations upgradient of BWD Well 5-1. The quarterly sampling schedule is planned going forward.

6.2 Evaluation of Capture Zones and TVOC Mass Removal

Tables 6 through **10** provide water-level measurement data for the Third Quarter of 2024 through the Third Quarter of 2025, respectively. **Table 11** summarizes calculated vertical hydraulic gradients for monitoring well pairs in the RW-21 area (calculated using the Second Quarter 2025 data) and compares these gradients to the Arcadis groundwater model-predicted vertical gradients for the RW-21 System when it is operating at a flow rate of 1,714 gpm. Data summarized in **Table 11** indicates that the calculated vertical hydraulic gradients at monitoring well clusters and the model predicted gradients are both downward when the RW-21 System is pumping at a rate where 90 percent or more of the TVOC mass passing through Cross Sections D-D' and S-S' **(Appendix B)** is being captured and removed.

The Arcadis Groundwater Model was used to simulate capture zones for BWD Well 5-1 and the GM-38, RW-21, and OU2 ONCT remedial systems. These simulated capture zones were overlayed on the OU3 plume to assess capture in the RW-21 Area. The result of this analysis is summarized in **Table 6-1.** Cross-Section D-D' represents the "hot spot" area of the OU3 plume referenced in the ROD. Cross Section S-S' is a second cross section that

runs parallel to Cross-Section D-D' and through the southernmost remedial well (RW-22) and is upgradient of BWD 5-1.

Table 6-1: Summary of Percentages of TVOC Mass Removal Along West-East Cross Sections After RW-21 Startup

Pumping Wells	Cross-Section D-D'	Cross-Section S-S'
All Systems (ONCT-OU2, RW-21, GM-38, BWD 5-1)	**99.93%**	**99.92%**
RW-21	99.57%	97.85%
GM-38	0.19%	1.75%
BWD 5-1	0.17%	0.32%
ONCT-OU2	0.0%	0.0%
ONCT-OU3	0.0%	0.0%

Based on modeling, nearly 100 percent of the OU3 plume TVOC mass discharge through the D-D' cross-section is captured when the RW-21 Remedial System is pumping at 1,714 gpm along with the pumping of other remedial wells and of this, 99.57 percent is captured by the RW-21 System. TVOC mass capture of the OU3 plume at cross-section S-S' (aligned parallel to cross-section D-D' and running through well RW-22) is equally as effective as at D-D' with total remedial systems capture of 99.92 percent, of which 97.85 percent is captured by the RW-21 System. See **Appendix B** for further details of the modeling results. Locations of Cross Sections D-D' and S-S' are presented on **Figures 1** and **2** of **Appendix B**.

6.3 Potentiometric Surface Evaluation

Water-level elevation data are summarized in **Tables 6** through **10**. **Figures 7** and **8** depict the potentiometric surfaces prior to and after the RW-21 system startup, respectively. The groundwater elevations shown on **Figure 8** were measured in April 2025.

Compared to **Figure 7, Figure 8** shows that the RW-21 System remedial wells have developed capture zones in Zone 3 (500 to 700 ft bls) of the OU3 plume (see zones of capture proximate to each of the remedial wells) that exceed the remedial objective for mass removal (Section 3).

Additionally, **Figure 8** illustrates the effect of pumping at Well BWD 5-1 on local groundwater flow conditions and shows the inferred location of the groundwater divide between Well RW-22 and Well BWD 5-1 based on the groundwater model and the water-level elevation data depicted. Also, **Figure 8** shows the groundwater divide between the OU2 ONCT remedial system cumulative capture zone and the capture zones of the RW-21 system.

6.4 Evaluation of South Recharge Basins

The South Recharge Basins on the Northrop Grumman-NWIRP Site were evaluated to determine:

- **Effect of additional recharge from the RW-21 System on the effectiveness of the OU2 ONCT System capture zone**: The Arcadis Groundwater Model confirmed that adding 2,400 gpm of treated water from the

RW-21 system to the South Recharge Basins would not affect the OU2 ONCT cumulative capture zone's effectiveness in preventing TVOC-impacted groundwater from leaving the Northrop Grumman-NWIRP Site.

- **Mounding of the water table at the South Basins compared to the depth of nearby residence basements**: Monitoring Well GM-21S was used to measure shallow groundwater levels south of the South Basins. This information was supplemented by weekly measurements of basin water levels to monitor water table changes. The westernmost south recharge basin did not receive water from October 1, 2024 to January 10, 2025 and from May 2, 2025 to September 30, 2025, to prepare the basin for future scarification and to allow for repairs to the sluice gates. Data was collectively evaluated to assess whether basin water levels approached the depth of a typical residential basement (**Figure 9**). Data indicate stable water levels that were consistent with the prior year, with groundwater levels remaining deeper than 24 ft bls (i.e., more than 10 ft deeper than a typical residential basement) and also confirms that the South Recharge Basins continue to have sufficient capacity to accept remedial system flows and stormwater runoff.

7 Groundwater Quality in Monitoring Wells

This section evaluates groundwater quality monitoring data for the reporting period in support of a determination of whether the RW-21 system is meeting its remedial objectives, as described in Section 3. Specifically, TVOC and 1,4-dioxane concentrations and trends are discussed. The key monitoring wells that support the evaluation have been grouped by location with the trends illustrated on **Figures 10, 11** and **12**. This section also discusses total iron concentrations. In evaluating trends in TVOCs and 1,4-dioxane, the data were compared to the historical maximum concentrations within the period of record and to the Year 2022 baseline (pre-RW-21 system startup) concentrations (**Tables 12 and 13**).

The monitoring wells selected for evaluation are representative of groundwater quality conditions, both horizontally and vertically, within the RW-21 Area. These wells also serve as surrogates for other wells not graphically depicted and provide comprehensive understanding of groundwater quality over time. The selection of wells for evaluation was based on criteria specific to location, TVOC and 1,4-dioxane concentrations, and purpose, as described below in Sections 7.1 and 7.2.

- **MW-109-3, MW-111-4, MW-116-5**, **RW-21_MW-7, RW-21_MW-11, and RW-21_MW-3-1:**
  These six wells having a north–south orientation, were selected due to their locations within the core of the OU3 plume (i.e., the area of greatest TVOC concentrations). Three of these wells (MW-109-3, MW-111-4, and MW-116-5) were also chosen for their extensive historical data records. The remaining three wells (RW-21_MW-7, RW-21_MW-11, and RW-21_MW-3-1) were also selected because they are located upgradient of BWD Plant 4.
- **RW-21_MW-13, RW-21_MW-15, and RW-21_MW-16:**
  These three wells were selected based on their location in the southern portion of the RW-21 Area and upgradient of public supply well BWD 5-1, and their position as sentinel wells for monitoring upgradient water quality trends.

The water quality evaluation is based on five quarterly rounds of groundwater sampling conducted between July 2024 and September 2025. These sampling rounds consisted of 23 monitoring wells per event, with samples analyzed in the laboratory for target compound list (TCL) VOCs and 1,4-dioxane, as stated in the LTMP. Review of the complete period of record shows that overall, analytical results indicate reductions in TVOC and 1,4-dioxane concentrations but at variable rates, which is expected due to the time required for the clean groundwater

propagation (initiated by the groundwater containment system operated along the former Plant 24 access road south of the Park starting in 2009) through the aquifer at different distances and depths. The differences in TVOC and 1,4-dioxane reduction rates described in Sections 7.1 and 7.2 are indicative of the complexity in hydrogeology and plume movement under pumping conditions. These results will inform potential future remedial system monitoring network optimization or monitoring frequency changes, to ensure the RW-21 System continues to meet its remedial objectives.

7.1 TVOCs and 1,4-Dioxane in Plume Core

Figures 10 and **12** depict trends in TVOC concentrations in the six plume core monitoring wells. Wells located in the OU3 plume exhibited VOC exceedances of SCGs (Standards, Criteria and Guidance Values), predominantly TCE and cis-1,2-DCE (**Table 14**). Overall, the six wells in **Table 7-1** (below) exhibited decreasing trends in TVOC concentrations when comparing the Third Quarter 2025 data to the corresponding historical maximum and baseline concentrations (**Table 7-1**). VOC concentrations for the complete monitoring well network are provided in **Table 14**.

Table 7-1. Summary of TVOC Decreases in Plume Core Monitoring Wells in the OU3 Plume

Monitoring Well Identification	Historical Maximum TVOC (ug/L)	Baseline TVOC (ug/L) (March 2022)	Current TVOC (ug/L) (September 2025)	Percentage TVOC Change (Historical Maximum)	Percentage TVOC Change (Baseline)
MW-109-3	3,458	466	320	- 91%	- 31%
MW-111-4	10,300	1,398	557	- 95%	- 60%
RW-21_MW-3-1	14,707	11,292	1,141	- 92%	- 90%
RW-21_MW-7	8,652	7,341	2,189	- 75%	- 70%
MW-116-5	7,536	6,889	1,416	- 81%	- 79%
RW-21_MW-11	5,352	5,352	2,016	- 62%	- 62%

The comparison of TVOC concentrations in the RW-21 Area monitoring wells to baseline concentrations and historical maximums are provided in **Tables 12** and **13**, respectively. These observations collectively indicate that the RW-21 System has significantly reduced TVOC concentrations in plume core wells upgradient of both BWD Plant 4 and Plant 5. Specifically, the monitoring wells have respectively shown a 78 percent and a 70 percent average decrease in TVOC concentrations compared to the historical maximum (**Table 13**) and baseline concentrations (**Table 12**). As changes in groundwater quality are slow to occur, some wells have not yet shown concentration decreases, however, continued pumping of the RW-21 System is expected to positively affect these wells and result in TVOC decreases over time.

1,4-dioxane is a constituent analyzed in monitoring wells sampled under the LTMP. The results of the 1,4-dioxane analysis for groundwater samples collected during the reporting period are provided in **Table 14**, organized by

hydrogeologic zone. Generally, 1,4-dioxane concentration trends are similar to TVOC trends (**Figures 10 and 12**).

7.2 TVOCs and 1,4-Dioxane in the Southern portion of the OU3 Plume

Figure 10 depicts trends in TVOC concentrations in Wells RW-21_MW-13, RW-21_MW-15, and RW-21_MW-16. These wells exhibited VOC exceedances of SCGs, predominantly TCE and cis-1,2-DCE (**Table 14**). Overall, the wells exhibited decreasing trends in TVOC concentrations when comparing the Third Quarter 2025 data to the corresponding historical maximum and baseline TVOC concentrations (**Table 7-2**). VOC concentrations for the monitoring well network for the reporting period are provided in **Table 14**.

Table 7-2. Summary of TVOC Decreases in Monitoring Wells in the Southern Portion of the OU3 Plume

Monitoring Well Identification	Historical Maximum TVOC (ug/L)	Baseline TVOC (ug/L) (March 2022)	Current TVOC (ug/L) (September 2025)	Percentage TVOC Change (Historical Maximum)	Percentage TVOC Change (Baseline)
RW_21_MW-13	609	323	174	- 71%	- 46%
RW_21_MW-15	2,899	2,899	927	- 68%	- 68%
RW_21_MW-16	1,551	1,507	212	- 86%	- 86%

The data summarized in **Table 7.2** indicate that the RW-21 System has reduced TVOC concentrations in wells located in the southern portion of the OU3 plume. Continued operation of the RW-21 System is expected to further decrease TVOC and 1,4-dioxane levels over time.

These three wells (located hydraulically upgradient of BWD Well 5-1) were initially sampled monthly to provide the NYSDEC and BWD with upgradient groundwater quality trends that could help forecast constituent concentrations at BWD Well 5-1. The sampling frequency was temporarily increased to weekly between December 18, 2024, and January 23, 2025, due to a temporary shutdown of the RW-21 System's remedial wells (RW-20, RW-21 and RW-22). The purpose of this more frequent monitoring was to determine whether TVOC and 1,4-dioxane concentrations were changing in these three monitoring wells, which might indicate potential future similar water quality changes at Well BWD 5-1.

Since the full-time startup of the System in August 2023 through the present, concentrations of TVOCs and 1,4-dioxane in the above three monitoring wells have consistently declined—even during the temporary shutdown period. These consistent declines under varying aquifer stress conditions such as varying pumping rates of the RW-21 remedial wells, BWD public supply wells and Navy's remedial wells suggest that the downward trend will continue. Based on these above observations, Northrop Grumman proposed changing the sampling frequency of these three wells from monthly to quarterly, as communicated to NYSDEC on March 27, 2025. This adjustment was implemented, following the 2025 first quarter sampling event. The revised schedule will continue to provide stakeholders with sufficient data to evaluate upgradient groundwater-quality trends, understand overall aquifer conditions, and assess the remedial system's effectiveness in addressing the plume.

Results for groundwater samples collected during the reporting period for 1,4-dioxane analysis are summarized in **Table 14**, organized by hydrogeologic zone. Overall, the concentration trend for 1,4-dioxane closely aligns with those of TVOCs, with both showing a consistent decline throughout the reporting period **(Figure 11)**.

7.3 Iron in the OU3 Plume

Three monitoring wells in the OU3 Plume are specified in the LTMP to be sampled for total iron via United Sates Environmental Protection Agency (USEPA) Method 6010D. Monitoring Wells RW-21_MW-3-1, RW-21_MW-11, and RW-21_MW-15 were sampled for iron during the reporting period. As shown in **Table 14**, SCG exceedances for total iron were not identified in any of the wells sampled. Total iron in Well RW-21_MW-3-1 and RW-21 MW-11 during this reporting period was consistently not detected. Total iron in Well RW-21_MW-15 ranged from non-detect to 243 µg/L.

8 Summary of Data Validation and Electronic Submittal

Arcadis performed validation of the RW-21 System water samples, and the LTMP groundwater quality data collected during this reporting period in accordance with the updated Quality Assurance Project Plan (QAPP), included in the RW-21 Area OM&M Manual (Arcadis 2023b), and following the contract laboratory program and applying relevant NYSDEC and USEPA protocols. The quality of the data is considered acceptable with the qualifiers provided in the data summary tables presented in the previously submitted quarterly reports.

The analytical data for the monitoring completed during the reporting period and presented in the above sections continue to be submitted to the NYSDEC on a quarterly basis in data report format and electronic data deliverable (EDD) format, in compliance with requirements outlined in Section 1.15(a) (Electronic Submissions) of NYSDEC's May 2010 Division of Environmental Remediation-10 (DER-10) guidance document (NYSDEC 2010).

9 Findings and Conclusions

The following subsections summarize findings and conclusions for the RW-21 System 2025 reporting period relative to the RW-21 System performance. Overall, the RW-21 system operational and environmental effectiveness data presented in this report support of the conclusion that the RW-21 system is exceeding the remedial objectives set forth in the OU3 ROD (NYSDEC 2013) and the OU3 Consent Order (NYSDEC 2014).

9.1 Operational Performance and Compliance

For the reasons identified below, the RW-21 system is operating as designed, meeting both compliance and performance objectives:

1. Extraction wells RW-20, RW-21, and RW-22 are operating at sufficient pumping rates to meet the remedial objectives, as discussed in Section 5.
2. The RW-21 system achieved mass removal rates of greater than 99.9 percent for TVOC and 1,4-dioxane, and discharges from the system meet the SPDES permit equivalent limits during the reported period.

3. The RW-21 system averaged a 76 percent operational runtime during the annual reporting period. Average operational runtime decreased from the previous annual reporting period (96 percent in Year 1) due to the shutdown described in Section 5.1. Since resuming 24/7 operation on May 29, 2025, the system uptime has been 93 percent. Northrop Grumman has installed additional process controls and enhanced system resiliency through the installation of a failsafe actuated close valve and additional treatment system programming to prevent recurrence of the temporary shutdown. Programming upgrades were also made to the fiber optic communications to the wells, and well high pressure setpoints and alarms have also been adjusted to shut down the pumping wells and treatment system in the event of dead-head pressures (e.g. pumping against closed actuator valve at T-200 influent tank).

9.2 Environmental Effectiveness

The RW-21 System has proven effective in meeting its remedial objectives. The following details support this conclusion regarding the system's effectiveness:

1. The modeling assessment (**Appendix B**) demonstrates that the RW-21 System is capturing greater than 97 percent of the OU3 plume mass along two lines of cross section. This confirms that the system is exceeding the remedial objective of 90 percent plume mass reduction.
2. The water level map documents distinct capture zones around the three remedial wells. These capture zones, induced by remedial well pumping at or above the design rates, support the conclusion that the RW-21 System is effective in removing TVOC and 1,4-dioxane impacted groundwater from the aquifer.
3. Vertical hydraulic gradients in monitoring well pairs in the RW-21 Area are downward, as expected due to pumping of the RW-21 System, and consistent with model simulated gradients for when the RW-21 System is pumping at 1,714 gpm and capturing greater than 97 percent of the TVOC mass moving through Cross Sections D-D' and S-S.'
4. The GM-21S hydrograph indicates that although the groundwater level local to the South Basins has fluctuated over the period of observation, it continuously remained deeper than 24 feet below the top of casing at GM-21S (which is comparable to the local ground surface elevation); this demonstrates that groundwater levels remain well below the bottom of residential basements near the South Basins.
5. Generally, trends of TVOC and 1,4-dioxane concentrations in groundwater monitoring wells within the OU3 plume continue to decrease since the system's startup. In general, changes in groundwater quality are comparatively slow to develop and will continue to be evaluated as additional data are generated.

Overall, the RW-21 system has achieved substantial reductions in TVOC concentrations within the OU3 plume including the southern portion of the OU3 plume, with continued remedial system operation anticipated to drive further decreases. Long-term monitoring data indicate sustained downward trends in TVOC and 1,4-dioxane concentrations in wells (RW-21_MW-13, RW-21_MW-15 and RW-21_MW-16) upgradient of BWD Well 5-1 since full-time system startup in August 2023. The 1,4-dioxane trends are consistent with TVOC trends, reflecting ongoing improvement in aquifer conditions and system effectiveness.

10 Suggestions

Based on the findings and conclusions provided in Section 9, Arcadis offers the following suggestions.

1. The scope of monitoring described in this report is sufficient to evaluate the effectiveness of the RW-21 System. Therefore, no changes are suggested to the environmental effectiveness monitoring program.
2. The scope of performance monitoring is sufficient to evaluate treatment system operating parameters to ensure effective system operation as well as timely response to non-routine events/ alarm conditions.
3. Due to the generally low concentrations of total iron, ferrous iron, total manganese, TSS, and TOC (Total organic carbon) detected during the monthly performance sampling, it is suggested that the sampling frequency for these parameters be decreased from monthly to quarterly. Further modifications may be recommended as treatment system operations continue, and more data is collected.
4. The scope of compliance monitoring was performed in accordance with the terms and conditions of Northrop Grumman's SPDES Permit Equivalent No. NY0096792, therefore no changes to the compliance monitoring program are suggested.

11 References

Arcadis 2011. Study Area Remedial Investigation Report, Operable Unit 3 – Former Grumman Settling Ponds, Bethpage, New York. April 7, 2011.

Arcadis 2023a: Arcadis of New York, Inc. (Arcadis). 2022 Annual Operation Maintenance and Monitoring Report, Operable Unit 2, Northrop Grumman Systems Corporation and Naval Weapons Industrial Reserve Plant (NWIRP) sites, Bethpage, New York. March 2023.

Arcadis 2023b: Arcadis of New York, Inc. (Arcadis). Operation Maintenance and Monitoring Manual, RW-21 Area, Northrop Grumman Systems Corporation, Bethpage, New York. April 2023.

Arcadis 2025: Arcadis of New York, Inc. (Arcadis). 2024 Annual Operation Maintenance and Monitoring Report Operable Unit 2, Northrop Grumman Systems Corporation, Bethpage, New York. March 31, 2025.

Hannon, E. (2025) Email to Sarah Johnston, Jess LaClair, Jason Pelton, Jim Sullivan, March 27, 2025.

NYSDEC. 2010. DER-10 / Technical Guidance for Site Investigation and Remediation, May 3, 2010.

NYSDEC. 2013. Record of Decision, Northrop Grumman- Bethpage Facility Operable Unit 3 Groundwater, State Superfund Project, Nassau County, Site Number 1-30-003A. March 2013.

NYSDEC. 2014. Order on Consent and Administrative Settlement, Northrop Grumman Systems Corporation, Site Number 1-30-003A, Operable Unit 3. May 2014.

12 Certification Statement

For each institutional or engineering control identified for the RW-21 System, I certify that all of the following statements are true:

a) The engineering control employed for the RW-21 System is unchanged from the date the control was put in place. The system improvements as described herein were submitted to NYSDEC.
b) Nothing has occurred that would impair the ability of such control to protect public health and the environment.
c) Nothing has occurred that would constitute a violation or failure to comply with any Operation, Maintenance and Monitoring Plan for this control.
d) Access to the RW-21 System will continue to be provided to NYSDEC to evaluate the remedy, including access to evaluate the continued maintenance of this control.



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Tables

Table 1
Year 2 Annual[1] System Operational Summary
RW-21 Area
Northrop Grumman
Bethpage, New York

	Annual Flow Rates (gpm)		Annual Flow Volumes (MG)			TVOC Mass Removed (lb)		1,4-Dioxane Mass Removed (lb)		Annual Remedial Well Uptime (%)
	Current Target [2]	Current Operational Flow [3]	Target [2]	Actual [3,4]	% of Target	Annual	Cumulative Since Startup	Annual	Cumulative Since Startup	
Influent Groundwater										
RW-20	500	436	305	266	87%	3,352	7,543	33	66	76%
RW-21	500	426	305	266	87%	3,492	8,976	32	82	76%
RW-22	500	517	305	318	104%	1,726	4,538	20	47	76%
Total [5]	**1,500**	**1,379**	**915**	**850**	**92%**	**8,570**	**21,057**	**85**	**195**	**76%**

Effluent Groundwater										
South Recharge Basins (Building 109 Contribution)	1500	1850	--	850	--	--	--	--	--	--

Treatment System	**Treatment System Efficiences [6]**								
Building 109 System:	>99.9%								

Notes and Abbreviations:

(1) Annual reporting period: August 2, 2024 through September 30, 2025.

(2) "Target" flow volumes represent the volume of water that is expected to be pumped/discharged during the reporting period and is calculated by multiplying the target rate by the reporting period duration.

(3) "Actual" flow rates for the system discharges represent the average flow rate during the reporting period and are determined by dividing the total flow recorded during the reporting period by the reporting period duration.

(4) The TCE, TVOC, and 1,4-Dioxane concentrations are averaged from the monthly sampling events performed during this reporting period.

(5) Total pumpage/recharge rates are accurate to ±15% based on available information and expected or typical precision/accuracy factors for the gauges and meters.

(6) Treatment system efficiencies are calculated by dividing the difference between the remedial well flow weighted influent and effluent TVOC concentrations by the remedial well flow weighted influent concentration.

-- Not Applicable
µg/L micrograms per liter
gpm gallons per minute
lbs pounds
MG million gallons
TCE trichloroethene
TVOC total volatile organic compounds
VOC volatile organic compounds

Table 2
Year 2 Fourth Quarter[1] System Operational Summary
RW-21 Area
Northrop Grumman
Bethpage, New York

	Quarterly Flow Rates (gpm)		Quarterly Flow Volumes (MG)			Quarterly Concentrations (µg/L)			VOC Mass Removed (lbs)		1,4-Dioxane Mass Removed (lbs)		Fourth Quarter Remedial Well Uptime (%)
	Current Target [2]	Current Operational Flow [3]	Target [2]	Actual [3,11]	% of Target	TCE [4]	TVOC [4]	1,4-Dioxane [4]	Quarterly	Cumulative	Quarterly	Cumulative	
Influent Groundwater													
RW-20	500	495	109	108	99%	1,147	1,418	14	1,280	7,543	13	66	86%
RW-21	500	495	109	108	99%	957	1,366	12	1,233	8,976	11	82	86%
RW-22	500	584	109	128	117%	478	584	7	625	4,538	7	47	86%
Total [5]	**1,500**	**1,574**	**327**	**344**	**105%**	**--**	**--**	**--**	**3,138**	**21,057**	**31**	**195**	**86%**
Effluent Groundwater [6,10]													
South Recharge Basins (Building 109)	1,500	1,574	327	343	105%	ND	ND	0.02	--	--	--	--	--
South Recharge Basins (Building 102)	2,231	2,431	296	534	180%	0.6	0.6	4.6	--	--	--	--	--
South Recharge Basins (Combined)	2,231 - 4,631	4,005	495 - 806	877	143%	ND	ND	1.9	--	--	--	--	--
Total	--	--	--	--	--								
Additional Flow to South Recharge Basins													
Storm Water Runoff Contributing to South Recharge Basins Flow Volume [7]	--	--	--	30	--	--	--		--	--	--	--	--
Total Flow Volume to South Recharge Basins [7,8]			**328**	**373**	**114%**								
Treatment Efficiencies [9]													
Building 109 System:	>99.9%												

Notes and Abbreviations:

(1) Quarterly reporting period: May 2, 2025 through September 30, 2025

(2) "Target" flow volumes represent the volume of water that is expected to be pumped/discharged during the reporting period and is calculated by multiplying the target rate by the reporting period duration.

(3) “Actual” flow rates for the system discharges represent the average flow rate during the reporting period and are determined by dividing the total flow recorded during the reporting period by the reporting period duration.

(4) The TCE, TVOC, and 1,4-Dioxane concentrations are averaged from the monthly sampling events performed during this reporting period on May 6, 2025, June 3, 2025, July 8, 2025, August 7, 2025, and September 10, 2025.

(5) Total pumpage/recharge rates are accurate to ±15% based on available information and expected or typical precision/accuracy factors for the gauges and meters.

(6) For this quarter, the quarterly flow rates to the south recharge basins (SRB) were calculated using the remedial well flow rates and available additional information and assumptions provided by Northrop Grumman regarding flow distribution, as follows: the Building 102 System (Remedial Wells 17 through 19), including the Building 102 steam condenser usage (15.8 MG), and the Building 109 AOP System, discharges effluent water to the SRB.

(7) Storm water runoff volume is calculated by multiplying the adjusted tributary area and NOAA precipitation data for the reporting periods. The tributary area is adjusted by the runoff coefficient to exclude the infiltration volume from the total rainfall volume. The tributary area, runoff coefficient, and adjusted tributary area are from Dvirka and Bartilucci Consulting Engineers' Storm Water Permit Evaluation Report (January, 28, 2010). The NOAA precipitation data are calculated as a sum of NOAA daily precipitation data for the reporting period. NOAA precipitation data are retrieved from Station GHCND:USW00054787 - FARMINGDALE REPUBLIC AIRPORT, NY US for the reporting period.

(8) Total flow volume to South Recharge Basins is estimated as a sum of flow volumes contributed by the effluent groundwater to South Recharge Basins and from storm water runoff to South Recharge Basins. Year 2 Fourth Quarter calculated South Recharge Basin flow volume is within historical operating range.

(9) Treatment system efficiencies are calculated by dividing the difference between the remedial well flow weighted influent and effluent TVOC concentrations by the remedial well flow weighted influent concentration.

(10) The percentages of effluent groundwater discharge to the south recharge basins are relative to remedial goals for hydraulic containment. The south recharge basins have sufficient capacity to receive the reported flows.

(11) During the reporting period there was a reduction in daily flow rates to accommodate repairs, maintenance and system upgrades.

-- Not Applicable
µg/L micrograms per liter
gpm gallons per minute
lbs pounds
MG million gallons
NOAA National Oceanic and Atmospheric Administration
RW Remedial Well
TCE trichloroethene
TVOC total volatile organic compounds
VOC volatile organic compounds
ND Not Detected

Table 3
Concentrations of Constituents in Remedial Wells
Year 2 Annual[1] Reporting Period
RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents[2] (units in µg/L)	Location ID: Sample ID: Sample Date:	RW-20 RW-20 8/14/2024	RW-21 RW-21 8/14/2024	RW-22 RW-22 8/14/2024	RW-20 RW-20 9/17/2024	RW-21 RW-21 9/17/2024	RW-22 RW-22 9/17/2024	RW-20 RW-20 10/10/2024	RW-21 RW-21 10/10/2024	RW-22 RW-22 10/10/2024
Volatile Organic Compounds (VOCs)[3]										
1,1,1-Trichloroethane	71-55-6	<5.0	<10	<4.0	<10	<10	<4.0	<10	<10	<4.0
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	<25	<50	<20	<50	<50	<20	<50	<50	<20
1,1,2-Trichloroethane	79-00-5	<5.0	<10	<4.0	<10	<10	<4.0	<10	<10	<4.0
1,1-Dichloroethane	75-34-3	**5.4**	**8.2 J**	**3.6 J**	**7.6 J**	**8.5 J**	**4.6**	**8.3 J**	**7.4 J**	**3.5 J**
1,1-Dichloroethene	75-35-4	**5.0**	**7.9 J**	**3.0 J**	**8.4 J**	**8.7 J**	**3.3 J**	<10	**6.4 J**	**3.8 J**
1,2-Dichloroethane	107-06-2	**6.4**	<10	**4.5**	**8.0 J**	**6.1 J**	**5.1**	**7.9 J**	<10	**4.2**
1,2-Dichloropropane	78-87-5	<5.0	<10	<4.0	<10	<10	<4.0	<10	<10	<4.0
Benzene	71-43-2	<2.5	<5.0	<2.0	<5.0	<5.0	<2.0	<5.0	<5.0	<2.0
Chloroform	67-66-3	**5.5**	5.8 J	**5.9**	<10	<10	**8.9**	**7.1 J**	<10	**6.0**
cis-1,2-Dichloroethene	156-59-2	**213**	**488**	**97.1**	**269**	**494**	**102**	**255**	**490**	**96.7**
Dichloromethane	75-09-2	<10	<20	<8.0	<20	<20	<8.0	<20	<20	<8.0
Tetrachloroethene	127-18-4	<5.0	<10	<4.0	<10	<10	<4.0	<10	<10	<4.0
trans-1,2-Dichloroethene	156-60-5	<5.0	<10	<4.0	<10	**7.0 J**	**3.7 J**	<10	<10	<4.0
Trichloroethene	79-01-6	**1,390**	**1,360**	**583**	**1,420**	**1,380**	**657**	**1,270**	**1,250**	**595**
Vinyl chloride	75-01-4	<5.0	<10	<4.0	<10	<10	<4.0	<10	<10	<4.0
Total VOCs[4]		**1,625**	**1,864**	**697**	**1,713**	**1,904**	**785**	**1,548**	**1,754**	**709**
Constituents[2] (units in µg/L)	**Location ID: Sample ID: Sample Date:**	**RW-20 RW-20 8/14/2024**	**RW-21 RW-21 8/14/2024**	**RW-22 RW-22 8/14/2024**	**RW-20 RW-20 9/17/2024**	**RW-21 RW-21 9/17/2024**	**RW-22 RW-22 9/17/2024**	**RW-20 RW-20 10/10/2024**	**RW-21 RW-21 10/10/2024**	**RW-22 RW-22 10/10/2024**
Semi-Volatile Organic Compounds (SVOCs)[3]										
1,4-Dioxane[3]	123-91-1	**15.5**	**22.1**	**8.03**	**12.7**	**12.5**	**5.01**	**16.9**	**15.9**	**10.0**
Metals[3]										
Iron (Total)	7439-89-6	**82.2 B**	**941**	**60.8 B**	<100	<100	<100	<100	**54.1 J**	**35.1 J**
Manganese (Total)	7439-96-5	**1.8 B**	<15	**2.8 B**	**1.8 J**	<15	**2.6 J**	**1.8 J**	<15	**2.2 J**

Notes and abbreviations on last page.

Table 3
Concentrations of Constituents in Remedial Wells
Year 2 Annual[1] Reporting Period
RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents[2] (units in µg/L)	Location ID: Sample ID: Sample Date:	RW-20 RW-20 11/14/2024	RW-21 RW-21 11/14/2024	RW-22 RW-22 11/14/2024	RW-20 RW-20 12/12/2024	RW-21 RW-21 12/12/2024	RW-22 RW-22 12/12/2024	RW-20 RW-20 1/27/2025	RW-21 RW-21 1/27/2025	RW-22 RW-22 1/27/2025
Volatile Organic Compounds (VOCs)[3]										
1,1,1-Trichloroethane	71-55-6	<5.0	<5.0	<4.0	<4.0	<4.0	**0.67 J**	**1.2**	<5.0	<1.0
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	<25	<25	<20	<20	<20	<5.0	<5.0	<25	<5.0
1,1,2-Trichloroethane	79-00-5	<5.0	<5.0	<4.0	<4.0	<4.0	**0.57 J**	**1.1**	<5.0	**0.66 J**
1,1-Dichloroethane	75-34-3	**6.2**	**7.6**	**3.6 J**	**5.4**	**6.3**	**3.5**	**6.9**	**7.1**	**3.7**
1,1-Dichloroethene	75-35-4	**5.5**	**6.2**	**3.1 J**	**6.7**	**7.3**	**3.7**	**7.9**	**6.8**	**3.7**
1,2-Dichloroethane	107-06-2	**6.2**	**4.5 J**	<4.0	**4.8**	**3.3 J**	**3.3**	**5.8**	**3.9 J**	**3.5**
1,2-Dichloropropane	78-87-5	<5.0	<5.0	<4.0	<4.0	<4.0	**0.75 J**	**1.2**	<5.0	**0.85 J**
Benzene	71-43-2	<2.5	<2.5	<2.0	<2.0	<2.0	<0.50	<0.50	<2.5	<0.50
Chloroform	67-66-3	**4.4 J**	**3.1 J**	**5.3**	**4.0**	**2.2 J**	**4.2**	**3.9**	**2.8 J**	**4.2**
cis-1,2-Dichloroethene	156-59-2	**247**	**473**	**90.8**	**210**	**383**	**84.9**	**238**	**434**	**88.8**
Dichloromethane	75-09-2	<10	<10	<8.0	<8.0	<8.0	<2.0	<2.0	<10	<2.0
Tetrachloroethene	127-18-4	**3.9 J**	**5.4**	<4.0	**3.6 J**	**4.4**	**0.74 J**	**4.4**	**5.3**	**0.84 J**
trans-1,2-Dichloroethene	156-60-5	**5.1**	**5.7**	<4.0	<4.0	**2.1 J**	**0.56 J**	**1.0**	<5.0	<1.0
Trichloroethene	79-01-6	**1,260**	**1,340**	**659**	**1,070**	**1,000**	**451**	**1,320**	**1,170**	**585**
Vinyl chloride	75-01-4	<5.0	<5.0	<4.0	<4.0	<4.0	<1.0	<1.0	<5.0	<1.0
Total VOCs[4]		**1,538**	**1,846**	**762**	**1,305**	**1,409**	**554**	**1,591**	**1,630**	**691**
Constituents[2] (units in µg/L)	**Location ID: Sample ID: Sample Date:**	**RW-20 RW-20 11/14/2024**	**RW-21 RW-21 11/14/2024**	**RW-22 RW-22 11/14/2024**	**RW-20 RW-20 12/12/2024**	**RW-21 RW-21 12/12/2024**	**RW-22 RW-22 12/12/2024**	**RW-20 RW-20 1/27/2025**	**RW-21 RW-21 1/27/2025**	**RW-22 RW-22 1/27/2025**
Semi-Volatile Organic Compounds (SVOCs)[3]										
1,4-Dioxane[3]	123-91-1	**14.8**	**19.8**	**7.39**	**14.8**	**13**	**3.02**	**16.4**	**12.6**	**8.65**
Metals[3]										
Iron (Total)	7439-89-6	<100	**105**	<100	<100	**45.8 J**	<100	<100	<100	<100
Manganese (Total)	7439-96-5	**1.4 J**	<15	**2.5 J**	**1.7 J**	<15	**2.9 J**	**1.5 J**	<15	**2.5 J**

Notes and abbreviations on last page.

Table 3
Concentrations of Constituents in Remedial Wells
Year 2 Annual[1] Reporting Period
RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents[2] (units in µg/L)	Location ID: Sample ID: Sample Date:	RW-20 RW-20 2/6/2025	RW-21 RW-21 2/6/2025	RW-22 RW-22 2/6/2025	RW-20 RW-20 3/5/2025	RW-21 RW-21 3/5/2025	RW-22 RW-22 3/5/2025	RW-20 RW-20 4/2/2025	RW-21 RW-21 4/2/2025	RW-22 RW-22 4/2/2025
Volatile Organic Compounds (VOCs)[3]										
1,1,1-Trichloroethane	71-55-6	<10	<5.0	**0.59 J**	<10	<5.0	<4.0	<10	<2.5	<4.0
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	<50	<25	<5.0	<50	<25	<20	<50	<13	<20
1,1,2-Trichloroethane	79-00-5	<10	<5.0	<1.0	<10	<5.0	<4.0	<10	<2.5	<4.0
1,1-Dichloroethane	75-34-3	**5.9 J**	**6.7**	**3.6**	**5.9 J**	**7.1**	**3.6 J**	<10	**7.4**	**3.9 J**
1,1-Dichloroethene	75-35-4	**6.1 J**	**5.8**	**3.9**	**7.1 J**	**6.7**	**2.6 J**	<10	**7.4**	**3.6 J**
1,2-Dichloroethane	107-06-2	**7.4 J**	**4.8 J**	**4.2**	**6.7 J**	**4.0 J**	**3.9 J**	**6.5 J**	**4.1**	**3.8 J**
1,2-Dichloropropane	78-87-5	<10	<5.0	**0.89 J**	<10	<5.0	<4.0	<10	<2.5	<4.0
Benzene	71-43-2	<5.0	<2.5	<0.50	<5.0	<2.5	<2.0	<5.0	<1.3	<2.0
Chloroform	67-66-3	**5.5 J**	**3.0 J**	**4.6**	<10	<5.0	**5.0**	<10	**2.3 J**	**4.9**
cis-1,2-Dichloroethene	156-59-2	**254**	**409**	**90.6**	**238**	**406**	**80.7**	**255**	**458**	**94.8**
Dichloromethane	75-09-2	<20	<10	<2.0	<20	<10	<8.0	<20	<5.0	<8.0
Tetrachloroethene	127-18-4	<10	**5.4**	**0.94 J**	<10	**4.7 J**	<4.0	<10	**3.4**	<4.0
trans-1,2-Dichloroethene	156-60-5	<10	**7.5**	**0.55 J**	<10	**3.1 J**	<4.0	<10	**3.4**	<4.0
Trichloroethene	79-01-6	**1,410**	**1,220**	**591**	**1,240**	**1,050**	**525**	**1,270**	**1,050**	**530**
Vinyl chloride	75-01-4	<10	<5.0	<1.0	<10	<5.0	<4.0	<10	<2.5	<4.0
Total VOCs[4]		**1,689**	**1,662**	**701**	**1,498**	**1,482**	**621**	**1,532**	**1,536**	**641**
Constituents[2] (units in µg/L)	**Location ID: Sample ID: Sample Date:**	**RW-20 RW-20 2/6/2025**	**RW-21 RW-21 2/6/2025**	**RW-22 RW-22 2/6/2025**	**RW-20 RW-20 3/5/2025**	**RW-21 RW-21 3/5/2025**	**RW-22 RW-22 3/5/2025**	**RW-20 RW-20 4/2/2025**	**RW-21 RW-21 4/2/2025**	**RW-22 RW-22 4/2/2025**
Semi-Volatile Organic Compounds (SVOCs)[3]										
1,4-Dioxane[3]	123-91-1	**14.9**	**14.6**	**8.02**	**10.2**	**12.9**	**7.01**	**13.0**	**9.77**	**6.87**
Metals[3]										
Iron (Total)	7439-89-6	<100	<100	<100	<100	<100	**95.4 J**	<100	<100	**37.8 J**
Manganese (Total)	7439-96-5	**3.0 J**	<15	**2.6 J**	**1.5 J**	<15	**2.9 J**	<15	<15	**2.4 J**

Notes and abbreviations on last page.

Table 3
Concentrations of Constituents in Remedial Wells
Year 2 Annual[1] Reporting Period
RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents[2] (units in µg/L)	Location ID: Sample ID: Sample Date:	RW-20 RW-20 5/6/2025	RW-21 RW-21 5/6/2025	RW-22 RW-22 5/6/2025	RW-20 RW-20 6/3/2025	RW-21 RW-21 6/3/2025	RW-22 RW-22 6/3/2025	RW-20 RW-20 7/8/2025	RW-21 RW-21 7/8/2025	RW-22 RW-22 7/8/2025
Volatile Organic Compounds (VOCs)[3]										
1,1,1-Trichloroethane	71-55-6	<5.0	<4.0	**0.82 J**	<5.0	<5.0	**0.59 J**	<5.0	<5.0	**0.75 J**
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	<25	<20	<5.0	<25	<25	<5.0	<25	<25	<5.0
1,1,2-Trichloroethane	79-00-5	<5.0	<4.0	**0.60 J**	<5.0	<5.0	**0.66 J**	<5.0	<5.0	**0.57 J**
1,1-Dichloroethane	75-34-3	**7.2**	**7.1**	**4.0**	**5.6**	**5.8**	**3.2**	**6.6**	**7.1**	**4.1**
1,1-Dichloroethene	75-35-4	**7.9**	**5.9**	**4.3**	**5.2**	**4.9 J**	**2.0**	**5.6**	**6.6**	**4.0**
1,2-Dichloroethane	107-06-2	**6.3**	**3.9 J**	**4.0**	**6.4**	**3.9 J**	**4.0**	**5.5**	**3.1 J**	**3.9**
1,2-Dichloropropane	78-87-5	<5.0	<4.0	<1.0	<5.0	<5.0	**0.79 J**	<5.0	<5.0	**0.83 J**
Benzene	71-43-2	<2.5	<2.0	<0.50	<2.5	<2.5	<0.50	<2.5	<2.5	<0.50
Chloroform	67-66-3	**5.2**	<4.0	**5.1**	**4.1 J**	<5.0	**3.3**	**4.4 J**	**2.7 J**	**4.6**
cis-1,2-Dichloroethene	156-59-2	**269**	**418**	**98.1**	**218**	**360**	**75.4**	**242**	**386**	**98.7**
Dichloromethane	75-09-2	<10	<8.0	<2.0	<10	<10	<2.0	<10	<10	<2.0
Tetrachloroethene	127-18-4	**3.8 J**	**4.6**	**0.75 J**	**3.8 J**	**4.5 J**	**0.74 J**	**2.8 J**	**4.1 J**	**0.90 J**
trans-1,2-Dichloroethene	156-60-5	**3.1 J**	**10.8**	<1.0	<5.0	<5.0	<1.0	<5.0	**4.1 J**	<1.0
Trichloroethene	79-01-6	**1,200**	**1,020**	**533**	**1,240**	**963**	**437**	**1,150**	**1,080**	**546**
Vinyl chloride	75-01-4	<5.0	<4.0	<1.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0
Total VOCs[4]		**1,503**	**1,470**	**651**	**1,483**	**1,342**	**528**	**1,417**	**1,494**	**664**
Constituents[2] (units in µg/L)	**Location ID: Sample ID: Sample Date:**	**RW-20 RW-20 5/6/2025**	**RW-21 RW-21 5/6/2025**	**RW-22 RW-22 5/6/2025**	**RW-20 RW-20 6/3/2025**	**RW-21 RW-21 6/3/2025**	**RW-22 RW-22 6/3/2025**	**RW-20 RW-20 7/8/2025**	**RW-21 RW-21 7/8/2025**	**RW-22 RW-22 7/8/2025**
Semi-Volatile Organic Compounds (SVOCs)[3]										
1,4-Dioxane[3]	123-91-1	**13.7**	**8.88 E**	**4.83**	**12.2**	**11.7**	**6.41**	**14.8**	**14.8**	**7.58**
Metals[3]										
Iron (Total)	7439-89-6	<100	<100	<100	<100	**106**	<100	**587**	**74.0 J**	<100
Manganese (Total)	7439-96-5	**1.8 J**	<15	**3.0 J**	**1.9 J**	<15	**2.9 J**	**2.5 J**	<15	**2.7 J**

Notes and abbreviations on last page.

Table 3
Concentrations of Constituents in Remedial Wells
Year 2 Annual[1] Reporting Period
RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents[2] (units in µg/L)	Location ID: Sample ID: Sample Date:	RW-20 RW-20 8/7/2025	RW-21 RW-21 8/7/2025	RW-22 RW-22 8/7/2025	RW-20 RW-20 9/10/2025	RW-21 RW-21 9/10/2025	RW-22 RW-22 9/10/2025
Volatile Organic Compounds (VOCs)[3]							
1,1,1-Trichloroethane	71-55-6	<5.0	<5.0	<4.0	<5.0	<5.0	**0.61 J**
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	<25	<25	<20	<25	<25	<5.0
1,1,2-Trichloroethane	79-00-5	<5.0	<5.0	<4.0	<5.0	<5.0	**0.55 J**
1,1-Dichloroethane	75-34-3	**7.3**	**6.7**	**3.7 J**	5.8	**5.3**	**3.5**
1,1-Dichloroethene	75-35-4	**7.5**	**7.1**	**3.4 J**	5.8	**5.1**	**3.0**
1,2-Dichloroethane	107-06-2	**6.0**	**3.7 J**	**3.5 J**	**4.3 J**	<5.0	**2.8**
1,2-Dichloropropane	78-87-5	<5.0	<5.0	<4.0	<5.0	<5.0	<1.0
Benzene	71-43-2	<2.5	<2.5	<2.0	<2.5	<2.5	<0.50
Chloroform	67-66-3	**5.3**	**3.0 J**	**4.9**	**4.7 J**	<5.0	**3.5**
cis-1,2-Dichloroethene	156-59-2	**275**	**417**	**89.2**	**229**	**335**	**80.4**
Dichloromethane	75-09-2	<10	<10	<8.0	<10	<10	<2.0
Tetrachloroethene	127-18-4	**3.6 J**	**4.0 J**	<4.0	<5.0	**3.5 J**	**0.74 J**
trans-1,2-Dichloroethene	156-60-5	<5.0	<5.0	<4.0	<5.0	**8.8**	<1.0
Trichloroethene	79-01-6	**1,170**	**953**	**490**	**975**	**771**	**386**
Vinyl chloride	75-01-4	<5.0	<5.0	<4.0	<5.0	<5.0	<1.0
Total VOCs[4]		**1,475**	**1,395**	**595**	**1,213**	**1,129**	**481**
Constituents[2] (units in µg/L)	**Location ID: Sample ID: Sample Date:**	**RW-20 RW-20 8/7/2025**	**RW-21 RW-21 8/7/2025**	**RW-22 RW-22 8/7/2025**	**RW-20 RW-20 9/10/2025**	**RW-21 RW-21 9/10/2025**	**RW-22 RW-22 9/10/2025**
Semi-Volatile Organic Compounds (SVOCs)[3]							
1,4-Dioxane[3]	123-91-1	**12.6**	**10.6**	**5.61**	**17.4**	**13**	**7.89**
Metals[3]							
Iron (Total)	7439-89-6	<100	**191**	<100	<100	<100	<100
Manganese (Total)	7439-96-5	**2.2 J**	<15	**2.6 J**	**1.5 J**	<15	**2.6 J**

Notes and abbreviations on last page.

Table 3
Concentrations of Constituents in Remedial Wells
Year 2 Annual[1] Reporting Period
RW-21 Area
Northrop Grumman
Bethpage, New York

Notes and Abbreviations:

(1) Reporting period: August 2, 2024 through September 30, 2025.

(2) Results for the program are validated at 20% frequency, per protocols specified in the LTM Groundwater Sampling Plan and OM&M Manual (Arcadis 2023).

(3) VOC samples analyzed using USEPA Method 8260C. 1,4-Dioxane samples analyzed using USEPA Method 8270D-SIM. Metal samples analyzed using USEPA Method 6010D.

(4) TVOC concentrations are rounded to the number of decimal places of the individual VOC with the least numerical precision (decimal place), including whole numbers with no decimal place.

5.4	Bold value indicates a detection
<10	Compound is not detected above its laboratory quantification limit
µg/L	micrograms per liter
ND	Not detected
J	Constituent value is estimated
E	Indicates value exceeds calibration range
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

Table 4
Performance Sampling Results
Year 2 Annual[1] Reporting Period
RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents[2] (units in µg/L)	Location ID: Sample ID: Sample Date:	Discharge Limit[5]	Influent Influent 8/14/2024	Pre-AOP Pre-AOP 8/14/2024	Post-AOP Post-AOP 8/14/2024	Pre-GAC Pre-GAC 8/14/2024	Effluent Effluent 8/14/2024	Influent Influent 9/17/2024	Pre-AOP Pre-AOP 9/17/2024	Post-AOP Post-AOP 9/17/2024	Pre-GAC Pre-GAC 9/17/2024	Effluent Effluent 9/17/2024	Influent Influent 10/10/2024	Pre-AOP Pre-AOP 10/10/2024	Post-AOP Post-AOP 10/10/2024	Pre-GAC Pre-GAC 10/10/2024	Effluent Effluent 10/10/2024
Volatile Organic Compounds (VOCs)[3]																	
1,1,1-Trichloroethane	71-55-6	5	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	**1.0**	**1.1**	<1.0	<5.0	<5.0	**0.92 J**	**0.96 J**	<1.0
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	<25	<25	<5.0	<5.0	<5.0	<25	<25	<5.0	<5.0	<5.0	<25	<25	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	--	<5.0	<5.0	**0.63 J**	**0.68 J**	<1.0	<5.0	<5.0	**0.54 J**	**0.56 J**	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	75-34-3	--	**5.6**	**5.3**	**3.3**	**3.1**	<1.0	**7.0**	**6.4**	**3.6**	**3.5**	<1.0	**6.3**	**6.7**	**3.5**	**3.3**	<1.0
1,1-Dichloroethene	75-35-4	5	**4.4 J**	**4.1 J**	<1.0	<1.0	<1.0	**6.3**	**5.9**	<1.0	<1.0	<1.0	**5.6**	**5.2**	<1.0	<1.0	<1.0
1,2-Dichloroethane	107-06-2	--	**5.0**	**4.7 J**	**2.0**	**1.8**	<1.0	**5.9**	**5.7**	**2.2**	**2.2**	<1.0	**5.3**	**5.1**	**1.9**	**1.9**	<1.0
1,2-Dichloropropane	78-87-5	--	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0
Benzene	71-43-2	--	<2.5	<2.5	<0.50	<0.50	<0.50	<2.5	<2.5	<0.50	<0.50	<0.50	<2.5	<2.5	<0.50	<0.50	<0.50
Chloroform	67-66-3	5	6.1	**6.3**	**3.5**	**3.4**	<1.0	<5.0	**6.1**	**4.6**	**5.3**	<1.0	**4.9 J**	**4.5 J**	**3.7**	**4.0**	<1.0
cis-1,2-Dichloroethene	156-59-2	5	**235**	**240**	<1.0	<1.0	<1.0	**281**	**267**	<1.0	<1.0	<1.0	**303**	**300**	<1.0	<1.0	<1.0
Dichloromethane	75-09-2	--	<10	<10	<2.0	<2.0	<2.0	<10	<10	<2.0	<2.0	<2.0	<10	<10	<2.0	<2.0	<2.0
Tetrachloroethene	127-18-4	5	<5.0	**3.8 J**	<1.0	<1.0	<1.0	**3.3 J**	**3.1 J**	<1.0	<1.0	<1.0	<5.0	**3.1 J**	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	156-60-5	5	**9.7**	**9.3**	<1.0	<1.0	<1.0	**6.4**	**5.6**	<1.0	<1.0	<1.0	**6.9**	**5.7**	<1.0	<1.0	<1.0
Trichloroethene	79-01-6	5	**866**	**893**	<1.0	<1.0	<1.0	**1,000**	**937**	<1.0	<1.0	<1.0	**919**	**974**	<1.0	<1.0	<1.0
Vinyl chloride	75-01-4	5	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0
Total VOCs[4]			**1,126**	**1,167**	**9.4**	**9.0**	**ND**	**1,310**	**1,237**	**11.9**	**12.7**	**ND**	**1,251**	**1,304**	**10.0**	**10.2**	**ND**
Constituents[2] (units in µg/L)	**Location ID: Sample ID: Sample Date:**		**Influent Influent 8/14/2024**	**Pre-AOP Pre-AOP 8/14/2024**	**Post-AOP Post-AOP 8/14/2024**	**Pre-GAC Pre-GAC 8/14/2024**	**Effluent Effluent 8/14/2024**	**Influent Influent 9/17/2024**	**Pre-AOP Pre-AOP 9/17/2024**	**Post-AOP Post-AOP 9/17/2024**	**Pre-GAC Pre-GAC 9/17/2024**	**Effluent Effluent 9/17/2024**	**Influent Influent 10/10/2024**	**Pre-AOP Pre-AOP 10/10/2024**	**Post-AOP Post-AOP 10/10/2024**	**Pre-GAC Pre-GAC 10/10/2024**	**Effluent Effluent 10/10/2024**
Semi-Volatile Organic Compounds (VOCs)[3]																	
1,4-Dioxane[3]	123-91-1	0.35	**13.0**	**13.7**	<0.30	<0.30	<0.30	**9.1**	**13.7**	<0.30	<0.30	<0.30	**14.5**	**15.1**	<0.30	<0.30	<0.30
Metals[6]																	
Iron (Total)	7439-89-6	600	--	--	--	--	--	<100	<100	<100	<100	<100	--	--	--	--	--
Manganese (Total)	7439-96-5	600	--	--	--	--	--	<15	<15	<15	<15	**2.0 J**	--	--	--	--	--
Sum of Total Iron and Manganese		1,000	--	--	--	--	--	ND	ND	ND	ND	**2.0**	--	--	--	--	--
Anions[7]																--	--
Nitrate/Nitrite	ARC-NO3NO2N	--	--	--	--	--	--	--	--	--	--	**3.2**	--	--	--	--	--
Nitrogen	7727-37-9	--	--	--	--	--	--	--	--	--	--	**3.2**	--	--	--	--	--
Total Kjeldahl Nitrogen	ARC-TKN	--	--	--	--	--	--	--	--	--	--	<0.20	--	--	--	--	--
Total Organic Carbon	ARC-TOC	--	--	--	--	--	--	<2.0	--	<2.0	--	<2.0	--	--	--	--	--
Total Suspended Solids	ARC-TSS	--	--	--	--	--	--	--	--	<4.0	<4.0	<4.0	--	--	--	--	--

Notes and abbreviations on last page.

Table 4
Performance Sampling Results
Year 2 Annual[1] Reporting Period
RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents[2] (units in µg/L)	Location ID: Sample ID: Sample Date:	Discharge Limit[5]	Influent Influent 11/14/2024	Pre-AOP Pre-AOP 11/14/2024	Post-AOP Post-AOP 11/14/2024	Pre-GAC Pre-GAC 11/14/2024	Effluent Effluent 11/14/2024	Influent Influent 12/12/2024	Pre-AOP Pre-AOP 12/12/2024	Post-AOP Post-AOP 12/12/2024	Pre-GAC Pre-GAC 12/12/2024	Effluent Effluent 12/12/2024	Influent Influent 1/23/2025	Pre-AOP Pre-AOP 1/23/2025	Post-AOP Post-AOP 1/23/2025	Pre-GAC Pre-GAC 1/23/2025	Effluent Effluent 1/23/2025
Volatile Organic Compounds (VOCs)[3]																	
1,1,1-Trichloroethane	71-55-6	5	<5.0	<5.0	**0.84 J**	**0.84 J**	<1.0	<5.0	<5.0	**0.74 J**	**0.80 J**	<1.0	<5.0	<5.0	**1.0**	**0.95 J**	<1.0
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	<25	<25	<5.0	<5.0	<5.0	<25	<25	<5.0	<5.0	<5.0	<25	<25	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	--	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	75-34-3	--	**5.1**	**5.1**	**2.8**	**2.8**	<1.0	**4.7 J**	**4.5 J**	**2.4**	**2.1**	<1.0	**6.9**	**5.9**	**3.3**	**3.2**	<1.0
1,1-Dichloroethene	75-35-4	5	**5**	**5**	<1.0	<1.0	<1.0	**4.4 J**	**4.3 J**	<1.0	<1.0	<1.0	**6.7**	**6.3**	<1.0	<1.0	<1.0
1,2-Dichloroethane	107-06-2	--	**4.1 J**	**4.0 J**	**1.6**	**1.7**	<1.0	**4.5 J**	**4.2 J**	**1.6**	**1.3**	<1.0	**4.7 J**	**4.7 J**	**1.9**	**1.6**	<1.0
1,2-Dichloropropane	78-87-5	--	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0
Benzene	71-43-2	--	<2.5	<2.5	<0.50	<0.50	<0.50	<2.5	<2.5	<0.50	<0.50	<0.50	<2.5	<2.5	<0.50	<0.50	<0.50
Chloroform	67-66-3	5	**3.6 J**	**3.4 J**	**3.0**	**3.1**	<1.0	**3.6 J**	**3.7 J**	**2.7**	**2.6**	<1.0	**6.8**	**5.5**	**3.6**	**3.5**	<1.0
cis-1,2-Dichloroethene	156-59-2	5	**217**	**221**	<1.0	<1.0	<1.0	**201**	**190**	<1.0	<1.0	<1.0	**301**	**289**	<1.0	<1.0	<1.0
Dichloromethane	75-09-2	--	<10	<10	<2.0	<2.0	<2.0	<10	<10	<2.0	<2.0	<2.0	<10	<10	<2.0	<2.0	<2.0
Tetrachloroethene	127-18-4	5	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	156-60-5	5	**4.7 J**	**3.7 J**	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	**4.5 J**	**4.0 J**	<1.0	<1.0	<1.0
Trichloroethene	79-01-6	5	**911**	**940**	<1.0	<1.0	<1.0	**794**	**760**	<1.0	<1.0	<1.0	**1,090**	**901**	<1.0	<1.0	<1.0
Vinyl chloride	75-01-4	5	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0
Total VOCs[4]			**1,151**	**1,182**	**8.2**	**8.4**	**ND**	**1,012**	**967**	**6.7**	**6.8**	**ND**	**1,421**	**1,216**	**9.8**	**9.3**	**ND**
Constituents[2] (units in µg/L)	**Location ID: Sample ID: Sample Date:**		**Influent Influent 11/14/2024**	**Pre-AOP Pre-AOP 11/14/2024**	**Post-AOP Post-AOP 11/14/2024**	**Pre-GAC Pre-GAC 11/14/2024**	**Effluent Effluent 11/14/2024**	**Influent Influent 12/12/2024**	**Pre-AOP Pre-AOP 12/12/2024**	**Post-AOP Post-AOP 12/12/2024**	**Pre-GAC Pre-GAC 12/12/2024**	**Effluent Effluent 12/12/2024**	**Influent Influent 1/23/2025**	**Pre-AOP Pre-AOP 1/23/2025**	**Post-AOP Post-AOP 1/23/2025**	**Pre-GAC Pre-GAC 1/23/2025**	**Effluent Effluent 1/23/2025**
Semi-Volatile Organic Compounds (VOCs)[3]																	
1,4-Dioxane[3]	123-91-1	0.35	**11.3**	**14.7**	<0.30	<0.30	<0.30	**9.25**	**10.8**	<0.30	<0.30	<0.30	**10.5**	**11.7**	<0.30	<0.30	<0.30
Metals[6]																	
Iron (Total)	7439-89-6	600	<100	**174**	<100	**39.4 J**	<100	--	--	--	--	--	--	--	--	--	--
Manganese (Total)	7439-96-5	600	**1.4 J**	**4.8 J**	**1.6 J**	**1.9 J**	**11.6 J**	--	--	--	--	--	--	--	--	--	--
Sum of Total Iron and Manganese		1,000	**1.4**	**179**	**1.6**	**41.3**	**11.6**	--	--	--	--	--	--	--	--	--	--
Anions[7]																--	--
Nitrate/Nitrite	ARC-NO3NO2N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen	7727-37-9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Kjeldahl Nitrogen	ARC-TKN	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Organic Carbon	ARC-TOC	--	<1000	--	<1000	--	<1000	--	--	--	--	--	--	--	--	--	--
Total Suspended Solids	ARC-TSS	--	--	--	<4000	**2600 J**	<4000	--	--	--	--	--	--	--	--	--	--

Notes and abbreviations on last page.

Table 4
Performance Sampling Results
Year 2 Annual[1] Reporting Period
RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents[2] (units in µg/L)	Location ID: Sample ID: Sample Date:	Discharge Limit[5]	Influent Influent 2/6/2025	Pre-AOP Pre-AOP 2/6/2025	Post-AOP Post-AOP 2/6/2025	Pre-GAC Pre-GAC 2/6/2025	Effluent Effluent 2/6/2025	Influent Influent 3/5/2025	Pre-AOP Pre-AOP 3/5/2025	Post-AOP Post-AOP 3/5/2025	Pre-GAC Pre-GAC 3/5/2025	Effluent Effluent 3/5/2025	Influent Influent 4/2/2025	Pre-AOP Pre-AOP 4/2/2025	Post-AOP Post-AOP 4/2/2025	Pre-GAC Pre-GAC 4/2/2025	Effluent Effluent 4/2/2025
Volatile Organic Compounds (VOCs)[3]																	
1,1,1-Trichloroethane	71-55-6	5	<5.0	<5.0	**0.73 J**	**0.83 J**	<1.0	<5.0	<5.0	**0.67 J**	**0.71 J**	<1.0	<5.0	<5.0	**0.88 J**	**0.88 J**	<1.0
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	<25	<25	<5.0	<5.0	<5.0	<25	<25	<5.0	<5.0	<5.0	<25	<25	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	--	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	75-34-3	--	**5.6**	**5.5**	**3.0**	**2.8**	<1.0	**5.3**	**5.8**	**3.0**	**3.1**	<1.0	**6.2**	**5.7**	**4.0**	**3.5**	<1.0
1,1-Dichloroethene	75-35-4	5	**6.0**	**6.1**	<1.0	<1.0	<1.0	**4.9 J**	**5.6**	<1.0	<1.0	<1.0	**6.0**	**5.8**	<1.0	<1.0	<1.0
1,2-Dichloroethane	107-06-2	--	**5.3**	**4.7 J**	**2.0**	**1.8**	<1.0	**4.6 J**	**4.9 J**	**2.1**	**1.9**	<1.0	**4.3 J**	**4.2 J**	**2.0**	**1.7**	<1.0
1,2-Dichloropropane	78-87-5	--	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0
Benzene	71-43-2	--	<2.5	<2.5	<0.50	<0.50	<0.50	<2.5	<2.5	<0.50	<0.50	<0.50	<2.5	<2.5	<0.50	<0.50	<0.50
Chloroform	67-66-3	5	**4.9 J**	**4.7 J**	**3.3**	**3.5**	<1.0	<5.0	**4.2 J**	**3.3**	**3.5**	<1.0	**4.3 J**	<5.0	**3.7**	**3.3**	<1.0
cis-1,2-Dichloroethene	156-59-2	5	**246**	**256**	<1.0	<1.0	<1.0	**221**	**236**	<1.0	<1.0	<1.0	**261**	**260**	<1.0	<1.0	<1.0
Dichloromethane	75-09-2	--	<10	<10	<2.0	<2.0	<2.0	<10	<10	<2.0	<2.0	<2.0	<10	<10	<2.0	<2.0	<2.0
Tetrachloroethene	127-18-4	5	**4.1 J**	**3.4 J**	<1.0	<1.0	<1.0	**3.1 J**	**3.4 J**	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	156-60-5	5	<5.0	<5.0	<1.0	<1.0	<1.0	**4.9 J**	**5.5**	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0
Trichloroethene	79-01-6	5	**1,080**	**1,050**	<1.0	<1.0	<1.0	**908**	**961**	<1.0	<1.0	<1.0	**880**	**884**	<1.0	<1.0	<1.0
Vinyl chloride	75-01-4	5	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0
Total VOCs[4]			**1,352**	**1,330**	**9.0**	**8.9**	**ND**	**1,152**	**1,226**	**9.1**	**9.2**	**ND**	**1,162**	**1,160**	**10.6**	**9.4**	**ND**
Constituents[2] (units in µg/L)	**Location ID: Sample ID: Sample Date:**		**Influent Influent 2/6/2025**	**Pre-AOP Pre-AOP 2/6/2025**	**Post-AOP Post-AOP 2/6/2025**	**Pre-GAC Pre-GAC 2/6/2025**	**Effluent Effluent 2/6/2025**	**Influent Influent 3/5/2025**	**Pre-AOP Pre-AOP 3/5/2025**	**Post-AOP Post-AOP 3/5/2025**	**Pre-GAC Pre-GAC 3/5/2025**	**Effluent Effluent 3/5/2025**	**Influent Influent 4/2/2025**	**Pre-AOP Pre-AOP 4/2/2025**	**Post-AOP Post-AOP 4/2/2025**	**Pre-GAC Pre-GAC 4/2/2025**	**Effluent Effluent 4/2/2025**
Semi-Volatile Organic Compounds (VOCs)[3]																	
1,4-Dioxane[3]	123-91-1	0.35	**4.96**	**11.2**	<0.30	<0.30	<0.30	**11.3**	**9.59**	<0.30	<0.30	<0.30	**8.43**	**9.11**	<0.30	<0.30	<0.30
Metals[6]																	
Iron (Total)	7439-89-6	600	<100	<100	<100	<100	<100	--	--	--	--	--	--	--	--	--	--
Manganese (Total)	7439-96-5	600	**1.7 J**	**1.7 J**	**1.8 J**	**2.2 J**	**2.8 J**	--	--	--	--	--	--	--	--	--	--
Sum of Total Iron and Manganese		1,000	**1.7**	**1.7**	**1.8**	**2.2**	**2.8**	--	--	--	--	--	--	--	--	--	--
Anions[7]																--	--
Nitrate/Nitrite	ARC-NO3NO2N	--	--	--	--	--	**2.9**	--	--	--	--	--	--	--	--	--	--
Nitrogen	7727-37-9	--	--	--	--	--	**2.9**	--	--	--	--	--	--	--	--	--	--
Total Kjeldahl Nitrogen	ARC-TKN	--	--	--	--	--	<0.20	--	--	--	--	--	--	--	--	--	--
Total Organic Carbon	ARC-TOC	--	**0.74 J**	--	<1.0	--	<1.0	--	--	--	--	--	--	--	--	--	--
Total Suspended Solids	ARC-TSS	--	--	--	<4.0	<4.0	<4.0	--	--	--	--	--	--	--	--	--	--

Notes and abbreviations on last page.

Table 4
Performance Sampling Results
Year 2 Annual[1] Reporting Period
RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents[2] (units in µg/L)	Location ID: Sample ID: Sample Date:	Discharge Limit[5]	Influent Influent 5/6/2025	Pre-AOP Pre-AOP 5/6/2025[8]	Post-AOP Post-AOP 5/6/2025	Pre-GAC Pre-GAC 5/6/2025	Effluent Effluent 5/6/2025	Influent Influent 6/3/2025	Pre-AOP Pre-AOP 6/3/2025	Post-AOP Post-AOP 6/3/2025	Pre-GAC Pre-GAC 6/3/2025	Effluent Effluent 6/3/2025	Influent Influent 7/8/2025	Pre-AOP Pre-AOP 7/8/2025	Post-AOP Post-AOP 7/8/2025	Pre-GAC Pre-GAC 7/8/2025	Effluent Effluent 7/8/2025
Volatile Organic Compounds (VOCs)[3]																	
1,1,1-Trichloroethane	71-55-6	5	<2.5	--	**1.0**	**0.99 J**	<1.0	<5.0	<1.0	**0.76 J**	**0.83 J**	<1.0	<5.0	<4.0	**0.78 J**	**0.95 J**	<1.0
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	<13	--	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<25	<20	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	--	<2.5	--	<1.0	<1.0	<1.0	<5.0	**0.86 J**	<1.0	<1.0	<1.0	<5.0	<4.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	75-34-3	--	**5.4**	--	**3.9**	**3.4**	<1.0	**5.7**	**6.4**	**2.8**	**2.6**	<1.0	**5.4**	**6.1**	**3.8**	**2.9**	<1.0
1,1-Dichloroethene	75-35-4	5	**5.0**	--	<1.0	<1.0	<1.0	**5.5**	**6.7**	<1.0	<1.0	<1.0	**5.1**	**4.0**	<1.0	<1.0	<1.0
1,2-Dichloroethane	107-06-2	--	**4.2**	--	**2.3**	**2.2**	<1.0	**5.2**	**4.8**	**2.1**	**1.5**	<1.0	**4.5 J**	**4.2**	**2.1**	**1.6**	<1.0
1,2-Dichloropropane	78-87-5	--	<2.5	--	<1.0	<1.0	<1.0	<5.0	**0.96 J**	<1.0	<1.0	<1.0	<5.0	<4.0	<1.0	<1.0	<1.0
Benzene	71-43-2	--	<1.3	--	<0.50	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<0.50	<2.5	<2.0	<0.50	<0.50	<0.50
Chloroform	67-66-3	5	**4.1**	--	**3.8**	**4.1**	<1.0	**4.1 J**	**3.5**	**2.5**	**2.6**	<1.0	**4.3 J**	**3.8 J**	**2.7**	**2.9**	<1.0
cis-1,2-Dichloroethene	156-59-2	5	**234**	--	<1.0	<1.0	<1.0	**232**	**229**	<1.0	<1.0	<1.0	**237**	**225**	<1.0	<1.0	<1.0
Dichloromethane	75-09-2	--	<5.0	--	<2.0	<2.0	<2.0	<10	<2.0	<2.0	<2.0	<2.0	<10	<8.0	<2.0	<2.0	<2.0
Tetrachloroethene	127-18-4	5	**2.5**	--	<1.0	<1.0	<1.0	<5.0	**2.9**	<1.0	<1.0	<1.0	<5.0	**2.7 J**	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	156-60-5	5	**6.4**	--	<1.0	<1.0	<1.0	<5.0	**1.1**	<1.0	<1.0	<1.0	<5.0	**5.5**	<1.0	<1.0	<1.0
Trichloroethene	79-01-6	5	**953**	--	<1.0	<1.0	<1.0	**811**	**845**	<1.0	<1.0	<1.0	**861**	**1,040**	<1.0	<1.0	<1.0
Vinyl chloride	75-01-4	5	<2.5	--	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<5.0	<4.0	<1.0	<1.0	<1.0
Total VOCs[4]			**1,215**	--	**11.0**	**10.7**	**ND**	**1,064**	**1,101**	**8.2**	**7.5**	**ND**	**1,117**	**1,291**	**9.4**	**8.4**	**ND**
Constituents[2] (units in µg/L)	**Location ID: Sample ID: Sample Date:**		**Influent Influent 5/6/2025**	**Pre-AOP Pre-AOP 5/6/2025**	**Post-AOP Post-AOP 5/6/2025**	**Pre-GAC Pre-GAC 5/6/2025**	**Effluent Effluent 5/6/2025**	**Influent Influent 6/3/2025**	**Pre-AOP Pre-AOP 6/3/2025**	**Post-AOP Post-AOP 6/3/2025**	**Pre-GAC Pre-GAC 6/3/2025**	**Effluent Effluent 6/3/2025**	**Influent Influent 7/8/2025**	**Pre-AOP Pre-AOP 7/8/2025**	**Post-AOP Post-AOP 7/8/2025**	**Pre-GAC Pre-GAC 7/8/2025**	**Effluent Effluent 7/8/2025**
Semi-Volatile Organic Compounds (VOCs)[3]																	
1,4-Dioxane[3]	123-91-1	0.35	**12.5**	**11.7**	<0.30	<0.30	<0.30	**13.6**	**10.5**	<0.30	<0.30	<0.30	**10.2**	**11.2**	<0.30	<0.30	<0.30
Metals[6]																	
Iron (Total)	7439-89-6	600	<100	<100	<100	<100	<100	--	--	--	--	--	--	--	--	--	--
Manganese (Total)	7439-96-5	600	<15	<15	<15	**1.5 J**	**3.6 J**	--	--	--	--	--	--	--	--	--	--
Sum of Total Iron and Manganese		1,000	ND	ND	ND	**1.5**	**3.6**	--	--	--	--	--	--	--	--	--	--
Anions[7]											--	--	--			--	--
Nitrate/Nitrite	ARC-NO3NO2N	--	--	--	--	--	**3**	--	--	--	--	--	--	--	--	--	--
Nitrogen	7727-37-9	--	--	--	--	--	**3.3**	--	--	--	--	--	--	--	--	--	--
Total Kjeldahl Nitrogen	ARC-TKN	--	--	--	--	--	**0.3**	--	--	--	--	--	--	--	--	--	--
Total Organic Carbon	ARC-TOC	--	<1.0	--	<1.0	--	<1.0	--	--	--	--	--	--	--	--	--	--
Total Suspended Solids	ARC-TSS	--	--	--	<4.0	<4.0	<4.0	--	--	--	--	--	--	--	--	--	--

Notes and abbreviations on last page.

Table 4
Performance Sampling Results
Year 2 Annual[1] Reporting Period
RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents[2] (units in µg/L)	Location ID: Sample ID: Sample Date:	Discharge Limit[5]	Influent Influent 8/7/2025	Pre-AOP Pre-AOP 8/7/2025	Post-AOP Post-AOP 8/7/2025	Pre-GAC Pre-GAC 8/7/2025	Effluent Effluent 8/7/2025	Influent Influent 9/10/2025	Pre-AOP Pre-AOP 9/10/2025	Post-AOP Post-AOP 9/10/2025	Pre-GAC Pre-GAC 9/10/2025	Effluent Effluent 9/10/2025
Volatile Organic Compounds (VOCs)[3]												
1,1,1-Trichloroethane	71-55-6	5	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	**0.68 J**	**0.70 J**	<1.0
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	<25	<25	<5.0	<5.0	<5.0	<25	<25	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	--	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	75-34-3	--	**5.5**	**5.5**	**4.0**	**2.8**	<1.0	**4.7 J**	**4.8 J**	**3.6**	**2.5**	<1.0
1,1-Dichloroethene	75-35-4	5	**5.7**	**5.2**	<1.0	<1.0	<1.0	**3.5 J**	**4.2 J**	<1.0	<1.0	<1.0
1,2-Dichloroethane	107-06-2	--	**3.9 J**	**3.8 J**	**2.3**	**1.4**	<1.0	**3.1 J**	**3.3 J**	**2.1**	**1.0**	<1.0
1,2-Dichloropropane	78-87-5	--	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0
Benzene	71-43-2	--	<2.5	<2.5	<0.50	<0.50	<0.50	<2.5	<2.5	<0.50	<0.50	<0.50
Chloroform	67-66-3	5	**4.3 J**	**3.9 J**	**3.0**	**2.8**	<1.0	**4.2 J**	**4.8 J**	**2.7**	**2.5**	<1.0
cis-1,2-Dichloroethene	156-59-2	5	**248**	**239**	<1.0	<1.0	<1.0	**200**	**203**	<1.0	<1.0	<1.0
Dichloromethane	75-09-2	--	<10	<10	<2.0	<2.0	<2.0	<10	<10	<2.0	<2.0	<2.0
Tetrachloroethene	127-18-4	5	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	156-60-5	5	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0
Trichloroethene	79-01-6	5	**908**	**906**	**0.67 J**	<1.0	<1.0	**650**	**670**	**0.70 J**	<1.0	<1.0
Vinyl chloride	75-01-4	5	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0
Total VOCs[4]			**1,175**	**1,163**	**10.0**	**7.0**	**ND**	**866**	**890**	**9.8**	**6.7**	**ND**
Constituents[2] (units in µg/L)	**Location ID: Sample ID: Sample Date:**		**Influent Influent 8/7/2025**	**Pre-AOP Pre-AOP 8/7/2025**	**Post-AOP Post-AOP 8/7/2025**	**Pre-GAC Pre-GAC 8/7/2025**	**Effluent Effluent 8/7/2025**	**Influent Influent 9/10/2025**	**Pre-AOP Pre-AOP 9/10/2025**	**Post-AOP Post-AOP 9/10/2025**	**Pre-GAC Pre-GAC 9/10/2025**	**Effluent Effluent 9/10/2025**
Semi-Volatile Organic Compounds (VOCs)[3]												
1,4-Dioxane[3]	123-91-1	0.35	**10.2**	**9.07**	<0.30	<0.30	<0.30	**11.1**	**8.54**	<0.30	<0.30	<0.30
Metals[6]												
Iron (Total)	7439-89-6	600	<100	<100	<100	**38.4 J**	<100	--	--	--	--	--
Manganese (Total)	7439-96-5	600	**1.9 J**	**1.8 J**	**2.0 J**	**2.6 J**	**2.9 J**	--	--	--	--	--
Sum of Total Iron and Manganese		1,000	**1.9**	**1.8**	**2.0**	**41.0**	**2.9**	--	--	--	--	--
Anions[7]								--	--	--	--	--
Nitrate/Nitrite	ARC-NO3NO2N	--	--	--	--	--	**2.9**	--	--	--	--	--
Nitrogen	7727-37-9	--	--	--	--	--	**3.1**	--	--	--	--	--
Total Kjeldahl Nitrogen	ARC-TKN	--	--	--	--	--	**0.21**	--	--	--	--	--
Total Organic Carbon	ARC-TOC	--	<1.0	--	<1.0	--	<1.0	--	--	--	--	--
Total Suspended Solids	ARC-TSS	--	--	--	**1.2 J**	<4.0	<4.0	--	--	--	--	--

Notes and abbreviations on last page.

Table 4
Performance Sampling Results
Year 2 Annual[(1)] Reporting Period
RW-21 Area
Northrop Grumman
Bethpage, New York

Notes and Abbreviations:

(1) Reporting period: August 2, 2024 through September 30, 2025.

(2) Results for the program are validated at 20% frequency, per protocols specified in the LTM Groundwater Sampling Plan and OM&M Manual (Arcadis 2023).

(3) VOC samples analyzed using USEPA Method 8260C. 1,4-Dioxane samples analyzed using USEPA Method 8270D-SIM.

(4) TVOC concentrations are rounded to the number of decimal places of the individual VOC with the least numerical precision (decimal place), including whole numbers with no decimal place.

(5) Discharge limits are per the SPDES permit equivalency, dated October 12, 2017, amended on March 23, 2023 and transmitted by the NYSDEC to Northrop Grumman on April 18, 2023.

(6) Samples were analyzed for Metals using USEPA Method 6010D.

(7) Samples were analyzed for Nitrogen, (Nitrate+Nitrite) and Total Kjeldahl Nitrogen (TKN) by USEPA Methods 353.2 and 351.2, respectively. Total Nitrogen is calculated as the sum of Nitrogen, (Nitrate+Nitrite) and TKN concentrations and is rounded to two significant figures.

(8) Samples were not analyzed for VOCs due to an inadvertent field sampling error.

6.0 Bold value indicates a detection
-- Not analyled
< 1.0 Compound is not detected above its laboratory quantification limit
µg/L micrograms per liter
ND Not detected
J Constituent value is estimated
USEPA United States Environmental Protection Agency
VOC Volatile Organic Compound

Table 5
Summary of SPDES Equivalency Effluent Water[1] Sample Analytical Results Year 2 Annual
Outfall 005
RW-21 Area
Northrop Grumman
Bethpage, New York

PARAMETER	Units	Discharge Limit[2]	Location ID: / Sample ID: / Sample Date:	OUTFALL 005[9] OUTFALL 05 8/15/2024	OUTFALL 005 OUTFALL 05 9/5/2024	OUTFALL 005 OUTFALL 05 10/9/2024	OUTFALL 005 OUTFALL 05 11/12/2024	OUTFALL 005 OUTFALL 05 12/10/2024	OUTFALL 005 OUTFALL 05 1/23/2025	OUTFALL 005 OUTFALL 05 2/18/2025
Volatile Organic Compounds (VOCs)[3]										
1,1,1-Trichloroethane (TCA)	µg/L	5		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	µg/L	5		< 0.50	< 0.50	< 1.0	< 2.0	< 1.0	< 2.0	< 2.0
1,1-Dichloroethene (1,1-DCE)	µg/L	5		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0
cis-1,2-dichloroethene	µg/L	5		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0
Chloroform	µg/L	5		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0
Methylene Chloride	µg/L	5		ug	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0
Tetrachloroethene (PCE)	µg/L	5		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0
trans-1,2-dichloroethene	µg/L	5		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0
Trichloroethene (TCE)	µg/L	5		**0.59 J**	**0.49 J**	< 1.0	**0.48 J**	**0.51 J**	**0.44 J**	< 1.0
Vinyl Chloride	µg/L	2		< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TVOCs[4]				**0.59**	**0.49**	ND	**0.48**	**0.51**	**0.44**	ND
Semivolatile Organic Compounds (SVOCs)[5]										
1,4-Dioxane	µg/L	NA / Monitor[9,10]		**2.8**	**3.0**	**2.4**	**4.2**	**3.0**	**2.6**	**3.7**
Metals[6]										
Iron	µg/L	600		**851**	< 100	< 100	< 100	**807**	< 100	< 100
Manganese	µg/L	600		**23.8**	**15.7**	< 15	**17.3**	**79.6**	< 15	< 15
Sum of Total Iron and Manganese	µg/L	1,000		**875**	**15.7**	ND	**17.3**	**887**	ND	ND
Nitrogen[7]										
Nitrogen, (Nitrate+Nitrite)	mg/L	NA		**3.9**	**4.1**	**3.6**	**3.2**	**3.9**	**3.7**	**3.8**
Nitrogen, Total Kjeldahl	mg/L	NA		< 0.20	**0.27**	**0.27**	< 0.20	< 0.20	< 0.20	< 0.20
Total Nitrogen	mg/L	10		**3.9**	**4.4**	**3.9**	**3.2**	**3.9**	**3.7**	**3.8**
pH										
pH - Intake (Building 109)[8]	S.U.	NA		4.5	5.7	5.3	5.0	5.2	5.5	5.5
pH - Outfall 005[9]	S.U.	5.0 - 8.5		6.1	7.2	6.5	6.6	6.3	7.0	6.7

Notes and Abbreviations on last page

Table 5
Summary of SPDES Equivalency Effluent Water[1] Sample Analytical Results Year 2 Annual
Outfall 005
RW-21 Area
Northrop Grumman
Bethpage, New York

PARAMETER	Units	Discharge Limit[2]	OUTFALL 005 OUTFALL 05 3/4/2025	OUTFALL 005 OUTFALL 05 4/9/2025	OUTFALL 005 OUTFALL 05 5/21/2025	OUTFALL 005 OUTFALL 05 6/11/2025	OUTFALL 005 OUTFALL 05 7/9/2025	OUTFALL 005 OUTFALL 05 8/5/2025	OUTFALL 005 OUTFALL 05 9/11/2025
Volatile Organic Compounds (VOCs)[3]									
1,1,1-Trichloroethane (TCA)	µg/L	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	µg/L	5	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,1-Dichloroethene (1,1-DCE)	µg/L	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-dichloroethene	µg/L	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	µg/L	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene Chloride	µg/L	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene (PCE)	µg/L	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-dichloroethene	µg/L	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene (TCE)	µg/L	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/L	2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TVOCs[4]			ND	ND	ND	ND	ND	ND	ND
Semivolatile Organic Compounds (SVOCs)[5]									
1,4-Dioxane	µg/L	NA / Monitor[9,10]	**3.9**	**2.8**	**2.0**	**2.3**	**1.6**	**1.2**	**2.3**
Metals[6]									
Iron	µg/L	600	< 100	< 100	< 100	< 100	< 100	< 100	< 100
Manganese	µg/L	600	< 15	< 15	< 15	< 15	< 15	< 15	< 15
Sum of Total Iron and Manganese	µg/L	1,000	ND	ND	ND	ND	ND	ND	ND
Nitrogen[7]									
Nitrogen, (Nitrate+Nitrite)	mg/L	NA	**3.8**	**3.5**	**3.6**	**3.8**	**3.6**	**3.5**	**3.9**
Nitrogen, Total Kjeldahl	mg/L	NA	< 0.20	**0.42**	< 0.14	**0.22**	< 0.20	< 0.20	< 0.20
Total Nitrogen	mg/L	10	**3.8**	**3.9**	**3.6**	**4.0**	**3.6**	**3.5**	**3.9**
pH									
pH - Intake (Building 109)[8]	S.U.	NA	5.6	6.3	6.3	5.3	4.9	4.9	5.1
pH - Outfall 005[9]	S.U.	5.0 - 8.5	6.5	6.0	6.0	6.3	5.9	6.2	6.0

Notes and Abbreviations on last page

Table 5
Summary of SPDES Equivalency Effluent Water[1] Sample Analytical Results Year 2 Annual
Outfall 005
RW-21 Area
Northrop Grumman
Bethpage, New York

Notes and Abbreviations:

[1] SPDES effluent water samples are collected at a point closest to the respective Outfalls to each of the recharge basins, not directly from the treatment system tower effluent ports unless otherwise noted.

[2] Discharge limits are per the SPDES permit equivalency, dated October 12, 2017, amended on March 23, 2023 and transmitted by the NYSDEC to Northrop Grumman on April 18, 2023.

[3] Samples were analyzed for permit specified VOCs using USEPA Method 624.

[4] TVOC concentrations are rounded to the number of decimal places of the individual VOC with the least precision (decimal places), including whole numbers with no decimal place.

[5] Samples were analyzed for 1,4-dioxane using USEPA Method 8270D-SIM.

[6] Samples were analyzed for iron and manganese using USEPA Method 200.7

[7] Samples were analyzed for Nitrogen, (Nitrate+Nitrite) and Total Kjeldahl Nitrogen (TKN) by USEPA Methods 353.2 and 351.2, respectively. Total Nitrogen is calculated as the sum of Nitrogen, (Nitrate+Nitrite) and TKN concentrations and is rounded to two significant figures.

[8] Influent pH based on flow weighted average of applicable individual well pH levels.

[9] Outfall 005 combines discharge from Building 109 AOP treatment system and Tower 102 (aka "Building 102") packed tower treatment systems; however, Tower 102 has not yet been upgraded for 1,4-D treatment. Although sample Outfall 005-T102 is included on the COC for the SPDES sampling report, analytical results have not been included in this report since this sample was collected for internal monitoring and analytical data associated with Outfall 005-T102 which will be included in a separate EDD submittal.

[10] Amended April 18, 2023 NYSDEC SPDES equivalency letter foortote (2) provides that interim 1,4-D effluent limitation shall be "Monitor" until the completion of the upgrade for the [Building 102] treatment system. Final 1,4-D effluent limitation shall be 0.35 ug/L.

--	Not Analyzed
5.2	Bolded value indicates a detection
< 1.0	Compound not detected above its laboratory quantification limit
µg/L	micrograms per liter
mg/L	milligrams per liter
J	Constituent value is estimated
DUP	Field Duplicate Sample
NA	Not Applicable
ND	Not Detected
ONCT	On-Site Containment and Treatment
SPDES	State Pollution Discharge Elimination System
S.U.	Standard Units
SVOCs	Semivolatile Organic Compounds
USEPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds

Table 6
Depth to Groundwater Measurements and Calculated Groundwater Elevations
2024 Quarter 3
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Well Identification	Measuring Point Elevation ft (NAVD 88)	Depth to Groundwater (ft bmp)	Groundwater-Level Elevation ft (NAVD 88)	Depth to Top of Screen (ft bls)	Depth to Bottom of Screen (ft bls)
Zone 1 Wells (0 to 300 Feet Below Land Surface)					
MW-109-3	111.92	42.19	69.73	233	243
Zone 2 Wells (300 to 500 Feet Below Land Surface)					
MW-111-4	103.38	39.83	63.55	448	468
RW-21 MW-4	102.31	43.07	59.24	369	384
RW-21 MW-5-1	96.84	36.64	60.20	300	310
RW-21 MW-8	98.51	42.36	56.15	460	470
RW-21 MW-12-1	74.69	19.62	55.07	415	425
Zone 3 Wells (500 to 700 Feet Below Land Surface)					
MW-116-5	93.58	40.81	52.77	570	590
RW-21 MW-1	101.29	39.21	62.08	615	625
RW-21 MW-2	96.28	48.21	48.07	600	610
RW-21 MW-3-1	97.37	48.65	48.72	556	566
RW-21 MW-3-2	97.53	49.05	48.48	595	605
RW-21 MW-5-2	96.84	40.31	56.53	560	570
RW-21 MW-6	94.02	39.18	54.84	604	624
RW-21 MW-7	96.57	42.39	54.18	580	590
RW-21 MW-9	91.60	39.51	52.09	630	640
RW-21 MW-11	94.35	46.17	48.18	638	648
RW-21 MW-12-2	74.69	19.28	55.41	590	600
RW-21 MW-14	85.26	42.81	42.45	630	640
RW-21 MW-15	92.20	44.62	47.58	676	686
RW-21 MW-16	89.46	42.44	47.02	636	646
RW-20	88.43	80.70	7.73	600	650
RW-21	91.12	80.50	10.62	531	626
RW-22	84.93	59.10	25.83	598	715
Zone 4 Wells (Greater Than 700 Feet Below Land Surface)					
MW-117-5	94.80	42.34	52.46	737	757
MW-118-5	85.53	33.44	52.09	718	738
RW-21 MW-13	87.48	38.79	48.69	716	726

Notes and Abbreviations:

Water level data was collected by Arcadis on September 10, 2024.

ft bmp feet below measuring point

ft (NAVD 88) feet relative to North American Vertical Datum 1988.

ft bls feet below land surface

Table 7
Depth to Groundwater Measurements and Calculated Groundwater Elevations
2024 Quarter 4
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Well Identification	Measuring Point Elevation ft (NAVD 88)	Depth to Groundwater (ft bmp)	Groundwater-Level Elevation ft (NAVD 88)	Depth to Top of Screen (ft bls)	Depth to Bottom of Screen (ft bls)
Zone 1 Wells (0 to 300 Feet Below Land Surface)					
MW-109-3	111.92	43.55	68.37	233	243
Zone 2 Wells (300 to 500 Feet Below Land Surface)					
MW-111-4	103.38	42	61.38	448	468
RW-21 MW-4	102.31	42.97	59.34	369	384
RW-21 MW-5-1	96.84	37.95	58.89	300	310
RW-21 MW-8	98.51	43.29	55.22	460	470
RW-21 MW-12-1	74.69	20.36	54.33	415	425
Zone 3 Wells (500 to 700 Feet Below Land Surface)					
MW-116-5	93.58	41.31	52.27	570	590
RW-21 MW-1	101.29	43.98	57.31	615	625
RW-21 MW-2	96.28	40.15	56.13	600	610
RW-21 MW-3-1	97.37	49.78	47.59	556	566
RW-21 MW-3-2	97.53	50.22	47.31	595	605
RW-21 MW-5-2	96.84	41.72	55.12	560	570
RW-21 MW-6	94.02	40.4	53.62	604	624
RW-21 MW-7	96.57	43.31	53.26	580	590
RW-21 MW-9	91.60	41.03	50.57	630	640
RW-21 MW-11	94.35	47.04	47.31	638	648
RW-21 MW-12-2	74.69	21.41	53.28	590	600
RW-21 MW-14	85.26	35.18	50.08	630	640
RW-21 MW-15	92.20	44.31	47.89	676	686
RW-21 MW-16	89.46	42.01	47.45	636	646
RW-20	94.08	81.6	12.48	600	650
RW-21	97.56	81.9	15.66	531	626
RW-22	90.47	58.2	32.27	598	715
Zone 4 Wells (Greater Than 700 Feet Below Land Surface)					
MW-117-5	94.80	42.99	51.81	737	757
MW-118-5	85.53	35.51	50.02	718	738
RW-21 MW-13	87.48	38.85	48.63	716	726

Notes and Abbreviations:

Water level data was collected by Arcadis on November 19, 2024.

ft bmp feet below measuring point

ft (NAVD 88) feet relative to North American Vertical Datum 1988.

ft bls feet below land surface

Table 8
Depth to Groundwater Measurements and Calculated Groundwater Elevations
2025 Quarter 1
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Well Identification	Measuring Point Elevation ft (NAVD 88)	Depth to Groundwater (ft bmp)	Groundwater-Level Elevation ft (NAVD 88)	Depth to Top of Screen (ft bls)	Depth to Bottom of Screen (ft bls)
Zone 1 Wells (0 to 300 Feet Below Land Surface)					
MW-109-3	111.92	44.35	67.57	233	243
Zone 2 Wells (300 to 500 Feet Below Land Surface)					
MW-111-4	103.38	41.66	61.72	448	468
RW-21 MW-4	102.31	43.32	58.99	369	384
RW-21 MW-5-1	96.84	38.71	58.13	300	310
RW-21 MW-8	98.51	43.11	55.40	460	470
RW-21 MW-12-1	74.69	19.95	54.74	415	425
Zone 3 Wells (500 to 700 Feet Below Land Surface)					
MW-116-5	93.58	38.38	55.20	570	590
RW-21 MW-1	101.29	44.05	57.24	615	625
RW-21 MW-2	96.28	40.42	55.86	600	610
RW-21 MW-3-1	97.37	50.13	47.24	556	566
RW-21 MW-3-2	97.53	50.60	46.93	595	605
RW-21 MW-5-2	96.84	41.15	55.69	560	570
RW-21 MW-6	94.02	40.39	53.63	604	624
RW-21 MW-7	96.57	43.77	52.80	580	590
RW-21 MW-9	91.60	40.40	51.20	630	640
RW-21 MW-11	94.35	46.36	47.99	638	648
RW-21 MW-12-2	74.69	11.49	63.20	590	600
RW-21 MW-14	85.26	35.10	50.16	630	640
RW-21 MW-15	92.20	40.57	51.63	676	686
RW-21 MW-16	89.46	37.90	51.56	636	646
RW-20	94.08	80.50	13.58	600	650
RW-21	97.56	80.30	17.26	531	626
RW-22	90.47	53.50	36.97	598	715
Zone 4 Wells (Greater Than 700 Feet Below Land Surface)					
MW-117-5	94.80	40.10	54.70	737	757
MW-118-5	85.53	34.49	51.04	718	738
RW-21 MW-13	87.48	37.43	50.05	716	726

Notes and Abbreviations:

Water level data was collected by Arcadis on February 17 and 18, 2025.

ft bmp feet below measuring point

ft (NAVD 88) feet relative to North American Vertical Datum 1988.

ft bls feet below land surface

Table 9
Depth to Groundwater Measurements and Calculated Groundwater Elevations
2025 Quarter 2
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Well Identification	Measuring Point Elevation ft (NAVD 88)	Depth to Groundwater (ft bmp)	Groundwater-Level Elevation ft (NAVD 88)	Depth to Top of Screen (ft bls)	Depth to Bottom of Screen (ft bls)
Zone 1 Wells (0 to 300 Feet Below Land Surface)					
MW-109-3	111.92	44.75	67.17	233	243
Zone 2 Wells (300 to 500 Feet Below Land Surface)					
MW-111-4	103.38	41.85	61.53	448	468
RW-21 MW-4	102.31	43.59	58.72	369	384
RW-21 MW-5-1	96.84	39.20	57.64	300	310
RW-21 MW-8	98.51	43.76	54.75	460	470
RW-21 MW-12-1	74.69	20.12	54.57	415	425
Zone 3 Wells (500 to 700 Feet Below Land Surface)					
MW-116-5	93.58	41.46	52.12	570	590
RW-20	94.08	82.52	11.56	600	650
RW-21	97.56	81.95	15.61	531	626
RW-21 MW-1	101.29	44.85	56.44	615	625
RW-21 MW-2	96.28	40.85	55.43	600	610
RW-21 MW-3-1	97.37	50.22	47.15	556	566
RW-21 MW-3-2	97.53	50.76	46.77	595	605
RW-21 MW-5-2	96.84	42.26	54.58	560	570
RW-21 MW-6	94.02	40.85	53.17	604	624
RW-21 MW-7	96.57	43.94	52.63	580	590
RW-21 MW-9	91.60	41.06	50.54	630	640
RW-21 MW-11	94.35	47.55	46.80	638	648
RW-21 MW-12-2	74.69	20.98	53.71	590	600
RW-21 MW-14	85.26	35.49	49.77	630	640
RW-21 MW-15	92.20	43.16	49.04	676	686
RW-21 MW-16	89.46	41.95	47.51	636	646
RW-20	94.08	82.52	11.56	600	650
RW-21	97.56	81.95	15.61	531	626
RW-22	90.47	56.48	33.99	598	715
Zone 4 Wells (Greater Than 700 Feet Below Land Surface)					
MW-117-5	94.80	40.77	54.03	737	757
MW-118-5	85.53	36.15	49.38	718	738
RW-21 MW-13	87.48	42.40	45.08	716	726

Notes and Abbreviations:

Water level data was collected by Arcadis on April 22, 2025.

ft bmp feet below measuring point

ft (NAVD 88) feet relative to North American Vertical Datum 1988.

ft bls feet below land surface

Table 10
Depth to Groundwater Measurements and Calculated Groundwater Elevations
2025 Quarter 3
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Well Identification	Measuring Point Elevation ft (NAVD 88)	Depth to Groundwater (ft bmp)	Groundwater-Level Elevation ft (NAVD 88)	Depth to Top of Screen (ft bls)	Depth to Bottom of Screen (ft bls)
Zone 1 Wells (0 to 300 Feet Below Land Surface)					
MW-109-3	111.92	47.37	64.55	233	243
Zone 2 Wells (300 to 500 Feet Below Land Surface)					
MW-111-4	103.38	44.92	58.46	448	468
RW-21 MW-4	102.31	46.92	55.39	369	384
RW-21 MW-5-1	96.84	41.89	54.95	300	310
RW-21 MW-8	98.51	47.36	51.15	460	470
RW-21 MW-12-1	74.69	24.34	50.35	415	425
Zone 3 Wells (500 to 700 Feet Below Land Surface)					
MW-116-5	93.58	45.34	48.24	570	590
RW-21 MW-1	101.29	47.22	54.07	615	625
RW-21 MW-2	96.28	44.41	51.87	600	610
RW-21 MW-3-1	97.37	54.06	43.31	556	566
RW-21 MW-3-2	97.53	54.64	42.89	595	605
RW-21 MW-5-2	96.84	45.99	50.85	560	570
RW-21 MW-6	94.02	44.88	49.14	604	624
RW-21 MW-7	96.57	47.81	48.76	580	590
RW-21 MW-9	91.60	45.44	46.16	630	640
RW-21 MW-11	94.35	51.68	42.67	638	648
RW-21 MW-12-2	74.69	25.57	49.12	590	600
RW-21 MW-14	85.26	40.37	44.89	630	640
RW-21 MW-15	92.20	50.05	42.15	676	686
RW-21 MW-16	89.46	47.58	41.88	636	646
RW-20	94.08	86.50	7.58	600	650
RW-21	97.56	86.10	11.46	531	626
RW-22	90.47	64.02	26.45	598	715
Zone 4 Wells (Greater Than 700 Feet Below Land Surface)					
MW-117-5	94.80	47.79	47.01	737	757
MW-118-5	85.53	41.55	43.98	718	738
RW-21 MW-13	87.48	47.52	39.96	716	726

Notes and Abbreviations:

Water level data was collected by Arcadis on September 9, 2025.

ft bmp feet below measuring point

ft (NAVD 88) feet relative to North American Vertical Datum 1988.

ft bls feet below land surface

Table 11
Comparison of Second Quarter 2025
Field Measured Vertical Hydraulic Gradients to
Model-Predicted Gradients
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Well Pair ID	Measuring Point Elevation (ft NAVD 88)	Well Screen Midpoint Elevation (ft NAVD 88)	Groundwater-Level Elevation (ft NAVD 88)	Field-Measured Vertical Gradient [1] (ft/ft) x 10-3	Model-Predicted, Steady-State Vertical Gradient (ft/ft) x 10-3	Difference Between Field Measured and Model Predicted Gradients [2]
RW-21_MW-3-1	97.37	-463.63	47.15	9.78	271.36	-261.58
RW-21_MW-3-2	97.53	-502.47	46.77			
RW-21_MW-5-1	96.84	-208.16	57.64	11.77	16.42	-4.65
RW-21_MW-5-2	96.84	-468.16	54.58			
RW-21_MW-12-1	74.69	-345.31	54.57	4.91	16.35	-11.44
RW-21_MW-12-2	74.69	-520.31	53.71			

Notes and Abbreviations:

(1) Vertical hydraulic gradients are calculated as follows:

$$\frac{(\text{Groundwater-Level Elevation}_1 - \text{Groundwater-Level Elevation}_2)}{(\text{Screen Midpoint Elevation}_1 - \text{Screen Midpoint Elevation}_2)}$$

$_1$ - Shallower well of pairing

$_2$ - Deeper well of pairing

Positive gradient value indicates a downward hydraulic gradient.

(2) Negative value indicates a smaller downward gradient compared to model predicted gradient.

ft (NAVD 88) Feet relative to North American Vertical Datum 1988.

Water level elevation data was collected by Arcadis on April 22, 2025.

Table 12
Percent Change in Total Volatile Organic Compounds Over Time from Baseline Sampling Values in Monitoring and Remedial Wells
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Monitoring Well ID	Baseline Sampling TVOC Concentration [1]		Current TVOC Concentration (2025 Q3)[1]		Percent Change From Baseline Sampling TVOC Concentration
	Date	µg/L	Date	µg/L	
RW-21 MW-1	3/31/2022	4,030	9/18/2025	1,922	-52%
RW-21 MW-2	3/31/2022	1,280	9/8/2025	4,281	234%
RW-21 MW-3-1	3/30/2022	11,292	9/8/2025	1,141	-90%
RW-21 MW-3-2	3/30/2022	6,592	9/8/2025	72.8	-99%
RW-21 MW-4	3/25/2022	238	9/5/2025	90.6	-62%
RW-21 MW-5-1	3/24/2022	100.5	9/19/2025	56.3	-44%
RW-21 MW-5-2	3/21/2022	30.2	9/19/2025	30.2	No Change
RW-21 MW-6	3/18/2022	4,216	9/15/2025	336	-92%
RW-21 MW-7	3/18/2022	7,341	9/18/2025	2,189	-70%
RW-21 MW-8	3/25/2022	605	9/17/2025	270	-55%
RW-21 MW-9	3/28/2022	1,111	9/16/2025	1,806	63%
RW-21 MW-11	3/28/2022	5,352	9/16/2025	2,016	-62%
RW-21 MW-12-1 [2]	5/5/2022	86.1	6/18/2025	73.0	-15%
RW-21 MW-12-2 [2]	5/5/2022	0.0	6/18/2025	0.0	No Change
RW-21 MW-13	3/22/2022	323	9/4/2025	174	-46%
RW-21 MW-14	3/23/2022	54.1	9/17/2025	39.8	-26%
RW-21 MW-15	3/22/2022	2,899	9/4/2025	927	-68%
RW-21 MW-16	3/23/2022	1,507	9/5/2025	212	-86%
MW-109-3	3/17/2022	466	9/15/2025	320	-31%
MW-111-4	3/17/2022	1,398	9/19/2025	557	-60%
MW-116-5	3/16/2022	6,889	9/9/2025	1,416	-79%
MW-117-5	3/29/2022	18.2	9/11/2025	18.0	-1%
MW-118-5	8/9/2022	177.48	9/10/2025	232	31%
Remedial Well ID					
RW-20	3/31/2022	3,434	9/10/2025	1,213.0	-65%
RW-21	4/4/2022	8,512	9/10/2025	1,129.0	-87%
RW-22	6/19/2018	554.27 [3]	9/10/2025	481.00	-13%

Notes and Abbreviations:

Yellow color indicates % increase from Baseline Sampling Event.

Green color indicates % decrease from Baseline Sampling Event.

No color indicates no change from Baseline Sampling Event.

TVOC Total Volatile Organic Compounds

[1] TVOC concentrations are rounded to the number of decimal places of the individual VOC with the least precision (decimal places), including whole numbers with no decimal place.

[2] TVOC concentration from 2025 Q2 sampling event; TVOC data from 2025 Q3 sampling event is not available due to laboratory error.

[3] TVOC data provided is closest available data to the baseline sampling event prior to RW-22 start-up.

Table 13
Percent Decrease in Total Volatile Organic Compounds Over Time from Historical High Values in Monitoring and Remedial Wells
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Monitoring Well ID	Historical High TVOC Concentration [1]		Current TVOC Concentration (2025 Q3)[1]		Percent Decrease From Historical High TVOC Concentration
	Date	µg/L	Date	µg/L	
RW-21 MW-1	12/6/2023	4,685	9/18/2025	1,922	-59%
RW-21 MW-2	2/21/2025	5,459	9/8/2025	4,281	-22%
RW-21 MW-3-1	5/7/2015	14,707	9/8/2025	1,141	-92%
RW-21 MW-3-2	12/7/2016	7,005	9/8/2025	72.8	-99%
RW-21 MW-4	1/9/2015	973	9/5/2025	90.6	-91%
RW-21 MW-5-1	3/24/2022	100.5	9/19/2025	56.3	-44%
RW-21 MW-5-2	12/14/2016	38.5	9/19/2025	30.2	-22%
RW-21 MW-6	3/18/2022	4,216	9/15/2025	336	-92%
RW-21 MW-7	12/13/2016	8,652	9/18/2025	2,189	-75%
RW-21 MW-8	12/2/2015	942	9/17/2025	270	-71%
RW-21 MW-9	3/4/2025	2,343	9/16/2025	1,806	-23%
RW-21 MW-11	3/28/2022	5,352	9/16/2025	2,016	-62%
RW-21 MW-12-1 [2]	12/14/2015	136	6/18/2025	73.0	-46%
RW-21 MW-12-2 [2]	12/8/2016	0.5	6/18/2025	0.0	-100%
RW-21 MW-13	8/31/2023	609	9/4/2025	174	-71%
RW-21 MW-14	10/26/2016	982	9/17/2025	39.8	-96%
RW-21 MW-15	3/22/2022	2,899	9/4/2025	927	-68%
RW-21 MW-16	5/25/2023	1,551	9/5/2025	212	-86%
MW-109-3	4/14/2009	3,458	9/15/2025	320	-91%
MW-111-4	5/6/2008	10,300	9/19/2025	557	-95%
MW-116-5	2/9/2022	7,536	9/9/2025	1,416	-81%
MW-117-5	12/14/2023	34.3	9/11/2025	18.0	-47%
MW-118-5	6/11/2025	466	9/10/2025	232	-50%
Remedial Well ID					
RW-20	8/25/2023	3,515	9/10/2025	1,213.0	-65%
RW-21	8/29/2017	8,599	9/10/2025	1,129.0	-87%
RW-22	11/21/2023	1,099	9/10/2025	481.0	-56%

Notes and Abbreviations:

Yellow color indicates % increase from historical high concentration.

Green color indicates % decrease from historical high concentration.

TVOC Total Volatile Organic Compounds

[1] TVOC concentrations are rounded to the number of decimal places of the individual VOC with the least precision (decimal places), including whole numbers with no decimal place.

[2] TVOC concentration from 2025 Q2 sampling event; TVOC data from 2025 Q3 sampling event is not available due to laboratory error.

Table 14
Groundwater Sample Analytical Results
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents (units in ug/L)	CAS RN	Hydrogeologic Zone:	ZONE 1										ZONE 2				
		Location ID:	MW-109-3	MW-109-3	MW-109-3	MW-109-3	MW-109-3	MW-109-3	MW-109-3	MW-109-3	MW-109-3	MW-109-3	MW-111-4	MW-111-4	MW-111-4	MW-111-4	MW-111-4
		Date:	9/12/2024	9/12/2024	11/21/2024	11/21/2024	3/3/2025	3/3/2025	6/16/2025	6/16/2025	9/15/2025	9/15/2025	9/18/2024	12/4/2024	3/6/2025	6/19/2025	9/19/2025
		Sample ID:	MW-109-3_20240912	REP091224PQ1	MW-109-3_20241121	REP112124AH1	MW-109-3	REP030325BM1	MW-109-3	REP061625BM1	MW-109-3_20250915	REP091525SH1	MW-111-4_20240918	MW-111-4_20241204	MW-111-4	MW-111-4	MW-111-4_20250919
VOCs	**CAS RN**	**TOGS 1.1.1 NYSDEC_SCGs**															
1,1,1-Trichloroethane	71-55-6	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	79-34-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0 J
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	<5.0	<5.0	**0.64 J**	<5.0	**0.60 J**	**0.74 J**	<5.0	<5.0	<5.0	<50	**3.5 J**	**2.8 J**	**2.6 J**	**2.1 J**	**1.4 J**
1,1,2-Trichloroethane	79-00-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0
1,1-Dichloroethane	75-34-3	5	**2.3**	**2.3**	**2.1**	**2.0**	**2.0**	**2.0**	**1.9**	**2.0**	**2.1**	**7.5 J**	**4.5**	**3.9**	**3.4 J**	**3.3**	**3.8**
1,1-Dichloroethene	75-35-4	5	**0.70 J**	**0.73 J**	**0.59 J**	**0.66 J**	**0.75 J**	**0.71 J**	**0.76 J**	**0.73 J**	<1.0	**10.0**	**4.1**	**3.0**	**3.1 J**	**1.9**	**2.3**
1,2-Dichloroethane	107-06-2	5	**0.76 J**	**0.76 J**	**0.72 J**	**0.61 J**	**0.75 J**	**0.83 J**	**0.83 J**	**0.74 J**	**0.78 J**	**7.1 J**	**0.62 J**	<1.0	<4.0	<1.0	<1.0
1,2-Dichloropropane	78-87-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0
1,3-Butadiene	106-99-0	NA	<5.0 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<5.0	<5.0 J	<20 J	<5.0	<5.0 J
1-Chloro-1,1-difluoroethane	75-68-3	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<5.0	<5.0	<20	<5.0	<5.0
2-Butanone (MEK)	78-93-3	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<10	<10	<40	<10	<10 J
4-Methyl-2-Pentanone	108-10-1	50	<5.0	<5.0 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<5.0	<5.0	<20	<5.0	<5.0 J
Acetone	67-64-1	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<10	<10	<40	<10	<10 J
Benzene	71-43-2	1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<2.0	<0.50	<0.50
Bromodichloromethane	75-27-4	50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0
Bromoform	75-25-2	50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0
Bromomethane	74-83-9	5	<2.0 J	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<2.0	<2.0	<8.0 J	<2.0	<2.0
Carbon Disulfide	75-15-0	50	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<2.0	<2.0	<8.0	<2.0	<2.0
Carbon Tetrachloride	56-23-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0
CFC-12	75-71-8	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<2.0	<2.0 J	<8.0	<2.0	<2.0
Chlorobenzene	108-90-7	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0
Chlorodibromomethane	124-48-1	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0
Chlorodifluoromethane	75-45-6	NA	**1.1 J**	**1.0 J**	**0.89 J**	**0.87 J**	**1.0 J**	**1.1 J**	**1.2 J**	**0.91 J**	**1.2 J**	<50	**0.99 J**	**1.1 J**	**3.8 J**	**0.62 J**	**0.59 J**
Chloroethane	75-00-3	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0
Chloroform	67-66-3	7	**6.8**	**8.5**	**4.8**	**4.7**	**5.5**	**5.3**	**5.0**	**5.0**	**4.9**	**7.8 J**	**0.87 J**	**0.58 J**	<4.0	**0.53 J**	**0.65 J**
Chloromethane	74-87-3	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0 J	<1.0	<1.0
cis-1,2-Dichloroethene	156-59-2	5	**178**	**172**	**150**	**145**	**166**	**159**	**148**	**147**	**134**	**373**	**625**	**586 D**	**526**	**425**	**481 D**
cis-1,3-Dichloropropene	10061-01-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0
Dichloromethane	75-09-2	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<2.0	<2.0	<8.0	<2.0	<2.0
Ethylbenzene	100-41-4	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0
m&p-Xylenes	ARC-mpXyl	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0
Methyl N-Butyl Ketone (2-Hexanone)	591-78-6	50	<5.0 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<5.0	<5.0	<20	<5.0	<5.0 J
o-Xylene	95-47-6	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0
Styrene (Monomer)	100-42-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0
Tetrachloroethene	127-18-4	5	**1.4**	**1.4**	**1.4**	**1.4**	**1.8**	**1.8**	**1.4**	**1.6**	**1.1**	<10	**3.1**	**2.6**	**2.7 J**	**2.4**	**1.5**
Toluene	108-88-3	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0
trans-1,2-Dichloroethene	156-60-5	5	**1.0**	**0.95 J**	**1.1**	**1.1**	**1.1**	**1.2**	**1.2**	**0.97 J**	**1.8**	<10	**2.0**	**6.0**	**8.0**	**12.1**	**14.2**
trans-1,3-Dichloropropene	10061-02-6	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0
Trichloroethene	79-01-6	5	**174 D**	**184 D**	**188**	**176**	**175**	**186**	**168**	**196**	**174**	**1470**	**105**	**76.8**	**77.6**	**58.0**	**51.9**
Vinyl chloride	75-01-4	2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<4.0	<1.0	<1.0
Total VOCs			**366**	**372**	**350**	**332**	**355**	**359**	**328**	**355**	**320**	**1875**	**750**	**683**	**627**	**506**	**557**
SVOCs SIM																	
1,4-Dioxane	123-91-1	NA	**4.0**	**3.8**	**3.6**	**5.2**	**4.8**	**4.2**	**3.5**	**3.5**	**4.3**	**4.1**	**7.6**	**8.2**	**5.0**	**5.1**	**5.2**
Metals																	
Iron (Total)	7439-89-6	300	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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Table 14
Groundwater Sample Analytical Results
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents (units in ug/L)	CAS RN	Hydrogeologic Zone:	Zone 2											
		Location ID:	RW-21_MW-12-1	RW-21_MW-12-1	RW-21_MW-12-1	RW-21_MW-12-1	RW-21_MW-12-1	RW-21_MW-12-1	RW-21_MW-4	RW-21_MW-4	RW-21_MW-4	RW-21_MW-4	RW-21_MW-4	RW-21_MW-5-1
		Date:	9/26/2024	12/16/2024	3/5/2025	6/18/2025	6/18/2025	9/12/2025	9/12/2024	11/21/2024	2/24/2025	6/9/2025	9/5/2025	9/11/2024
		Sample ID:	RW-21_MW-12-1_20240926	RW-21_MW-12-1_20241216	RW-21_MW-12-1	RW-21_MW-12-1_20250618	RW-21-MW-12-1	RW-21_MW-12-1	RW-21_MW-4_20240912	RW-21_MW-4_20241121	RW-21_MW-4	RW-21_MW-4	RW-21_MW-4	RW-21_MW-5-1_20240911
VOCs	**CAS RN**	**TOGS 1.1.1 NYSDEC_SCGs**												
1,1,1-Trichloroethane	71-55-6	5	**1.1**	**1.1**	**1.4**	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	79-34-5	5	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	<5.0	<5.0	<5.0	<5.0	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	**0.69 J**
1,1,2-Trichloroethane	79-00-5	5	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	75-34-3	5	**4.4**	**4.4**	**4.4**	**4.3**	--	--	**1.0**	**1.0**	**0.91 J**	**0.81 J**	**0.75 J**	<1.0
1,1-Dichloroethene	75-35-4	5	**1.7**	**1.5**	**1.9**	**1.7**	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	107-06-2	5	**0.61 J**	**0.88 J**	**0.92 J**	**0.80 J**	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	78-87-5	5	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Butadiene	106-99-0	NA	<5.0	<5.0	<5.0	<5.0	--	--	<5.0	<5.0	<5.0 J	<5.0 J	<5.0	<5.0
1-Chloro-1,1-difluoroethane	75-68-3	NA	<5.0	<5.0	<5.0	<5.0	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone (MEK)	78-93-3	50	<10	<10	<10	<10	--	--	<10	<10	<10	<10	<10	<10
4-Methyl-2-Pentanone	108-10-1	50	<5.0	<5.0	<5.0	<5.0	--	--	<5.0 J	<5.0	<5.0	<5.0	<5.0	<5.0
Acetone	67-64-1	50	<10	<10	<10	<10	--	--	<10	<10	<10	<10	<10	<10
Benzene	71-43-2	1	<0.50	<0.50	<0.50	<0.50	--	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	75-27-4	50	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	75-25-2	50	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0
Bromomethane	74-83-9	5	<2.0	<2.0	<2.0	<2.0	--	--	<2.0	<2.0	<2.0 J	<2.0	<2.0	<2.0
Carbon Disulfide	75-15-0	50	<2.0	<2.0	<2.0	<2.0	--	--	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon Tetrachloride	56-23-5	5	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CFC-12	75-71-8	5	<2.0	<2.0	<2.0	<2.0	--	--	<2.0	<2.0	<2.0	<2.0	<2.0 J	<2.0
Chlorobenzene	108-90-7	5	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorodibromomethane	124-48-1	5	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorodifluoromethane	75-45-6	NA	<5.0	<5.0	<5.0	<5.0	--	--	<5.0	<5.0	<5.0 J	<5.0	<5.0	<5.0
Chloroethane	75-00-3	5	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	67-66-3	7	<1.0	**0.53 J**	**0.56 J**	**0.52 J**	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	74-87-3	5	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	156-59-2	5	**7.8**	**8.2**	**9.4**	**8.5**	--	--	**40.7**	**42.2**	**38.5**	**34.8**	**32.2**	**0.67 J**
cis-1,3-Dichloropropene	10061-01-5	5	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dichloromethane	75-09-2	5	<2.0	<2.0	<2.0	<2.0	--	--	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	100-41-4	5	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m&p-Xylenes	ARC-mpXyl	5	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl N-Butyl Ketone (2-Hexanone)	591-78-6	50	<5.0	<5.0	<5.0	<5.0	--	--	<5.0	<5.0	<5.0	<5.0	<5.0 J	<5.0
o-Xylene	95-47-6	5	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene (Monomer)	100-42-5	5	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	127-18-4	5	<1.0	<1.0	<1.0	<1.0	--	--	**1.1**	**0.89 J**	**0.95 J**	**0.89 J**	**0.81 J**	**0.77 J**
Toluene	108-88-3	5	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	156-60-5	5	<1.0	<1.0	<1.0	<1.0	--	--	**0.55 J**	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	10061-02-6	5	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	79-01-6	5	**58.4**	**59.9**	**69.1**	**57.2**	--	--	**70.6**	**71.6**	**74.9**	**63.5**	**56.8**	**35.2**
Vinyl chloride	75-01-4	2	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total VOCs			**74**	**77**	**88**	**73**	0	0	**114.0**	**115.7**	**115.3**	**100.0**	**90.6**	**37.3**
SVOCs SIM														
1,4-Dioxane	123-91-1	NA	**2.1**	**2.6**	**2.0**	--	**1.8**	**1.9**	**1.2**	**1.3**	<0.24	**0.79**	**0.59**	**5.9**
Metals														
Iron (Total)	7439-89-6	300	--	--	--	--	--	--	--	--	--	--	--	--

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Table 14
Groundwater Sample Analytical Results
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents (units in ug/L)	CAS RN	Hydrogeologic Zone:	ZONE 2									ZONE 3			
		Location ID:	RW-21_MW-5-1	RW-21_MW-5-1	RW-21_MW-5-1	RW-21_MW-5-1	RW-21_MW-8	RW-21_MW-8	RW-21_MW-8	RW-21_MW-8	RW-21_MW-8	RW-21_MW-7	MW-116-5	MW-116-5	MW-116-5
		Date:	11/22/2024	3/7/2025	6/10/2025	9/19/2025	9/18/2024	12/3/2024	2/24/2025	6/4/2025	9/17/2025	9/18/2025	9/13/2024	11/22/2024	2/25/2025
		Sample ID:	RW-21_MW-5-1_20241122	RW-21_MW-5-1	RW-21_MW-5-1	RW-21_MW-5-1_20250919	RW21_MW-8_20240918	RW-21_MW-8_20241203	RW-21_MW-8	RW-21_MW-8	RW-21_MW-8	RW-21_MW-7	MW-116-5_20240913	MW-116-5_20241122	MW-116-5
VOCs	**CAS RN**	**TOGS 1.1.1 NYSDEC_SCGs**													
1,1,1-Trichloroethane	71-55-6	5	<1.0	<1.0	<1.0	<1.0	**0.59 J**	**0.66 J**	<1.0	<1.0	<1.0	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	79-34-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	**0.95 J**	**1.8 J**	**1.1 J**	**0.76 J**	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50	<50	<50
1,1,2-Trichloroethane	79-00-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
1,1-Dichloroethane	75-34-3	5	<1.0	<1.0	<1.0	<1.0	**5.5**	**4.9**	**3.0**	**2.1**	**3.2**	**9.3 J**	**15.6**	**11.1**	**7.4 J**
1,1-Dichloroethene	75-35-4	5	<1.0	<1.0	<1.0	<1.0	**3.5**	**3.5**	**2.0**	**1.4**	**1.8**	**11.7**	**20.1**	**15.6**	**9.7 J**
1,2-Dichloroethane	107-06-2	5	<1.0	<1.0	<1.0	<1.0	**1.6**	**1.4**	**0.93 J**	<1.0	**0.81 J**	**7.7 J**	**18.6**	**13.8**	**10.1**
1,2-Dichloropropane	78-87-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
1,3-Butadiene	106-99-0	NA	<5.0 J	<5.0	<5.0	<5.0 J	<5.0	<5.0	<5.0 J	<5.0	<5.0	<50	<50	<50	<50
1-Chloro-1,1-difluoroethane	75-68-3	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50	<50	<50
2-Butanone (MEK)	78-93-3	50	<10 J	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100
4-Methyl-2-Pentanone	108-10-1	50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50	<50	<50
Acetone	67-64-1	50	<10 J	<10	<10	<10	<10	<10	<10	<10	<10	<100	<100	<100 J	<100
Benzene	71-43-2	1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
Bromoform	75-25-2	50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
Bromomethane	74-83-9	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0 J	<2.0	<2.0	<20	<20	<20	<20
Carbon Disulfide	75-15-0	50	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<20
Carbon Tetrachloride	56-23-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
CFC-12	75-71-8	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<20
Chlorobenzene	108-90-7	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
Chlorodibromomethane	124-48-1	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
Chlorodifluoromethane	75-45-6	NA	<5.0	<5.0	<5.0	<5.0 J	<5.0	<5.0	<5.0 J	<5.0	<5.0	<50	<50	<50	<50
Chloroethane	75-00-3	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
Chloroform	67-66-3	7	<1.0	<1.0	<1.0	<1.0	**1.3**	**1.3**	**0.88 J**	**0.56 J**	**0.78 J**	**8.6 J**	**17.5**	**8.8 J**	**5.3 J**
Chloromethane	74-87-3	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
cis-1,2-Dichloroethene	156-59-2	5	**0.94 J**	**0.83 J**	**0.64 J**	**1.1**	**159**	**160**	**97.9**	**66.7**	**98.8**	**569**	**699**	**531**	**384**
cis-1,3-Dichloropropene	10061-01-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
Dichloromethane	75-09-2	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<20
Ethylbenzene	100-41-4	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
m&p-Xylenes	ARC-mpXyl	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
Methyl N-Butyl Ketone (2-Hexanone)	591-78-6	50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50	<50	<50
o-Xylene	95-47-6	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
Styrene (Monomer)	100-42-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
Tetrachloroethene	127-18-4	5	**0.83 J**	**1.2**	**1.1**	**0.84 J**	<1.0	**0.65 J**	<1.0	<1.0	<1.0	**6.1 J**	**8.1 J**	**5.8 J**	<10
Toluene	108-88-3	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
trans-1,2-Dichloroethene	156-60-5	5	<1.0	<1.0	<1.0	<1.0	**0.95 J**	**1.6**	**0.93 J**	**0.62 J**	**0.78 J**	**6.8 J**	<10	<10	**7.7 J**
trans-1,3-Dichloropropene	10061-02-6	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
Trichloroethene	79-01-6	5	**38.0**	**65.9**	**56.7**	**53.6**	**194**	**275**	**185**	**127**	**164**	**1570**	**2520**	**2260 D**	**1750**
Vinyl chloride	75-01-4	2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<10
Total VOCs			**40.7**	**69.7**	**59.5**	**56.3**	**366**	**449**	**291**	**198**	**270**	**2189**	**3299**	**2846**	**2174**
SVOCs SIM															
1,4-Dioxane	123-91-1	NA	**6.7**	**6.1**	**7.9**	**6.8**	**7.8**	**10**	**5.4**	**2.9**	**5.4**	**23**	**53**	**48 J**	**40 M**
Metals															
Iron (Total)	7439-89-6	300	--	--	--	--	--	--	--	--	--	--	--	--	--

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Table 14
Groundwater Sample Analytical Results
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents (units in ug/L)	CAS RN	Hydrogeologic Zone:	ZONE 3											
		Location ID:	MW-116-5	MW-116-5	RW-21_MW-1	RW-21_MW-1	RW-21_MW-1	RW-21_MW-1	RW-21_MW-1	RW-21_MW-11	RW-21_MW-11	RW-21_MW-11	RW-21_MW-11	RW-21_MW-11
		Date:	6/13/2025	9/9/2025	9/16/2024	11/20/2024	3/7/2025	6/20/2025	9/18/2025	9/17/2024	11/26/2024	3/4/2025	6/17/2025	9/16/2025
		Sample ID:	MW-116-5	MW-116-5	RW-21_MW-1_20240916	RW-21_MW-1_20241120	RW-21_MW-1	RW-21_MW-1_20250620	RW-21_MW-1	RW-21_MW-11_20240917	RW-21_MW-11_20241126	RW-21_MW-11	RW-21_MW-11	RW-21_MW-11
VOCs	**CAS RN**	**TOGS 1.1.1 NYSDEC_SCGs**												
1,1,1-Trichloroethane	71-55-6	5	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	5	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	<50	<25	<100	<100	<50	<50	<50	<50	<50	<13	<25	<25
1,1,2-Trichloroethane	79-00-5	5	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
1,1-Dichloroethane	75-34-3	5	**8.0 J**	**7.6**	<20	<20	**7.1 J**	<10	<10	<10	<10	**1.8 J**	<5.0	**6.1**
1,1-Dichloroethene	75-35-4	5	**8.4 J**	**5.8**	**12.6 J**	**12.3 J**	**11.2**	**6.6 J**	**6.4 J**	<10	<10	**1.7 J**	<5.0	**5.2**
1,2-Dichloroethane	107-06-2	5	**8.9 J**	**7.6**	<20	<20	<10	<10	<10	**6.9 J**	**7.0 J**	**2.9**	**4.2 J**	**7.7**
1,2-Dichloropropane	78-87-5	5	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
1,3-Butadiene	106-99-0	NA	<50 J	<25	<100	<100	<50	<50	<50	<50	<50 J	<13	<25	<25
1-Chloro-1,1-difluoroethane	75-68-3	NA	<50	<25	<100	<100	<50	<50	<50	<50	<50	<13	<25	<25
2-Butanone (MEK)	78-93-3	50	<100	<50	<200	<200	<100	<100	<100	<100	<100 J	<25	<50	<50
4-Methyl-2-Pentanone	108-10-1	50	<50	<25	<100	<100	<50	<50	<50	<50	<50	<13	<25	<25
Acetone	67-64-1	50	<100	<50	<200	<200	<100	<100	<100	<100	<100 J	<25	<50	<50
Benzene	71-43-2	1	<5.0	<2.5	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<1.3	<2.5	<2.5
Bromodichloromethane	75-27-4	50	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
Bromoform	75-25-2	50	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
Bromomethane	74-83-9	5	<20	<10	<40	<40	<20	<20	<20	<20	<20	<5.0	<10	<10
Carbon Disulfide	75-15-0	50	<20	<10	<40	<40	<20	<20	<20	<20	<20	<5.0	<10	<10
Carbon Tetrachloride	56-23-5	5	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
CFC-12	75-71-8	5	<20	<10	<40	<40	<20	<20	<20	<20	<20	<5.0	<10	<10
Chlorobenzene	108-90-7	5	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
Chlorodibromomethane	124-48-1	5	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
Chlorodifluoromethane	75-45-6	NA	<50	<25	<100	<100	<50	<50	<50	<50	<50	<13	<25	<25
Chloroethane	75-00-3	5	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
Chloroform	67-66-3	7	**7.0 J**	**6.1**	<20	<20	<10	<10	<10	<10	**7.3 J**	**2.7**	**4.0 J**	**8.2**
Chloromethane	74-87-3	5	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	5	**343**	**260**	**340**	**281**	**233**	**148**	**139**	**177**	**227**	**89.9**	**120**	**289**
cis-1,3-Dichloropropene	10061-01-5	5	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
Dichloromethane	75-09-2	5	<20	<10	<40	<40	<20	<20	<20	<20	<20	<5.0	<10	<10
Ethylbenzene	100-41-4	5	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
m&p-Xylenes	ARC-mpXyl	5	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
Methyl N-Butyl Ketone (2-Hexanone)	591-78-6	50	<50	<25	<100	<100	<50	<50	<50	<50	<50	<13	<25	<25
o-Xylene	95-47-6	5	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
Styrene (Monomer)	100-42-5	5	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
Tetrachloroethene	127-18-4	5	<10	<5.0	<20	<20	**7.4 J**	<10	**6.9 J**	<10	<10	<2.5	<5.0	<5.0
Toluene	108-88-3	5	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	5	<10	**8.6**	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	5	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
Trichloroethene	79-01-6	5	**1570**	**1120**	**3130**	**2720**	**2440**	**1840**	**1770**	**1440**	**1420**	**951**	**882**	**1700**
Vinyl chloride	75-01-4	2	<10	<5.0	<20	<20	<10	<10	<10	<10	<10	<2.5	<5.0	<5.0
Total VOCs			**1945**	**1416**	**3483**	**3013**	**2699**	**1995**	**1922**	**1624**	**1661**	**1050**	**1010**	**2016**
SVOCs SIM														
1,4-Dioxane	123-91-1	NA	**20 J**	**33 MM**	**36**	**39**	**33**	**26**	**26**	**23**	**25 J**	**12**	**15**	**25**
Metals														
Iron (Total)	7439-89-6	300	--	--	--	--	--	--	--	<100	<100	<100	--	<100

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Table 14
Groundwater Sample Analytical Results
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents (units in ug/L)	CAS RN	Hydrogeologic Zone:	ZONE 3										
		Location ID:	RW-21_MW-12-2	RW-21_MW-12-2	RW-21_MW-12-2	RW-21_MW-12-2	RW-21_MW-12-2	RW-21_MW-14	RW-21_MW-14	RW-21_MW-14	RW-21_MW-14	RW-21_MW-14	RW-21_MW-15
		Date:	9/26/2024	12/16/2024	3/5/2025	6/18/2025	9/12/2025	9/25/2024	12/19/2024	2/19/2025	6/4/2025	9/17/2025	7/31/2024
		Sample ID:	RW-21_MW-12-2_20240926	RW-21_MW-12-2_20241216	RW-21_MW-12-2	RW-21_MW-12-2_20250618	RW-21_MW-12-2	RW-21_MW-14_20240925	RW-21_MW-14_20241219	RW-21_MW-14_20250219	RW-21_MW-14	RW-21_MW-14	RW-21_MW-15
VOCs	**CAS RN**	**TOGS 1.1.1 NYSDEC_SCGs**											
1,1,1-Trichloroethane	71-55-6	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
1,1,2,2-Tetrachloroethane	79-34-5	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0 J	<5.0	<5.0	<50
1,1,2-Trichloroethane	79-00-5	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
1,1-Dichloroethane	75-34-3	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	**0.59 J**	<10
1,1-Dichloroethene	75-35-4	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
1,2-Dichloroethane	107-06-2	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
1,2-Dichloropropane	78-87-5	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
1,3-Butadiene	106-99-0	NA	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0 J	<5.0	<5.0	<50
1-Chloro-1,1-difluoroethane	75-68-3	NA	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0 J	<5.0	<5.0	<50
2-Butanone (MEK)	78-93-3	50	<10	<10	<10	<10	--	<10 J	<10	<10	<10	<10	<100
4-Methyl-2-Pentanone	108-10-1	50	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<50
Acetone	67-64-1	50	<10	<10	<10	<10	--	<10 J	<10	<10	<10	<10	<100
Benzene	71-43-2	1	<0.50	<0.50	<0.50	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0
Bromodichloromethane	75-27-4	50	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
Bromoform	75-25-2	50	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
Bromomethane	74-83-9	5	<2.0	<2.0	<2.0	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<20
Carbon Disulfide	75-15-0	50	<2.0	<2.0	<2.0	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<20
Carbon Tetrachloride	56-23-5	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
CFC-12	75-71-8	5	<2.0	<2.0	<2.0	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<20
Chlorobenzene	108-90-7	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
Chlorodibromomethane	124-48-1	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
Chlorodifluoromethane	75-45-6	NA	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0 J	<5.0	<5.0	<50
Chloroethane	75-00-3	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
Chloroform	67-66-3	7	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
Chloromethane	74-87-3	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
cis-1,2-Dichloroethene	156-59-2	5	<1.0	<1.0	<1.0	<1.0	--	**0.68 J**	**3.7**	**4.3**	**1.8**	**8.3**	**90.5**
cis-1,3-Dichloropropene	10061-01-5	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
Dichloromethane	75-09-2	5	<2.0	<2.0	<2.0	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<20
Ethylbenzene	100-41-4	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
m&p-Xylenes	ARC-mpXyl	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
Methyl N-Butyl Ketone (2-Hexanone)	591-78-6	50	<5.0	<5.0	<5.0	<5.0	--	<5.0 J	<5.0	<5.0	<5.0	<5.0	<50
o-Xylene	95-47-6	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
Styrene (Monomer)	100-42-5	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
Tetrachloroethene	127-18-4	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
Toluene	108-88-3	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
trans-1,2-Dichloroethene	156-60-5	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
trans-1,3-Dichloropropene	10061-02-6	5	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
Trichloroethene	79-01-6	5	<1.0	<1.0	<1.0	<1.0	--	**46.8**	**25.8**	**23.4**	**23.4**	**30.9**	**1460**
Vinyl chloride	75-01-4	2	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<10
Total VOCs			0	0	0	0	0	**47.5**	**29.5**	**27.7**	**25.2**	**39.8**	**1551**
SVOCs SIM													
1,4-Dioxane	123-91-1	NA	<0.23	<0.23	<0.24	<0.23	<0.24	**1.2**	**1.1**	<0.24	**0.71**	**1.9**	**17 J**
Metals													
Iron (Total)	7439-89-6	300	--	--	--	--	--	--	--	--	--	--	--

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Table 14
Groundwater Sample Analytical Results
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents (units in ug/L)	CAS RN	Hydrogeologic Zone:	ZONE 3									
		Location ID:	RW-21_MW-15	RW-21_MW-15	RW-21_MW-15	RW-21_MW-15	RW-21_MW-15	RW-21_MW-15	RW-21_MW-15	RW-21_MW-15	RW-21_MW-15	RW-21_MW-15
		Date:	8/27/2024	9/20/2024	10/10/2024	12/4/2024	12/19/2024	12/26/2024	1/3/2025	1/8/2025	1/14/2025	1/24/2025
		Sample ID:	RW-21_MW-15_20240827	RW-21_MW-15_20240920	RW-21_MW-15_20241010	RW-21_MW-15_20241204	RW-21_MW-15_20241219	RW-21_MW-15_20241226	RW-21_MW-15_20250103	RW-21_MW-15_20250108	RW-21_MW-15_20250114	RW-21_MW-15_20250124
VOCs	**CAS RN**	**TOGS 1.1.1 NYSDEC_SCGs**										
1,1,1-Trichloroethane	71-55-6	5	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	5	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	<50	<50	<50	<25	<25	<25	<25	<25	<25	<25
1,1,2-Trichloroethane	79-00-5	5	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	5	<10	<10	<10	**4.1 J**	**3.9 J**	**3.9 J**	**2.8 J**	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	5	<10	<10	<10	<5.0	**3.8 J**	<5.0	**3.5 J**	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	5	<10	<10	**7.0 J**	**6.1**	**5.7**	**5.5**	**4.0 J**	**5.0**	**4.1 J**	**3.4 J**
1,2-Dichloropropane	78-87-5	5	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,3-Butadiene	106-99-0	NA	<50	<50 J	<50	<25 J	<25	<25	<25	<25	<25	<25
1-Chloro-1,1-difluoroethane	75-68-3	NA	<50	<50	<50	<25	<25	<25	<25	<25	<25	<25
2-Butanone (MEK)	78-93-3	50	<100	<100	<100	<50	<50	<50	<50	<50	<50	<50
4-Methyl-2-Pentanone	108-10-1	50	<50	<50	<50	<25	<25	<25	<25	<25	<25	<25
Acetone	67-64-1	50	<100 J	<100 J	<100 J	<50 J	<50	<50	<50	<50	<50	<50
Benzene	71-43-2	1	<5.0	<5.0	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Bromodichloromethane	75-27-4	50	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromoform	75-25-2	50	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromomethane	74-83-9	5	<20 J	<20	<20 J	<10	<10	<10	<10	<10	<10	<10
Carbon Disulfide	75-15-0	50	<20	<20	<20	<10	<10	<10	<10	<10	<10	<10
Carbon Tetrachloride	56-23-5	5	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
CFC-12	75-71-8	5	<20 J	<20	<20	<10 J	<10	<10	<10	<10	<10	<10
Chlorobenzene	108-90-7	5	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	5	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorodifluoromethane	75-45-6	NA	<50	<50	<50	<25 J	<25	<25	<25	<25	<25	<25
Chloroethane	75-00-3	5	<10	<10 J	<10 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	67-66-3	7	**5.4 J**	<10	**5.1 J**	**5.6**	**6.8**	**5.9**	**4.4 J**	**3.4 J**	**3.0 J**	<5.0 B
Chloromethane	74-87-3	5	<10	<10 J	<10 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	5	**140**	**132**	**129**	**179**	**163**	**126**	**110**	**107**	**87.8**	**75.6**
cis-1,3-Dichloropropene	10061-01-5	5	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dichloromethane	75-09-2	5	<20	<20	<20	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	100-41-4	5	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
m&p-Xylenes	ARC-mpXyl	5	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl N-Butyl Ketone (2-Hexanone)	591-78-6	50	<50	<50	<50	<25	<25	<25	<25	<25	<25	<25
o-Xylene	95-47-6	5	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Styrene (Monomer)	100-42-5	5	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	5	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	108-88-3	5	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	5	<10	<10	<10	**6.6**	**3.1 J**	**4.0 J**	<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	5	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	5	**1570 J**	**1490**	**1280 J**	**1150 D**	**920**	**825**	**871**	**891**	**802**	**751**
Vinyl chloride	75-01-4	2	<10	<10 J	<10 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total VOCs			**1715**	**1622**	**1421**	**1351**	**1106**	**970**	**996**	**1006**	**897**	**830**
SVOCs SIM												
1,4-Dioxane	123-91-1	NA	**21**	**20**	**21**	**28 J**	**21**	**18**	**16 MM**	**18**	**12**	**16**
Metals												
Iron (Total)	7439-89-6	300	--	<100	--	**243**	--	--	--	--	--	--

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Table 14
Groundwater Sample Analytical Results
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents (units in ug/L)	CAS RN	Hydrogeologic Zone:	ZONE 3										
		Location ID:	RW-21_MW-15	RW-21_MW-15	RW-21_MW-15	RW-21_MW-16	RW-21_MW-16	RW-21_MW-16	RW-21_MW-16	RW-21_MW-16	RW-21_MW-16	RW-21_MW-16	RW-21_MW-16
		Date:	2/20/2025	6/3/2025	9/4/2025	7/30/2024	8/28/2024	9/25/2024	10/11/2024	12/20/2024	12/26/2024	1/2/2025	1/8/2025
		Sample ID:	RW-21_MW-15_20250220	RW-21_MW-15	RW-21_MW-15	RW-21_MW-16	RW-21_MW-16_20240828	RW-21_MW-16_20240925	RW-21_MW-16_20241011	RW-21_MW-16_20241220	RW-21_MW-16_20241226	RW-21_MW-16_20250102	RW-21_MW-16_20250108
VOCs	**CAS RN**	**TOGS 1.1.1 NYSDEC_SCGs**											
1,1,1-Trichloroethane	71-55-6	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	79-34-5	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	<25 J	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	75-34-3	5	<5.0	<5.0	**3.0 J**	**0.85 J**	**1.7**	**2.0**	**1.3**	**0.82 J**	<1.0	**1.6**	**1.1**
1,1-Dichloroethene	75-35-4	5	<5.0	<5.0	<5.0	**0.87 J**	**1.5**	**2.0**	**1.4**	<1.0	**0.64 J**	**1.3**	**1.2**
1,2-Dichloroethane	107-06-2	5	<5.0	<5.0	**4.0 J**	**1.1**	**1.1**	**1.4**	**1.3**	<1.0	**0.69 J**	**1.6**	**1.1**
1,2-Dichloropropane	78-87-5	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Butadiene	106-99-0	NA	<25 J	<25 J	<25 J	<5.0	<5.0	<5.0	<5.0	<5.0 J	<5.0	<5.0	<5.0
1-Chloro-1,1-difluoroethane	75-68-3	NA	<25 J	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone (MEK)	78-93-3	50	<50	<50	<50	<10	<10	<10	<10 J	<10	<10	<10	<10
4-Methyl-2-Pentanone	108-10-1	50	<25	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acetone	67-64-1	50	<50	<50	<50	<10	<10 J	<10	<10 J	<10 J	<10	<10	<10
Benzene	71-43-2	1	<2.5	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	75-27-4	50	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	75-25-2	50	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	74-83-9	5	<10	<10	<10	<2.0	<2.0 J	<2.0	<2.0	<2.0 J	<2.0	<2.0	<2.0
Carbon Disulfide	75-15-0	50	<10	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon Tetrachloride	56-23-5	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CFC-12	75-71-8	5	<10	<10	<10	<2.0	<2.0 J	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chlorobenzene	108-90-7	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorodibromomethane	124-48-1	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorodifluoromethane	75-45-6	NA	<25 J	<25	<25 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroethane	75-00-3	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	67-66-3	7	<5.0	**3.0 J**	**3.9 J**	**1.6**	**0.99 J**	**1.5**	**1.3**	**0.61 J**	**0.70 J**	**1.4**	**1.2**
Chloromethane	74-87-3	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0 J	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	156-59-2	5	**76.8**	**76.7**	**88.7**	**21.6**	**30.7**	**33.4**	**26.5**	**14.6**	**13.4**	**29.2**	**23.7**
cis-1,3-Dichloropropene	10061-01-5	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dichloromethane	75-09-2	5	<10	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	100-41-4	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m&p-Xylenes	ARC-mpXyl	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl N-Butyl Ketone (2-Hexanone)	591-78-6	50	<25	<25	<25	<5.0	<5.0	<5.0	<5.0 J	<5.0	<5.0	<5.0	<5.0
o-Xylene	95-47-6	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene (Monomer)	100-42-5	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	127-18-4	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	108-88-3	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	156-60-5	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	10061-02-6	5	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	79-01-6	5	**830**	**732**	**827**	**193**	**162**	**164**	**176**	**113**	**129**	**172**	**200**
Vinyl chloride	75-01-4	2	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0	<1.0	<1.0
Total VOCs			**907**	**812**	**927**	**219**	**198**	**204**	**208**	**129**	**144**	**207**	**228**
SVOCs SIM													
1,4-Dioxane	123-91-1	NA	**14**	**16**	**16 J**	**3.4 J**	**4.4**	**5.0**	--	**2.0**	**1.6**	**5.8**	**3.3**
Metals													
Iron (Total)	7439-89-6	300	<100	<100	<100	--	--	--	--	--	--	--	--

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Table 14
Groundwater Sample Analytical Results
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents (units in ug/L)	CAS RN	Hydrogeologic Zone:	ZONE 3											
		Location ID:	RW-21_MW-16	RW-21_MW-16	RW-21_MW-16	RW-21_MW-16	RW-21_MW-16	RW-21_MW-2	RW-21_MW-2	RW-21_MW-2	RW-21_MW-2	RW-21_MW-2	RW-21_MW-3-1	RW-21_MW-3-1
		Date:	1/14/2025	1/24/2025	2/19/2025	6/9/2025	9/5/2025	9/12/2024	12/3/2024	2/21/2025	6/6/2025	9/8/2025	9/17/2024	11/26/2024
		Sample ID:	RW-21_MW-16_20250114	RW-21_MW-16_20250124	RW-21_MW-16_20250219	RW-21_MW-16	RW-21_MW-16	-21_MW-2_20240	9-21_MW-2_20241	RW-21_MW-2	RW-21_MW-2	RW-21_MW-2	RW-21_MW-3-1_20240917	RW-21_MW-3-1_20241126
VOCs	**CAS RN**	**TOGS 1.1.1 NYSDEC_SCGs**												
1,1,1-Trichloroethane	71-55-6	5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<25	<5.0	<25	<5.0	<10
1,1,2,2-Tetrachloroethane	79-34-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<25	<5.0	<25	<5.0	<10
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50	<130	<25	<130	<25	<50
1,1,2-Trichloroethane	79-00-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<25	<5.0	<25	**2.7 J**	<10
1,1-Dichloroethane	75-34-3	5	**1.0**	**0.79 J**	**0.90 J**	**1.2**	**0.90 J**	**16.8**	**18.4**	**19.3 J**	**9.2**	**18.6 J**	**14.6**	**9.1 J**
1,1-Dichloroethene	75-35-4	5	**1.1**	**0.82 J**	**1.1**	**1.3**	**1.0**	**13.7**	**17.6**	**20.1 J**	**11.0**	<25	**17.1**	**12.2**
1,2-Dichloroethane	107-06-2	5	**1.3**	**0.95 J**	**0.97 J**	**0.93 J**	**1.1**	**11.5**	**11.4**	<25	**7.7**	<25	**15.4**	**9.9 J**
1,2-Dichloropropane	78-87-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<25	<5.0	<25	**3.9 J**	<10
1,3-Butadiene	106-99-0	NA	<5.0	<5.0 J	<5.0 J	<5.0 J	<5.0	<50	<50	<130	<25	<130	<25	<50 J
1-Chloro-1,1-difluoroethane	75-68-3	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50	<130	<25	<130	<25	<50
2-Butanone (MEK)	78-93-3	50	<10	<10	<10	<10	<10	<100	<100	<250	<50	<250	<50	<100 J
4-Methyl-2-Pentanone	108-10-1	50	<5.0	<5.0	<5.0	<5.0	<5.0 J	<50 J	<50	<130	<25	<130	<25	<50
Acetone	67-64-1	50	<10	<10	<10 J	<10	<10	<100	<100	<250	<50	<250	<50	<100 J
Benzene	71-43-2	1	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<13	<2.5	<13	<2.5	<5.0
Bromodichloromethane	75-27-4	50	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<25	<5.0	<25	<5.0	<10
Bromoform	75-25-2	50	<1.0	<1.0	<1.0	<1.0	<1.0 J	<10	<10	<25	<5.0	<25	<5.0	<10
Bromomethane	74-83-9	5	<2.0	<2.0 J	<2.0	<2.0	<2.0	<20	<20	<50	<10	<50	<10	<20
Carbon Disulfide	75-15-0	50	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<50	<10	<50	<10	<20
Carbon Tetrachloride	56-23-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<25	<5.0	<25	<5.0	<10
CFC-12	75-71-8	5	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<50	<10	<50	<10	<20
Chlorobenzene	108-90-7	5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<25	<5.0	<25	<5.0	<10
Chlorodibromomethane	124-48-1	5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<25	<5.0	<25	<5.0	<10
Chlorodifluoromethane	75-45-6	NA	<5.0	<5.0	<5.0 J	<5.0	<5.0	<50	<50	<130	<25	<130	<25	<50
Chloroethane	75-00-3	5	<1.0	<1.0	<1.0	<1.0	<1.0 J	<10	<10	<25	<5.0	<25	<5.0	<10
Chloroform	67-66-3	7	**1.2**	<1.0 B	**1.2**	**1.0**	**1.6**	<10	**8.0 J**	<25	**5.5**	<25	**13.7**	**8.3 J**
Chloromethane	74-87-3	5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<25	<5.0	<25	<5.0	<10
cis-1,2-Dichloroethene	156-59-2	5	**24.1**	**16.4**	**21.1**	**27.2**	**25.2**	**909**	**1070**	**1170**	**627**	**982**	**948**	**671**
cis-1,3-Dichloropropene	10061-01-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<25	<5.0	<25	<5.0	<10
Dichloromethane	75-09-2	5	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<50	<10	<50	<10	<20
Ethylbenzene	100-41-4	5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<25	<5.0	<25	<5.0	<10
m&p-Xylenes	ARC-mpXyl	5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<25	<5.0	<25	<5.0	<10
Methyl N-Butyl Ketone (2-Hexanone)	591-78-6	50	<5.0	<5.0	<5.0	<5.0	<5.0 J	<50	<50	<130	<25	<130	<25	<50
o-Xylene	95-47-6	5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<25	<5.0	<25	<5.0	<10
Styrene (Monomer)	100-42-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<25	<5.0	<25	<5.0	<10
Tetrachloroethene	127-18-4	5	<1.0	<1.0	<1.0	<1.0	<1.0	**9.1 J**	**13.7**	<25	**6.3**	<25	**7.0**	**7.8 J**
Toluene	108-88-3	5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<25	<5.0	<25	<5.0	<10
trans-1,2-Dichloroethene	156-60-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	9.0 J	11.2	<25	**4.8 J**	<25	**7.0**	<10
trans-1,3-Dichloropropene	10061-02-6	5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<25	<5.0	<25	<5.0	<10
Trichloroethene	79-01-6	5	**171**	**119**	**165**	**151**	**182**	**2420 D**	**4040**	**4250**	**1390**	**3280**	**2370**	**1710 J**
Vinyl chloride	75-01-4	2	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<25	<5.0	<25	<5.0	<10
Total VOCs			**200**	**138**	**190**	**183**	**212**	**3389**	**5190**	**5459**	**2062**	**4281**	**3399**	**2428**
SVOCs SIM														
1,4-Dioxane	123-91-1	NA	**3.2**	**3.0**	**2.9**	**3.3**	**3.1**	**75 J**	**88**	**79**	**54**	**42**	**45**	**38 J**
Metals														
Iron (Total)	7439-89-6	300	--	--	--	--	--			--	--	--	<100	<100

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Table 14
Groundwater Sample Analytical Results
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents (units in ug/L)		Hydrogeologic Zone:	ZONE 3													
		Location ID:	RW-21_MW-3-1	RW-21_MW-3-1	RW-21_MW-3-1	RW-21_MW-3-2	RW-21_MW-3-2	RW-21_MW-3-2	RW-21_MW-3-2	RW-21_MW-3-2	RW-21_MW-3-2	RW-21_MW-3-2	RW-21_MW-3-2	RW-21_MW-3-2	RW-21_MW-3-2	RW-21_MW-5-2
		Date:	3/6/2025	6/6/2025	9/8/2025	9/17/2024	9/17/2024	11/26/2024	11/26/2024	3/6/2025	3/6/2025	6/6/2025	6/6/2025	9/8/2025	9/8/2025	9/11/2024
		Sample ID:	RW-21_MW-3-1	RW-21_MW-3-1	RW-21_MW-3-1	RW-21_MW-3-2_20240917	REP091724SV1	RW-21_MW-3-2_20241126	REP112624KK1	RW-21_MW-3-2	REP030625BM1	RW-21_MW-3-2	REP060625BM1	RW-21_MW-3-2	REP090825SH1	RW-21_MW-5-2_20240911
VOCs	**CAS RN**	**TOGS 1.1.1 NYSDEC_SCGs**														
1,1,1-Trichloroethane	71-55-6	5	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	79-34-5	5	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	<50	<50	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	5	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	75-34-3	5	**11.2**	**17.9**	**5.7**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**3.1**
1,1-Dichloroethene	75-35-4	5	**16.0**	**14.1**	**5.5**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.6**
1,2-Dichloroethane	107-06-2	5	**11.1**	**9.3 J**	**4.2 J**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	78-87-5	5	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Butadiene	106-99-0	NA	<50 J	<50	<25	<5.0	<5.0	<5.0 J	<5.0	<5.0 J	<5.0 J	<5.0	<5.0	<5.0	<5.0	<5.0
1-Chloro-1,1-difluoroethane	75-68-3	NA	<50	<50	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone (MEK)	78-93-3	50	<100	<100	<50	<10	<10	<10 J	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-Pentanone	108-10-1	50	<50	<50	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acetone	67-64-1	50	<100	<100	<50	<10	<10	<10 J	<10 J	<10	<10	<10	<10	<10	<10	**5.1 J**
Benzene	71-43-2	1	<5.0	<5.0	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	75-27-4	50	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	75-25-2	50	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	74-83-9	5	<20 J	<20	<10	<2.0	<2.0	<2.0	<2.0	<2.0 J	<2.0 J	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon Disulfide	75-15-0	50	<20	<20	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon Tetrachloride	56-23-5	5	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CFC-12	75-71-8	5	<20	<20	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chlorobenzene	108-90-7	5	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorodibromomethane	124-48-1	5	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorodifluoromethane	75-45-6	NA	<50 J	<50	<25	<5.0	<5.0	<5.0	<5.0	<5.0 J	<5.0 J	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroethane	75-00-3	5	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	67-66-3	7	<10	**5.9 J**	**4.9 J**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.2**
Chloromethane	74-87-3	5	<10 J	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0 J	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	156-59-2	5	**802**	**961**	**330**	**1.3**	**1.4**	**0.86 J**	**1.1**	**5.3**	**5.3**	**0.56 J**	<1.0	**4.0**	**4.5**	**4.5**
cis-1,3-Dichloropropene	10061-01-5	5	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dichloromethane	75-09-2	5	<20	<20	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	100-41-4	5	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m&p-Xylenes	ARC-mpXyl	5	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl N-Butyl Ketone (2-Hexanone)	591-78-6	50	<50	<50	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
o-Xylene	95-47-6	5	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene (Monomer)	100-42-5	5	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	127-18-4	5	**6.9 J**	**10.2**	**5.4**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	108-88-3	5	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	156-60-5	5	<10	**17.7**	**11.6**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	10061-02-6	5	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	79-01-6	5	**2220 D**	**3020**	**774**	**70.7**	**78.6**	**69.0**	**69.7**	**305 D**	**292 D**	**65.2**	**66.8**	**65.9**	**68.3**	**12.5**
Vinyl chloride	75-01-4	2	<10	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total VOCs			**3067**	**4056**	**1141**	**72.0**	**80.0**	**69.9**	**70.8**	**310**	**297**	**65.8**	**66.8**	**69.9**	**72.8**	**28.0**
SVOCs SIM																
1,4-Dioxane	123-91-1	NA	**29 J**	**21**	**12**	**0.90**	**0.78**	**0.76**	**0.73**	**1.1**	**1.1**	<0.24	**0.43**	**0.32**	**0.24**	**3.2**
Metals																
Iron (Total)	7439-89-6	300	<100	<100	<100	--	--	--	--	--	--	--	--	--	--	--

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Table 14
Groundwater Sample Analytical Results
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents (units in ug/L)	CAS RN	Hydrogeologic Zone:	ZONE 3										
		Location ID:	RW-21_MW-5-2	RW-21_MW-5-2	RW-21_MW-5-2	RW-21_MW-5-2	RW-21_MW-6	RW-21_MW-6	RW-21_MW-6	RW-21_MW-6	RW-21_MW-6	RW-21_MW-7	RW-21_MW-7
		Date:	11/22/2024	3/7/2025	6/10/2025	9/19/2025	9/16/2024	11/20/2024	3/3/2025	6/16/2025	9/15/2025	9/19/2024	12/3/2024
		Sample ID:	RW-21_MW-5-2_20241122	RW-21_MW-5-2	RW-21_MW-5-2	RW-21_MW-5-2_20250919	RW-21_MW-6_20240916	RW-21_MW-6_20241120	RW-21_MW-6	RW-21_MW-6	RW-21_MW-6_20250915	RW-21_MW-7_20240919	RW-21_MW-7_20241203
VOCs	**CAS RN**	**TOGS 1.1.1 NYSDEC_SCGs**											
1,1,1-Trichloroethane	71-55-6	5	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
1,1,2,2-Tetrachloroethane	79-34-5	5	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	<5.0	<5.0	<5.0	<5.0	<100	<50	<50	<25	<5.0	<25	<50
1,1,2-Trichloroethane	79-00-5	5	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
1,1-Dichloroethane	75-34-3	5	**2.2**	**1.4**	**1.3**	**3.1**	**14.0 J**	**11.4**	**10.3**	**5.3**	**2.1**	**12.7**	**12.0**
1,1-Dichloroethene	75-35-4	5	**1.2**	**0.69 J**	<1.0	**1.6**	**13.4 J**	**11.9**	**13.9**	**7.1**	**0.75 J**	**13.1**	**13.3**
1,2-Dichloroethane	107-06-2	5	<1.0	<1.0	<1.0	<1.0	**18.5 J**	**12.5**	**11.1**	**5.6**	**0.87 J**	**8.9**	**10.5**
1,2-Dichloropropane	78-87-5	5	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
1,3-Butadiene	106-99-0	NA	<5.0 J	<5.0	<5.0	<5.0 J	<100	<50	<50	<25	<5.0	<25	<50
1-Chloro-1,1-difluoroethane	75-68-3	NA	<5.0	<5.0	<5.0	<5.0	<100	<50	<50	<25	<5.0	<25	<50
2-Butanone (MEK)	78-93-3	50	<10 J	<10	<10	<10 J	<200	<100	<100	<50	<10	<50	<100
4-Methyl-2-Pentanone	108-10-1	50	<5.0	<5.0	<5.0	<5.0	<100	<50	<50	<25	<5.0	<25 J	<50
Acetone	67-64-1	50	**3.2 J**	**6.0 J**	**7.1 J**	**5.0 J**	<200	<100	<100	<50	<10	<50	<100
Benzene	71-43-2	1	<0.50	<0.50	<0.50	<0.50	<10	<5.0	<5.0	<2.5	<0.50	<2.5	<5.0
Bromodichloromethane	75-27-4	50	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
Bromoform	75-25-2	50	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
Bromomethane	74-83-9	5	<2.0	<2.0	<2.0	<2.0	<40	<20	<20	<10	<2.0	<10	<20
Carbon Disulfide	75-15-0	50	<2.0	<2.0	<2.0	<2.0	<40	<20	<20	<10	<2.0	<10	<20
Carbon Tetrachloride	56-23-5	5	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
CFC-12	75-71-8	5	<2.0	<2.0	<2.0	<2.0	<40	<20	<20	<10	<2.0	<10	<20
Chlorobenzene	108-90-7	5	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
Chlorodibromomethane	124-48-1	5	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
Chlorodifluoromethane	75-45-6	NA	<5.0	<5.0	<5.0	<5.0	<100	<50	<50	<25	**1.3 J**	<25	<50
Chloroethane	75-00-3	5	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
Chloroform	67-66-3	7	**0.78 J**	<1.0	<1.0	**1.3**	**18.7 J**	**9.6 J**	**10.2**	**4.6 J**	**5.0**	**9.7**	**8.6 J**
Chloromethane	74-87-3	5	<1.0	<1.0	<1.0	<1.0 J	<20	<10	<10	<5.0	<1.0	<5.0	<10
cis-1,2-Dichloroethene	156-59-2	5	**3.5**	**1.8**	**1.9**	**5.3**	**743**	**561**	**621**	**283**	**140**	**813**	**728**
cis-1,3-Dichloropropene	10061-01-5	5	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
Dichloromethane	75-09-2	5	<2.0	<2.0	<2.0	<2.0	<40	<20	<20	<10	<2.0	<10	<20
Ethylbenzene	100-41-4	5	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
m&p-Xylenes	ARC-mpXyl	5	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
Methyl N-Butyl Ketone (2-Hexanone)	591-78-6	50	<5.0	<5.0	<5.0	<5.0 J	<100	<50	<50	<25	<5.0	<25	<50
o-Xylene	95-47-6	5	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
Styrene (Monomer)	100-42-5	5	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
Tetrachloroethene	127-18-4	5	<1.0	<1.0	<1.0	<1.0	<20	**9.4 J**	**11.3**	**7.8**	**1.2**	**9.3**	**10.8**
Toluene	108-88-3	5	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
trans-1,2-Dichloroethene	156-60-5	5	<1.0	<1.0	<1.0	<1.0	<20	<10	**12.5**	**4.2 J**	**1.7**	**7.1**	**9.0 J**
trans-1,3-Dichloropropene	10061-02-6	5	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
Trichloroethene	79-01-6	5	**10.6**	**6.3**	**6.1**	**13.9**	**2600**	**2320**	**2490**	**1220**	**183**	**1830 D**	**1870**
Vinyl chloride	75-01-4	2	<1.0	<1.0	<1.0	<1.0	<20	<10	<10	<5.0	<1.0	<5.0	<10
Total VOCs			**21.5**	**16.2**	**16.4**	**30.2**	**3408**	**2936**	**3180**	**1538**	**336**	**2704**	**2662**
SVOCs SIM													
1,4-Dioxane	123-91-1	NA	**3.0**	**2.5**	**2.3**	**3.4**	**27**	**38**	**34**	**20**	**22**	**26**	**36**
Metals													
Iron (Total)	7439-89-6	300	--	--	--	--	--	--	--	--	--	--	--

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Table 14
Groundwater Sample Analytical Results
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents (units in ug/L)	CAS RN	Hydrogeologic Zone:	ZONE 3							ZONE 4						
		Location ID:	RW-21_MW-7	RW-21_MW-7	RW-21_MW-9	RW-21_MW-9	RW-21_MW-9	RW-21_MW-9	RW-21_MW-9	MW-117-5	MW-117-5	MW-117-5	MW-117-5	MW-117-5	MW-118-5	MW-118-5
		Date:	3/4/2025	6/10/2025	9/16/2024	11/20/2024	3/4/2025	6/17/2025	9/16/2025	9/23/2024	12/9/2024	3/14/2025	6/12/2025	9/11/2025	9/24/2024	11/25/2024
		Sample ID:	RW-21_MW-7	RW-21_MW-7	RW-21_MW-9_20240916	RW-21_MW-9_20241120	RW-21_MW-9	RW-21_MW-9	RW-21_MW-9	MW-117-5_20240923	MW-117-5_20241209	MW-117-5_20250314	MW-117-5	MW-117-5	MW-118-5_20240924	MW-118-5_20241125
VOCs	**CAS RN**	**TOGS 1.1.1 NYSDEC_SCGs**														
1,1,1-Trichloroethane	71-55-6	5	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	79-34-5	5	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	<50	<25	<50	<50	<50	<25	<25	**0.67 J**	**0.71 J**	<5.0	**0.72 J**	**0.96 J**	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	5	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	75-34-3	5	**9.6 J**	**11.5**	**8.4 J**	**7.3 J**	**7.8 J**	**5.8**	**8.0**	<1.0	<1.0	<1.0	<1.0	**0.60 J**	**1.3**	**1.3**
1,1-Dichloroethene	75-35-4	5	**12.5**	**11.6**	**9.2 J**	**9.0 J**	**10.1**	**6.1**	**6.4**	<1.0	**0.61 J**	<1.0	**0.60 J**	<1.0	**1.0**	**0.95 J**
1,2-Dichloroethane	107-06-2	5	**11.1**	**8.8**	**11.7**	**9.4 J**	**8.7 J**	**6.5**	**8.5**	<1.0	<1.0	<1.0	<1.0	<1.0	**1.3**	**1.3**
1,2-Dichloropropane	78-87-5	5	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Butadiene	106-99-0	NA	<50	<25	<50	<50	<50	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1-Chloro-1,1-difluoroethane	75-68-3	NA	<50	<25	<50	<50	<50	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone (MEK)	78-93-3	50	<100	<50	<100	<100	<100	<50	<50	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-Pentanone	108-10-1	50	<50	<25	<50	<50	<50	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acetone	67-64-1	50	<100	<50	<100	<100	<100	<50	<50	<10	<10	<10	<10	<10	<10	<10
Benzene	71-43-2	1	<5.0	<2.5	<5.0	<5.0	<5.0	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	75-27-4	50	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	75-25-2	50	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	74-83-9	5	<20	<10	<20	<20	<20	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon Disulfide	75-15-0	50	<20	<10	<20	<20	<20	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon Tetrachloride	56-23-5	5	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CFC-12	75-71-8	5	<20	<10	<20	<20	<20	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chlorobenzene	108-90-7	5	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorodibromomethane	124-48-1	5	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorodifluoromethane	75-45-6	NA	<50	<25	<50	<50	<50	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroethane	75-00-3	5	<10	**6.8**	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	67-66-3	7	**8.2 J**	**6.7**	**12.9**	**10.2**	**10.1**	**6.3**	**9.0**	<1.0	<1.0	<1.0	<1.0	<1.0	**3.2**	**2.9**
Chloromethane	74-87-3	5	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	156-59-2	5	**748**	**711**	**378**	**375**	**388**	**235**	**337**	**1.3**	**1.2**	**1.1**	**1.5**	**1.1**	**31.3**	**31.5**
cis-1,3-Dichloropropene	10061-01-5	5	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dichloromethane	75-09-2	5	<20	<10	<20	<20	<20	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	100-41-4	5	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m&p-Xylenes	ARC-mpXyl	5	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl N-Butyl Ketone (2-Hexanone)	591-78-6	50	<50	<25	<50	<50	<50	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
o-Xylene	95-47-6	5	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene (Monomer)	100-42-5	5	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	127-18-4	5	**11.5**	**7.6**	**5.9 J**	**7.3 J**	**8.5 J**	**4.8 J**	**4.8 J**	**0.66 J**	**0.77 J**	**0.71 J**	**0.97 J**	<1.0	<1.0	<1.0
Toluene	108-88-3	5	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	156-60-5	5	**6.8 J**	**7.3**	<10	<10	<10	<5.0	**2.7 J**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	10061-02-6	5	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	79-01-6	5	**2280**	**1810**	**1690**	**1750**	**1910**	**1180**	**1430**	**17.1**	**16.5**	**15.7**	**19.2**	**15.3**	**231**	**239**
Vinyl chloride	75-01-4	2	<10	<5.0	<10	<10	<10	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total VOCs			**3088**	**2581**	**2116**	**2168**	**2343**	**1445**	**1806**	**19.7**	**19.8**	**17.5**	**23.0**	**18.0**	**269**	**277**
SVOCs SIM																
1,4-Dioxane	123-91-1	NA	**22**	**28**	**27**	**34**	**24**	**19**	**29**	**3.2**	**3.1**	**1.9**	**3.2**	**3.8**	**3.9**	**4.8**
Metals																
Iron (Total)	7439-89-6	300	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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Table 14
Groundwater Sample Analytical Results
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents (units in ug/L)	CAS RN	Hydrogeologic Zone:	ZONE 4											
		Location ID:	MW-118-5	MW-118-5	MW-118-5	RW-21_MW-13	RW-21_MW-13	RW-21_MW-13	RW-21_MW-13	RW-21_MW-13	RW-21_MW-13	RW-21_MW-13	RW-21_MW-13	RW-21_MW-13
		Date:	2/26/2025	6/11/2025	9/10/2025	7/30/2024	8/27/2024	9/19/2024	10/10/2024	10/10/2024	12/18/2024	12/27/2024	1/2/2025	1/2/2025
		Sample ID:	MW-118-5	MW-118-5	MW-118-5	RW-21_MW-13	RW-21_MW-13_20240827	RW-21_MW-13_20240919	RW-21_MW-13_20241010	REP101024AH1	RW-21_MW-13_20241218	RW-21_MW-13_20241227	RW-21_MW-13_20250102	REP010225SV1
VOCs	**CAS RN**	**TOGS 1.1.1 NYSDEC_SCGs**												
1,1,1-Trichloroethane	71-55-6	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	79-34-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	75-34-3	5	**1.4**	**1.8**	**1.8**	**0.59 J**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	75-35-4	5	**1.0**	**1.4**	**1.3**	**0.69 J**	<1.0	<1.0	<1.0	<1.0	**0.59 J**	<1.0	<1.0	<1.0
1,2-Dichloroethane	107-06-2	5	**1.3**	**1.8**	**1.7**	**0.95 J**	**0.61 J**	**0.85 J**	<1.0	<1.0	**0.71 J**	**0.78 J**	**0.78 J**	**0.70 J**
1,2-Dichloropropane	78-87-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Butadiene	106-99-0	NA	<5.0	<5.0	<5.0	<5.0 J	<5.0	<5.0	<5.0	<5.0	<5.0 J	<5.0	<5.0	<5.0
1-Chloro-1,1-difluoroethane	75-68-3	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone (MEK)	78-93-3	50	<10	<10	<10	<10	<10	<10	<10	<10 J	<10	<10	<10	<10
4-Methyl-2-Pentanone	108-10-1	50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acetone	67-64-1	50	<10	<10	<10	<10 J	<10 J	<10	<10 J	<10 J	<10 J	<10	<10	<10
Benzene	71-43-2	1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	75-27-4	50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	75-25-2	50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	74-83-9	5	<2.0	<2.0	<2.0	<2.0 J	<2.0 J	<2.0	<2.0 J	<2.0	<2.0 J	<2.0	<2.0	<2.0
Carbon Disulfide	75-15-0	50	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon Tetrachloride	56-23-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CFC-12	75-71-8	5	<2.0	<2.0	<2.0	<2.0	<2.0 J	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chlorobenzene	108-90-7	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorodibromomethane	124-48-1	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorodifluoromethane	75-45-6	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroethane	75-00-3	5	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0	<1.0 J	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	67-66-3	7	**3.6**	**3.2**	**3.6**	<1.0	<1.0 J	**0.93 J**	<1.0	<1.0	**0.70 J**	**0.84 J**	**0.84 J**	**0.89 J**
Chloromethane	74-87-3	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	156-59-2	5	**32.0**	**48.0**	**36.1**	**19.4**	**16.3**	**18.5**	**9.4**	**9.7**	**15.7**	**13.9**	**14.8**	**15.3**
cis-1,3-Dichloropropene	10061-01-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dichloromethane	75-09-2	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	100-41-4	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m&p-Xylenes	ARC-mpXyl	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl N-Butyl Ketone (2-Hexanone)	591-78-6	50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 J	<5.0	<5.0	<5.0	<5.0
o-Xylene	95-47-6	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene (Monomer)	100-42-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	127-18-4	5	<1.0	**0.76 J**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	108-88-3	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	156-60-5	5	<1.0	**1.5**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	10061-02-6	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	79-01-6	5	**251**	**408**	**187**	**278 D**	**235 D**	**239 D**	**167**	**183**	**155**	**90.7**	**86.2**	**98.3**
Vinyl chloride	75-01-4	2	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0	<1.0 J	<1.0 J	<1.0	<1.0	<1.0	<1.0
Total VOCs			**290**	**466**	**232**	**300**	**252**	**259**	**176**	**193**	**173**	**106.2**	**102.6**	**115.2**
SVOCs SIM														
1,4-Dioxane	123-91-1	NA	**4.1**	**6.1**	**4.1**	**5.2 J**	**4.1**	**4.1 J**	**2.1**	**2.4**	**3.3**	**3.0**	**5.0**	**5.2**
Metals														
Iron (Total)	7439-89-6	300	--	--	--	--	--	--	--	--	--	--	--	--

Footnotes on last page

Table 14
Groundwater Sample Analytical Results
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Constituents (units in ug/L)		Hydrogeologic Zone:	ZONE 4					
		Location ID:	RW-21_MW-13	RW-21_MW-13	RW-21_MW-13	RW-21_MW-13	RW-21_MW-13	RW-21_MW-13
		Date:	1/7/2025	1/13/2025	1/23/2025	2/20/2025	6/3/2025	9/4/2025
		Sample ID:	RW-21_MW-13_20250107	RW-21_MW-13_20250113	RW-21_MW-13_20250123	RW-21_MW-13_20250220	RW-21_MW-13	RW-21_MW-13
VOCs	**CAS RN**	**TOGS 1.1.1 NYSDEC_SCGs**						
1,1,1-Trichloroethane	71-55-6	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	79-34-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	5	<5.0	<5.0	<5.0	<5.0 J	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	75-34-3	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	75-35-4	5	<1.0	<1.0	<1.0	<1.0	<1.0	**0.63 J**
1,2-Dichloroethane	107-06-2	5	**0.83 J**	**0.87 J**	**0.78 J**	**0.78 J**	<1.0	<1.0
1,2-Dichloropropane	78-87-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Butadiene	106-99-0	NA	<5.0	<5.0	<5.0	<5.0 J	<5.0 J	<5.0 J
1-Chloro-1,1-difluoroethane	75-68-3	NA	<5.0	<5.0	<5.0	<5.0 J	<5.0	<5.0 J
2-Butanone (MEK)	78-93-3	50	<10	<10	<10	<10	<10	<10
4-Methyl-2-Pentanone	108-10-1	50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acetone	67-64-1	50	<10	<10	<10	<10	<10	<10
Benzene	71-43-2	1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	75-27-4	50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	75-25-2	50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	74-83-9	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon Disulfide	75-15-0	50	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon Tetrachloride	56-23-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CFC-12	75-71-8	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chlorobenzene	108-90-7	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorodibromomethane	124-48-1	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorodifluoromethane	75-45-6	NA	<5.0	<5.0	<5.0	<5.0 J	<5.0	<5.0 J
Chloroethane	75-00-3	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	67-66-3	7	**0.75 J**	**0.90 J**	<1.0 B	**1.3 J**	<1.0	<1.0
Chloromethane	74-87-3	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	156-59-2	5	**14.9**	**17.4**	**16.6**	**18.7 J**	**9.1**	**14.7**
cis-1,3-Dichloropropene	10061-01-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dichloromethane	75-09-2	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	100-41-4	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m&p-Xylenes	ARC-mpXyl	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl N-Butyl Ketone (2-Hexanone)	591-78-6	50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
o-Xylene	95-47-6	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene (Monomer)	100-42-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	127-18-4	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	108-88-3	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	156-60-5	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	10061-02-6	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	79-01-6	5	**117**	**134**	**174**	**157 J**	**118**	**159**
Vinyl chloride	75-01-4	2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total VOCs			**133**	**153**	**191**	**178**	**127**	**174**
SVOCs SIM								
1,4-Dioxane	123-91-1	NA	**4.1**	**2.9**	**3.6**	**5.1**	**2.8**	**2.7 J**
Metals								
Iron (Total)	7439-89-6	300	--	--	--	--	--	--

Footnotes on last page

Table 14
Groundwater Sample Analytical Results
Operable Unit 3 - RW-21 Area
Northrop Grumman
Bethpage, New York

Notes and Abbreviations:

20% of the RW-21 Long Term Monitoring groundwater quality data was validated by following the Quality Assurance/ Quality Control (QA/QC) criteria set forth in USEPA guidance documents “EPA Requirements for Quality Assurance Project Plans, EPA QA/R-5” (USEPA 2001) and Guidance for Quality Assurance Project Plans.

100% of groundwater quality data for monitoring wells: RW-21_MW-13, RW-21_MW-15, and RW-21_RW-16 was validated by following the QA/QC criteria set forth in USEPA guidance documents “EPA Requirements for Quality Assurance Project Plans, EPA QA/R-5” (USEPA 2001) and Guidance for Quality Assurance Project Plans.

Groundwater samples were collected in accordance with EPA QA/G-5” (USEPA 2002), and the NYSDEC guidance document “Technical Guidance for Site Investigation and Remediation, DER-10” (NYSDEC 2010).

Standards, Criteria, and Guidance (SCG) values based on NYSDEC TOGs 1.1.1 (NYSDEC 1998); most stringent values are listed.

All sample results are reported in ug/L.

TVOC concentrations are rounded to the number of decimal places of the individual VOC with the least numerical precision (decimal place), including whole numbers with no decimal place.

Samples analyzed for 1,4-Dioxane using USEPA Method 8270D SIM.

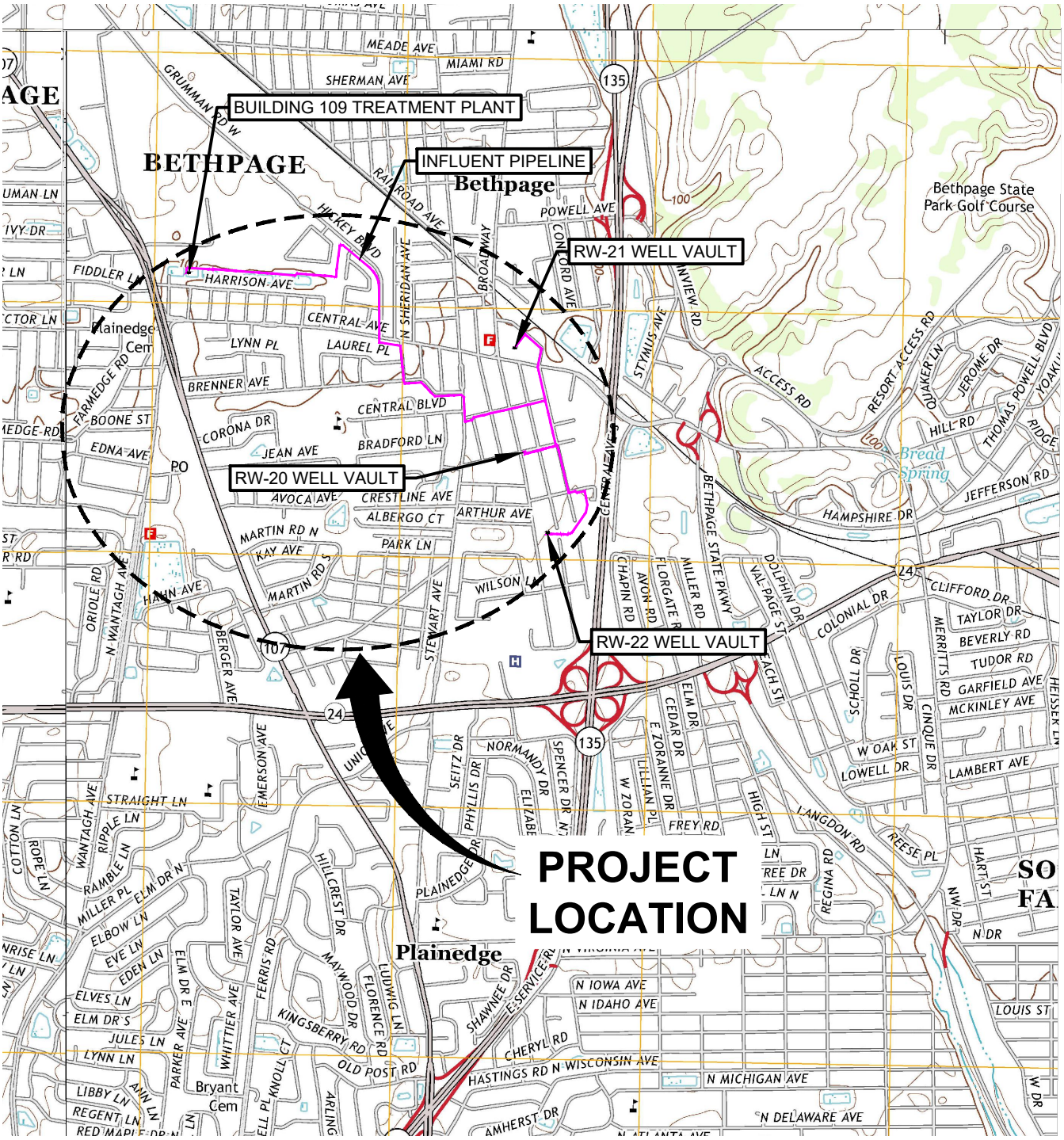
Samples analyzed for TCL VOCs using USEPA Method 8260C.

Samples analyzed for total iron using USEPA Method 6010D.

Bold value indicates a detection.

DER	Division of Environmental Remediation
NYSDEC	New York State Department of Environmental Conservation
USEPA	United States Environmental Protection Agency
TCL	Target compound list
TOGs	Technical and Operational Guidance Series
TVOC	Total Volatile Organic Compounds
VOC	Volatile Organic Compound
	Compound detected in exceedance of NYSDEC SCG Criteria
<1.0	Compound not detected above its laboratory quantification limit
ug/L	Micrograms per liter
J	Value is estimated
REP	Blind replicate
--	Not Analyzed or data not available
D	Concentration is based on a diluted sample analysis.
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank
SIM	Selective ion monitoring
CAS RN	Chemical Abstract Services Registry Number
NA	No defined SCG value
M / MM	Indicates that the flagged compound did not meet criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

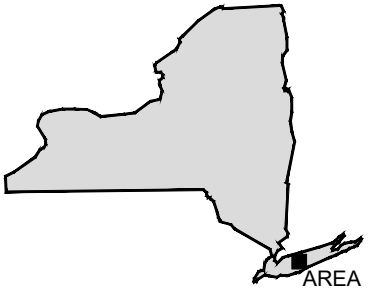
Figures



REFERENCE: BASE MAP USGS 7.5 MINUTE QUADRANGLE, AMITYVILLE, FREEPORT, HICKSVILLE, HUNTINGTON, NEW YORK, 2013

0 2000' 4000'

GRAPHIC SCALE



NORTHROP GRUMMAN
BETHPAGE, NEW YORK
RW-21 AREA

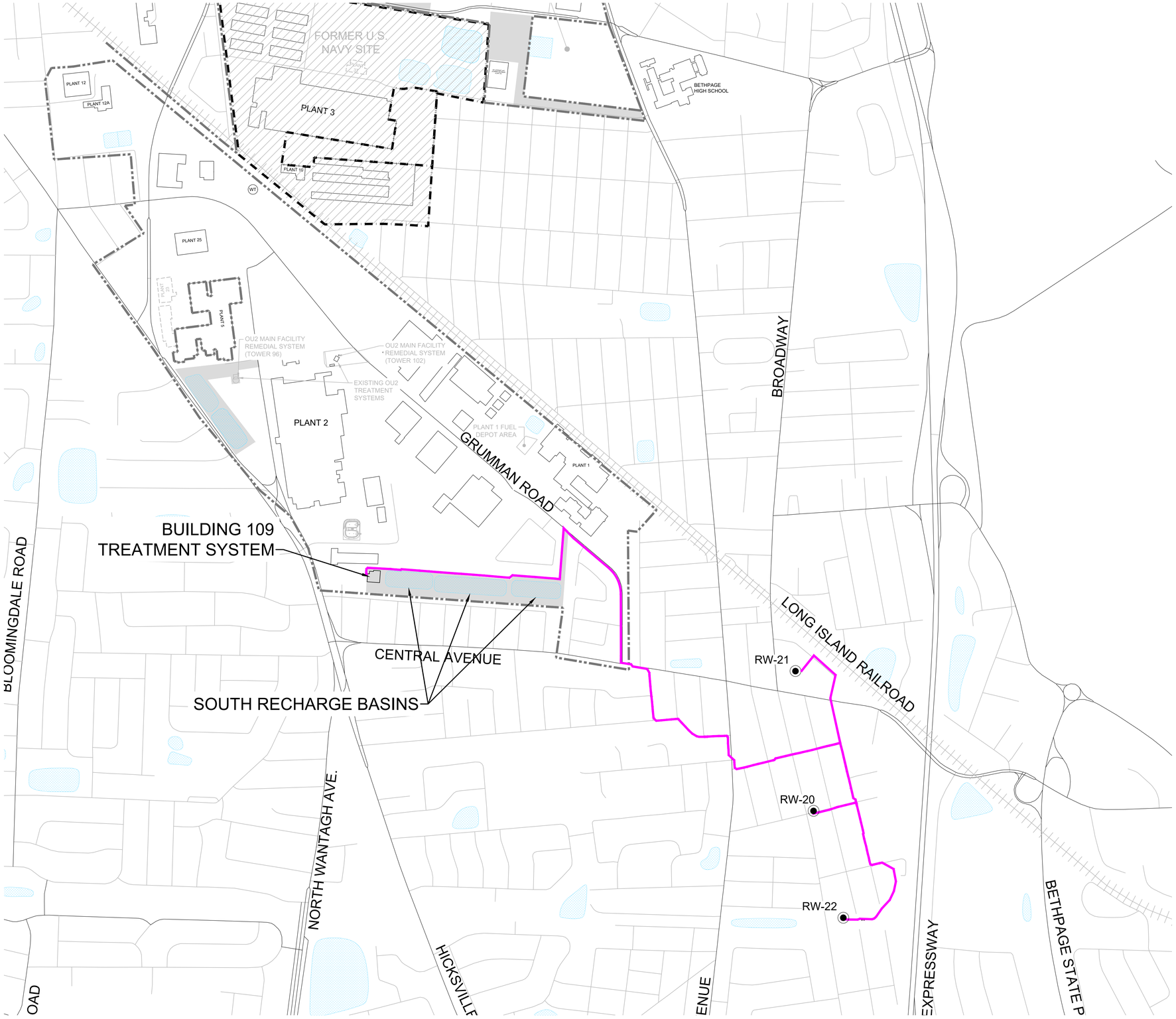
SITE LOCATION

ARCADIS

FIGURE
1

XREFS:
IMAGES:
NY-AMITYVILLE.jpg
NY-FREEPORT.jpg
NY-HICKSVILLE.jpg
NY-HUNTINGTON.jpg

C:\Users\ksartori\ACCDocs\Arcadis\AUS-NORTHROP GRUMMAN-BETHPAGE-BETHPAGE New York\Project Files\2023\01-In Progress\01-DWG\RW21-FIG01-SITE MAP.DWG LAYOUT: 1 SAVED: 8/18/2023 10:06 AM ACADVER: 24.2S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: PLTFULL.CTB
PLOTTED: 8/18/2023 1:08 PM BY: SARTORI, KATHERINE



NORTHROP GRUMMAN
BETHPAGE, NEW YORK
RW-21 AREA

SITE MAP

ARCADIS

FIGURE
2

C:\Users\ksartori\ACCDocs\Arcadis\AUS-NORTHROP GRUMMAN-BETHPAGE-BETHPAGE New York\Project Files\2023\01-In Progress\01-DWG\RW21-FIG02-SITE MAP.DWG LAYOUT: 2 SAVED: 8/18/2023 1:16 PM ACADVER: 24.2S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB
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PLOTTED: 5/16/2024 3:14 PM BY: SMALL, BRIAN
XREFS:
XBDR-EP
IMAGES:

TREATMENT BUILDING LIMITS

P-100A
P-100B
SODIUM HYDROXIDE
T-100

SOLIDS BIN
OFF-SITE DISPOSAL

D-1000B
D-1000B
DEWATERING VOLUTES

P-1000A
P-1000B
DEWATERING VOLUTE FEED PUMPS

C-900
CLARIFIER

D-900
COAGULANT DRUM

P-900
COAGULANT FEED PUMP

T-1100
STORAGE TANK

P-1100
DECANT PUMP

P-1001A
P-1001B
FLOCCULANT PUMPS

D-1001
FLOCCULANT DRUM

RW-20
RW-21
RW-22
GROUNDWATER RECOVERY WELLS

BUILDING SUMPS

T-200
INFLUENT EQ TANK

P-200A
P-200B
P-200C
OXIDATION FEED PUMPS

ADVANCED OXIDATION SYSTEM
AO-300

OZONE GENERATOR
OZONE GENERATOR
OZONE GENERATOR
APT WATER EQUIPMENT

T-400
OXIDIZED WATER TRANSFER TANK

P-400A
P-400B
P-400C
FILTER FEED PUMPS

T-600
BACKWASH TANK

P-600
BACKWASH PUMP

F-500A
F-500B
PRESSURE FILTERS

CF-700A
CF-700B
CARTRIDGE FILTERS

G-800A
G-800B
G-800C
G-800D
G-800E
G-800F
G-800G
G-800H
GAC CONTACTORS

TREATED WATER

T-300
HYDROGEN PEROXIDE

P-3600
P-3610

VAP-301
VAP-302
VAPORIZERS

LO-300
LIQUID OXYGEN TANK

TREATMENT BUILDING LIMITS

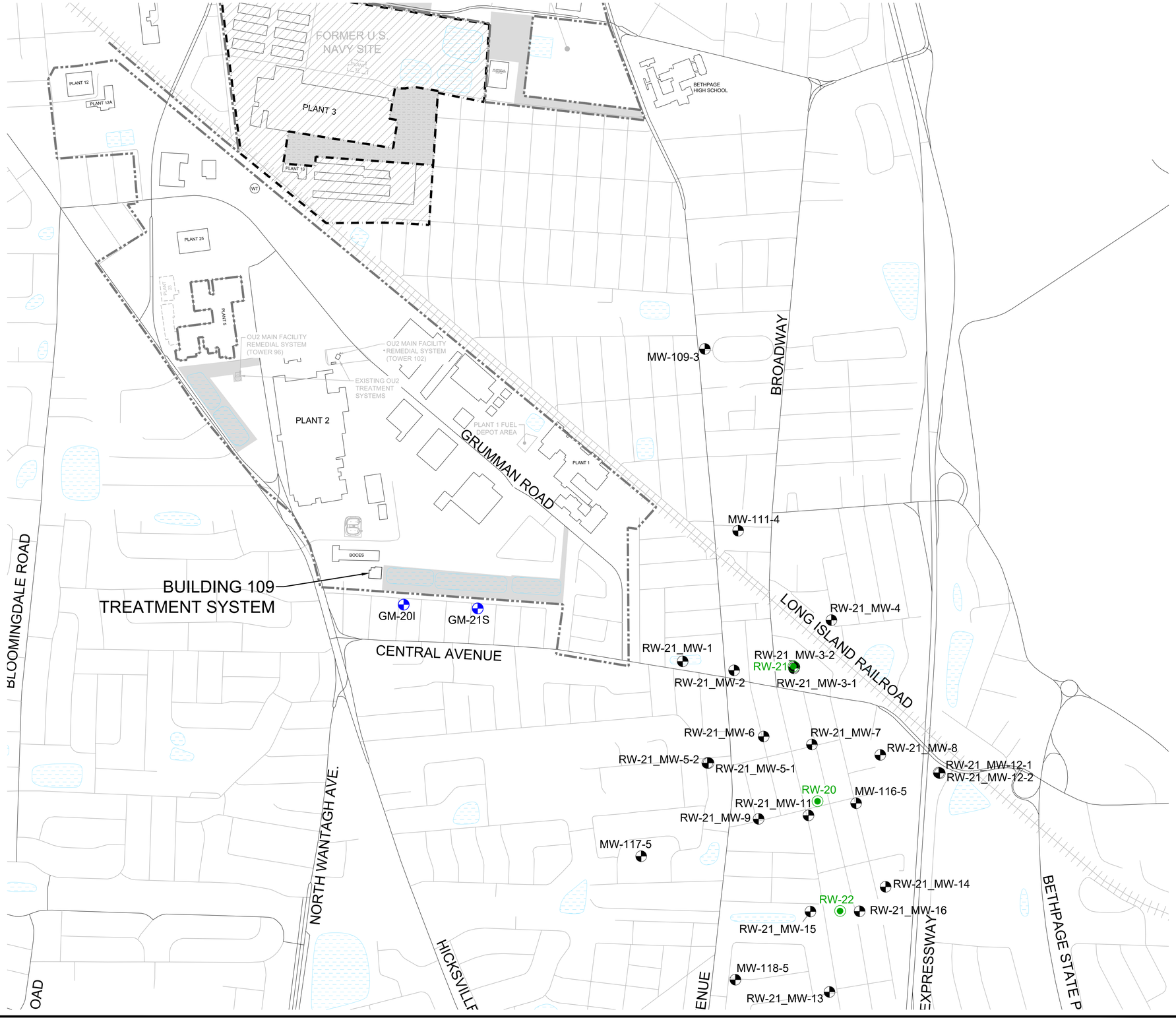
LEGEND:
PRIMARY PROCESS
AUXILLARY PROCESS
INTERMITTENT FLOW

NORTHROP GRUMMAN
BETHPAGE, NEW YORK
RW-21 AREA

PROCESS FLOW DIAGRAM

ARCADIS

FIGURE
3



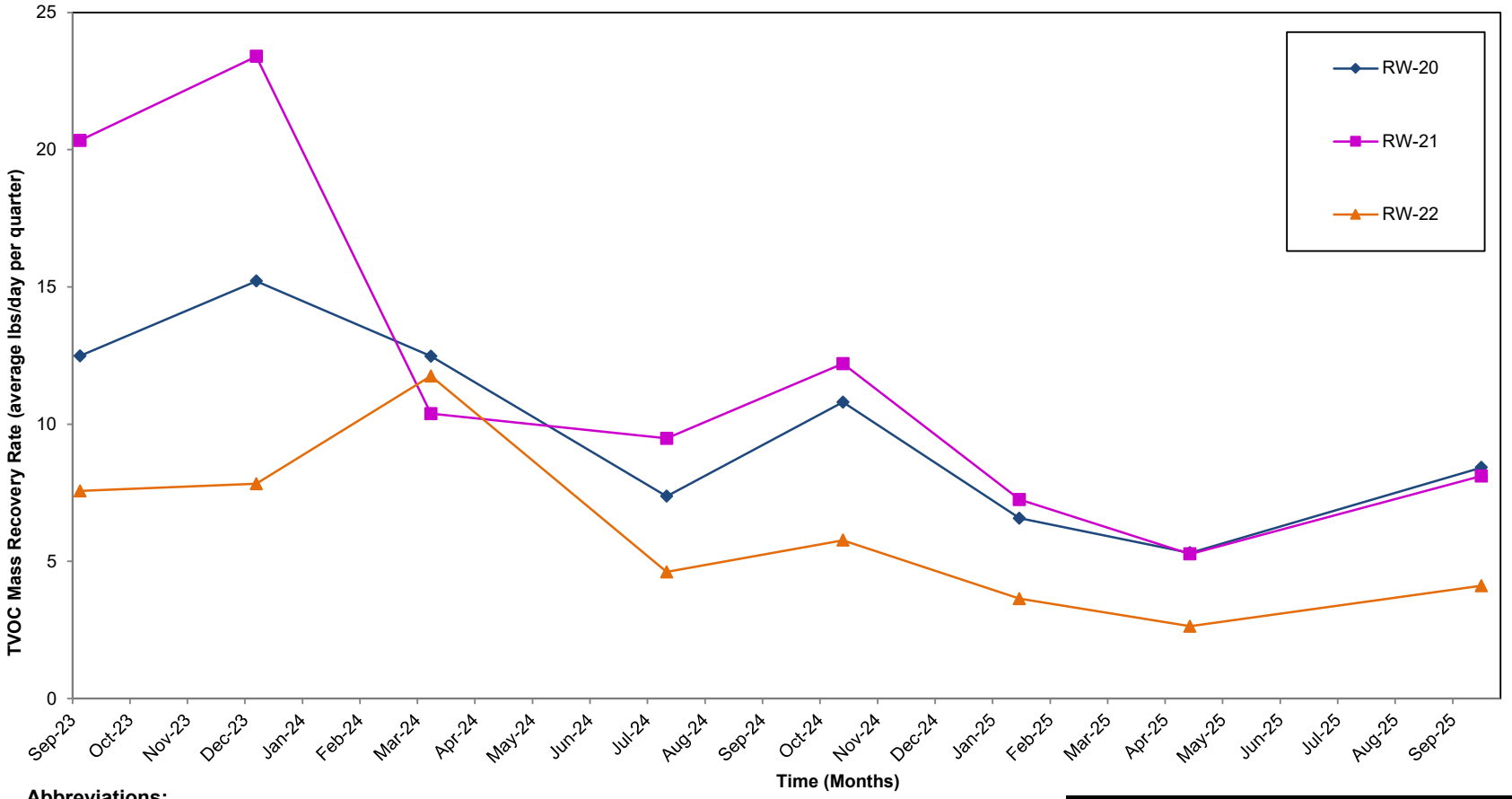
NORTHROP GRUMMAN
BETHPAGE, NEW YORK
RW-21 AREA

RW-21 AREA WELL LOCATIONS AND SITE FEATURES

ARCADIS

FIGURE
4

C:\Users\gsteinberger\DCACCDocs\ArcadisAUS-NORTHROP GRUMMAN-BETHPAGE New York\Project Files\2023\01-In Progress\01-DWG\GEN-FIG1-RW21 AREA WELLS.dwg LAYOUT: 1 SAVED: 11/14/2023 2:21 PM ACADVER: 24.2S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 11/14/2023 2:24 PM BY: STEINBERGER, GEORGE
XREFS: PROJECTNAME: ----
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Xr1498x01
XrBDR-EP



Abbreviations:

VOC = Volatile Organic Compound.

lbs/day = Pounds per day.

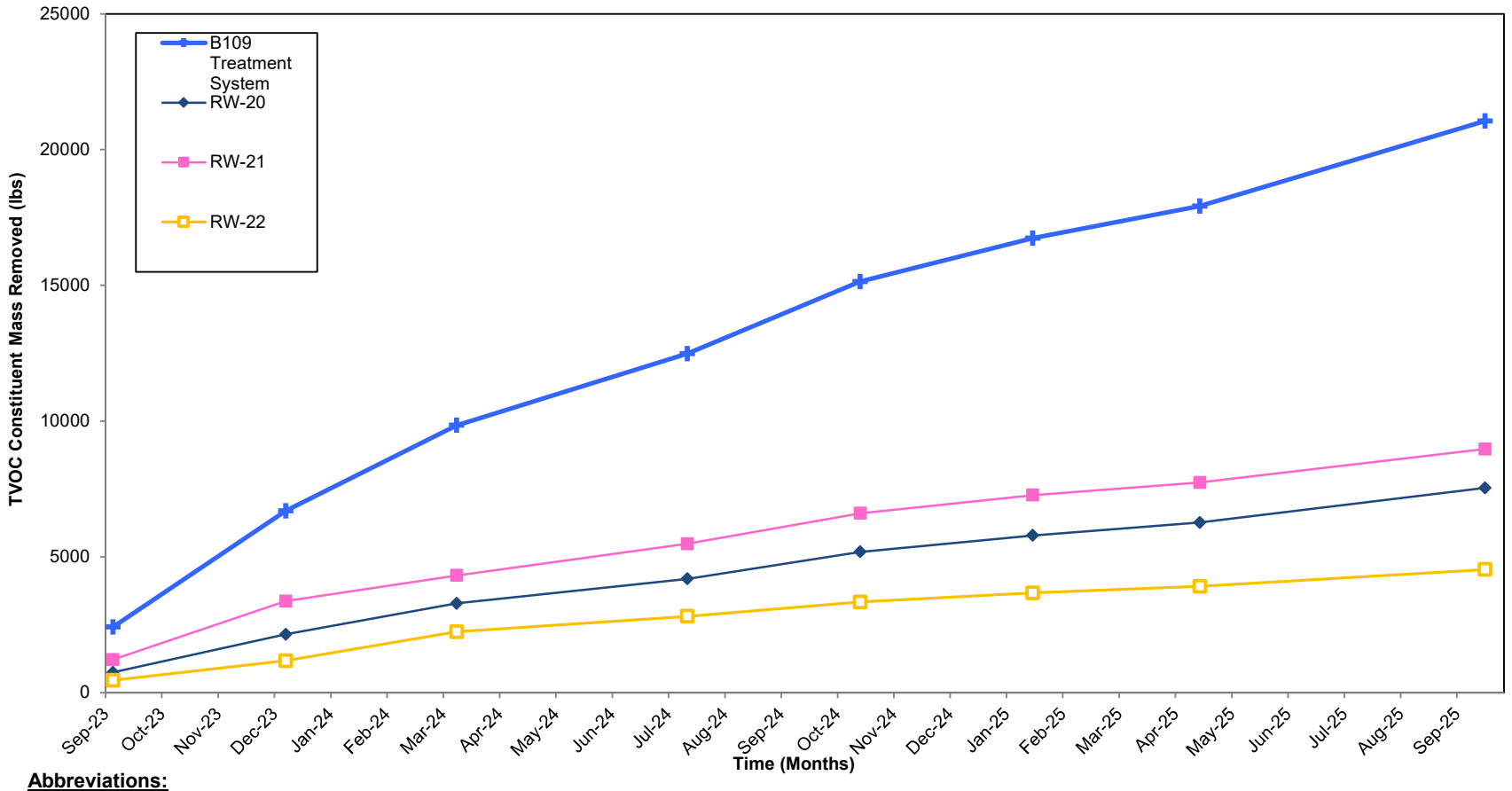
TVOCs = Sum of VOCs detected

NORTHROP GRUMMAN
BETHPAGE, NEW YORK
RW-21 AREA

AVERAGE DAILY TVOC MASS REMOVED PER QUARTER BY REMEDIAL WELLS, STARTUP TO SEPTEMBER 2025

ARCADIS

FIGURE 5



Abbreviations:

VOC = Volatile Organic Compound

lbs = Pounds

TVOCs = Sum of VOCs detected

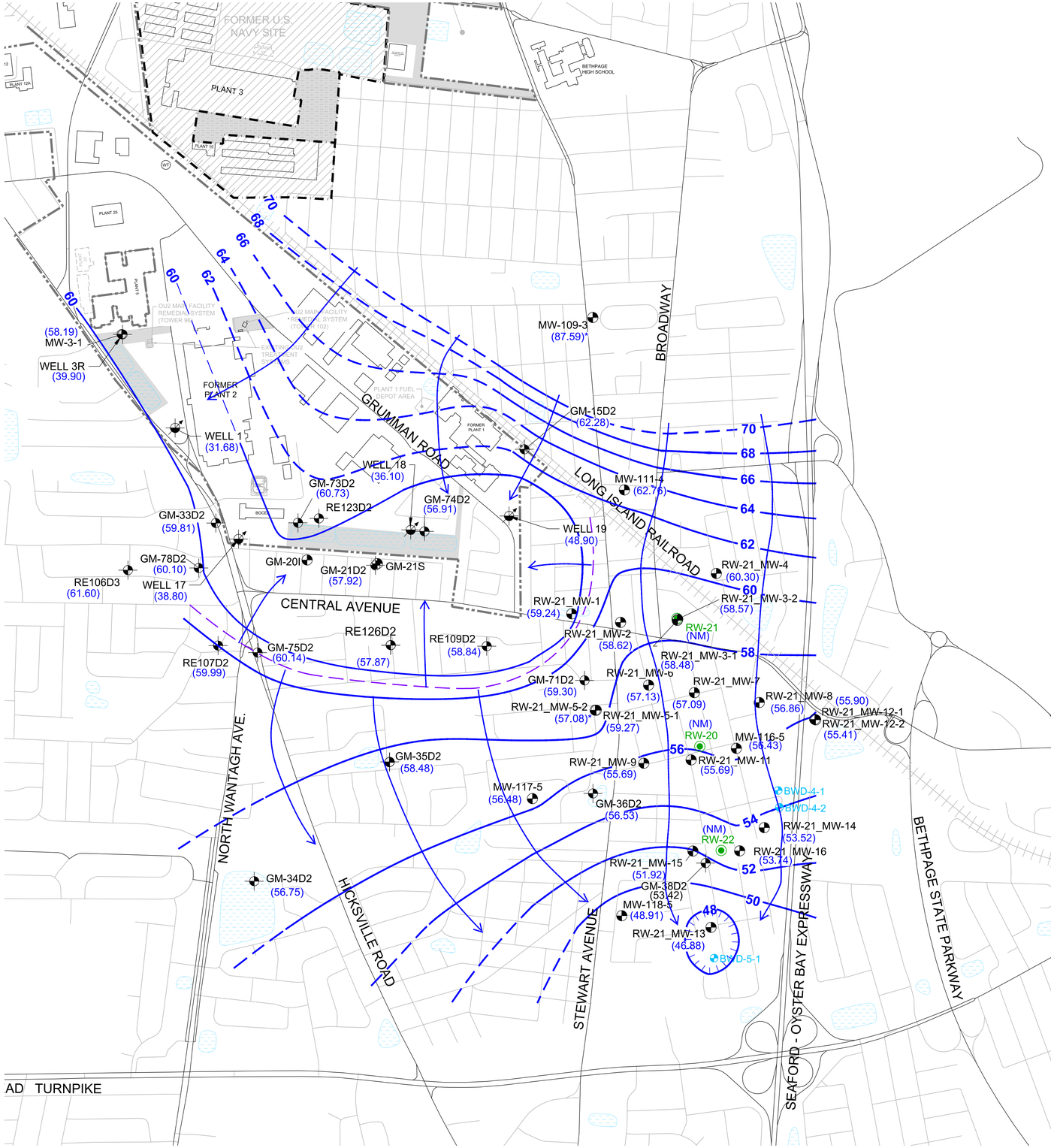
B109 = Building 109

NORTHROP GRUMMAN
BETHPAGE, NEW YORK
RW-21 AREA

CUMULATIVE TVOC MASS REMOVED PER YEAR BY REMEDIAL WELLS, STARTUP TO SEPTEMBER 2025

ARCADIS

FIGURE 6



EXPLANATION:

- FORMER NORTHROP GRUMMAN PROPERTY BOUNDARY
- FORMER OCCIDENTAL CHEMICAL CORPORATION PROPERTY BOUNDARY
- NORTHROP GRUMMAN OWNED PROPERTY (AS OF 2022)
- NAVY OWNED PROPERTY (AS OF 2014)
- FORMER NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
- RECHARGE BASIN
- OU3 MONITORING WELL
- PUBLIC SUPPLY WELL
- OU2 MONITORING WELL
- REMEDIAL WELL
- 56 — LINE OF EQUAL WATER-LEVEL ELEVATION IN FEET ABOVE NAVD88 LEVEL (FT NAVD88) (DASHED WHERE LINE OF EQUAL WATER-LEVEL ELEVATION IS LESS CERTAIN)
- (55.90) WATER-LEVEL ELEVATION (FT NAVD88)
- DIRECTION OF HORIZONTAL COMPONENT OF GROUNDWATER FLOW
- GROUNDWATER POTENTIOMETRIC SURFACE DEPRESSION
- GROUNDWATER DIVIDE
- * READINGS NOT USED FOR CONTOUR
- NM NOT MEASURED

NOTES:

1. OU2 MONITOR WELL WATER LEVEL ELEVATIONS COLLECTED MAY 2022.
2. RW-21 MONITORING WELL BASELINE WATER LEVEL ELEVATIONS COLLECTED DURING MARCH 2022 BASELINE SAMPLING EVENT.
3. MW-118-5 MONITORING WELL WATER LEVEL ELEVATION COLLECTED JUNE 22, 2022.

0 600' 1,200'
GRAPHIC SCALE

NORTHROP GRUMMAN
BETHPAGE, NEW YORK
RW-21AREA

POTENTIOMETRIC SURFACE ELEVATION AND GENERALIZED HORIZONTAL GROUNDWATER FLOW DIRECTIONS IN ZONE 3 (500-700 FT bgs)

ARCADIS

FIGURE 7

C:\Users\wbernd\g.ARCADIS-US\DC\ACCDocs\Arcadis ACC US\AUS-99999999-NOR GRUM_BETHPAGE_NY\Project Files\10_WIP\10T_ARC_ENV\2024101-DWG\GEN-FIG-GWE WELLS 2022.dwg LAYOUT: 7A SAVED: 10/4/2024 2:30 PM ACADVER: 23.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULLRED.CTB PLOTTED: 10/4/2024 2:46 PM BY: BERNDGEN, WENDY DARLENE
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XrBDR-EP

C:\Users\BSmall\DC\ACCDocs\Arcadis ACC US\AUS-99999999-NOR GRUM_BETHPAGE_NY\Project Files\10_WIP\10T_ARC_ENV\2025\01-DWG\RW21-FIG08-MARCH2025-POTENTIOMETRIC SURFACE.dwg LAYOUT: 8 SAVED: 12/1/2025 2:56 PM ACADVER: 24.2S (LMS TECH) PAGESETUP: ----
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X1496X01
X-RW-21-RDL
IMAGES:
Arcadis Logo.png

FORMER U.S. NAVY SITE

PLANT 3

PLANT 12A

PLANT 1

PLANT 2

BETHPAGE HIGH SCHOOL

OU3 MAIN FACILITY REMEDIAL SYSTEM (TOWER 28)

OU2 MAIN FACILITY REMEDIAL SYSTEM (TOWER 102)

EXISTING OU2 TREATMENT SYSTEMS

PLANT 1 FUEL DEPOT AREA

FORMER PLANT 2

BROADWAY

GRUMMAN ROAD

LONG ISLAND RAILROAD

CENTRAL AVENUE

NORTH WANTAGH AVE.

HICKSVILLE ROAD

STEWART AVENUE

SEAFORD - OYSTER BAY EXPRESSWAY

BETHPAGE STATE PARKWAY

AD TURNPIKE

MW-3-1 (55.20)
WELL 3R (30.22)
WELL 1 (31.98)
WELL 18 (35.29)
GM-73D2 (61.47)
RE123D2 (58.70)
GM-74D2 (63.64)
GM-33D2 (59.51)
RE106D3 (60.18)
GM-78D2 (59.33)
WELL 17 (41.52)
GM-21D2 (56.77)
RE107D2 (58.00)
GM-75D2 (60.54)
RE109D2 (56.10)
GM-71D2 (58.15)
MW-109-3 (67.17)
GM-15D2 (61.89)
MW-111-4 (61.53)
WELL 19 (46.70)
RW-21_MW-1 (56.44)
RW-21_MW-2 (55.43)
RW-21_MW-3 (47.15)
RW-21_MW-6 (53.17)
RW-21_MW-7 (52.63)
RW-21_MW-4 (58.72)
RW-21_MW-3-2 (46.77)
RW-21 (8.77)
RW-21_MW-8 (54.75)
RW-21_MW-12-2 (53.71)
RW-20 (5.25)
MW-116-5 (52.12)
RW-21_MW-9 (50.54)
RW-21_MW-11 (46.80)
GM-35D2 (56.66)
MW-117-5 (54.03)
GM-36D2 (54.10)
BWD-4-1
BWD-4-2
RW-21_MW-14 (49.77)
RW-21_MW-16 (47.51)
RW-21_MW-15 (49.04)
RW-22 (27.40)
MW-118-5 (49.38)
RW-21_MW-13 (45.08)
BWD-5-1
GM-34D2 (54.96)

APPROXIMATE DOWNGRADIENT EXTENT OF CAPTURE ZONE (GROUNDWATER DIVIDE)

EXPLANATION:

- FORMER NORTHROP GRUMMAN PROPERTY BOUNDARY
- FORMER OCCIDENTAL CHEMICAL CORPORATION PROPERTY BOUNDARY
- NORTHROP GRUMMAN OWNED PROPERTY (AS OF 2022)
- NAVY OWNED PROPERTY (AS OF 2014)
- FORMER NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
- RECHARGE BASIN
- OU3 MONITORING WELL
- PUBLIC SUPPLY WELL
- OU2 MONITORING WELL
- OU2 REMEDIAL WELL
- OU3 REMEDIAL WELL
- 56 — LINE OF EQUAL WATER-LEVEL ELEVATION IN FEET RELATIVE TO NAVD88 LEVEL (FT NAVD88) (DASHED WHERE LINE OF EQUAL WATER-LEVEL ELEVATION IS LESS CERTAIN)
- GROUNDWATER POTENTIOMETRIC SURFACE DEPRESSION CONTOUR APPROXIMATELY LOCATED
- (58.88) WATER-LEVEL ELEVATION (FT NAVD88)
- GROUNDWATER DIVIDE
- GROUNDWATER FLOW DIRECTION

NOTE:

1. WATER LEVEL MEASUREMENTS FOR OU2 AND OU3 MONITORING AND REMEDIAL WELLS COLLECTED 2025 QUARTER 2.

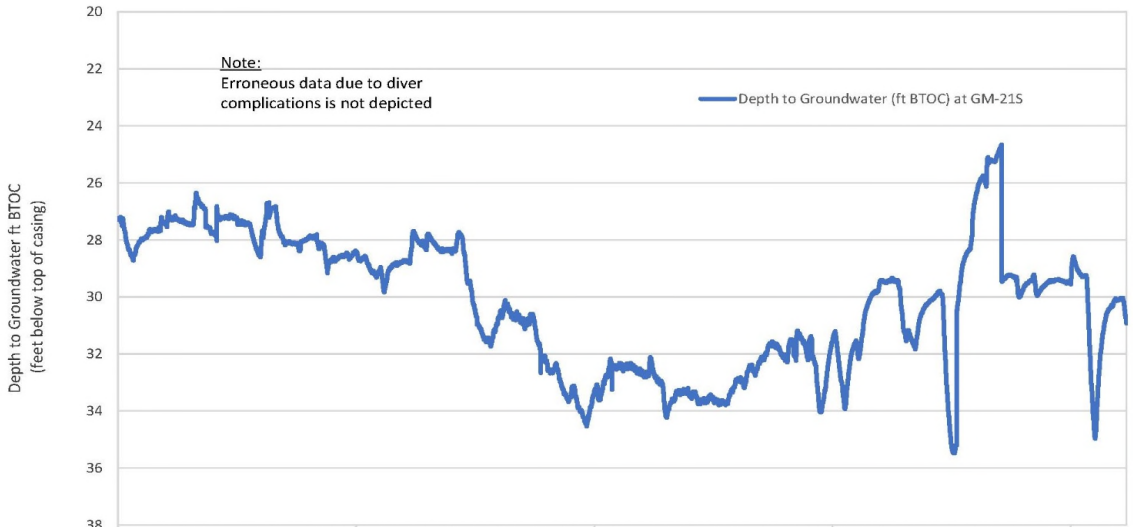
0 600' 1,200'
GRAPHIC SCALE

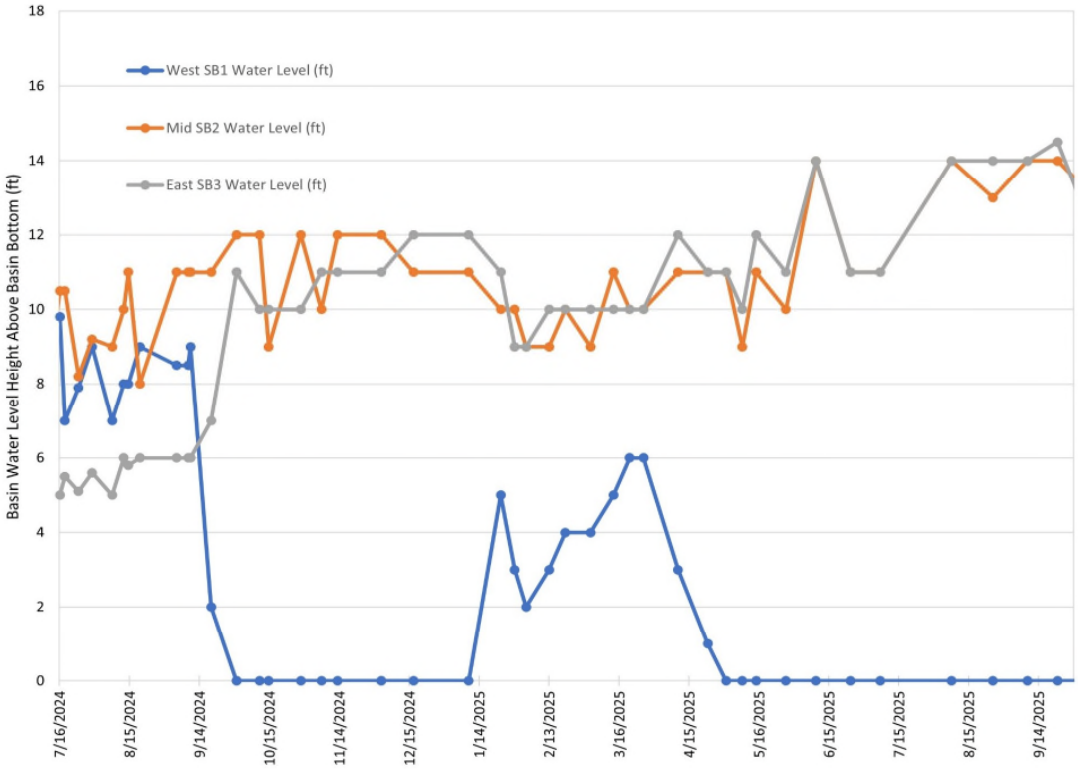
NORTHROP GRUMMAN
BETHPAGE, NEW YORK
RW-21 AREA

POTENTIOMETRIC SURFACE ELEVATION AND GENERALIZED HORIZONTAL GROUNDWATER FLOW DIRECTIONS IN ZONE 3 (500 TO 700 FEET BELOW LAND SURFACE) DURING 2ND QUARTER 2025

ARCADIS

FIGURE 8





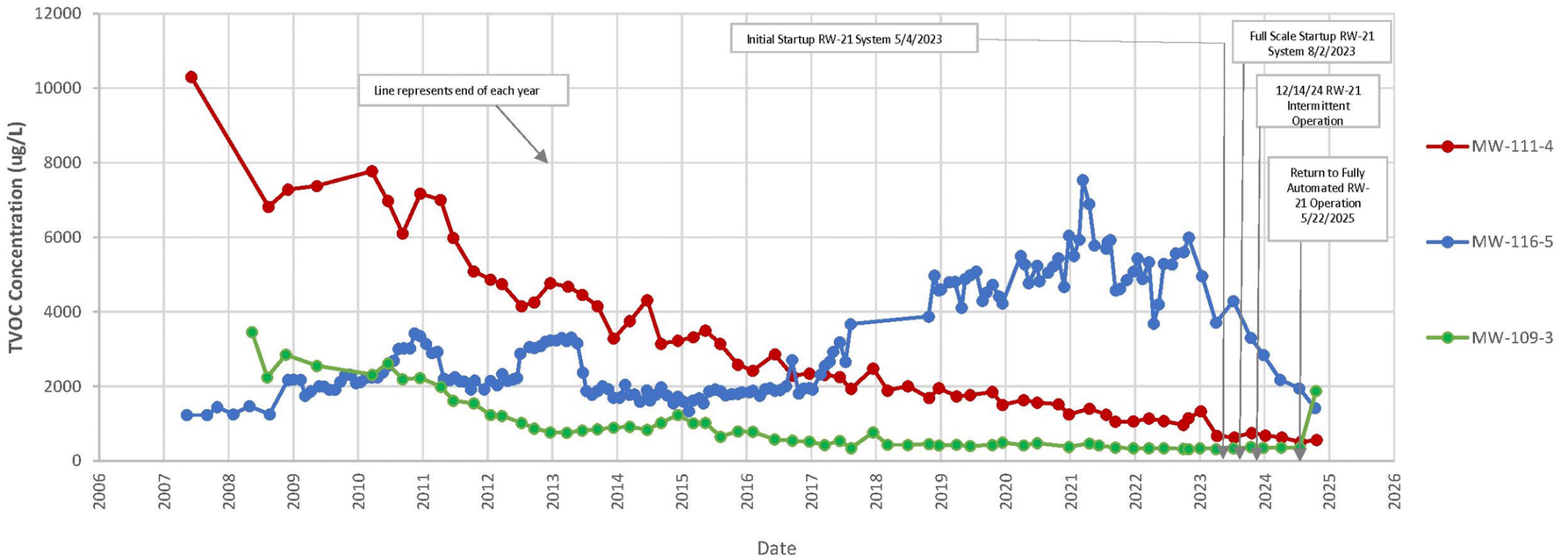
NORTHROP GRUMMAN
BETHPAGE, NEW YORK
RW-21 AREA

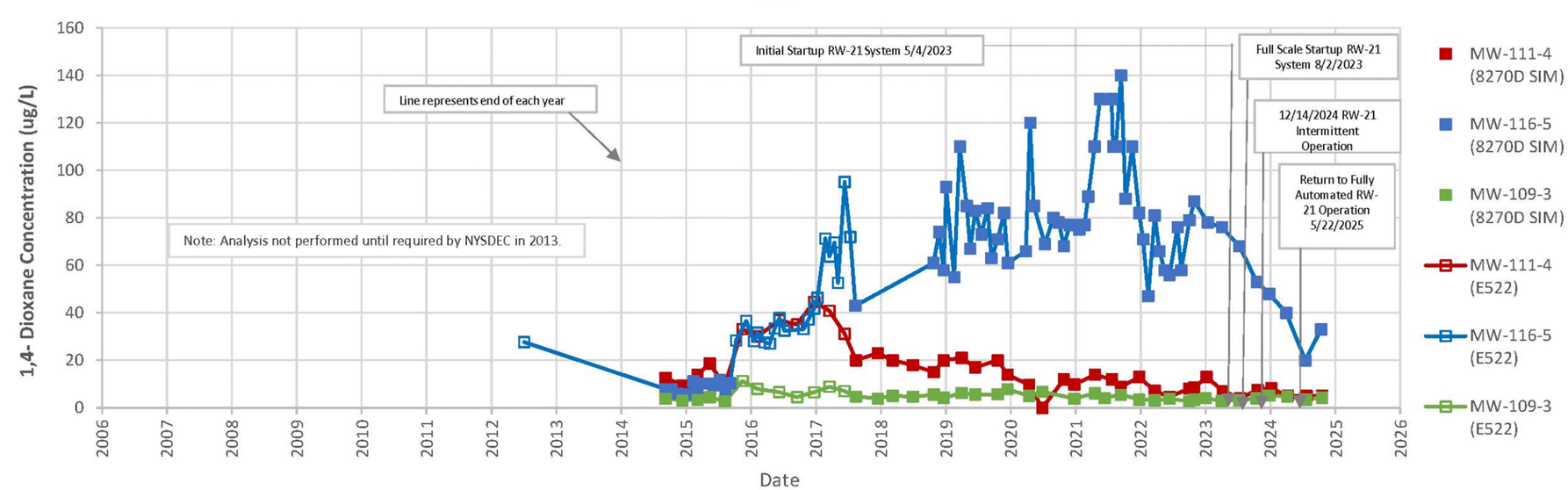
DEPTH TO WATER AT MONITORING WELL GM-21S AND SOUTH RECHARGE BASIN WATER LEVELS VS TIME

ARCADIS

FIGURE
9

12/1/2025 11:05:43 AM





Notes and Abbreviations:

TVOC: Total volatile organic compound

Total VOCs: Sum of VOCs detected

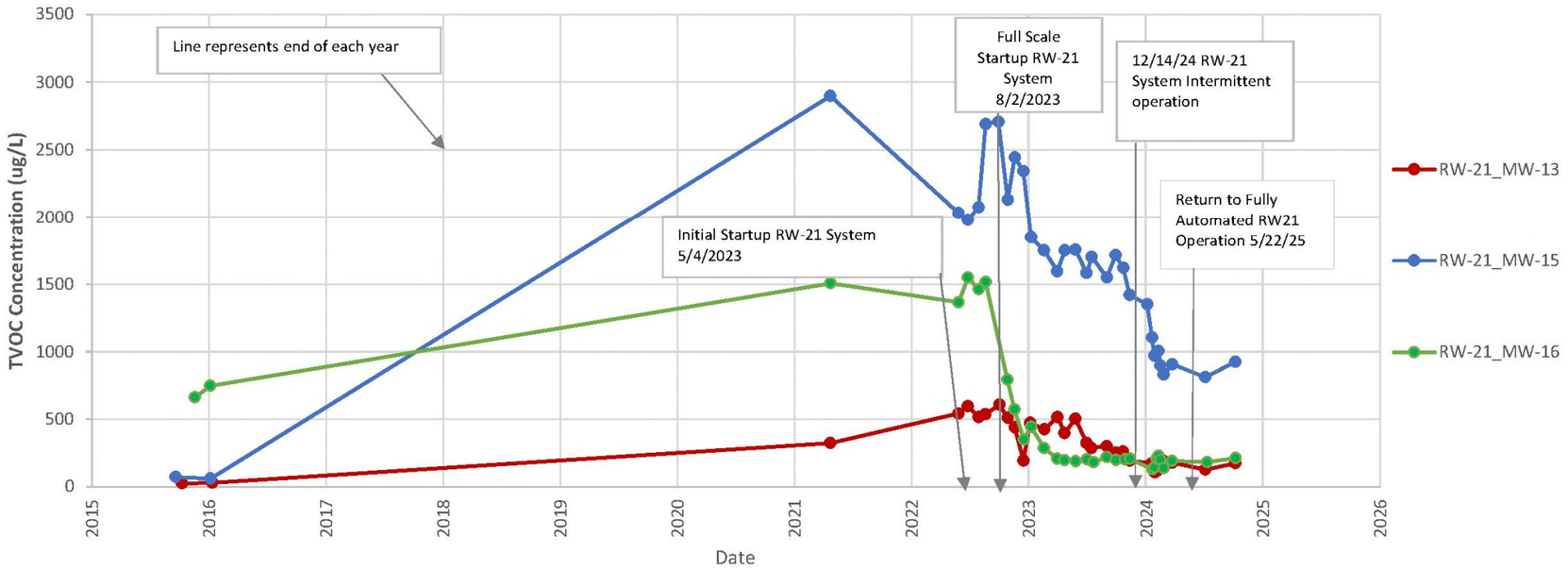
µg/L: micrograms per liter

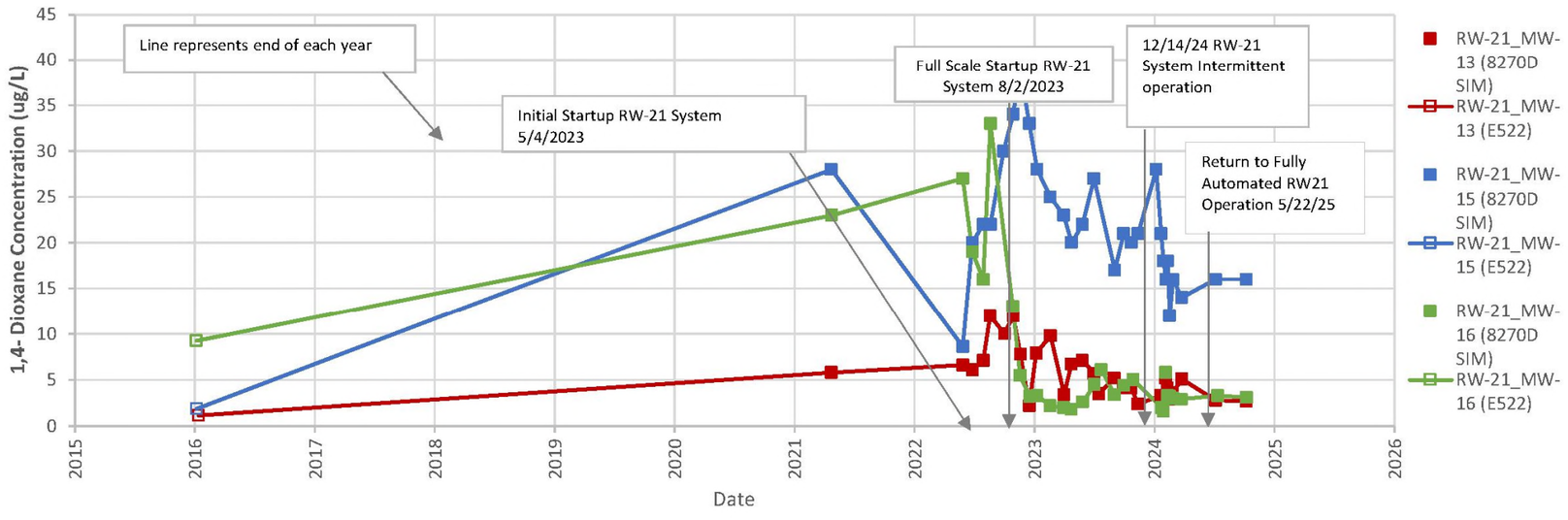
NORTHROP GRUMMAN
BETHPAGE, NEW YORK
RW-21 AREA

TOTAL VOLATILE ORGANIC COMPOUNDS AND 1,4 DIOXANE CONCENTRATIONS IN MW-109-3, MW-111-4 AND MW-116-5

ARCADIS

FIGURE
10





Notes and Abbreviations:

TVOC: Total volatile organic compound

Total VOCs: Sum of VOCs detected

µg/L: micrograms per liter

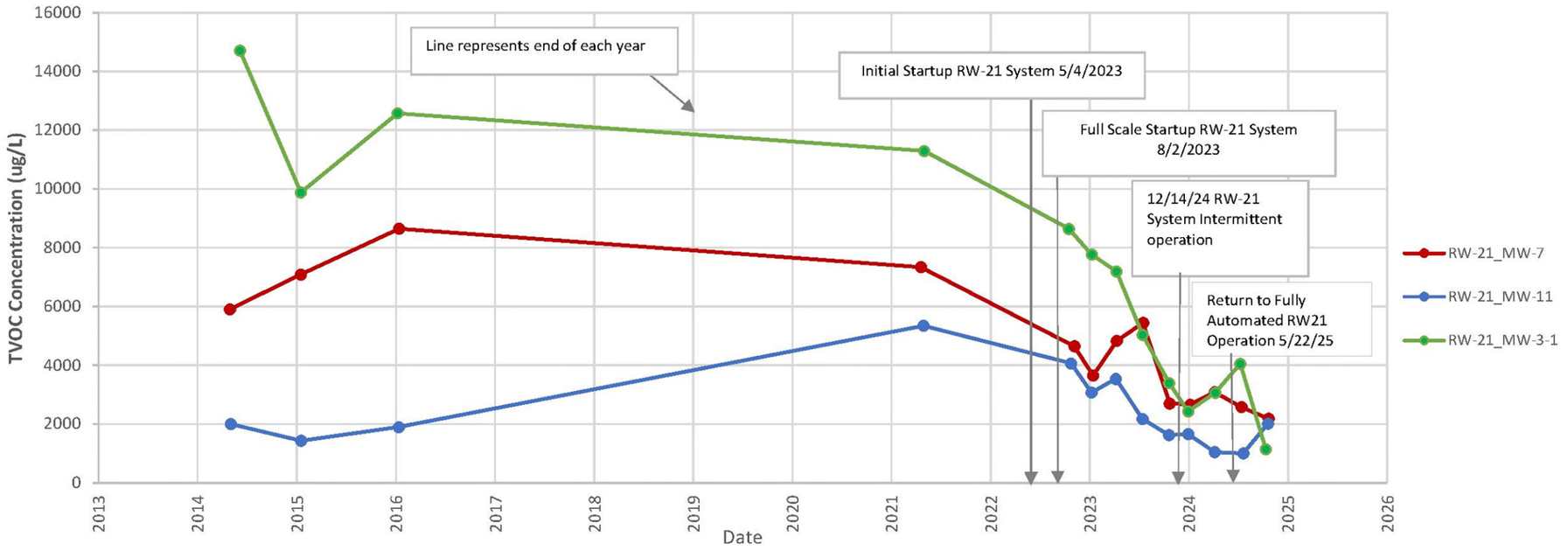
NORTHROP GRUMMAN
BETHPAGE, NEW YORK
RW-21 AREA

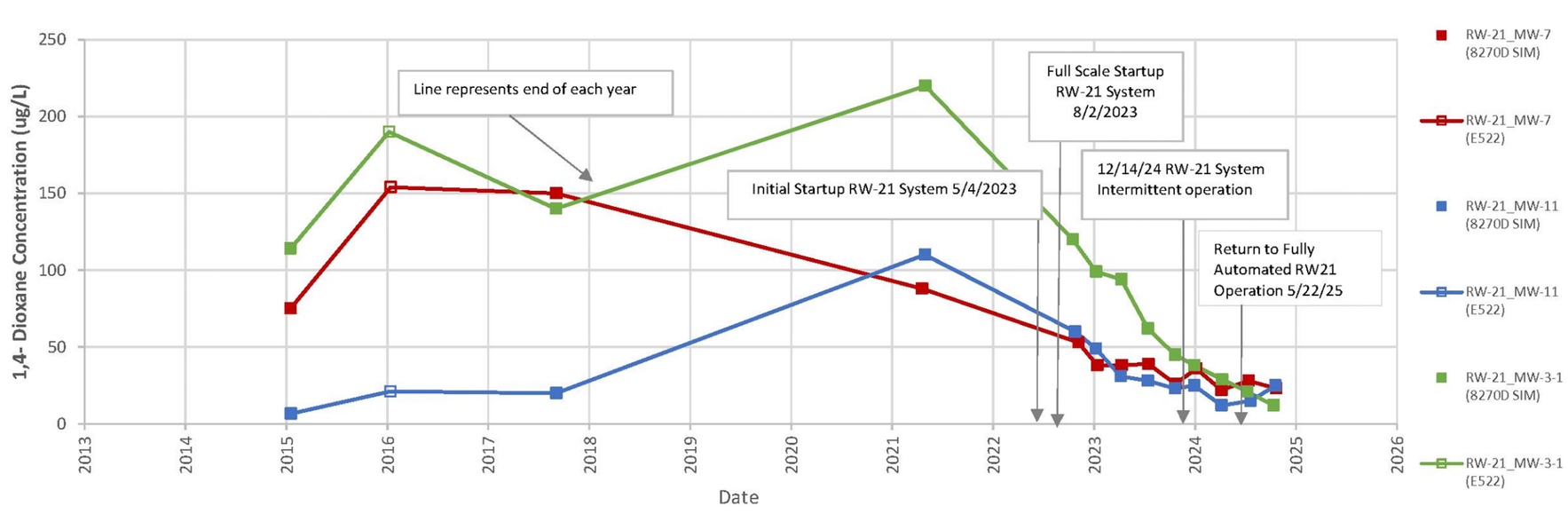
TOTAL VOLATILE ORGANIC COMPOUNDS AND 1,4 DIOXANE CONCENTRATIONS IN RW-21_MW-13, RW-21_MW-15, AND RW-21_MW-16

ARCADIS

FIGURE
11

11/13/2025 2:15:31 PM





Notes and Abbreviations:

TVOC: Total volatile organic compound

Total VOCs: Sum of VOCs detected

µg/L: micrograms per liter

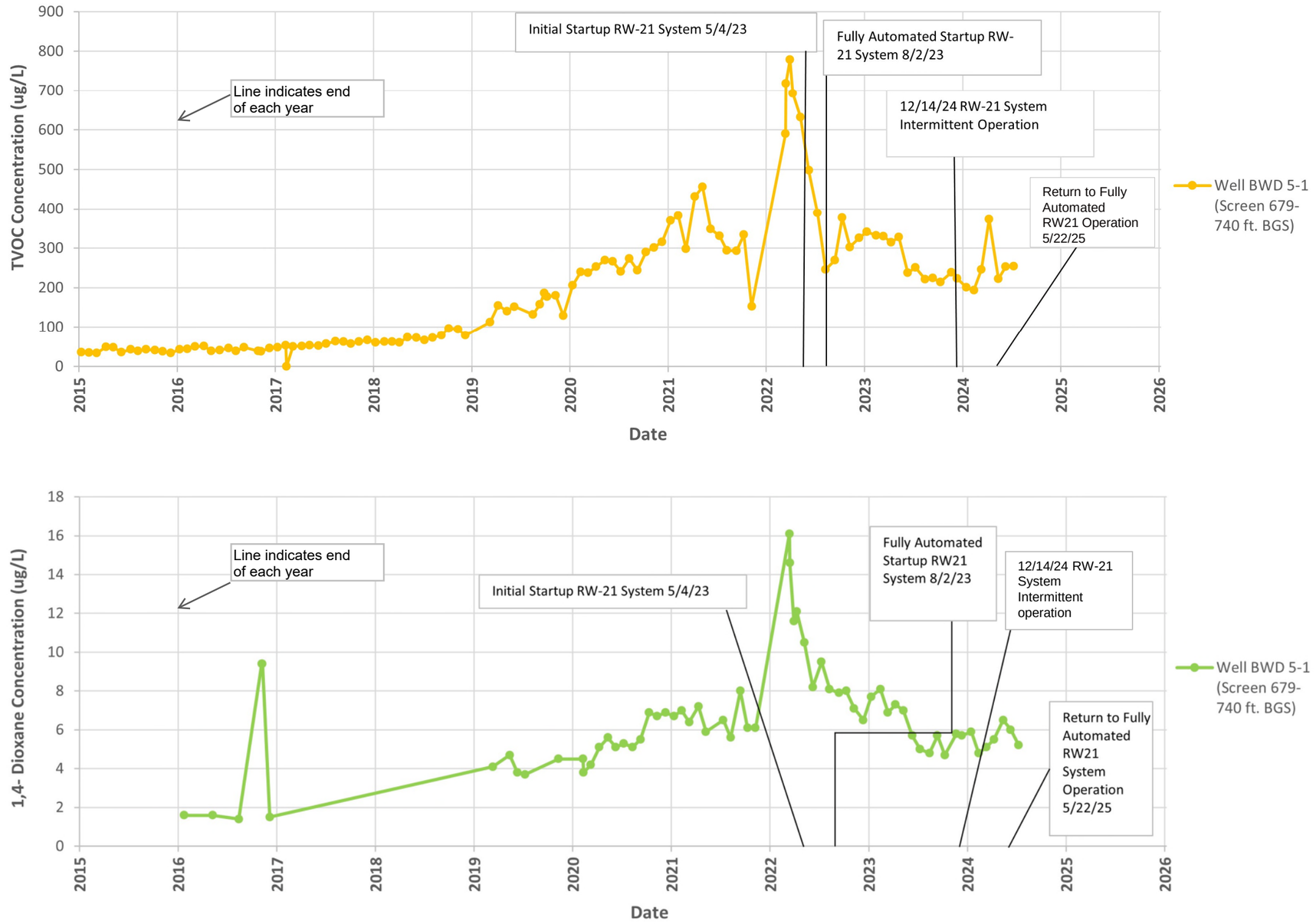
NORTHROP GRUMMAN
BETHPAGE, NEW YORK
RW-21 AREA

TOTAL VOLATILE ORGANIC COMPOUNDS AND 1,4 DIOXANE CONCENTRATIONS IN RW-21_MW-3-1, RW-21_MW-7, AND RW-21_MW-11

ARCADIS

FIGURE
12

11/13/2025 3:06:12 PM



Notes and Abbreviations:

TVOC: Total volatile organic compound

Total VOCs: Sum of VOCs detected

µg/L: micrograms per liter

BWD: Bethpage Water District

Samples collected by Bethpage Water District and analytical results provided to Northrop Grumman under the Freedom of Information Law (FOIL).

NORTHROP GRUMMAN
BETHPAGE, NEW YORK
RW-21 AREA

TOTAL VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE CONCENTRATIONS IN RAW WATER SAMPLES FROM WELL BWD 5-1

ARCADIS

FIGURE
13

11/13/2025 9:44:49 AM

Appendix A

Groundwater Sampling Logs

PREM-mm-11524-28

~~Program 5A~~ JE2130

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #:

Send Report To

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Alexander Hellman
Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix
1 TB1204KK1	12/04/24	—		✓	W
2 FB1204KK1	12/4/24	0730		✓	W
3 MW-111-4	12/4/24	0955		✓	GW
4 AW-21_MW-15	12/4/24	1305		✓	GW

Preservative	B	B	C
Filtered (Y/N)			
# of Containers	3	2	1
Container Information	1	1	4

PARAMETER ANALYSIS & METHOD

- VC8260NG38PZ+20, VM, S+13BUTADN, VMS-F142
- VC8260NG38PZ+20, VM, S+13BUTADN, VMS-F142
- Total Iron via USPA 6010

Keys

Preservation Key: A. H2SO4; B. HCL; C. HNO3; D. NaOH; E. None; F. Other: ; G. Other: ; H. Other:

Container Information Key: 1. 40 ml Vial; 2. 1L Amber; 3. 250ml Plastic; 4. 500ml Plastic; 5. Encore; 6. 2 oz. Glass; 7. 4 oz. Glass; 8. 8 oz. Glass; 9. Other: ; 10. Other:

Matrix Key: SO - Soil; W - Water; T - Tissue; SE - Sediment; SL - Sludge; A - Air; NL - NAPL/Oil; SW - Sample Wipe; Other: GW

REMARKS

A6
V540
V545

Initial Assessment NA
Label Verification NA

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓):

Laboratory Information and Receipt

Lab Name: SGS Accutest
Cooler packed with ice (✓)
Specify Turnaround Requirements: STANDARD TAT
Shipping Tracking #: Lab Provided Courier

Cooler Custody Seal (✓): Intact / Not Intact
Sample Receipt:
Condition/Cooler Temp: 2.0°

Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name: Alexander Hellman	Printed Name: Jeremy Pereira	Printed Name:	Printed Name:
Signature:	Signature:	Signature:	Signature:
Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm:
Date/Time: 12/4/24	Date/Time: 2:46 pm	Date/Time:	Date/Time:

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SR 6662

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager

Telephone: 631-829-0643 cell

Address: 105 Maxess Road Suite N108

Fax: 631-249-7610

City: Melville State: NY Zip: 11747

E-mail Address: Benjamin.Wolf@aracadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY

Project #: 30223092.PSSI3

Sampler's Printed Name: Alexander Hellman

Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
						E		2	2	PARAMETER ANALYSIS & METHOD
FB120424KK1	12/4/24	0730		✓	W					X
MW-111-4	12/4/24	0955		✓	GW					X
RW-21_MW-15	12/4/24	1305		✓	GW					X

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: GW

REMARKS

Special Instructions/Comments:

Tier II QA/QC Deliverables Requested

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: Alexander Hellman	Printed Name:	Printed Name:	Printed Name: Evan Price
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm: SGS-KAS
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 12/04/24	Date/Time:	Date/Time:	Date/Time: 12-5-24 1020

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Katahdin Analytical Services SR6662 page 0000010 of 0000012

GW FB TB

FREM NM 11524 28

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #: JE3011

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Kyja Krauss
Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix
1 TB121824KK1	12/18/24	—		✓	W
2 FB121824KK1	12/18/24	1645		✓	W
3 RW-21_MW-13	12/18/24	1535		✓	GW

Preservative	B	B	C						
Filtered (✓)									
# of Containers	3	2	1						
Container Information	1	1	4						

PARAMETER ANALYSIS & METHOD

VC8260(NG38P2+20, VM S+13BUTADN, VMS+F142	VC8260(NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010						
X	X							
	X							
X								

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

Initial Assessment 3B NP
Label Verification _____

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: Kyja Krauss	Printed Name: Susan Curtis	Printed Name: Susan Curtis	Printed Name: Joshua Reiter
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Immaculate	Firm/Courier:	Firm: SGS
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp: _____	Date/Time: 12/18/24	Date/Time: 12/19/24 1:35	Date/Time: 5:25	Date/Time: 12/19/24 1730

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1.4°C IR5 SGS COURIER

5.2 5

JE3011: Chain of Custody
Page 1 of 2

SR 6982

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager

Telephone: 631-829-0643 cell

Address: 105 Maxess Road Suite N108

Fax: 631-249-7610

City: Melville State: NY Zip: 11747

E-mail Address: Benjamin.Wolf@aracadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY

Project #: 30223092.PSSI3

Sampler's Printed Name: Lyra Kraus

Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE
FB121824KK1	12/18/24	1645		✓	W	X
RW-21_MW-13	12/18/24	1535		✓	GW	X

Preservative	E							
Filtered (✓)								
# of Containers	2							
Container Information	2							

PARAMETER ANALYSIS & METHOD

REMARKS

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

Special Instructions/Comments:

Tier II QA/QC Deliverables Requested

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓)	Printed Name: Lyra Kraus	Printed Name:	Printed Name:	Printed Name: Gian Price
☒ Cooler packed with ice (✓)	☒ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm: SGS-KAS
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 12/18/24	Date/Time:	Date/Time:	Date/Time: 12-20-24 1030

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GW
PB TB

****Program 5A****

PAEm-mm-11571L 20

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JE3333

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Kyra Kraus
Sampler's Signature:

Preservative	B	B	C					
Filtered (✓)								
# of Containers	3	2	1					
Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC/8260NC38P2+20, VM S+13BUTADN, VMS+F142	VC/8260NC38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USEPA 6010
1 TB122024KK1	12/20/24	—		✓	W		X	
2 FB122024KK1	12/20/24	0730		✓	W		X	
3 RW-21_MW-16	12/20/24	0945		✓	GW	X		

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

V727

Assessment Verification B 2/4/25

Special QA/QC Instructions(✓): X

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓)	Printed Name: Kyra Kraus	Printed Name: M. Daly	Printed Name:	Printed Name:
X Cooler packed with ice (✓)	X Intact ☐ Not Intact	Signature:	Signature: Mahwood Daly	Signature:	Signature:
Specify Turnaround Requirements: 5-Day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier: IMPULSE	Firm:
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp: 1.7°C IR000	Date/Time: 12/20/24	Date/Time:	Date/Time: 12/20/24 1930	Date/Time:

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SGS COURIER

5.2 5

JE3333: Chain of Custody
Page 1 of 2

SK 7611

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
290 Broadhollow Road Suite 307E	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com
Project Name/Location (City, State):	**Project #:**
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name:	**Sampler's Signature:**
Kyla Kraus	

Preservative	None						
Filtered (✓)							
# of Containers	2						
Container Information	2						

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE							REMARKS
FB122024KK1	12/20/24	0730		✓	W	X							
EW-21_MW-16	12/20/24	0945		✓	GW	X							

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: _____

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin	Cooler Custody Seal (✓)	Printed Name: Kyla Kraus	Printed Name:	Printed Name:	Printed Name: Evan Price
☒ Cooler packed with ice (✓)	☒ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: 5-day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm: SGS-KAS
Shipping Tracking #: FedEx overnight Priority	Condition/Cooler Temp: _____	Date/Time: 12/20/24	Date/Time:	Date/Time:	Date/Time: 12-21-24 1120

20730826 CofC AR Form 08.27.2035

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

GW
TB

PREM-MM-11524-28

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 7

Lab Work Order #: JE 3539

Send Results to:	Contact & Company Name:	Telephone:
	Benjamin Wolf -Task Manager	631-829-0643 cell
	Address:	Fax:
	105 Maxess Road Suite N108	631-249-7610
	City / State / Zip: Melville NY 11747	E-mail Address: Benjamin.Wolf@arcadis.com
	Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	Project #: 30223092.PSSI3
	Sampler's Printed Name: S Vlavianos	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010	REMARKS
						B	B	C					
								3	2	1			
						1	1	4					
1. TB01022555V1	1/2/25	—		✓	W					X			
2. FB01022555V1	1/2/25	0700		✓	W					X			
3. RW-21_MW-13	1/2/25	0930		✓	GW	X							
4. RW-21_MW-16	1/2/25	1145		✓	GW	X				1			
5 REPO1022555V1	1/2/25	—		✓	GW	X							

Preservation Key: A: H_2SO_4; B: HCL; C: HNO_3; D: NaOH; E: None; F: Other:; G: Other:; H: Other:

Container Information Key: 1: 40 ml Vial; 2: 1 L/Amber; 3: 250 ml Plastic; 4: 500 ml Plastic; 5: Encore; 6: 2 oz. Glass; 7: 4 oz. Glass; 8: 8 oz. Glass; 9: Other:; 10: Other:

Matrix Key: SO - Soil; SE - Sediment; NL - NAPL/Oil; W - Water; SL - Sludge; SW - Sample Wipe; T - Tissue; A - Air; Other: GW

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓): ARCA

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name:	Printed Name:	Printed Name: Benny Lem
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature: SGS Courier	Signature:
Specify Turnaround Requirements: RUSH STANDARD TAT 5 Day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: SGS	Firm/Courier:	Firm: SGS
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp:	Date/Time: 1/2/25	Date/Time: 1/2/25 1538	Date/Time:	Date/Time: 1/2/25 16:30

20730826 CofC AR Form 08.27.2015

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IR50 2,8

5.2 5

JE3539: Chain of Custody
Page 1 of 2

SS0016

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com
Project Name/Location (City, State):	**Project #:**
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name: S Vlavianos	**Sampler's Signature:**

Preservative	E											
Filtered (✓)												
# of Containers	2											
Container Information	2											

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE						REMARKS
FB0102255V1	11/2/25	0700		✓	W	X						
RW-21_MW-13	11/2/25	0950		✓	GW	X						
RW-21_MW-16	11/2/25	1145		✓	GW	X						
REP01022555V1	11/2/25	—		✓	GW	X						

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ **Special QA/QC Instructions(✓):**

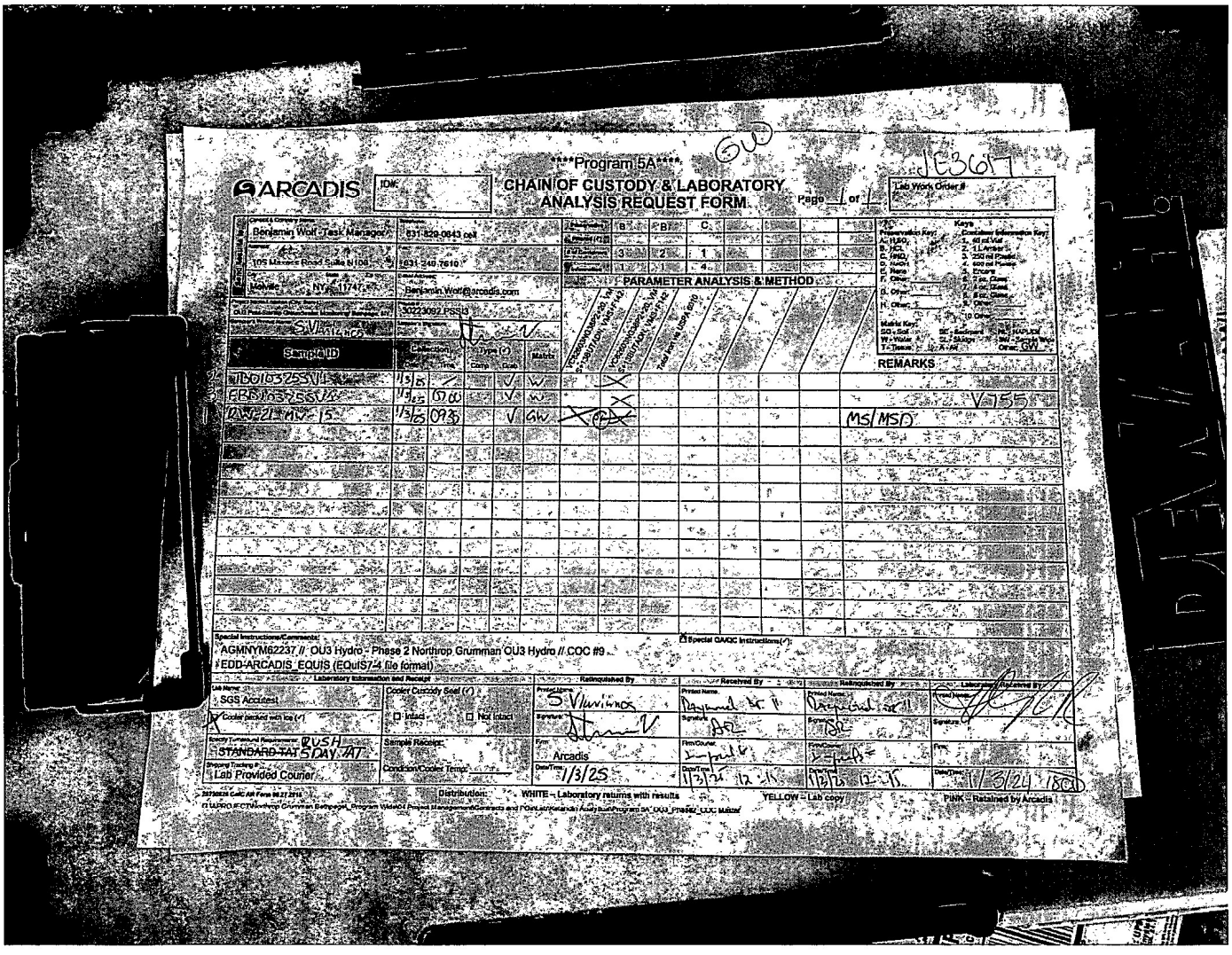
Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name: Richard G	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: ~~STANDARD TAT~~ RUSH 5 DAY TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 11/2/25	Date/Time: 01-03-25	Date/Time:	Date/Time:

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Katahdin Analytical Services SS0016 page 0000011 of 0000013



****Program 5A****

ARCADIS

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

JE3617

Lab Work Order #

PARAMETER ANALYSIS & METHOD

REMARKS

Sample ID	Collection Date	Collection Time	Type (C=Comp, G=Grab)	Matrix
MBOI03255V1	11/5/25		G	W
FBBI03255V1	11/5/25	0700	G	W
GW-21-MW-15	11/5/25	0935	G	GW

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓):

MS/MSD

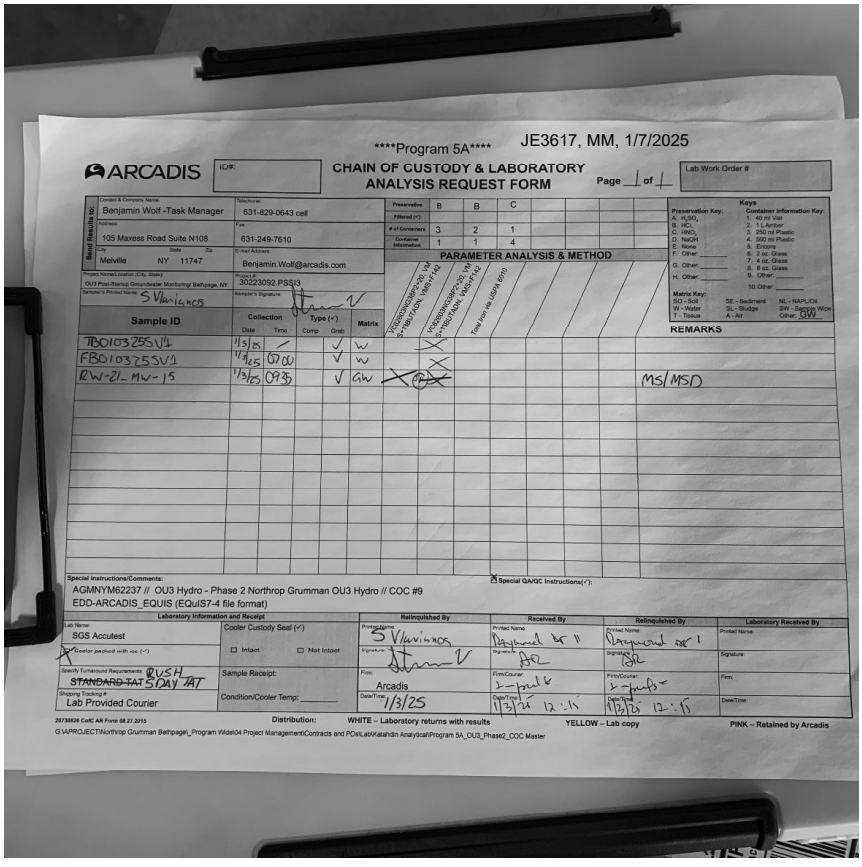
V=155

Laboratory Information and Receipt

Lab Name: SGS Accutest
Cooler packed with Ice (✓)
Shipping Instructions: BUSH STANDARD TAT 5 DAY TAT
Shipment Tracking #: Lab Provided Courier
Cooler Custody Seal (✓): Intact / Not Intact
Sample Receipt:
Condition/Cooler Temp:

Relinquished By: S. Vlavianos, Arcadis, 11/3/25
Received By: Arcadis, 11/3/25 12:15
Relinquished By: 11/3/25 12:15
Received By: 11/3/24 1800

Distribution: WHITE – Laboratory returns with results; YELLOW – Lab copy; PINK – Retained by Arcadis



****Program 5A**** JE3617, MM, 1/7/2025

ARCADIS

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Report Results to: Benjamin Wolf -Task Manager, 631-829-0543 cell

Address: 105 Maxess Road Suite N108, Melville NY 11747

Fax: 631-249-7610

E-mail Address: Benjamin.Wolf@arcadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY

Project #: 30223092.PSSI3

Sampler's Printed Name: SVlahinos

Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	PARAMETER ANALYSIS & METHOD	REMARKS
						B	B	C			
								3	2	1	
						1	1	4			
TB01032555V1	1/3/25		✓		W					X	
FB01032555V1	1/3/25	0700		✓	W					X	
RW-21-MW-15	1/3/25	0930		✓	GW	X	X	X		X	MS/MSD

Keys

Preservation Key: A: H_2SO_4 B: HCl C: HNO_3 D: NaOH E: None F: Other: G: Other: H: Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil, W - Water, T - Tissue, SE - Sediment, SL - Sludge, A - Air, NL - NAPL/Oil, SW - Sample Wipe, Other: GW

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: SVlahinos	Printed Name: Bagwell for JJ	Printed Name: Bagwell for J	Printed Name:
Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: RUSH ~~STANDARD TAT~~ 5 DAY TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: 1-post 6	Firm/Courier: 1-pmfs=	Firm:
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp:	Date/Time: 1/3/25	Date/Time: 1/3/25 12:14	Date/Time: 1/3/25 12:15	Date/Time:

20130526 CofC AR Form 08.27.2015

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JE3617: Chain of Custody
Page 4 of 4

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # SS0042

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: SVlavianos	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
FB010325SV1	1/3/24	0700		✓	W	X	
KW-21_MW-15	1/3/24	0935		✓	W	X	MS/MSD

Preservative	E
Filtered (✓)	
# of Containers	2
Container Information	2

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other _____

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: GW

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: SVlavianos	Printed Name:	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature: CMW
Specify Turnaround Requirements: ~~STANDARD TAT~~ RUSH 5 DAY TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 1/3/25	Date/Time:	Date/Time:	Date/Time: 1/4/25 10:35

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Katahdin Analytical Services SS0042 page 0000011 of 0000013

PREM-MM-09424-79

GW
TB

ID#: TB

****Program 5A****

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

ARCADIS

Page 1 of 1

Lab Work Order #: JE3688

Send Results to:	Contact & Company Name:	Telephone:
	Benjamin Wolf -Task Manager	631-829-0643 cell
	Address:	Fax:
	290 Broadhollow Road Suite 307E	631-249-7610
	City / State / Zip: Melville NY 11747	E-mail Address: Benjamin.Wolf@arcadis.com
	Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	Project #: 30223092.PSSI3
	Sampler's Printed Name: Shirley He	Sampler's Signature: Shirley He

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010	REMARKS
						B	B	C					
						3	2	1					
						1	1	4					
1. TB010725AH1	1/7/25	—		✓	W					X	X		
2. FB010725AH1	1/7/25	0730		✓	W					X	X		
3. RW-21_MW-13	1/7/25	1020		✓	GW	X	X						

Keys

Preservation Key: A: H2SO4; B: HCL; C: HNO3; D: NaOH; E: None; F: Other: ; G: Other: ; H: Other:

Container Information Key: 1: 40 ml Vial; 2: 1 L Amber; 3: 250 ml Plastic; 4: 500 ml Plastic; 5: Encore; 6: 2 oz. Glass; 7: 4 oz. Glass; 8: 8 oz. Glass; 9: Other: ; 10: Other:

Matrix Key: SO: Soil; W: Water; T: Tissue; SE: Sediment; SL: Sludge; A: Air; NL: NAPL/Oil; SW: Sample Wipe; Other: GW

PARAMETER ANALYSIS & METHOD

Initial Assessment ZB-JW

Label Verification

Special Instructions/Comments:

AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓)	Printed Name: Shirley He	Printed Name: Andrew Johnson	Printed Name:	Printed Name:
☑ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature: Shirley He	Signature:	Signature:	Signature:
Specify Turnaround Requirements: 5-Day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm:
Shipping Tracking #: Courier pick-up	Condition/Cooler Temp: 2.1/C/no	Date/Time: 1/7/25	Date/Time:	Date/Time:	Date/Time: 1/7/25 19:00

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5.2 5

JE3688: Chain of Custody
Page 1 of 2

****Program 5A****

550080

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: Shirley He	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix
FB010725AH1	1/7/25	0730		✓	W
RW-21_MW-13	1/7/25	1020		✓	GW

Preservative	E
Filtered (✓)	
# of Containers	2
Container Information	2

PARAMETER ANALYSIS & METHOD

1,4-Dioxane, by 8270D SIM, CLLE

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

Special Instructions/Comments:

Tier II QA/QC Deliverables Requested

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Shirley He	Printed Name: Richard Gary	Printed Name:	Printed Name:
☑ Cooler packed with ice (✓)		Signature: Shirley He	Signature: Richard G.	Signature:	Signature:
Specify Turnaround Requirements: 5-day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Priority Overnight	Condition/Cooler Temp: _____	Date/Time: 1/7/25	Date/Time: 1-8-25 0955	Date/Time:	Date/Time:

20730826 CofC AR Form 08.27.2015

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Katahdin Analytical Services SS0080 page 0000009 of 0000011

GW FB TB

****Program 5A****

PREM-MM-01625-7

ARCADIS

ID#: 1

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JE3825

Send Results to:	Contact & Company Name:	Telephone:
	Benjamin Wolf -Task Manager	631-829-0643 cell
	Address:	Fax:
	290 Broadhollow Road Suite 307E	631-249-7610
	City / State / Zip: Melville NY 11747	E-mail Address: Benjamin.Wolf@arcadis.com
	Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	Project #: 30223092.PSSI3
	Sampler's Printed Name: Pat Quinlan	Sampler's Signature: Pat Quinlan

	Preservative	B	B	C					
	Filtered (✓)								
	# of Containers	3	2	1					
	Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC8260NG38P2+20, VM S+13BUTADN, VMS+F142	VC8260NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010	REMARKS
1- TBolnk25Pa1	1-8-25	—		✓	GW		X		
2- FBulnk25Pa1	1/8/25	0720		✓	W		X		
3- RW-21_MW-16	1/8/25	1000		✓	GW	X			
4- RW-21_MW-15	1/8/25	1145		✓	GW	X			

Keys

Preservation Key: A: H2SO4; B: HCL; C: HNO3; D: NaOH; E: None; F: Other: ; G: Other: ; H: Other:

Container Information Key: 1: 40 ml Vial; 2: 1 L Amber; 3: 250 ml Plastic; 4: 500 ml Plastic; 5: Encore; 6: 2 oz. Glass; 7: 4 oz. Glass; 8: 8 oz. Glass; 9: Other: ; 10: Other:

Matrix Key: SO - Soil; W - Water; T - Tissue; SE - Sediment; SL - Sludge; A - Air; NL - NAPL/Oil; SW - Sample Wipe; Other: GW

Special Instructions/Comments:

AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓): 1 of 2 Assessment R3A 20% Verification

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Pat Quinlan	Printed Name:	Printed Name:	Printed Name: Joshua McLean
☒ Cooler packed with ice (✓) —		Signature: Pat Quinlan	Signature:	Signature:	Signature:
Specify Turnaround Requirements: 5-Day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: IMPULSE	Firm/Courier:	Firm: SGS
Shipping Tracking #:	Condition/Cooler Temp:	Date/Time: 1-8-25 1448	Date/Time: 1-8-2025 1448	Date/Time:	Date/Time: 1/8/25 1823

20730826 CofC AR Form 08.27.2015

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SGS COURIER 0.3 IRSG

5.2 5

JE3825: Chain of Custody
Page 1 of 2

****Program 5A****

SS0098

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address: 210 Broadhollow Rd Suite 307E ~~105 Maxess Road Suite N108~~	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: Pat Quinlan	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE
FB01082525	1-8-25	0730		✓	W	X
RW-21_MW-16	1/8/25	1000		✓	GW	X
RW-21_MW-15	1/8/25	1145		✓	GW	X

Preservative	E
Filtered (✓)	
# of Containers	2
Container Information	2

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: GW

REMARKS

Special Instructions/Comments:

Tier II QA/QC Deliverables Requested

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Pat Quinlan	Printed Name:	Printed Name:	Printed Name: Richard Geary
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm: Katahdin
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 1-8-25	Date/Time:	Date/Time:	Date/Time: 1-9-25 1130

20730826 CofC AR Form 08.27.2015

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Katahdin Analytical Services SS0098 page 0000010 of 0000012

GW FB TB

****Program 5A****

PREA MM 111524 2DS

JE4077

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager

Telephone: 631-829-0643 cell

Address: 290 Broadhollow Road Suite 307E

Fax: 631-249-7610

City: Melville State: NY Zip: 11747

E-mail Address: Benjamin.Wolf@arcadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY

Project #: 30223092.PSSI3

Sampler's Printed Name: Shirley He

Sampler's Signature: Shirley He

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix
1 TB011325SH1	1/13/25	—		✓	W
2 FB011325SH1	1/13/25	0730		✓	W
3 RW-21_MW-13	1/13/25	0950		✓	GW

Preservative	B	B	C							
Filtered (✓)										
# of Containers	3	2	1							
Container Information	1	1	4							

PARAMETER ANALYSIS & METHOD

	VC8260/3NG8P2+20. VM S+13BUTAOIN, VMS+F142	VC8260/3NG8P2+20. VM S+13BUTAOIN, VMS+F142	Total Iron via USPA 6010
1	X	X	
2	X	X	
3	X		

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil SE - Sediment NL - NAPL/Oil W - Water SL - Sludge SW - Sample Wipe T - Tissue A - Air Other: GW

REMARKS

Initial Assessment SA JP

Label Verification

Special Instructions/Comments:

AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓)	Printed Name: Shirley He	Printed Name:	Printed Name:	Printed Name: Joshua Rattan
☑ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature: Shirley He	Signature:	Signature:	Signature:
Specify Turnaround Requirements: 5-Day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: SGS	Firm/Courier: SGS	Firm: SGS
Shipping Tracking #: Courier pick-up	Condition/Cooler Temp:	Date/Time: 1/13/25 1115	Date/Time: 1/13/25	Date/Time: 1/13/25 1736	Date/Time: 1/13/25 1730

0.4°C IR60

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5.2 5

JE4077: Chain of Custody

Page 1 of 2

****Program 5A****

SS0157

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address	**Fax**
290 Broadhollow Road Suite 307E	631-249-7610
City / State / Zip	**E-mail Address**
Melville NY 11747	Benjamin.Wolf@aracadis.com
Project Name/Location (City, State)	**Project #**
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name	**Sampler's Signature**
Shirley He	Shirley He

Preservative	E						
Filtered (✓)							
# of Containers	2						
Container Information	2						

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE							REMARKS
FB011325SH1	1/13/25	0730		✓	W	X							
RW-21_MW-13	1/13/25	0950		✓	GW	X							

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

Special Instructions/Comments:

Tier II QA/QC Deliverables Requested

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Shirley He	Printed Name: Richard G	Printed Name:	Printed Name:
☑ Cooler packed with ice (✓)		Signature: Shirley He	Signature: Richard G	Signature:	Signature:
Specify Turnaround Requirements: 5-day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Priority Overnight	Condition/Cooler Temp:	Date/Time:	Date/Time: 1-14-25 0935	Date/Time:	Date/Time:

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Katahdin Analytical Services SS0157 page 0000009 of 0000011

GW
TB
FB

ID#:

****Program 5A****

PRGM-MN-09424-79

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

ARCADIS

Page 1 of 1

Lab Work Order #:

Send Results to:

Contact & Company Name:	Benjamin Wolf -Task Manager
Telephone:	631-829-0643 cell
Address:	290 Broadhollow Road Suite 307E
Fax:	631-249-7610
City / State / Zip	Melville NY 11747
E-mail Address:	Benjamin.Wolf@arcadis.com
Project Name/Location (City, State):	OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #:	30223092.PSSI3
Sampler's Printed Name:	Shirley He
Sampler's Signature:	Shirley He

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	VC(2603NG38PZ+20, VN S+13BUTADN, VMS-F142	VC(2603NG38PZ+20, VN S+13BUTADN, VMS-F142	Total Iron via USPA 6010	REMARKS
						B	B	C					
								3	2	1			
						1	1	4					
1. TB011425PQ1	1/14/25	—		✓	W						X		
2. FB011425PQ1	1/14/25	0730		✓	GW						X		
~~RW-21_MW-16~~	~~1/14/25~~	~~1000~~		~~✓~~	~~GW~~						X		
3. RW-21_MW-16	1/14/25	1000		✓	GW					X			
4. RW-21_MW-15	1/14/25	1145		✓	GW					X			

Keys

Preservation Key: A: H_2SO_4 B: HCl C: HNO_3 D: NaOH E: None F: Other: G: Other: H: Other:

Container Information Key: 1: 40 ml Vial 2: 1 L Amber 3: 250 ml Plastic 4: 500 ml Plastic 5: Encore 6: 2 oz. Glass 7: 4 oz. Glass 8: 8 oz. Glass 9: Other: 10: Other:

Matrix Key: SO - Soil W - Water T - Tissue SE - Sediment SL - Sludge A - Air NL - NAPL/Oil SW - Sample Wipe Other: GW

Initial Assessment BL3A
Label Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: Shirley He	Printed Name: Junior F #1	Printed Name: J Wilson F	Printed Name: AJ Taylor
☑ Cooler packed with ice (✓)		Signature: Shirley He	Signature:	Signature:	Signature:
Specify Turnaround Requirements: 5-Day TAT	Sample Receipt: TK50.0c 5.5	Firm: Arcadis	Firm/Courier: Impulse Courier	Firm/Courier: (illegible)	Firm: SGS
Shipping Tracking #: Courier pick-up	Condition/Cooler Temp:	Date/Time: 1/14/25 1539	Date/Time: 1/14/25 1539	Date/Time: 1/14/25 (illegible)	Date/Time: 1/15 1843

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5.2 5

JE4132: Chain of Custody
Page 1 of 2

****Program 5A****

SS0181

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: Shirley He	Sampler's Signature: Shirley He

Preservative	E
Filtered (✓)	
# of Containers	2
Container Information	2

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
FB011425PQ1	1/14/25	0730		✓	W	X	
RW-21_MW-16	1/14/25	1000		✓	GW	X	
RW-21_MW-15	1/14/25	1145		✓	GW	X	

Special Instructions/Comments:

Tier II QA/QC Deliverables Requested

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Shirley He	Printed Name: Evan Price	Printed Name:	Printed Name:
☑ Cooler packed with ice (✓)		Signature: Shirley He	Signature:	Signature:	Signature:
Specify Turnaround Requirements: 5-day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx priority Overnight	Condition/Cooler Temp: _____	Date/Time: 1/14/25	Date/Time: 1-15-25 0945	Date/Time:	Date/Time:

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Katahdin Analytical Services SS0181 page 0000010 of 0000012

GW TB
FB

PREM MM 01625 7

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #: JE4592

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Brandon Monegro
Sampler's Signature: Brandon Monegro

	Preservative	B	B	C					
	Filtered (Y)								
	# of Containers	3	2	1					
	Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key: A. H_2SO_4 B. NCL C. HNO_3 D. NaOH E. None F. Other: _____ G. Other: _____ H. Other: _____

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: _____ 10. Other: _____

Matrix Key: SO - Soil SE - Sediment NL - NAPL/Oil W - Water SL - Sludge SW - Sample Wipe T - Tissue A - Air Other: GW

	Sample ID	Collection Date	Collection Time	Type (Y) Comp	Type (Y) Grab	Matrix	VC/2603NG38P2+20 VM S+13BUTADN VMS+F142	VC/2603NG38P2+20 VM S+13BUTADN VMS+F142	Total Iron via USPA 6010	REMARKS
1	RW-21_MW-13	01/23/25	1140		✓	GW	X			
2	FB012325SH1	01/23/25	0930		✓	W		X		
3	TB012325SH1	01/23/25	—		✓	W		X		

Initial Assessment BC3A
Label Verification _____

Special QA/QC Instructions(✓):

SGS COURIER

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓)	Printed Name: Brandon Monegro	Printed Name: Raymond AT 11	Printed Name: Raymond AT 1	Printed Name: AJT
☑ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature: Brandon Monegro	Signature: JR	Signature: JR	Signature:
Specify Turnaround Requirements: 5-Day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: 1-punk	Firm/Courier: 1-punk	Firm: SGS
Shipping Tracking #: Courier PickUp	Condition/Cooler Temp: 2.2; 2.1 IR50	Date/Time:	Date/Time: 1/23/25 3:30	Date/Time: 1/23/25 19:38	Date/Time: 1/23/25 1938

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SS0323

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: Brandon Monegro	Sampler's Signature: Brandon Monegro

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
						E		2	2	
RW-21_MW-13	01/23/25	1140		✓	GW					X
FB0123255H1	01/23/25	0930		✓	W					X
Test										

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Brandon Monegro	Printed Name: Evan Price	Printed Name:	Printed Name:
☑ Cooler packed with ice (✓)		Signature: Brandon Monegro	Signature:	Signature:	Signature:
Specify Turnaround Requirements: 5-day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: Fedex Priority Overnight	Condition/Cooler Temp: _____	Date/Time: 01/23/25	Date/Time: 1-24-25 0945	Date/Time:	Date/Time:

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Katahdin Analytical Services SS0323 page 0000009 of 0000011

GW TB FB

****Program 5A****

PREM-MM-01625-7

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #: JE4634

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Brandon Monegro
Sampler's Signature: Brandon Monegro

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information
						B		3	1
						B		2	1
						C		1	4
1 RW-21_MW-16	01/24/25	1000		✓	GW				
2 RW-21_MW-15	01/24/25	1210		✓	GW				
3 FB01242515H1	01/24/25	0730		✓	W				
4 TB01242515H1	01/24/25	—		✓	W				

PARAMETER ANALYSIS & METHOD

- VC82603NG38P2+20 VM S+13BUTADN, VMS+F142
- VC82603NG38P2+20 VM S+13BUTADN, VMS+F142
- Total Iron via USPA 6010

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

Initial Assessment BLZB
Label Verification _____

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt

Lab Name: SGS Accutest
☑ Cooler packed with ice (✓)
Specify Turnaround Requirements: 5-Day TAT
Shipping Tracking #: Courier Pickup
Cooler Custody Seal (✓): ☐ Intact ☐ Not Intact
Sample Receipt:
Condition/Cooler Temp: _____

Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name: Brandon Monegro	Printed Name: Otis Winfrey	Printed Name: Otis Winfrey	Printed Name: JOSHUA KEITAN
Signature: Brandon Monegro	Signature:	Signature:	Signature:
Firm: Arcadis	Firm/Courier: SGS	Firm/Courier: SGS	Firm: SGS
Date/Time: 01/24/25	Date/Time: 1/24/25	Date/Time: 1/24/25	Date/Time: 1/24/25 1700

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5.2 5

JE4634: Chain of Custody
Page 1 of 2

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
290 Broadhollow Road Suite 307E	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State):	Project #:
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name:	**Sampler's Signature:**
Brandon Monegro	Brandon Monegro

Preservative	E						
Filtered (✓)							
# of Containers	2						
Container Information	2						

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE							REMARKS
RW-21_MW-16	01/24/25	1000		✓	GW	X							
RW-21_MW-15	01/24/25	1210		✓	GW	X							
FB012425SH1	01/24/25	0730		✓	W	X							

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Brandon Monegro	Printed Name: Courier	Printed Name:	Printed Name:
☑ Cooler packed with ice (✓)		Signature: Brandon Monegro	Signature:	Signature:	Signature:
Specify Turnaround Requirements: 5-day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: Fedex Priority Overnight	Condition/Cooler Temp: _____	Date/Time: 01/24/25	Date/Time: 1/25/25 9:50	Date/Time:	Date/Time:

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Katahdin Analytical Services SS0359 page 0000010 of 0000012

****Program 5A****

AQ TB FB

PREM-MM-021225-3

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #: JE5971

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Kyra Kraus
Sampler's Signature:

	Preservative	B	B	C				
	Filtered (✓)							
	# of Containers	3	2	1				
	Container Information	1	1	4				

PARAMETER ANALYSIS & METHOD

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC8260NGSBP2+20, VM S+13BUTADN, VMS+F142	VC8260NGSBP2+20, VM S+13BUTADN, VMS+F142	Total Iron via USEPA 6010					REMARKS
1	TB021925KK1	2/19/25	—		✓			X						V994
2	FB021925KK1	2/19/25	0730		✓		X							S
3	RW-21_MW-16	2/19/25	1105		✓		X							
4	RW-21_MW-14	2/19/25	1345		✓		X							

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other:
G. Other:
H. Other:

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other:
10. Other:

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: GW

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Initial Assessment
Label Verification

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓)	Printed Name: Kyra Kraus	Printed Name: Otto Wimpfl	Printed Name: Otto Wimpfl	Printed Name: Aleandri Rodriguez
☒ Cooler packed with ice (✓)	☒ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: SGS	Firm/Courier: SGS	Firm: SGS
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp: 1.3'	Date/Time: 2/19/25	Date/Time: 2/19/25	Date/Time: 2/19/25 1837	Date/Time: 2/19/25 1900

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JE5971: Chain of Custody
Page 1 of 2

SS0801

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
290 Broadhollow Road Suite 307E	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State):	Project #:
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name: Kyra Kraus	**Sampler's Signature:**

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix
FB021925 KK1	2/19/25	0730		✓	W
RW-21_MW-16	2/19/25	1105		✓	GW
RW-21_MW-14	2/19/25	1345		✓	GW

Preservative	E							
Filtered (✓)								
# of Containers	2							
Container Information	2							

PARAMETER ANALYSIS & METHOD

1,4-Dioxane, by 8270D SIM, CLLE

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other _____
G. Other _____
H. Other _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: Richard G	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 2/19/25	Date/Time: 2-21-25 1215	Date/Time:	Date/Time:

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Katahdin Analytical Services SS0801 page 0000010 of 0000012

UW FB

****Program 5A****

PREM MM 021225 S1

JE6037 PN

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Kyra Kraus
Sampler's Signature:

Preservative	B	B	C						
Filtered (✓)									
# of Containers	3	2	1						
Container Information	1	1	4						

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VCB2603NG38P2+20, VM S+13BUTADN, VMS+F142	VCB2603NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010
1 TB022025KK1	2/20/25	—		✓	W		X	X
2 FB022025KK1	2/20/25	0750		✓	W		X	X
3 RW-21-MW15	2/20/25	1035		✓	GW	X		
4 RW-21-MW13	2/20/25	1242		✓	GW	X		

Keys

Preservation Key:
A. H_2SO_4
B. HCl
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

3B NP

Initial Assessment _____
Label Verification _____

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

X Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓)	Printed Name: Kyra Kraus	Printed Name:	Printed Name:	Printed Name: JOSHUA REHAN
X Cooler packed with ice (✓)	X Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier: SGS	Firm: SGS
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp: _____	Date/Time: 2/20/25	Date/Time: 2/20/25 1540	Date/Time: 2/20/25 1743	Date/Time: 2/20/25 1743

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JE6037: Chain of Custody
Page 1 of 3

****Program 5A****

550802

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address	**Fax**
290 Broadhollow Road Suite 307E	631-249-7610
City / State / Zip	**E-mail Address**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State)	Project #
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name	**Sampler's Signature**
Kyra Kraus	

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
FB02202SKK1	2/20/25	0730		✓	W	E		2	2	X
RW-21_MW-15	2/20/25	1035		✓	GW					X
RW-21_MW-13	2/20/25	1242		✓	GW					X

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ **Special QA/QC Instructions(✓):**

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓)	Printed Name: Kyra Kraus	Printed Name: Richard G	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)	☒ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 2/20/2025	Date/Time: 2-21-25 1220	Date/Time:	Date/Time:

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Katahdin Analytical Services SS0802 page 0000014 of 0000016

GW TB FB

PREM-MM-021225-31

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JE6166

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Kyra Kraus
Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix
1 TB022125KK1	2/21/25	—		✓	W
2 FB022125KK1	2/21/25	0730		✓	W
3 RW-21_MW-2	2/21/25	1130		✓	GW

Preservative	B	B	C						
Filtered (✓)									
# of Containers	3	2	1						
Container Information	1	1	4						

PARAMETER ANALYSIS & METHOD

VC82603NG38P2+20_VM S+13BUTADN_VMS+F142	VC82603NG38P2+20_VM S+13BUTADN_VMS+F142	Total Iron via USPA 6010
X	X	
X	X	
X		

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

VOA

Initial Assessment 2/24
Label Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: Raymond Dr II	Printed Name: Raymond Dr II	Printed Name:
☐ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Courier	Firm/Courier: Courier	Firm: SGS
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp: _____	Date/Time: 2/21/25 @1557	Date/Time: 2/21/25 @1557	Date/Time: 2/21/2025	Date/Time: 2/21/2025

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21 VOA

4 7 AR-50

JE6166: Chain of Custody
Page 1 of 2

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # 550828

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: Kyra Krauss	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix
EB022125KK1	2/21/25	0730		✓	W
RW-21-MW-2	2/21/25	1130		✓	GW

Preservative	E
Filtered (✓)	
# of Containers	2
Container Information	2

PARAMETER ANALYSIS & METHOD

1,4-Dioxane, by 8270D SIM, CLLE

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: Kyra Krauss	Printed Name: Evan Price	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 2/21/25	Date/Time: 2-22-25 1000	Date/Time:	Date/Time:

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Katahdin Analytical Services SS0828 page 0000011 of 0000013

GW
FB
TB

ARCADIS

ID#:

****Program 5A****

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

JE6192
Pem-mm-(21225-31

Lab Work Order #

Send Results to:	Contact & Company Name	Telephone
	Benjamin Wolf -Task Manager	631-829-0643 cell
	Address	Fax
	290 Broadhollow Road Suite 307E	631-249-7610
	City / State / Zip	E-mail Address
	Melville NY 11747	Benjamin.Wolf@arcadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY

Project #: 30223092.PSSI3

Sampler's Printed Name: Kyra Kraus

Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010	REMARKS
						B	B	C					
								3	2	1			
						1	1	4					
1 TB022425KK1	2/24/25	—		✓	W						X		
2 FB022425KK1	2/24/25	0730		✓	W						X		
3 RW-21-MW-8	2/24/25	0955		✓	GW	X							
4 RW-21-MW-4	2/24/25	1130		✓	GW	X							
Wet Assessment JE 3-4													
ification													

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

Special Instructions/Comments:

AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓)	Printed Name: Kyra Kraus	Printed Name:	Printed Name:	Printed Name: JOSHUA REITAN
☒ Cooler packed with ice (✓)	☒ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: SGS	Firm/Courier: SGS	Firm: SGS
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp: _____	Date/Time: 2/24/2025	Date/Time: 2/24/25	Date/Time: 2/24/25	Date/Time: 2/24/25 1600

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****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # 550843

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: Kyra Kraus	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix
FB022425KK1	2/24/25	0730		✓	W
RW-21_MW-8	2/24/25	0955		✓	GW
RW-21_MW-4	2/24/25	1130		✓	GW

Preservative	E
Filtered (✓)	
# of Containers	2
Container Information	2

PARAMETER ANALYSIS & METHOD

1,4-Dioxane, by 8270D SIM, CLLE

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓)	Printed Name: Kyra Kraus	Printed Name: Evan Price	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)	☒ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: 2.7°	Date/Time: 2/24/2025	Date/Time: 2-25-25 1040	Date/Time:	Date/Time:

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Katahdin Analytical Services SS0843 page 0000010 of 0000012

GW
FB

****Program 5A****

PREM-mh-021225-31

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JE7014

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Brandon Monegro
Sampler's Signature: Brandon Monegro

Preservative	B	B	C					
Filtered (✓)								
# of Containers	3	2	1					
Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38P2+20, VM S+13BUTADIN, VMS+F142	VC82603NG38P2+20, VM S+13BUTADIN, VMS+F142	Total Iron via USPA 6010
1	TB030625BM1	3/6/25	—		✓	W	X	X	
2	FB030625BM1	3/6/25	0730		✓	W	X	X	X
3	MW-111-4	3/6/25	1008		✓	GW	X		
4	RW-21_MW-3-1	3/6/25	1250		✓	GW	X		X
5	RW-21_MW-3-2	3/6/25	1257		✓	GW	X		
6	REP030625BM1	3/6/25	—		✓	GW	X		

Keys

Preservation Key:
A. H_2SO_4
B. HCl
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

ABJ
VHL

Initial Assessment NB3A
Label Verification _____

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Brandon Monegro	Printed Name: Raymond DR II	Printed Name: Raymond DR II	Printed Name:
☑ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp: _____	Date/Time: 3/6/25	Date/Time: 3/7/25 3:50	Date/Time: 3/7/25 2015	Date/Time:

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SGS COURIER

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5.2 5

JE7014: Chain of Custody
Page 2 of 3

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # SS1037

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: Brandon Monegro	Sampler's Signature: Brandon Monegro

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE
FB030625BMI	3/6/25	0730		✓	W	X
MW-111-4	3/6/25	1008		✓	GW	X
RH-21_MW-3-1	3/6/25	1250		✓	GW	X
RH-21_MW-3-2	3/6/25	1257		✓	GW	X
REP030625BMI	3/6/25	—		✓	GW	X

Preservative	E						
Filtered (✓)							
# of Containers	2						
Container Information	2						

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☑ Intact ☐ Not Intact	Printed Name: Brandon Monegro	Printed Name: Evan Price	Printed Name:	Printed Name:
☑ Cooler packed with ice (✓)		Signature: Brandon Monegro	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt: Condition/Cooler Temp: 1.1 1.3	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority		Date/Time: 3/6/25	Date/Time: 3-7-25 0930	Date/Time:	Date/Time:

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GW TB

****Program 5A****

PREM-MM-021225-31

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JE6257

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Kyla Kraus
Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010
						B		3	1			
						B		2	1			
						C		1	4			
1- TB022525EKL1	2/25/25	—		✓	GW						X	
2- MW-116-5	2/25/25	1120		✓	GW					X		

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: GW

REMARKS

Initial Assessment BLB
Label Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

X Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Kyla Kraus	Printed Name:	Printed Name:	Printed Name:
X ☐ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: SGS	Firm/Courier: SGS	Firm:
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp: 0.9c	Date/Time: 2/25/25 1442	Date/Time: 2/25/25	Date/Time: 2/25/25 1728	Date/Time:

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JE6257: Chain of Custody
Page 1 of 2

****Program 5A****

550873

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: Kyra Kraus	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
						E		2	2	
MW-116-5	2/25/25	1120		✓	GW					X

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: RichardG	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature: Richard G	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 2/25/25	Date/Time: 2-26-25 1035	Date/Time:	Date/Time:

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Katahdin Analytical Services SS0873 page 0000009 of 0000011

PREM MM 021925 31

GW TB ****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JE 6332

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Brandon Monagro
Sampler's Signature:

	Preservative	B	B	C					
	Filtered (Y)								
	# of Containers	3	2	1					
	Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

	Sample ID	Collection Date	Collection Time	Type (Y) Comp	Type (Y) Grab	Matrix	VC8260SIMG38P2+20, VM S+13BUTADN, VMS+F142	VC8260SIMG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010						
1.	MW-118-5	02/26/25	1237		✓	GW	X								
2.	TB022625KK1	02/26/25	—		✓	W		X							

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil SE - Sediment NL - NAPL/Oil W - Water SL - Sludge SW - Sample Wipe T - Tissue A - Air Other: GW

REMARKS

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Brandon Monagro	Printed Name: Otis W	Printed Name: Otis W	Printed Name: Benny Wen
☑ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: SGS	Firm/Courier: SGS	Firm:
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp: 1.3	Date/Time: 02/26/25	Date/Time: 2/26/25 1715	Date/Time: 2/26/25	Date/Time:

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Initial Assessment BH

Label Verification

5.2 5

JE6332: Chain of Custody
Page 1 of 2

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # SS0897

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address	**Fax**
290 Broadhollow Road Suite 307E	631-249-7610
City / State / Zip	**E-mail Address**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State)	Project #
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name	**Sampler's Signature**
Brandon Monegro	Brandon Monegro

Preservative	E						
Filtered (✓)							
# of Containers	2						
Container Information	2						

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE
MW-118-5	02/26/25	1237		✓	GW	X

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

[X] **Special QA/QC Instructions(✓):**

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Brandon Monegro	Printed Name: Evan Price	Printed Name:	Printed Name:
☑ Cooler packed with ice (✓)		Signature: Brandon Monegro	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 02/26/25	Date/Time: 2-27-25 0910	Date/Time:	Date/Time:

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Katahdin Analytical Services SS0897 page 0000008 of 0000010

PREM-MM-021225-31

GW FB TB

ID#:

****Program 5A****

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

ARCADIS

Page 1 of 1

Lab Work Order # JE6597

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Brandon Monegro
Sampler's Signature: Brandon Monegro

Preservative	B	B	C					
Filtered (✓)								
# of Containers	3	2	1					
Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38P2+20 VM S+13BUTADN, VMS-F142	VC82603NG38P2+20 VM S+13BUTADN, VMS-F142	Total Iron via USPA 6010
1- MW-109-3	03/03/25	1150		✓	GW	X		
2- RW-21_MW-6	03/03/25	1420		✓	GW	X		
3- FB030325KK1	03/03/25	0730		✓	W		X	
4- TB030325KK1	03/03/25	—		✓	W		X	
5- REP030325BM1	03/03/25	—		✓	GW	X		

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

Initial Assessment 3A NP
Label Verification _____

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Brandon Monegro	Printed Name: S. MOHAMMED	Printed Name: S. MOHAMMED	Printed Name:
☑ Cooler packed with ice (✓)		Signature: Brandon Monegro	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: COURIER	Firm/Courier: COURIER	Firm:
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp: _____	Date/Time: 03/03/2025 1558	Date/Time: 3/3/25 1558	Date/Time: 3/3/25 7:08 PM	Date/Time: 3/3/25 7:08

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5.2 5

JE6597: Chain of Custody
Page 1 of 2

SS0954

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address	**Fax**
290 Broadhollow Road Suite 307E	631-249-7610
City / State / Zip	**E-mail Address**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State)	Project #
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name	**Sampler's Signature**
Brandon Monegro	Brandon Monegro

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
MW-109-3	03/03/25	1150		✓	GW	E		2	2	X
RW-21_MW-6	03/03/25	1420		✓	GW					X
FB030325KK1	03/03/25	0730		✓	W					X
REP030325BM1	03/03/25	—		✓	GW					X

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: GW

REMARKS

Special Instructions/Comments:

Tier II QA/QC Deliverables Requested

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

[X] **Special QA/QC Instructions(✓):**

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Brandon Monegro	Printed Name: Richard G	Printed Name:	Printed Name:
☑ Cooler packed with ice (✓)		Signature: Brandon Monegro	Signature: Richard G	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 03/03/2025	Date/Time: 3-4-25 0955	Date/Time:	Date/Time:

20730826 CofC AR Form 08.27.2015

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Katahdin Analytical Services SS0954 page 0000011 of 0000013

GW FB TB

****Program 5A****

PREM-MM-021225-31

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JE6662

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Kyra Kraus
Sampler's Signature:

	Preservative	B	B	C					
	Filtered (✓)								
	# of Containers	3	2	1					
	Container Information	1	1	4					

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: _____ G. Other: _____ H. Other: _____

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: _____ 10. Other: _____

Matrix Key: SO - Soil SE - Sediment NL - NAPL/Oil W - Water SL - Sludge SW - Sample Wipe T - Tissue A - Air Other: GW

PARAMETER ANALYSIS & METHOD

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USEPA 6010	REMARKS
1-	TB030425KK1	3/4/25	—		✓	W		X		
2-	FB030425KK1	3/4/25	0730		✓	W		X	X	
3-	RW-21-MW-7	3/4/25	1005		✓	GW	X			
4-	RW-21-MW-9	3/4/25	1227		✓	GW	X			
5-	RW-21-MW-11	3/4/25	1430		✓	GW	X		X	

Initial Assessment BL/B

Label Verification

Special Instructions/Comments:

AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓)	Printed Name: Kyra Kraus	Printed Name:	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm: 3/4 19:08
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp: _____	Date/Time: 3/4/25	Date/Time:	Date/Time:	Date/Time:

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JE6662: Chain of Custody
Page 1 of 2

SS0986

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name:	Sampler's Signature:

Preservative	E
Filtered (✓)	
# of Containers	2
Container Information	2

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: GW

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
FB030425KK1	3/4/25	0730		✓	W	X	
RW-21_MW-7	3/4/25	1005		✓	GW	X	
RW-21_MW-9	3/4/25	1227		✓	GW	X	
RW-21_MW-11	3/4/25	1430		✓	GW	X	

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: Richard G	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 3/4/25	Date/Time: 3-5-25 1005	Date/Time:	Date/Time:

20730826 CofC AR Form 08.27.2015

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Katahdin Analytical Services SS0986 page 0000011 of 0000013

JE6788
****Program 5A****

PREm-mm-021225-31

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Kyra Kraus
Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	VC82603NG38P2+20, VM S+13BUTHDN, VMS+F142	Total Iron via USPA 6010
						B	B	C				
						3	2	1				
						1	1	4				
1 TB030525BMI	3/5/25	—		✓	W					X	X	
2 TB030525BMI	3/5/25	0730		✓	W					X	X	
3 RW-21-MW-12-1	3/5/25	1050		✓	GW	X						
4 RW-21-MW-12-2	3/5/25	1125		✓	GW	X						

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

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Initial Assessment NB3D
Label Verification _____

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓): ☐

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: Raymond Ng II	Printed Name: Raymond Ng II	Printed Name: 3/5 21:04
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Courier	Firm/Courier: Courier	Firm:
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp: _____	Date/Time: 3/5/2025 1626	Date/Time: 3/5/25 4:26	Date/Time: 3/5/25	Date/Time:

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****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # 551036

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: Lyra Kraus	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
FB030525BM1	3/5/25	0730		✓	W	E		2	2	X
RW-21_MW-12-1	3/5/25	1050		✓	GW					X
RW-21_MW-12-2	3/5/25	1125		✓	GW					X

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other. _____
10. Other. _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil, W - Water, SL - Sludge, SW - Sample Wipe, T - Tissue, A - Air, Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☑ Intact ☐ Not Intact	Printed Name: Lyra Kraus	Printed Name: Evan Price	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: 0.9	Date/Time: 3/5/2025	Date/Time: 3-7-25 0930	Date/Time:	Date/Time:

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Katahdin Analytical Services SS1036 page 0000010 of 0000012

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****Program 5A****

ARCADIS | ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JE7016

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Brandon Monegro
Sampler's Signature: Brandon Monegro

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010
						B		3	1			
						B		2	1			
						C		1	4			
1 TB030725KK1	3/7/25	~~0730~~ BR		✓	W						X	
2 FB030725KK1	3/7/25	0730		✓	W						X	
3 RW-21_MW-1	3/7/25	1046		✓	GW	X						
4 RW-21_MW-5-1	3/7/25	1355		✓	GW	X						
5 RW-21_MW-5-2	3/7/25	1410		✓	GW	X						

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

PARAMETER ANALYSIS & METHOD

REMARKS

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Initial Verification MB 3/7
Label Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Brandon Monegro	Printed Name: Raymond Ayala II	Printed Name: Raymond Ayala II	Printed Name:
☒ Cooler packed with ice (✓)		Signature: Brandon Monegro	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Courier	Firm/Courier: Courier	Firm:
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp: _____	Date/Time: 3/7/25 3:50	Date/Time: 3/7/25	Date/Time: 3/7/25 2015	Date/Time:

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JE7016: Chain of Custody
Page 1 of 2

SS1075

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address	**Fax**
290 Broadhollow Road Suite 307E	631-249-7610
City / State / Zip	**E-mail Address**
Melville NY 11747	Benjamin.Wolf@aracadis.com
Project Name/Location (City, State)	**Project #**
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name	**Sampler's Signature**
Brandon Monegro	Brandon Monegro

Preservative	E
Filtered (✓)	
# of Containers	2
Container Information	2

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: GW

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
FB030725KK1	3/7/25	0730		✓	W	X	
RW-21_MW-1	3/7/25	1046		✓	GW	X	
RW-21_MW-5-1	3/7/25	1355		✓	GW	X	
RW-21_MW-5-2	3/7/25	1410		✓	GW	X	

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Brandon Monegro	Printed Name: Richard G	Printed Name:	Printed Name:
☑ Cooler packed with ice (✓)		Signature: Brandon Monegro	Signature: Richard G	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 3/7/25	Date/Time: 3-10-25 1000	Date/Time:	Date/Time:

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Katahdin Analytical Services SS1075 Page 1 of 1

Program 5A SW TB PREM MM 02625 103 JE7465

ARCADIS ID#:

CHAIN OF CUSTODY & LABORATORY ~~ANALYSIS REQUEST FORM~~

Page 1 of 1

Lab Work Order #:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: S Wiegand	Sampler's Signature:

	Sample ID	Collection Date	Collection Time	Matrix	# of Containers	Preservative	VC02603NG38P2+20, VM S+13BUTADN, VMS+F142	VC02603NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010
1	JB0314255V1	3/14/25		W	3	B	X		
2	MW-117-5	3/14/25	1255	GW	1	C		X	

PARAMETER ANALYSIS & METHOD

Keys: Preservation Key: B - HCl, C - Zinc Acetate. Container Information Key: 1. 40 ml Vial, 2. 1 L Amber, 3. 250 ml Plastic, 4. 500 ml Plastic, 5. Other, 10. Other. Matrix Key: SW - Surface Water, GW - Groundwater, WW - Wastewater, SL - Sludge, SO - Soil, A - Air, WI - Wipe, Other.

REMARKS

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Initial Assessment YB
Label Verification

Laboratory	Relinquished By	Received By	Relinquished By	Received By
Lab Name: ~~SGS Accutest~~	Printed Name: S Wiegand	Printed Name: Sean Curtis	Printed Name: Sean Curtis	Printed Name: Nasant Patel
☒ Cooler packed with ice (✓)	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Firm: Arcadis	Firm/Courier: Impulse	Firm/Courier	Firm:
Shipping Tracking #:	Date/Time: 3/14/25 ~1600	Date/Time: 3/14/25 1730	Date/Time: 7:35	Date/Time: 3/15/25 7:40

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"""Program 5A"""

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # SS1219

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: S Mavianos
Sampler's Signature:

Preservative	E						
Filtered (✓)							
# of Containers	2						
Container Information	2						

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE							REMARKS
MW-117-5	3/13/25	1255		✓	GW	X							

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

[X] Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☑ Intact ☐ Not Intact	Printed Name: S Mavianos	Printed Name: Evan Price	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt: Condition/Cooler Temp: 1.3°	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:		Date/Time: 3/14/25 1400	Date/Time: 3-15-25 1015	Date/Time:	Date/Time:

20730826 CofC AR Form 08.27.2015

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Katahdin Analytical Services SS1219 page 0000008 of 0000010

JE12475

****Program 5A****

Prem-mm-051925-168

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address	**Fax**
290 Broadhollow Road, Melville, NY 11747	631-249-7610
City / State / Zip	**E-mail Address**
Melville NY 11747	Benjamin.Wolf@arcadis.com
Project Name/Location (City, State)	**Project #**
OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	30223092.PSSI3
Sampler's Printed Name	**Sampler's Signature**
Kyra Kraus	

Preservative	B	B	C				
Filtered (✓)							
# of Containers	3	2	1				
Container Information	1	1	4				

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38P2+20 VM S+13BUTADN, VMS+F142	VC82603NG38P2+20 VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010	REMARKS
1 TB060325KK1	6/3/25	—		✓	W		X		
2 FB060325KK1	6/3/25	0730		✓	W		X	X	
3 RW-21-MW-13	6/3/25	1002		✓	GW	X			MS/MSD
4 RW-21-MW-15	6/3/25	1239		✓	GW	X		X	

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: GW

Initial Assessment 2 SM

Label Verification _____

Special Instructions/Comments:

AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓)	Printed Name: Kyra Kraus	Printed Name:	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature:	Signature	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm:
Shipping Tracking #: Lab Provided courier	Condition/Cooler Temp: _____	Date/Time:	Date/Time: 6-3-25 @ 1405	Date/Time:	Date/Time: 6/3/25 18:10

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4.3 4.4

IA-50

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5.2 5

JE12475: Chain of Custody

Page 1 of 2

552918

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address	**Fax**
290 Broadhollow Road, Melville, NY 11747	631-249-7610
City / State / Zip	**E-mail Address**
Melville NY 11747	Benjamin.Wolf@aracadis.com
Project Name/Location (City, State)	**Project #**
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name	**Sampler's Signature**
Kyra Kraus	

Preservative	E						
Filtered (✓)							
# of Containers	2						
Container Information	2						

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE							REMARKS
FB060325KK1	6/3/25	0730		✓	W	X							
RW-21_MW-13	6/3/25	1002		✓	GW	X							MS/MSD
RW-21-MW-15	6/3/25	1239		✓	GW	X							

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☑ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: Richard G	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature: Richard G	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: 1.5	Date/Time: 6/3/2025	Date/Time: 6-4-251035	Date/Time:	Date/Time:

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****Program 5A**** JE12863 Prem-mm-

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Kyla Kraus
Sampler's Signature:

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	B	B	C						PARAMETER ANALYSIS & METHOD
							Filtered (✓)									VC8260NGSBPZ+20, VM S+13BUTADN, VMS-F-142
							Number of Containers	3	2	1						VC8260NGSBPZ+20, VM S+13BUTADN, VMS-F-142
							Sampling Equipment	1	1	4						Total Iron via USPA 6010
1	TB060925KK1	6/9/25	—		✓	W										
2	FB060925KK1	6/9/25	0730		✓	W										
3	RW21_MW-16	6/9/25	1000		✓	GW										
4	RW-21_MW-4	6/9/25	1130		✓	GW										

Keys

Preservation Key: A. H_2SO_4 B. HCl C. HNO_3 D. NaOH E. None F. Other: ____ G. Other: ____ H. Other: ____

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: ____ 10. Other: ____

Matrix Key: SO - Soil SE - Sediment NL - NAPL/Oil W - Water SL - Sludge SW - Sample Wipe T - Tissue A - Air Other: GW

REMARKS

V747

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Kyla Kraus	Printed Name: Raymond Ar II	Printed Name: Raymond Ar	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt: IRT0	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm:
Shipping Tracking #: Lab Provided courier	Condition/Cooler Temp: 2°C	Date/Time: 6/9/2025	Date/Time: 6/9/25 1309	Date/Time: 6/9/25 16:26	Date/Time:

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SGS COURIER

5.2 5

553053

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address 290 Broadhollow Road, Melville, NY 11747	**Fax** 631-249-7610
City Melville **State** NY **Zip** 11747	**E-mail Address** Benjamin.Wolf@aracadis.com
Project Name/Location (City, State) OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	**Project #** 30223092.PSSI3
Sampler's Printed Name Kyra Kraus	**Sampler's Signature**

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
						E		2	2	
FB060925 KK1	6/9/25	0730		✓	W					X
RW-21_MW-16	6/9/25	1000		✓	GW					X
RW-21_MW-4	6/9/25	1130		✓	GW					X

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

PARAMETER ANALYSIS & METHOD

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: Evan Price	Printed Name	Printed Name
☒ Cooler packed with ice (✓)		Signature	Signature	Signature	Signature
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier	Firm
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: 4.2°	Date/Time: 6/9/2025	Date/Time: 6-10-25 1045	Date/Time	Date/Time

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JE13349 Program 5A PREM-MM-051925-168

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf - Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223082.PS513.00256.0060.PS613
Sampler's Printed Name: Kyra Krauss
Sampler's Signature:

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	B	B	C							REMARKS
								PARAMETER ANALYSIS & METHOD									
								VC82603NG38P2+20_VM S+13BUTADN_VMS-F142	VC82603NG38P2+20_VM S+13BUTADN_VMS-F142	Total Iron via USPA 6010							
	# of Containers							3	2	1							
	Container Information							1	1	4							
1	TBQ61325KF1	6/13/25	—		✓	W											
2	MW-116-5	6/13/25	1250		✓	GW		X									MS/MSD

Key:
Preservative Key: A. H_2SO_4 B. HCl C. HNO_3 D. NaOH E. None F. Other: G. Other: H. Other:
Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:
Matrix Key: SO - Soil SE - Sediment NL - NAPL/Oil W - Water SL - Sludge SW - Sample Wipe T - Tissue A - Air Other: GW

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Kyra Krauss	Printed Name	Printed Name	Printed Name
X Cooler packed with ice (✓)		Signature:	Signature	Signature	Signature
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier	Firm/Courier	Firm
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp:	Date/Time: 6/13/25	Date/Time	Date/Time	Date/Time: 6/13/25 1831

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Impulse 1.4°C IR50

5.2 5

JE13349: Chain of Custody
Page 1 of 2

553194

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: ~~30223092.PSS13~~ 30281601D.PSS13
Sampler's Printed Name: Kyra Kraus	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
MW-116-5	6/13/25	1250		✓	GW	E		2	2	X	MS/MSD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: Richard G	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature: Richard G	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 6/13/2025	Date/Time: 6-14-25 0940	Date/Time:	Date/Time:

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GW
TB
FB

PREM - MM - 036257-03
JE12661

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:	Contact & Company Name	Telephone	Preservative	B	B	C					
	Benjamin Wolf -Task Manager	631-829-0643 cell	Filtered (✓)								
	Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610	# of Containers	3	2	1					
	City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@arcadis.com	Container Information	1	1	4					
	Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	Project #: 30223092.PSSI3									
	Sampler's Printed Name: Lyra Kraus	Sampler's Signature:									

PARAMETER ANALYSIS & METHOD

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38P2+20, VM S+13BUTHION, VMS+F142	VC82603NG38P2+20, VM S+13BUTHION, VMS+F142	Total Iron via USPA 6010								
	~~FB060425BMIT~~ KE																
1	TB060425 BM1	6/4/25	—		✓	W		X									
2	FB060425 BM1	6/4/25	0730		✓	W		X									
3	RW-21_MW-14	6/4/25	0955		✓	GW	X										
4	RW-21_MW-8	6/4/25	1205		✓	GW	X										

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other:
G. Other:
H. Other:

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other:
10. Other:

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

V724

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Lyra Kraus	Printed Name: MAX MENDY	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm:
Shipping Tracking #: Lab Provided courier	Condition/Cooler Temp:	Date/Time: 6/4/25	Date/Time:	Date/Time:	Date/Time: 6/4/25 19:09

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2.4C
IR50

Initial Assessment NB2B
Label Verification

552951

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address 290 Broadhollow Road, Melville, NY 11747	**Fax** 631-249-7610
City Melville **State** NY **Zip** 11747	**E-mail Address** Benjamin.Wolf@aracadis.com
Project Name/Location (City, State) OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	**Project #** 30223092.PSSI3
Sampler's Printed Name kyra kraus	**Sampler's Signature**

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
						E		2	2	
FB060425BM1	6/4/25	0730		✓	N					X
RW-21-MW-14	6/4/25	0955		✓	GW					X
RW-21-MW-8	6/4/25	1205		✓	GW					X

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other, GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ **Special QA/QC Instructions(✓):**

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☑ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: Richard G	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature: Richard G	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority.	Condition/Cooler Temp: 0.7	Date/Time: 6/4/25	Date/Time: 6-5-25 1010	Date/Time:	Date/Time:

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SS2951 page 0000010 of 0000012

GW
Ta FA

****Program 5A****

JE12880
PRelm mm 05/9z 1.8

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Kyla Kraus
Sampler's Signature:

Preservative	B	B	C			
Filtered (✓)						
# of Containers	3	2	1			
Container Information	1	1	4			

PARAMETER ANALYSIS & METHOD

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC8260NG38P2+20_VM S+13BUTADN_VMS-F142	VC8260NG38P2+20_VM S+13BUTADN_VMS-F142	Total Iron via USPA 6010									
1	TB060625KK1	6/6/25	—		✓	W												
2	FB060625KK1	6/6/25	0730		✓	W												
3	RW-21-MW-3-1	6/6/25	1005		✓	GW												
4	RW-21_MW-3-2	6/6/25	1035		✓	GW												
5	RW-21_MW-2	6/6/25	1258		✓	GW												
6	REPD060625BM1	6/6/25	—		✓	GW												

Keys

Preservation Key:
A. H2SO4
B. HCL
C. HNO3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

A37
V760

Initial Assessment 3AEA
Label Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt

Lab Name: SGS Accutest
☒ Cooler packed with ice (✓)
Specify Turnaround Requirements: STANDARD TAT
Shipping Tracking #: Lab Provided Courier

Cooler Custody Seal (✓): ☐ Intact ☐ Not Intact
Sample Receipt:
Condition/Cooler Temp: _____

Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name: Kyla Kraus	Printed Name: Raymond DT II	Printed Name: Raymond DT II	Printed Name:
Signature:	Signature:	Signature:	Signature:
Firm: Arcadis	Firm/Courier: Lpuls	Firm/Courier: Lpuls	Firm:
Date/Time: 6/6/25	Date/Time: 6/6/25 @1558	Date/Time: 6/6/25 2058	Date/Time:

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SGS COURIER 1.3
IM-80

JE12880: Chain of Custody
Page 1 of 2

SS 3018

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address 290 Broadhollow Road, Melville, NY 11747	**Fax** 631-249-7610
City Melville **State** NY **Zip** 11747	**E-mail Address** Benjamin.Wolf@aracadis.com
Project Name/Location (City, State) OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	**Project #** 30223092.PSSI3
Sampler's Printed Name Kyra Kraus	**Sampler's Signature**

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
						E		2	2	
FB060625KK1	6/6/25	0730		✓	W					X
RW-21_MW-3-1	6/6/25	1005		✓	GW					X
RW-21_MW-3-2	6/6/25	1035		✓	GW					X
RW-21_MW-2	6/6/25	1258		✓	GW					X
REP060625BM1	6/6/25	—		✓	GW					X

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil, W - Water, SL - Sludge, SW - Sample Wipe, T - Tissue, A - Air, Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓)	Printed Name: ~~Kyra Kraus~~	Printed Name: Evan Price	Printed Name	Printed Name
☒ Cooler packed with ice (✓)	☒ Intact ☐ Not Intact	Signature	Signature	Signature	Signature
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier	Firm
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: 3.6, 3.2	Date/Time: 6/6/25	Date/Time: 6-9-25 1050	Date/Time	Date/Time

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SS3018 Page 1 of 1

GW FB TB

****Program 5A****

JE13206

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:	Contact & Company Name:	Telephone:
	Benjamin Wolf -Task Manager	631-829-0643 cell
	Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
	City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@arcadis.com
	Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	Project #: 30223092.PSSI3
	Sampler's Printed Name: Kyra Kraus	Sampler's Signature:

Preservative	B	B	C							
Filtered (✓)										
# of Containers	3	2	1							
Container Information	1	1	4							

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NGSBP2+20, VM S+15BUTADN, VMSF142	VC82603NGSBP2+20, VM S+15BUTADN, VMSF142	Total Iron via USPA 6010
1- TB06102SKK1	6/10/25	—		✓	W		X	
2- FB06102SKK1	6/10/25	0730		✓	W		X	
3- RW21_MW-5-1	6/10/25	0950		✓	GW	X		
4- RW-21_MW-5-2	6/10/25	1010		✓	GW	X		
5- RW-21_MW-7	6/10/25	1220		✓	GW	X		

Keys

Preservation Key: A. H_2SO_4, B. HCL, C. HNO_3, D. NaOH, E. None, F. Other:, G. Other:, H. Other:

Container Information Key: 1. 40 ml Vial, 2. 1 L Amber, 3. 250 ml Plastic, 4. 500 ml Plastic, 5. Encore, 6. 2 oz. Glass, 7. 4 oz. Glass, 8. 8 oz. Glass, 9. Other:, 10. Other:

Matrix Key: SO - Soil, W - Water, T - Tissue, SE - Sediment, SL - Sludge, A - Air, NL - NAPL/Oil, SW - Sample Wipe, Other: GW

REMARKS

Initial Assessment ZA AM

Label Verification

Special Instructions/Comments:

AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: M. Daly	Printed Name: M. Daly	Printed Name: NISANT SATH
☒ Cooler packed with ice (✓)		Signature:	Signature: M. Daly	Signature: M. Daly	Signature
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Impulse	Firm/Courier: Impulse	Firm:
Shipping Tracking #: lab Provided courier	Condition/Cooler Temp:	Date/Time: 6/10/2025	Date/Time: 6/10/25 @ 1536	Date/Time:	Date/Time: 06/10/25 8.35pm

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5

SS 3089

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address	**Fax**
290 Broadhollow Road, Melville, NY 11747	631-249-7610
City / State / Zip	**E-mail Address**
Melville NY 11747	Benjamin.Wolf@aracadis.com
Project Name/Location (City, State)	**Project #**
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name	**Sampler's Signature**
Kyra Kraus	

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
						E		2	2	
FB061025KK1	6/10/25	0730		✓	W					X
RW-21_MW-5-1	6/10/25	0950		✓	GW					X
RW-21_MW-5-2	6/10/25	1010		✓	GW					X
RW-21_MW-7	6/10/25	1220		✓	GW					X

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓)	Printed Name: Kyra Kraus	Printed Name: Evan Price	Printed Name	Printed Name
☒ Cooler packed with ice (✓)	☒ Intact ☐ Not Intact	Signature	Signature	Signature	Signature
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt: Good	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier	Firm
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: 2.7°	Date/Time: 6/10/25	Date/Time: 6/11/25 1040	Date/Time	Date/Time

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SS3089 Page 1 of 1

JE13226

****Program 5A****

ARCADIS | ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # PREM-MM-051925-168

Send Results to:

Contact & Company Name:	Benjamin Wolf -Task Manager
Telephone:	631-829-0643 cell
Address:	290 Broadhollow Road, Melville, NY 11747
Fax:	631-249-7610
City / State / Zip:	Melville NY 11747
E-mail Address:	Benjamin.Wolf@arcadis.com
Project Name/Location (City, State):	OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #:	30222082.PSSI3 ~~30286060.PSSI3~~
Sampler's Printed Name:	Kyra Kraus
Sampler's Signature:	

Preservative	B	B	C				
Filtered (Y)							
# of Containers	3	2	1				
Container Information	1	1	4				

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (Y) Comp	Type (Y) Grab	Matrix	VC/8260NG38P2+20, VM S+13BUTADIN, VMS+F142	VC/8260NG38P2+20, VM S+13BUTADIN, VMS+F142	Total Iron via USPA 6010	REMARKS
1 TB061125KX1	6/11/25	—		✓	W		X		
2 MW-118-S	6/11/25	1243		✓	GW	X			

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

SGS COURIER

Initial Assessment RBJ
Label Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓):

2.4C TBSD

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Kyra Kraus 6/11/25 1810	Printed Name:	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm:
Shipping Tracking #: lab provided courier	Condition/Cooler Temp: _____	Date/Time: 6/11/25	Date/Time: 6-11-25 @ 1507	Date/Time:	Date/Time:

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5.2 5

JE13226: Chain of Custody
Page 1 of 2

****Program 5A****

ARCADIS

ID#: SS3125

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address 290 Broadhollow Road, Melville, NY 11747	**Fax** 631-249-7610
City Melville **State** NY **Zip** 11747	**E-mail Address** Benjamin.Wolf@aracadis.com
Project Name/Location (City, State) OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	**Project #** ~~30225052.PSS18~~ 30286060. FSS13
Sampler's Printed Name Kyra Kraus	**Sampler's Signature**

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
						E		2	2	
MW-118-5	6/11/25	1243		✓	GW					X

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: Kim Voser	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority 446044936475	Condition/Cooler Temp: _____	Date/Time: 6/11/25	Date/Time: 6/12/25 1100	Date/Time:	Date/Time:

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****Program 5A**** JE13346 PREM-MM-051925-168

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:	Contact & Company Name	Telephone
	Benjamin Wolf -Task Manager	631-829-0643 cell
	Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
	City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@arcadis.com
	Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	Project #: 30286060.PSS13
	Sampler's Printed Name: Kyra Kraus	Sampler's Signature:

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	B	B	C									
							Filtered (✓)												
							# of Containers	3	2	1									
							Sample Quantity Information	1	1	4									
1	TB061225KK1	6/12/25	—		✓	W			X										
2	MW-117-S	6/12/25	1148		✓	GW	X												

PARAMETER ANALYSIS & METHOD

VC82603NC38P2+20, VM S+13BUTADIN, VMS+F142

VC82603NC38P2+20, VM S+13BUTADIN, VMS+F142

Total Iron via USPA 6010

Keys

Preservation Key: A. H_2SO_4 B. HCl C. HNO_3 D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil W - Water T - Tissue SE - Sediment SL - Sludge A - Air NL - NAPL/Oil SW - Sample Wipe Other: GW

REMARKS

V844

Special Instructions/Comments:

AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓): ☐ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: Mar	Printed Name: Marques Conn	Printed Name:
☒ Cooler packed with ice (✓)	Sample Receipt:	Signature:	Signature: Marques Conn	Signature:	Signature: Joaming
Specify Turnaround Requirements: STANDARD TAT	Condition: Cooler Temp:	Firm: Arcadis	Firm/Courier:	Firm/Courier	Firm
Shipping Tracking #: Lab Provided Courier		Date/Time: 6/12/2025	Date/Time: 6/12/25 @ 1426	Date/Time: 6/12/25 1915	Date/Time

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SGS COURIER

5.2 5

SS3181

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address 290 Broadhollow Road, Melville, NY 11747	**Fax** 631-249-7610
City Melville **State** NY **Zip** 11747	**E-mail Address** Benjamin.Wolf@aracadis.com
Project Name/Location (City, State) OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	**Project #** (60) ~~30223092.PSSI3 30260060.PSSI3~~
Sampler's Printed Name Kyla Krauss	**Sampler's Signature**

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix
MW-117-5	6/12/25	1148		✓	GW

Preservative	E
Filtered (✓)	
# of Containers	2
Container Information	2

PARAMETER ANALYSIS & METHOD

1,4-Dioxane, by 8270D SIM, CLLE

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

X **Special QA/QC Instructions(✓):**

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☑ Intact ☐ Not Intact	Printed Name: Kyra Krauss	Printed Name: Evan Price	Printed Name:	Printed Name:
X ☑ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: Fedex Overnight Priority	Condition/Cooler Temp: 0.6°	Date/Time: 6/12/25	Date/Time: 6-13-25 1520	Date/Time:	Date/Time:

20730826 CofC AR Form 08.27.2015

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JE13342 ****Program 5A**** PDEN mm-DD-YY-168

ARCADIS — CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

ID#:

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Benjamin Wolf -Task Manager
Telephone	631-829-0643 cell
Address	290 Broadhollow Road, Melville, NY 11747
Fax	631-249-7610
City / State / Zip	Melville NY 11747
E-mail Address	Benjamin.Wolf@arcadis.com
Project Name/Location (City, State)	OU3 Post-Startup Groundwater Monitoring/ Bethpage NY
Project #	~~30220892.PS313~~ 30286060.PS43
Sampler's Printed Name	Kyra Krauss
Sampler's Signature	

Preservation	B	B	C					
Filtered (Y)								
# of Containers	3	2	1					
Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key: A. H_2SO_4 B. HCl C. HNO_3 D. NaOH E. None F. Other: ____ G. Other: ____ H. Other: ____

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: ____ 10. Other: ____

Matrix Key: SO - Soil, SE - Sediment, NL - NAPL/Oil, W - Water, SL - Sludge, SW - Sample Wipe, T - Tissue, A - Air, Other: GW

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC8260B/NG3BP2+20 VM S+13BUTADN, VMS+F142	VC8260B/NG3BP2+20 VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010	REMARKS
1	TB061625FF1	6/16/25	—		✓	W	X	X		
2	FB061625FF1	6/16/25	0730		✓	W	X	X		
3	RW-21_MW-6	6/16/25	1125		✓	GW	X			
4	MW-109-3	6/16/25	0910		✓	GW	X			
5	REP061625BM1	6/16/25	—		✓	GW	X			

Special Instructions/Comments:

AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt	Cooler Custody Seal (✓)	Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	☐ Intact ☐ Not Intact	Printed Name: Kyra Krauss	Printed Name: Raymund Or II	Printed Name: Raymund Or II	Printed Name: Zihan P
☒ Cooler packed with ice (✓)	Sample Receipt:	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Condition/Cooler Temp: ____	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm: SGS
Shipping Tracking #: Lab Provided courier		Date/Time: 6/16/25	Date/Time: 6/16/25 @1445	Date/Time: 6/16/25	Date/Time: 6/16/25 19:02

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SGS COURIER

5.2 5

SS3202

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address 290 Broadhollow Road, Melville, NY 11747	**Fax** 631-249-7610
City Melville **State** NY **Zip** 11747	**E-mail Address** Benjamin.Wolf@aracadis.com
Project Name/Location (City, State) OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	**Project #** ~~30223002.PSS13~~ 30286060.PS513
Sampler's Printed Name Kyra Krauss	**Sampler's Signature**

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix
FB061625KK1	6/16/25	0730		✓	W
RW-21-MW-6	6/16/25	1126		✓	GW
MW-109-3	6/16/25	0910		✓	GW
REPD061625BM1	6/16/25	—		✓	GW

Preservative	E							
Filtered (✓)								
# of Containers	2							
Container Information	2							

PARAMETER ANALYSIS & METHOD

1,4-Dioxane, by 8270D SIM, CLLE

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ **Special QA/QC Instructions(✓):**

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Kyra Krauss	Printed Name: Richard G	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature: Richard G	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEX Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 6/16/25	Date/Time: 6-17-25 1030	Date/Time:	Date/Time:

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GW FB TB

Perm- mm-051925-168

ARCADIS

ID#:

****Program 5A****

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JE13627

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: ~~30123092.PSGI3~~ 30280060.PS513
Sampler's Printed Name: Kyra Kraus
Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	B	B	C				
						Filtered (✓)							
						# of Containers	3	2	1				
						Container Information	1	1	4				
1- TB061725KK1	6/17/25	—		✓	W		X						
2- FB061725KK1	6/17/25	0730		✓	W		X	X					
3- RW-21_MW-11	6/17/25	0927		✓	GW	X		X					
4- RW-21_MW-9	6/17/25	1118		✓	GW	X							

PARAMETER ANALYSIS & METHOD

VC82603NG38P2+20 VM S+13BUTADN, VMS-F142 | VC82603NG38P2+20 VM S+13BUTADN, VMS-F142 | Total Iron via USPA 6010

Keys

Preservation Key: A. H_2SO_4 B. HCl C. HNO_3 D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil W - Water T - Tissue SE - Sediment SL - Sludge A - Air NL - NAPL/Oil SW - Sample Wipe Other: GW

REMARKS

Initial Assessment CLP
Label Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓): ☐ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: Raymond Br II	Printed Name: Raymond Br II	Printed Name: C 6/17/25
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: courier	Firm/Courier: courier	Firm:
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp:	Date/Time: 6/17/25	Date/Time: 6/17/25 @1502	Date/Time: 6/17/25 1715	Date/Time:

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2.7 IR-50

SGS COURIER

5.2 5

SS3270

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: ~~30223092.PSS13~~ 3628060.PSS13
Sampler's Printed Name: Lyra Krauss	Sampler's Signature:

Preservative	E
Filtered (✓)	
# of Containers	2
Container Information	2

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil; SE - Sediment; NL - NAPL/Oil
W - Water; SL - Sludge; SW - Sample Wipe
T - Tissue; A - Air; Other: GW

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE
FB06172SKK1	6/17/25	0730		✓	W	X
RW-21_MW-11	6/17/25	0927		✓	GW	X
RW-21_MW-9	6/17/25	1118		✓	GW	X

PARAMETER ANALYSIS & METHOD

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

[X] Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) [X] Intact [ ] Not Intact	Printed Name: Lyra Krauss	Printed Name: Evan Price	Printed Name:	Printed Name:
[X] Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: 3.2	Date/Time: 6/17/25	Date/Time: 6/18/25 1050	Date/Time:	Date/Time:

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GW TB FB

PREM-mm-051925-168

ARCADIS

ID#:

****Program 5A****

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JE13532

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: ~~30223092.PSSI3~~ 30286060.PSSI3
Sampler's Printed Name: Kyra Krauss
Sampler's Signature:

Preservative	B	B	C					
Filtered (✓)								
# of Containers	3	2	1					
Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC8260D NG38PZ+20, VM S+15BUTADN, VMS-F142	VC8260D NG38PZ+20, VM S+15BUTADN, VMS-F142	Total Iron via USEPA 6010	REMARKS
1	TB061825KK1	6/18/25	—		✓	W		X		V869
2	FB061825KK1	6/18/25	0730		✓	W		X		
3	RW-21_MW-12-1	6/18/25	1005		✓	GW	X			
4	RW-21_MW-12-2	6/18/25	1117		✓	GW	X			

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: GW

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):
Initial Assessment IB
Label Verification

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓)	Printed Name: Kyra Krauss	Printed Name: Andrew Jones	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm:
Shipping Tracking #: Lab Provided courier	Condition/Cooler Temp: _____	Date/Time: 6/18/25	Date/Time: 6/18/25 @ 1353	Date/Time:	Date/Time: 6/18/25 17:30

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JE13532: Chain of Custody
Page 1 of 2

SS3333

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address	**Fax**
290 Broadhollow Road Suite 307E	631-249-7610
City / State / Zip	**E-mail Address**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State)	Project #
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	~~30223092.PSS13~~ 30281.0060.PSS13
Sampler's Printed Name	**Sampler's Signature**
Kyra Kraus	

Preservative	E
Filtered (✓)	
# of Containers	2
Container Information	2

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE
FB0618 25 KK1	6/18/25	0730		✓	W	X
RW-21_MW-12-1	6/18/25	1005		✓	GW	X
RW-21_MW-12-2	6/18/25	1117		✓	GW	X

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: Richard G	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature: Richard A	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 6/18/25	Date/Time: 6-20-25 1145	Date/Time:	Date/Time:

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PREM-MM-051925-168

****Program 5A****

TB FB GW

ARCADIS ID#: JE13676

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: ~~30223092.PSS13~~ 30286060.PSS13
Sampler's Printed Name: Kyra Krauls
Sampler's Signature:

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix
1	TB061925KK1	6/19/25	—		✓	W
2	FB061925KK1	6/19/25	0700		✓	GW
3	MW-111-4	6/19/25	0837		✓	GW

Preservative: B | B | C
Filtered (✓):
# of Containers: 3 | 2 | 1
Container Information: 1 | 1 | 4

PARAMETER ANALYSIS & METHOD

VOC 8260 NGMP 2+20, VM S+1,3BUTADIEN, VMS+F142
VOC 8260 NGMP 2+20, VM S+1,3BUTADIEN, VMS+F142
Total Iron via USPA 6010

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil W - Water T - Tissue SE - Sediment SL - Sludge A - Air NL - NAPL/Oil SW - Sample Wipe Other: GW

REMARKS

Initial Assessment 2A IO

Confirmation

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt

Lab Name: SGS Accutest
☒ Cooler packed with ice (✓)
Specify Turnaround Requirements: STANDARD TAT
Shipping Tracking #: Lab Provided courier
Cooler Custody Seal (✓): ☐ Intact ☐ Not Intact
Sample Receipt:
Condition/Cooler Temp:

Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name: Kyra Krauls	Printed Name: Anthony Carlino	Printed Name: Anthony Carlino	Printed Name: NEIANT PATEL
Signature:	Signature:	Signature:	Signature:
Firm: Arcadis	Firm/Courier: Impulse Courier	Firm/Courier: Impulse Courier	Firm:
Date/Time: 6/19/25	Date/Time: 6-19-25 1118 AM	Date/Time: 6/19/25 800PM	Date/Time: 6/19/25 8:05 pm

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5.2 5

JE13676: Chain of Custody
Page 1 of 2

553332

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address	**Fax**
290 Broadhollow Road Suite 307E	631-249-7610
City / State / Zip	**E-mail Address**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State)	Project #
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	~~30223092.PSSI3~~ 30286060 PSS 13
Sampler's Printed Name	**Sampler's Signature**
Kyra Krauss	

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
FB061925KK1	6/19/25	0700		✓	W	E		2	2	X
MW-111-4	6/19/25	0837		✓	GW					X

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: GW

REMARKS

Special Instructions/Comments:

Tier II QA/QC Deliverables Requested

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Kyra Krauss	Printed Name: Richard G	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 6/19/25	Date/Time: 6-20-25 1145	Date/Time:	Date/Time:

JE 13815
PREM-MM-051925-168

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: ~~30220092.PS613~~ 30286060.PS513
Sampler's Printed Name: Lyra Krauss
Sampler's Signature:

Preservative	B	B	C					
Filtered (✓)								
# of Containers	3	2	1					
Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010
1 TB062025KK1	6/20/25	—		✓	W		X	
2 FB062025KK1	6/20/25	0730		✓	W		X	
3 RW-21_MW-1	6/20/25	0945		✓	GW	X		

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil SE - Sediment NL - NAPL/Oil W - Water SL - Sludge SW - Sample Wipe T - Tissue A - Air Other: GW

REMARKS

V911

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt

Lab Name: SGS Accutest
☒ Cooler packed with Ice (✓)
Specify Turnaround Requirements: STANDARD TAT
Shipping Tracking #: Lab Provided Courier

Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact
Sample Receipt:
Condition/Cooler Temp: _____

Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name: Lyra Krauss	Printed Name: Andrew Jones	Printed Name:	Printed Name:
Signature:	Signature:	Signature:	Signature:
Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm:
Date/Time: 6/20/25	Date/Time: 6/20/25 @ 1308	Date/Time:	Date/Time: 6/20/25 19:12

20730826 CofC AR Form 08.27.2015

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Initial Assessment ZA-EC

Label Verification _____

SGS COURIER

1.8 IR-8

5.2 5

553356

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address	**Fax**
290 Broadhollow Road Suite 307E	631-249-7610
City / State / Zip	**E-mail Address**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State)	Project #
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	~~30223092.PSSI3~~ 30286060. PSSI3
Sampler's Printed Name	**Sampler's Signature**
Kyra Kraus	

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
FB062025KK1	6/20/25	0730		✓	W	E		2	2	X
RW-21_MW-1	6/20/25	0945		✓	GW	E		2	2	X

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ **Special QA/QC Instructions(✓):**

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: Richard G	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 6/20/25	Date/Time: 6-21-25 1000	Date/Time:	Date/Time:

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JD93117
PREM-MM-042424-19

GW

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Ben Wolf
Telephone: 631 829-0643
Address: 105 Maxess Rd S. N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092 PSSI3
Sampler's Printed Name: S Vlavianos
Sampler's Signature:

Preservative	B	B							
Filtered (✓)									
# of Containers	3	2							
Container Information	1	1							

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38P2+20 VM S+13BUTADN, VMS+F142	VC82603NG38P2+20 VM S+13BUTADN, VMS+F142
1 TB073024AH1	7/30/24			✓			X
2 FB073024SV1	7/30/24	0730		✓			X
3 RW21_MW-13	7/30/24	0945		✓		X	
4 RW-21_MW-16	7/30/24	1146		✓		X	

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: GW

REMARKS

V930

Initial Assessment 2BHK
Label Verification _____

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☐ Special QA/QC Instructions(✓):
CATEGORY B DELIVERABLES REQUESTED

Laboratory Information and Receipt

Lab Name: SGS Accutest
☒ Cooler packed with ice (✓)
Specify Turnaround Requirements: STANDARD TAT
Shipping Tracking #
Cooler Custody Seal (✓): ☐ Intact ☐ Not Intact
Sample Receipt: ice
Condition/Cooler Temp: 1.9

Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name: S Vlavianos	Printed Name: Raymond Ar 1	Printed Name: Raymond Ar	Printed Name: Erica Ranestad
Signature:	Signature:	Signature:	Signature:
Firm: Arcadis	Firm/Courier: Courier	Firm/Courier: Courier	Firm:
Date/Time: 7/30/24 1730	Date/Time: 7/30/24 1:15	Date/Time: 7/30/24	Date/Time: 7/30/24 5:00 pm

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cup
1.9 1750

JD93117: Chain of Custody
Page 1 of 2

SR 4020

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Ben Wolf

Telephone: 631-829-0643

Address: 105 Maxess Rd S. N108

Fax: 631-249-7610

City: Melville State: NY Zip: 11747

E-mail Address: Benjamin.Wolf@Arcadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY

Project #: B0223092 PSSI3

Sampler's Printed Name: SV/MV, MM/JS

Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	PARAMETER ANALYSIS & METHOD: 1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
RW-21_MW-13	7/30/24	0945		✓	GW	E		2	2	X	
RW-21_MW-16	7/30/24	1146		✓	GW					X	
FB07302451V1	7/30/24	0730		✓	FB					X	

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: GW

Special Instructions/Comments:
NYS CATEGORY B DELIVERABLES REQUESTED
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: BNiavianos	Printed Name: Evan Price	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 7/30/24 1230	Date/Time: 7-31-24 0950	Date/Time:	Date/Time:

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Katahdin Analytical Services SR4020 page 0000010 of 0000012

GW FB TB

****Program 5A****

PREM-MM-G732475

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JD93227

Send Results to:

Contact & Company Name: Ben Wolf
Telephone: 631 829 0643
Address: 105 Maxess Rd S.N108
Fax: 631 749 7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30273092 PSST3
Sampler's Printed Name: S Vlavianos
Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142
						B	B				
								3	2		
								1	1		
1- TB073124AM1	7/31/24			✓	TB						X
2- FB073124SV1	7/31/24	0730		✓	FB						X
3- RW-21_MW-15	7/31/24	1015		✓	GW	X					

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: GW

REMARKS

Initial Assessment MBZB

Label Verification:

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):
CATEGORY B DELIVERABLES REQUESTED

Laboratory Information and Receipt

Lab Name: SGS Accutest
☒ Cooler packed with ice (✓)
Specify Turnaround Requirements: STANDARD TAT
Shipping Tracking #:
Cooler Custody Seal (✓): ☐ Intact ☐ Not Intact
Sample Receipt:
Condition/Cooler Temp: _____

Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name: S Vlavianos	Printed Name: Raymond Dr II	Printed Name: Raymond Dr I	Printed Name: James Kluy
Signature:	Signature:	Signature:	Signature:
Firm: Arcadis	Firm/Courier: Impulse	Firm/Courier: Impulse	Firm: SGS
Date/Time: 7/31/24 1300	Date/Time: 7/31/24 2:20	Date/Time: 7/31/24	Date/Time: 7/31/24 18:36

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4.4

5.2 5

JD93227: Chain of Custody
Page 1 of 2

SR 4055

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Ben Wolf

Telephone: 631 829 0643

Address: 105 Maxess Rd S Melville

Fax: 631 249 7610

City: Melville State: NY Zip: 11747

E-mail Address: Benjamin.Wolf@arcadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY

Project #: 30273092 PS5F3

Sampler's Printed Name: S Vlavianos

Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE
FB073124SV1	7/31/24	0730		✓	FB	X
RW-21_MW-15	7/31/24	1005		✓	GW	X

Preservative	E
Filtered (✓)	
# of Containers	2
Container Information	2

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other _____
G. Other _____
H. Other _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: GW

REMARKS

Special Instructions/Comments:

NYS CATEGORY B DELIVERABLES REQUESTED

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name: Evan Price	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 7/31/24 1300	Date/Time: 8-1-24 0940	Date/Time:	Date/Time:

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Katahdin Analytical Services SR4055 page 0000009 of 0000011

GW | JD94983

Prem-En-082024-159

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Alexander Hellman
Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010
1 TB082724AH1	08/27/24	—		✓	W		X	
2 FB082724AH1	08/27/24	0730		✓	W		X	
3 RW-21-MW-13	08/27/24	0940		✓	GW	X		
4 RW-21-MW-15	08/27/24	1130		✓	GW	X		

Preservative	B	B	C				
Filtered (✓)							
# of Containers	3	2	1				
Container Information	1	1	4				

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other:
G. Other:
H. Other:

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other:
10. Other:

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

V1008

Initial Assessment 2 RJD

Label Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓):
~~CATEGORY B DELIVERABLES REQUESTED~~ AM

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Alexander Hellman	Printed Name: Raymond DT	Printed Name: Raymond DT	Printed Name: James Kwon
✓ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Logical SO	Firm/Courier: Logical SO	Firm: SGS
Shipping Tracking #: Courier pick-up	Condition/Cooler Temp:	Date/Time: 08/27/24 9:57	Date/Time: 8/27/24	Date/Time: 8/28/24	Date/Time: 8/27/24 ~~8:24~~ 8:24

20730826 CofC AR Form 08.27.2015

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IR-50

****Program 5A****

ARCADIS

ID#: SR4648

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address	**Fax**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip	**E-mail Address**
Melville NY 11747	Benjamin.Wolf@aracadis.com
Project Name/Location (City, State)	**Project #**
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name	**Sampler's Signature**
Alexander Hellman	

Preservative	E						
Filtered (✓)							
# of Containers	2						
Container Information	2						

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE						REMARKS
FB082724AH1	08/27/24	0730		✓	W	X						
RW-21_MW-13	08/27/24	0940		✓	GW	X						
RW-21_MW-15	08/27/24	1130		✓	GW	X						

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

Special Instructions/Comments:
NYS CATEGORY B DELIVERABLES REQUESTED
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Alexander Hellman	Printed Name: Jacob Bruce	Printed Name:	Printed Name:
☑ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: Fedex Priority Overnight	Condition/Cooler Temp: _____	Date/Time: 08/27/24	Date/Time: 8-28-24 0940	Date/Time:	Date/Time:

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

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Katahdin Analytical Services SR4648 page 0000010 of 0000012

ARCADIS

ID#: GW FB TB

****Program 5A****

PREM-CF-081524-132

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JD95100

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Alexander Hellman
Sampler's Signature:

Preservative	B	B	C					
Filtered (✓)								
# of Containers	3	2	1					
Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC/E2603NG38P2+20_VM S+13BUTADN_VMSF142	VC/E2603NG38P2+20_VM S+13BUTADN_VMSF142	Total Iron via USEPA 6010	REMARKS
1	TB08282AH1	8/28/24	—		✓	W				V1012
2	FB08282AH1	8/28/24	0730		✓	W	X	X		
3	RW-21_MW-16	8/28/24	0930		✓	GW	X			

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

Initial Assessment KG 3A
Label Verification _____

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):
~~CATEGORY B DELIVERABLES REQUESTED~~ (AH) SGS COURIER

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Alexander Hellman	Printed Name: Raymond Or II	Printed Name: Raymond Or I	Printed Name: Joshua Keiran
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Impulse	Firm/Courier: Impulse	Firm: SGS
Shipping Tracking #: Courier pick-up	Condition/Cooler Temp: _____	Date/Time: 8/28/24	Date/Time: 8/28/24 12:45	Date/Time:	Date/Time: 8/28/24 1750

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0.9

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****Program 5A****

ARCADIS

ID#: SR4684

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: Alexander Hellman	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
FB08282424HI	8/28/24	0730		✓	W	E		2	2	X
RW-21_MW-16	8/28/24	0930		✓	GW					X

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil; SE - Sediment; NL - NAPL/Oil; W - Water; SL - Sludge; SW - Sample Wipe; T - Tissue; A - Air; Other: GW

REMARKS

Special Instructions/Comments:
NYS CATEGORY B DELIVERABLES REQUESTED
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Alexander Hellman	Printed Name: Jacob Bruce	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: Fedex Priority overnight	Condition/Cooler Temp: _____	Date/Time: 8/28/24	Date/Time: 8-29-24 0930	Date/Time:	Date/Time:

20730826 CofC AR Form 08.27.2015

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Katahdin Analytical Services SR4684 page 0000009 of 0000011

Program 5A Program 5A GW PREM-mm-09424279

ARCADIS ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JD96611

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: S Vlavianos
Sampler's Signature:

Preservative	B	B	C				
Filtered (✓)							
# of Containers	3	2	1				
Container Information	1	1	4				

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC/8260/NG/38P2+20, VM S+13BUTADN, VMS+F142	VC/8260/NG/38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010	REMARKS
1 TB0919245VL	9/19/24			✓	TB		X		V1191
2 FB0919245VL	9/19/24	0730		✓	FB		X		
3 RW-21-MW-13	9/19/24	0945		✓	GW	X			MS/MSD
~~RW-21-MW-13(SD)~~	~~9/19/24~~	~~1115~~		✓	GW	X			
4 RW-21 MW-7	9/19/24	1115		✓	GW	X			

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):
Initial Assessment NB7A
Label Verification _____

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name: Andrew Johnson	Printed Name: Andrew Johnson	Printed Name: James Kwan
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Impulse	Firm/Courier:	Firm: SGS
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/19/24 1340 1505	Date/Time: 9/19/24 1805	Date/Time:	Date/Time: 9/19/24 1755 3

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JR-5D

5.2 5

Program 5A "Program 5A" SR 5156

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: S Wiwianos	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE							REMARKS
Preservative						E							
Filtered (✓)													
# of Containers						2							
Container Information						2							
FB09192415 V1	9/19/24	0730		✓	FB	X							
RW_21_MW-13	9/19/24	0945		✓	GW	X							MS/MSD
RW-21_MW-7	9/19/24	1115		✓	GW	X							

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: GW

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Wiwianos	Printed Name: Evan Price	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/19/24 1236	Date/Time: 9-20-24 0950	Date/Time:	Date/Time:

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Katahdin Analytical Services SR5156 page 0000013 of 0000015

GW Program 5A Program 5A JD96619 PREM-CF-081524-132

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: S Vlavianos
Sampler's Signature:

Preservative	B	B	C					
Filtered (✓)								
# of Containers	3	2	1					
Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38P2x20, VIM Sx13BUTADN, VMS+F142	VC82603NG38P2x20, VIM Sx13BUTADN, VMS+F142	Total Iron via USPA 6010	REMARKS
1 TB092024SV2	9/20/24			V	TB		X		A14
2 FB092024SV2	9/20/24	0730		V	FB		X	X	V1193
3 RW-21_MW-15	9/20/24	1025		V	GW	X	X	X	

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other:
G. Other:
H. Other:

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other:
10. Other:

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name: O Winfrey	Printed Name: O. Winfrey 1903	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: 1.7	Date/Time: 9/20/24 1300	Date/Time: 9/20/24 1320	Date/Time: 9/20/24	Date/Time:

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5.2 5

JD96619: Chain of Custody
Page 1 of 2

Program 5A ****Program 5A****

ARCADIS

ID#: SR5178

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: S Vlavianos	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
						E		2	2	
FB0920245V1	9/20/24	0730		✓	GW					X
RW-21_MW-15	9/20/24	1025		✓	GW					X

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ **Special QA/QC Instructions(✓):**

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name: Bennett Flanders	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/20/24 1230	Date/Time: 9/21/24 10:35	Date/Time:	Date/Time:

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Katahdin Analytical Services SR5178 page 0000009 of 0000011

Program 5A Program 5A GW PREM-MM-094294-79

ARCADIS

ID#: JD96834

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.RSSI3
Sampler's Printed Name: S Vlawianos
Sampler's Signature:

Preservative	B	B	C				
Filtered (✓)							
# of Containers	3	2	1				
Container Information	1	1	4				

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil SE - Sediment NL - NAPL/Oil W - Water SL - Sludge SW - Sample Wipe T - Tissue A - Air Other: GW

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010	REMARKS
1	TB092524PQ1	9/25/24			✓	TB		X		
2	FB092524PQ1	9/25/24	0730		✓	FB		X		
3	RW-21_MW-14	9/25/24	1016		✓	GW	X			MS/MSD
4	RW-21_MW-16	9/25/24	1146		✓	GW	X			

Initial Assessment NB3B

Label Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt

Lab Name: SGS Accutest
☒ Cooler packed with ice (✓) 1.5
Specify Turnaround Requirements: STANDARD TAT
Shipping Tracking #:
Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact
Sample Receipt:
Condition/Cooler Temp:

	Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name:	S Vlawianos	Otis Winthrey	Otis Winthrey	
Signature:				
Firm:	Arcadis		B23	
Date/Time:	9/25/24	9/25/24	9/25/24	

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1.5 IR50 CP

"""Program 5A""" Program 5A

SR 5264

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State):	Project #:
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name: S Vlavianos	**Sampler's Signature:**

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
FB092524PQ1	9/25/24	0730		✓	FB	E		2	2	X	
RW-21_MW-14	9/25/24	1010		✓	GW	E		2	2	X	MS/MSD
RW-21_MW-16	9/25/24	1140		✓	GW	E		2	2	X	

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: GW

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ **Special QA/QC Instructions(✓):**

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name: Evan Price	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/25/24	Date/Time: 9-26-24 0905	Date/Time:	Date/Time:

20730826 CofC AR Form 08.27.2015

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Katahdin Analytical Services SR5264 page 0000012 of 0000014

GW FB TB

Program 5A

PREM EN 08/2024 1539

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JD95851

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30228092.PSSI3
Sampler's Printed Name: SVlaviancos
Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix
1 FB091124PQ1	9/11/24	0730		✓	FB
2 TB091124PQ1	9/11/24			✓	TB
3 RW-21_MW-5-1	9/11/24	1016		✓	GW
4 RW-21_MW-5-2	9/11/24	1140		✓	GW

Preservative	B	B	C						
Filtered (✓)									
# of Containers	3	2	1						
Container Information	1	1	4						

PARAMETER ANALYSIS & METHOD

Sample ID	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	VC82603NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010
1 FB091124PQ1		X	
2 TB091124PQ1		X	
3 RW-21_MW-5-1	X		
4 RW-21_MW-5-2	X		

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil SE - Sediment NL - NAPL/Oil
W - Water SL - Sludge SW - Sample Wipe
T - Tissue A - Air Other: GW

REMARKS

VOA7 S

SGS COURIER

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: SVlaviancos	Printed Name: Raymond Jr N	Printed Name: Raymond Jr I	Printed Name:
☑ Cooler packed with ice (✓)		Signature:	Signature: AR	Signature: AR	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Logistics	Firm/Courier: Logistics	Firm:
Shipping Tracking #:	Condition/Cooler Temp: 3.6°C IR50	Date/Time: 9/11/24 1300	Date/Time: 9/11/24 12:45	Date/Time: 9/11/24	Date/Time:

20730826 CofC AR Form 08.27.2015

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5.2 5

JD95851: Chain of Custody
Page 1 of 2

"""Program 5A"""

ARCADIS

ID#: SR4976

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY

Project #: 30223092.PSSI3

Sampler's Printed Name: S Wolf, MNS

Sample(s) Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
FB091124PQ1	9/11/24	0730		✓	FB	E		2	2	X	
RW-21_MW-5-1	9/11/24	1010		✓	GW					X	
RW-21_MW-5-2	9/11/24	1140		✓	GW					X	

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓): X

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Wolf, MNS	Printed Name: Jacob Bruce	Printed Name:	Printed Name:
☑ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/11/24 1300	Date/Time: 9-12-24 0935	Date/Time:	Date/Time:

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Katahdin Analytical Services SR4976 page 0000010 of 0000012

GW FB TB

ARCADIS

ID#:

Program 5A

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Prem-mm-082324-188

Lab Work Order # JD96056

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: S Vlavianos
Sampler's Signature:

Preservative	B	B	C					
Filtered (✓)								
# of Containers	3	2	1					
Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38P2+20..VM S+13BUTADIN..VMS+F142	VC82603NG38P2+20..VM S+13BUTADIN..VMS+F142	Total Iron via USPA 6010					
1	TB09122415V1	9/12/24			✓	TB								
2	FB09122415V1	9/12/24	0736		✓	FB								
3	RW-21_MW-4	9/12/24	0915		✓	GW	X							
4	RW-21_MW-2	9/12/24	1050		✓	GW	X							
5	MW-109-3	9/12/24	1205		✓	GW	X							
6	REP09122415PG1	9/12/24			✓	GW	X							

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

VII20
S

Initial Assessment 2BJD

Final Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

SGS COURIER

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name: Raymond & II	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature: DR	Signature: DR	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Impulse	Firm/Courier: Impulse	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/12/24	Date/Time: 9/12/24 12:12	Date/Time: 9/12/24 1400	Date/Time:

1.4°C IR

20730826 CofC AR Form 08.27.2015

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5.2 5

JD96056: Chain of Custody
Page 1 of 2

"""Program 5A"""

ARCADIS

ID#: SR5011

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: S Vlavianos	Sampler's Signature:

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: GW

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	PARAMETER ANALYSIS & METHOD: 1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
FB091224SV1	9/12/24	0730		✓	FB	E		2	2	X	
RW-21_MW-4	9/12/24	0915		✓	GW					X	
RW-21_MW-2	9/12/24	1050		✓	GW					X	
MW-109-3	9/12/24	1205		✓	GW					X	
REP091224PQ1	9/12/24	—		✓	GW					X	

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name: Jacob Bruce	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/12/24	Date/Time: 9-13-24 1025	Date/Time:	Date/Time:

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Katahdin Analytical Services SR5011 page 0000013 of 0000015

Program 5a Program 5A JD96142 DREM-EN-082024-159

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: S Vlavianos	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information
						B	B	C	
						3	2	1	
						1	1	4	
FB091324PQ1 (5)	9/13/24	0730		✓	FB			X	
1 TB091324PQ1	9/13/24	—		✓	TB			X	
2 MW-116-5	9/13/24	1040		✓	GW	X			

PARAMETER ANALYSIS & METHOD

VC/8260NG38P2+20, VMS+F142	VC/8260NG38P2+20, VMS+F142	Total Iron via USPA 6010	REMARKS
X	X		
	X		
X			

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓):
Initial As... NB3B
Label Verifi...
2.2 CTD IRSO

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name:	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: SGS	Firm/Courier: SGS	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/13/24 1300	Date/Time: 9/13/24 1300	Date/Time: 9/13/24 1735	Date/Time:

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JD96142: Chain of Custody
Page 1 of 2

Program 5a

"""Program 5A"""

ARCADIS

ID#: SR5033

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address	**Fax**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip	**E-mail Address**
Melville NY 11747	Benjamin.Wolf@aracadis.com
Project Name/Location (City, State)	**Project #**
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name	**Sampler's Signature**
S Vlavianos	

Preservative	E
Filtered (✓)	
# of Containers	2
Container Information	2

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: GW

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
FB091324PQ1	9/13/24	0730		✓	FB	X	
MW-116-5	9/13/24	1040		✓	GW	X	

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name: Jacob Bruce	Printed Name:	Printed Name:
☐ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/13/24 1400	Date/Time: 9.14.24 1100	Date/Time:	Date/Time:

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Katahdin Analytical Services SR5033 page 0000008 of 0000010

Program 5A Program 5A Prem-mn-082224-28

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JD96209

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: S Vlavianos
Sampler's Signature:

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38P2+20. VM S+13BUTADN. VMS+F142	VC82603NG38P2+20. VM S+13BUTADN. VMS+F142	Total Iron via USPA 6010
1	TB091624SV1	9/16/24	/		✓	TB	X		
2	FB091624SV1	9/16/24	0730		✓	FB	X		
3	RW-21_MW-1	9/16/24	1010		✓	GW	X	X	X
4	RW-21_MW-6	9/16/24	1143		✓	GW	X	X	X
5	RW-21_MW-9	9/16/24	1315		✓	GW	X	X	X

Preservative	B	B	C
Filtered (✓)			
# of Containers	3	2	1
Container Information	1	1	4

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: _____ G. Other: _____ H. Other: _____

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: _____ 10. Other: _____

Matrix Key: SO - Soil SE - Sediment NL - NAPL/Oil W - Water SL - Sludge SW - Sample Wipe T - Tissue A - Air Other: GW

REMARKS

Initial Assessment JE 2-A

Label Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓):

Laboratory Information and Receipt

Lab Name: SGS Accutest
Cooler packed with ice (✓)
Specify Turnaround Requirements: STANDARD TAT
Shipping Tracking #:
Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact
Sample Receipt:
Condition/Cooler Temp: 1-G 1R50

Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name: S Vlavianos	Printed Name: Engels Batista	Printed Name: Engels Batista	Printed Name:
Signature:	Signature:	Signature:	Signature:
Firm: Arcadis	Firm/Courier: SGS	Firm/Courier: SGS	Firm:
Date/Time: 9/16/24 1430	Date/Time: 9-16-24 1358	Date/Time: 09-16-24 1749	Date/Time:

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5.2 5

JD96209: Chain of Custody
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Program 5A ~~~~~Program 5A~~~~~

ARCADIS

ID#: SR5053

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State):	Project #:
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name: S Vlavianos	**Sampler's Signature:**

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE
FB091624SV1	9/16/24	0730		✓	FB	X
RW-21_MW-1	9/16/24	1010		✓	GW	X
RW-21_MW-6	9/16/24	1145		✓	GW	X
RW-21_MW-9	9/16/24	1315		✓	GW	X

Preservative	E
Filtered (✓)	
# of Containers	2
Container Information	2

PARAMETER ANALYSIS & METHOD

REMARKS

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name: Jacob Bruce	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/16/24 1430	Date/Time: 9-17-24 1000	Date/Time:	Date/Time:

20730826 CofC AR Form 08.27.2015

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Katahdin Analytical Services SR5053 page 0000011 of 0000013

GW TB FB Program 5A Program 5A

PREM-MM-09424-79

ARCADIS ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JD96324

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: S Mavromatis	Sampler's Signature:

Preservative	B	B	C				
Filtered (✓)							
# of Containers	3	2	1				
Container Information	1	1	4				

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

PARAMETER ANALYSIS & METHOD

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC/8260/NG38P2+20, VM S+13BUTADN, VMS-F-142	VC/8260/NG38P2+20, VM S+13BUTADN, VMS-F-142	Total Iron via USPA 6010					REMARKS
1	TB09172451V1	9/17/24	—		✓	TB		X						A27 V1457
2	FB09172451V1	9/17/24	0730		✓	FB		X	X					
3	RW-21_MW-5-1	9/17/24	1000		✓	GW	X		X					
4	RW-21_MW-3-2	9/17/24	0950		✓	GW	X							
5	REP09172451V1	9/17/24	—		✓	GW	X							
6	RW-21_MW-11	9/17/24	1140		✓	GW	X		X					

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓): 3BHR

Label Verification

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓)	Printed Name: S Mavromatis	Printed Name: Reggie	Printed Name: Reggie	Printed Name: James Kwon
☒ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: SGS	Firm/Courier: SGS	Firm: SGS
Shipping Tracking #	Condition/Cooler Temp: 1.5	Date/Time: 9/17/24 1506	Date/Time: 9/17/24 1500	Date/Time: 9/17/24 1847	Date/Time: 9/17/24 18:47

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Program 5A "Program 5A"

ARCADIS

ID#: SR5096

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com
Project Name/Location (City, State):	**Project #:**
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name: S Vlavianos	**Sampler's Signature:**

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE
FB09172451V1	9/17/24	0730		✓	FB	X
RW-21_MW-3-1	9/17/24	1000		✓	GW	X
RW-21_MW-3-2	9/17/24	0950		✓	GW	X
REP09172451V1	9/17/24	—		✓	GW	X
RW-21_MW-11	9/17/24	1140		✓	GW	X

	Preservative	Filtered (✓)	# of Containers	Container Information
	E		2	2

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other. _____
G. Other: _____
H. Other. _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓): X

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name: Jacob Bruce	Printed Name:	Printed Name:
X Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/17/24 1300	Date/Time: 9-18-24 0935	Date/Time:	Date/Time:

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Katahdin Analytical Services SR5096 page 0000013 of 0000015

GW FB TB Program 5A Program 5A PREM-NNN-09424-79

ARCADIS ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JD96422

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: S Vlavianos	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	B	B	C					
						Filtered (✓)								
						# of Containers	3	2	1					
						Container Information	1	1	4					
1 TB09182451V1	9/18/24			✓	TB			X						
2 FB09182451V1	9/18/24	0730		✓	FB			X						
3 MW-111-4	9/18/24	0910		✓	GW	X								
4 RW-21_MW-8	9/18/24	1050		✓	GW	X								

PARAMETER ANALYSIS & METHOD

VC82603NG38P2+20 VM S+13BUTADN. VMS+F142	VC82603NG38P2+20 VM S+13BUTADN. VMS+F142	Total Iron via USPA 6010						REMARKS
	X							V1161
	X							5
X								
X								

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil SE - Sediment NL - NAPL/Oil
W - Water SL - Sludge SW - Sample Wipe
T - Tissue A - Air Other: GW

Initial Assessment 3A/ZA
Label Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name: Alex Wyatney	Printed Name: Alex Letterney	Printed Name:
☐ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: 1.3	Date/Time: 9/18/24 1300	Date/Time: 9/19/24 1300	Date/Time: 9/19/24 1851	Date/Time:

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JD96422: Chain of Custody
Page 1 of 2

Program 5A *****Program 5A*****

ARCADIS

ID#: SR5141

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY

Project #: 30223092.PSSI3

Sampler's Printed Name: S Vlavianos

Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
						E		2	2	
FB09182451VL	9/18/24	0730		✓	FB					X
MW-111-4	9/18/24	0910		✓	GW					X
RW-21_MW-8	9/18/24	1050		✓	GW					X

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name: Jacob Bruce	Printed Name:	Printed Name:
☐ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/18/24 1700	Date/Time: 9-19-24 1350	Date/Time:	Date/Time:

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Katahdin Analytical Services SR5141 page 0000010 of 0000012

GW TB Program 5A

ARCADIS ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

PRem-mm-09424-79

Lab Work Order # JD96658

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: S Vlavianos	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information
						B	B	C	
						3	2	1	
						1	1	4	
1 TBG9623245V1	9/23/24			J	TB				
2 MW-117-5	9/23/24	14:35		J	GW	X			

PARAMETER ANALYSIS & METHOD

VC82603NG38P2+20 VM S+13BUTADN, VMS+F142	VC82603NG38P2+20 VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010
X		
	X	

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

REMARKS

VL198

Data Validation ZAEN

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name: O. Winfrey	Printed Name: O Winfrey	Printed Name: James Kwon
☒ Cooler packed with ice (✓) 1.2		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm: SGS
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/23/24 1500	Date/Time: 9/23/24 1500	Date/Time: 9/23/24 1824	Date/Time: 9/23/24 18:24

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JD96658: Chain of Custody
Page 1 of 2

Program 5A ""Program 5A"" SR 5198

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY

Project #: 30223092.PS13

Sampler's Printed Name: S Vlavianos

Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	PARAMETER ANALYSIS & METHOD: 1,4-Dioxane, by 8270D SIM, CLLE
						E		2	2	
MW-117-5	9/23/24	14:35		✓	GW					X

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

Special Instructions/Comments:

Tier II QA/QC Deliverables Requested

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name: Evan Price	Printed Name:	Printed Name:
☐ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/23/24 1530	Date/Time: 9-24-24 0925	Date/Time:	Date/Time:

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Katahdin Analytical Services SR5198 page 0000008 of 0000010

GW TB

ARCADIS

ID#:

Program 5A

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

PREM-MM-09424-79

Lab Work Order #: JD96773

Send Results to:

Contact & Company Name:	Benjamin Wolf -Task Manager
Telephone:	631-829-0643 cell
Address:	105 Maxess Road Suite N108
Fax:	631-249-7610
City / State / Zip:	Melville NY 11747
E-mail Address:	Benjamin.Wolf@arcadis.com
Project Name/Location (City, State):	OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #:	30223092.PSSI3
Sampler's Printed Name:	Pat Quinlan
Sampler's Signature:	

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	VC62603NG38P2+20 VM S+13BUTADN, VMS-F142	VC62603NG39P2+20 VM S+13BUTADN, VMS-F142	Total Iron via USPA 6010	REMARKS
						B	B	C					
										PARAMETER ANALYSIS & METHOD			
								3	2	1			
								1	1	4			
1 TB092424V1	9-24-24	—		✓	W						X		VV2LO
2 MW-118-5	↓	11:18		✓	GW	X							

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

Initial Assessment 4BHR

Label Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓): ☒

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Pat Quinlan	Printed Name: Maggie	Printed Name: Peggy P	Printed Name: James Kwon
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: SGS	Firm/Courier: SGS	Firm: SGS
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9.24.24	Date/Time: 9/24/24 1250	Date/Time: 9/24/24 1823	Date/Time: 9/24/24 18:23

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4.7 IR-OD

5.2 5

SR5226

"""Program 5A"""

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY

Project #: 30223092.PSSI3

Sampler's Printed Name: Pat Quinlan

Sampler's Signature:

Preservative	E							
Filtered (✓)								
# of Containers	2							
Container Information	2							

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE							REMARKS
MW-118-S	9-24-24	11:18		✓	GW	X							

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: GW

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

[X] Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Pat Quinlan	Printed Name: Evan Price	Printed Name:	Printed Name:
[X] Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9-24-24	Date/Time: 9-25-24 0925	Date/Time:	Date/Time:

20730826 CofC AR Form 08.27.2015

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Katahdin Analytical Services SR5226 page 0000008 of 0000010

GW FB TB

Program SA ~~Program SA~~

PREM-NYM-09424-79

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #: JD96959

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: S Villanueva
Sampler's Signature:

Preservative	B	B	C				
Filtered (✓)							
# of Containers	3	2	1				
Container Information	1	1	4				

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VOC 8260 3NG38P2+20, VM S+15BUTADN, VMS+F142	VOC 8260 3NG38P2+20, VM S+15BUTADN, VMS+F142	Total Iron via USPA 6010					
1 TB092624SV1	9/26/24			✓	TB		X						
2 FB092624SV1	9/26/24	0730		✓	FB		X						
3 RW-21_MW-12-1	9/26/24	1025		✓	GW	X							
4 RW-21_MW-12-2	9/26/24	1045		✓	GW	X							

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

VA
S

Final Assessment: 2 bottles

Label Verification: _____

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

SGS COURIER

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Villanueva	Printed Name: Raymond Ortiz II	Printed Name: Raymond Ortiz I	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature: DR	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: SGS	Firm/Courier: SGS	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/26/24 1200	Date/Time: 9/26/24 1340	Date/Time: 9/26/24 1700	Date/Time:

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20730826 CofC AR Form 08.27.2015

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JD96959: Chain of Custody
Page 1 of 2

*****Program 5A***** Program 5A

ARCADIS

ID#: SR5295

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State):	Project #:
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PS8I3
Sampler's Printed Name: S Vlavianos	**Sampler's Signature:**

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE
FB092624SV1	9/26/24	0730		✓	FB	X
RW-21_MW-12-1	9/26/24	1025		✓	GW	X
RW-21_MW-12-2	9/26/24	1045		✓	GW	X

Preservative	E						
Filtered (✓)							
# of Containers	2						
Container Information	2						

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name: Jacob Bruce	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/26/24 1200	Date/Time: 9-27-24 0915	Date/Time:	Date/Time:

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Katahdin Analytical Services SR5295 page 0000010 of 0000012

GW
FD
TB

****Program 5A****

PREM-TM-032525-170

JE18472

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: ~~30223092~~.PSSI3 30286060.PSS13
Sampler's Printed Name: Kyra Kraus
Sampler's Signature:

Preservative	B	B	C					
Filtered (✓)								
# of Containers	3	2	1					
Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38P2+20_VM S+13BUTADN_VMS+F142	VC82603NG38P2+20_VM S+13BUTADN_VMS+F142	Total Iron via USPA 6010	REMARKS
1	TB090425KK1	9/4/25	—		✓	W		X		
2	FB090425KK1	9/4/25	0730		✓	W		X	X	
3	RW-21_MW-13	9/4/25	1025		✓	GW	X		X	*MS/MSD
4	RW-21_MW-15	9/4/25	1250		✓	GW	X			

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Final Assessment 2R 9/4
Label Verification

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓)	Printed Name: Kyra Kraus	Printed Name: Raymond # 11	Printed Name: Raymond #11	Printed Name: Jaqueline Ellis
☒ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm:
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp: _____	Date/Time: 9/4/25	Date/Time: 9/4/25 2:35	Date/Time:	Date/Time: 9/4/25 1730

20730826 CofC AR Form 08 27 2015

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JE18472: Chain of Custody
Page 1 of 2

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # SS 5210

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30286060.PSSI3
Sampler's Printed Name: Kyra Kraus	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
						E		2	2		
FB090425KK1	9/4/25	0730		✓	W					X	
RW-21_MW-13	9/4/25	1025		✓	GW					X	*MS/MSD
RW-21_MW-15	9/4/25	1250		✓	GW					X	

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

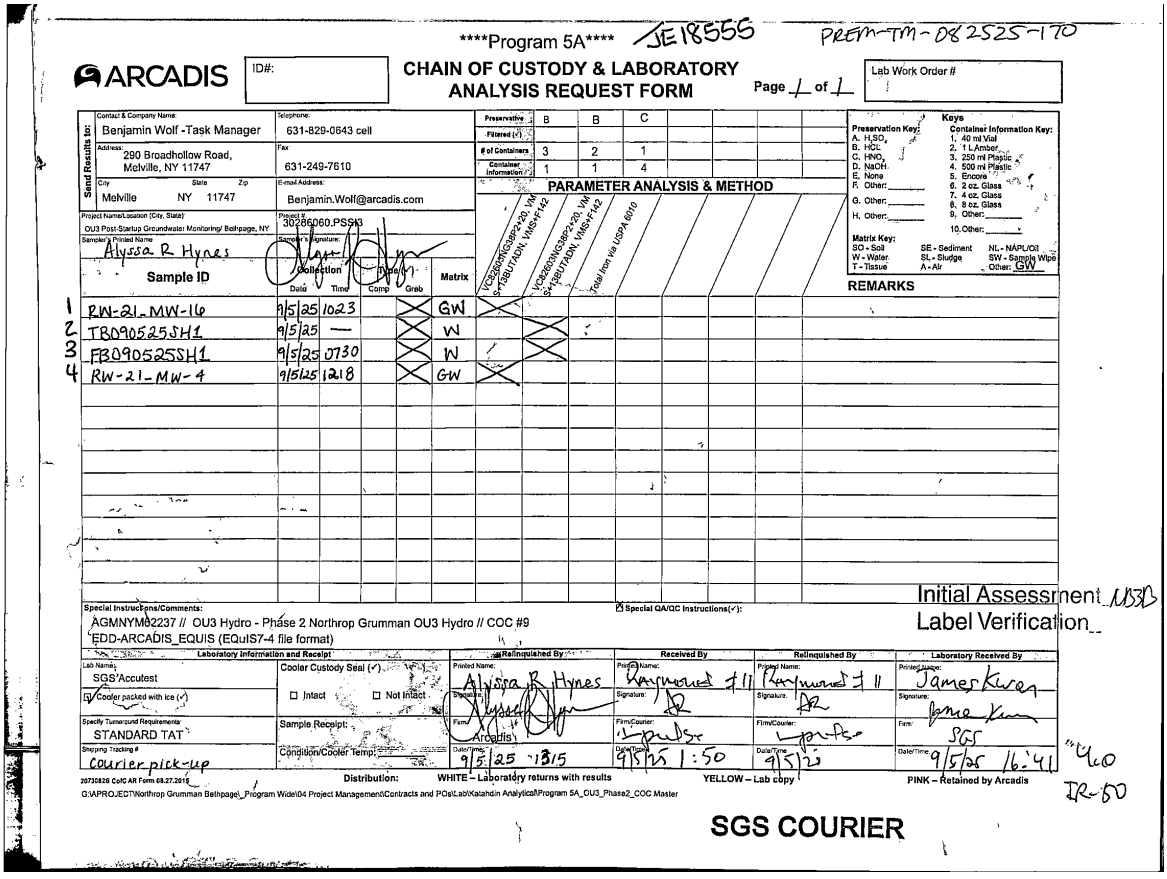
[X] Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: Kim Vogel	Printed Name:	Printed Name:
[X] Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 9/4/25	Date/Time: 9/8/25 0900	Date/Time:	Date/Time:

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****Program 5A**** JE18555 PREM-TM-082525-170

ARCADIS ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1 Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30286060.PS#3
Sampler's Printed Name: Alyssa R Hynes
Sampler's Signature:

	Sample ID	Collection Date	Collection Time	Comp	Grab	Matrix	Preservative	B	B	C						
							Filtered (✓)									
							# of Containers	3	2	1						
							Container Information	1	1	4						
1	RW-21-MW-16	9/5/25	1023		X	GW		X								
2	TB090525SH1	9/5/25	—		X	W			X							
3	FB090525SH1	9/5/25	0730		X	W		X	X							
4	RW-21-MW-4	9/5/25	1218		X	GW		X								

PARAMETER ANALYSIS & METHOD

VOC 8260(NCSB)+20+1,4-DIOXANE (SIM) + TENTATIVELY IDENTIFIED COMPOUNDS, WMS-F142

VOC 8260(NCSB)+20+1,4-DIOXANE (SIM) + TENTATIVELY IDENTIFIED COMPOUNDS, WMS-F142

Total Iron via USEPA 6010

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: _____ G. Other: _____ H. Other: _____

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: _____ 10. Other: _____

Matrix Key: SO - Soil W - Water T - Tissue SE - Sediment SL - Sludge A - Air NL - NAPL/Oil SW - Sample Wipe Other: GW

REMARKS

Special Instructions/Comments:
AGMNYM82237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓):

Initial Assessment MSB
Label Verification

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Alyssa R Hynes	Printed Name: Raymond J II	Printed Name: Raymond J II	Printed Name: James Kwan
☑ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm: SGS
Shipping Tracking #: Courier pick-up	Condition/Cooler Temp:	Date/Time: 9/5/25 1315	Date/Time: 9/5/25 1:50	Date/Time: 9/5/25	Date/Time: 9/5/25 16:41

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SGS COURIER

5.2 5

JE18555: Chain of Custody
Page 1 of 2

****Program 5A****

555200

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30286060.PSSI3
Sampler's Printed Name: Alyssa R Hynes	Sampler's Signature: Alyssa R Hynes

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
						E		2	2	
RW-21_MW-16	9/5/25	1023		X	GW					X
RW-21_MW-4	9/5/25	1218		X	GW					X
FB090525SH1	9/5/25	0730		X	W					X

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Alyssa R Hynes	Printed Name: Richard G	Printed Name:	Printed Name:
☑ Cooler packed with ice (✓)		Signature: Alyssa R Hynes	Signature: Richard G	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: SGS ~~Katahdin Analytical Labs~~	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Priority Overnight	Condition/Cooler Temp: _____	Date/Time: 9/5/25 1400	Date/Time: 9-6-25 0845	Date/Time:	Date/Time:

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GW TB FB ****Program 5A**** JE19615 PRGM-TM-082525-170

ARCADIS | ID#: | **CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM** | Page 1 of 1 | Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30286068.PSSI3
Sampler's Printed Name: S Villwock
Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	# of Containers	VC82603N(G38P2+20 VM S+13BUTADN VMS-F142	VC82603N(G38P2+20 VM S+13BUTADN VMS-F142	Total Iron via USPA 6010	REMARKS
1 TB091925SH1	9/19/25	—		✓	W	3	X			VOA
2 FB091925SH1	9/19/25	0730		✓	W	3	X			S
3 MW-111-4	9/19/25	0850		✓	GW	3	X			
4 RW-21_MW5-1	9/19/25	1028		✓	GW	3	X			
5 RW-21_MW5-2	9/19/25	1030		✓	GW	3	X			

Preservative: B, B, C
Filtered (✓):
# of Containers: 3, 2, 1
Container Information: 1, 1, 4

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encora 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil, W - Water, T - Tissue, SE - Sediment, SL - Sludge, A - Air, NL - NAPL/Oil, SW - Sample Wipe, Other: GW

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Villwock	Printed Name: Raymond #11	Printed Name: Raymond #11	Printed Name: Jaggery Ellis
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm: SGS
Shipping Tracking #:	Condition/Cooler Temp:	Date/Time: 9/19/25 1200	Date/Time: 9/19/25 2:05	Date/Time: 9/19/25	Date/Time: 9/19/25 8:10

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Verification

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JE19615: Chain of Custody
Page 1 of 2

****Program 5A****

555532

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30286060.RSSI3
Sampler's Printed Name: S Vlavianos	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
FB09192551-1	9/15/25	0735		✓	W	E		2	2	X
MW-111-4	9/15/25	0850		✓	GW					X
RW-21_MW-5-1	9/15/25	1028		✓	GW					X
RW-21_MW-5-2	9/15/25	1030		✓	GW					X

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ **Special QA/QC Instructions(✓):**

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: S Vlavianos	Printed Name: Richard G	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: SGS Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/19/25	Date/Time: 9-20-25 0940	Date/Time:	Date/Time:

20730826 CofC AR Form 08.27.2015

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****Program 5A**** JE18618 PREM-TM-082525-170

ARCADIS ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Contact & Company Name	Benjamin Wolf -Task Manager
Address	290 Broadhollow Road, Melville, NY 11747
City / State / Zip	Melville NY 11747
Telephone	631-829-0643 cell
Fax	631-249-7610
E-mail Address	Benjamin.Wolf@arcadis.com
Project Name/Location (City, State)	OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #	30286060.PSSI3
Sampler's Printed Name	Pat Quinlan
Sampler's Signature	

Preservation: B B C
Filtered (Y/N):
# of Containers: 3 2 1
Container Information: 1 1 4

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Grab (G)	Composite (C)	Matrix	VC82603NG38P2-20. VM S-13BUTADN. VMS-F142	VC82603NG38P2-20. VM S-13BUTADN. VMS-F142	Total Iron via USPA 6010	REMARKS
1 TB09082625PG	9-8-25	—		✓	W		X		
2 FB09082525PG	9/8/25	0730		✓	W		X	X	
3 RW-21 - MW-3-1	9/8/25	1025		✓	GW	X		X	
4 RW-21 - MW-3-2	9/8/25	1035		✓	GW	X			
5 RW-21 - MW-2	9/8/25	1237		✓	GW	X			
6 REP09082525W1	9/8/25	—		✓	GW	X			

Keys

Preservation Key:	Container Information Key:
A. H_2SO_4	1. 40 ml Vial
B. NaOH	2. 1 L Amber
C. HNO_3	3. 250 ml Plastic
D. MeOH	4. 500 ml Plastic
E. None	5. Encore
F. Other	6. 2 oz Glass
G. Other	7. 4 oz Glass
H. Other	8. 8 oz Glass
	9. Other

Matrix Key: SO - Soil; SE - Sediment; SL - NAPL/OR; W - Water; SS - Solids; WP - Wipe; T - Tissue; A - Air; Other

All V328

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (Y)	Printed Name: Pat Quinlan	Printed Name: Raymond Hill	Printed Name: Raymond Hill	Printed Name:
Cooler packed with ice (✓)	Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt	Firm: Arcadis	Firm/Courier: Courier	Firm/Courier: Courier	Firm:
Shipping Tracking #: Courier pick-up	Condition/Cooler Temp:	Date/Time: 9-8-25 1	Date/Time: 9/8/25 1:50	Date/Time: 9/8/25	Date/Time: 9/8/24

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****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # SS 5241

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30286060.PSSI3
Sampler's Printed Name: Pat Quinlan	Sampler's Signature: Pat Quinlan

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
						E		2	2	
FB090825PQ	9-8-25	0730		✓	W					X
RW-21 - MW-3-1	9/8/25	1025		✓	GW					X
RW-21 - MW-3-2	9/8/25	1035		✓	GW					X
RW-21 - MW-2	9/8/25	1237		✓	GW					X
REPO90825SH-1	9/8/25	—		✓	GW					X

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓)	Printed Name: Pat Quinlan	Printed Name: Evan Price	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature: Pat Quinlan	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Priority Overnight	Condition/Cooler Temp: _____	Date/Time: 9-8-25 /	Date/Time: 9-9-25 1130	Date/Time:	Date/Time:

20730826 CofC AR Form 08.27.2015

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GW FB TB

****Program 5A****

PREM-MM-051925-168 JE18713

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30286060.PSSI3
Sampler's Printed Name: Shirley He
Sampler's Signature: Shirley He

Preservative	B	B	C					
Filtered (✓)								
# of Containers	3	2	1					
Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other:_____ G. Other:_____ H. Other:_____

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other:_____ 10. Other:_____

Matrix Key: SO - Soil SE - Sediment NL - NAPL/Oil W - Water SL - Sludge SW - Sample Wipe T - Tissue A - Air Other: GW

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38PZ+20_VM S+15BUTADN_VMS+F142	VC82603NG38PZ+20_VM S+15BUTADN_VMS+F142	Total Iron via USPA 6010	REMARKS
1	TB090925SH1	9/19/25	—		✓	W		X		VOA
2	FB090925SH1	9/19/25	0730		✓	W		X		
3	MW-116-5	9/19/25	1100		✓	GW	X			MS/MSD

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Shirley He	Printed Name: Raymond T 21	Printed Name: Raymond T 11	Printed Name: James Kwan
☑ Cooler packed with ice (✓)		Signature: Shirley He	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Spulse	Firm/Courier: Spulse	Firm: SGS
Shipping Tracking #: courier pick-up	Condition/Cooler Temp:	Date/Time: 9/19/25	Date/Time: 9/19/25 13:40	Date/Time:	Date/Time: 9/19/25 18:30

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JE18713: Chain of Custody
Page 1 of 2

555265

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name	Telephone
Benjamin Wolf -Task Manager	631-829-0643 cell
Address	**Fax**
290 Broadhollow Road, Melville, NY 11747	631-249-7610
City / State / Zip	**E-mail Address**
Melville NY 11747	Benjamin.Wolf@aracadis.com
Project Name/Location (City, State)	**Project #**
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30286060.PSSI3
Sampler's Printed Name	**Sampler's Signature**
Shirley He	Shirley He

Preservative	E						
Filtered (✓)							
# of Containers	2						
Container Information	2						

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
FB090925SH1	9/9/25	0730		✓	W	X	
MW-116-5	9/9/25	1100		✓	GW	X	MS/MSD

PARAMETER ANALYSIS & METHOD

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ **Special QA/QC Instructions(✓):**

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Shirley He	Printed Name: Richard G	Printed Name:	Printed Name:
☑ Cooler packed with ice (✓)		Signature: Shirley He	Signature: Richard G	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Priority Overnight	Condition/Cooler Temp: _____	Date/Time: 9/9/25	Date/Time: 9-10-25 0930	Date/Time:	Date/Time:

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GW TB
FB

****Program 5A****

PREM-TM-08 25-170 JE18931

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30286060.PSSI3
Sampler's Printed Name: Shirley He
Sampler's Signature: Shirley He

Preservative	B	B	C					
Filtered (✓)								
# of Containers	3	2	1					
Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38P2+20 VM S+13BUTADN VMS+F142	VC82603NG38P2+20 VM S+13BUTADN VMS+F142	Total Iron via USPA 6010	REMARKS
1 TB091025KK1	9/10/25	—		✓	W		X		
2 FB091025KK1	9/10/25	0730		✓	W		X		
3 MW-118-5	9/10/25	1100		✓	GW	X			

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Initial Assessment 38 mm
Label Verification

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Shirley He	Printed Name: [illegible]	Printed Name: [illegible]	Printed Name: Jobarry Ellis
☑ Cooler packed with ice (✓)		Signature: Shirley He	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Impulse	Firm/Courier: Impulse	Firm:
Shipping Tracking #: Courier pick-up	Condition/Cooler Temp: _____	Date/Time: 9/10/25	Date/Time: 9/10 2:00 pm	Date/Time: 9/10/25 5:10 pm	Date/Time: 5:10 9/10

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JE18931: Chain of Custody
Page 1 of 2

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # 55 5309

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30286060.PSSI3
Sampler's Printed Name: Shirley He	Sampler's Signature: Shirley He

Preservative	E
Filtered (✓)	
# of Contaiers	2
Container Information	2

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil, W - Water, SL - Sludge, SW - Sample Wipe, T - Tissue, A - Air, Other: GW

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	PARAMETER ANALYSIS & METHOD: 1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
FB091025KK1	9/10/25	0730		✓	W	X	
MW-118-5	9/10/25	1100		✓	GW	X	

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Shirley He	Printed Name: Evan Price	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature: Shirley He	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: ~~Katahdin Analytical Labs~~ SGS	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Priority Overnight	Condition/Cooler Temp: _____	Date/Time: 9/10/25	Date/Time: 9-11-25 0930	Date/Time:	Date/Time:

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****Program 5A****

PREM-TM-082525-170

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30286060.PSSI3
Sampler's Printed Name: Shirley He
Sampler's Signature: Shirley He

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	VC82503NG38P2+20, VM S+13BUTADN, VMS+F142	VC82503NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010
							B	B	C		PARAMETER ANALYSIS & METHOD		
									3	2	1		
									1	1	4		
1	TB091125KK1	9/11/25	—		✓	W							
2	FB091125KK1	9/11/25	0730		✓	W						X	
3	MW-117-5	9/11/25	1145		✓	GW	X					X	

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil SE - Sediment NL - NAPL/Oil W - Water SL - Sludge SW - Sample Wipe T - Tissue A - Air Other: GW

REMARKS: JE19045

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓): ...ssessment MS3B ...bol Verification

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓)	Printed Name: Shirley He	Printed Name: Raymund # 11	Printed Name: Raymund # 11	Printed Name:
☑ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature: Shirley He	Signature: DR	Signature: DR	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Impulse	Firm/Courier: Impulse	Firm:
Shipping Tracking #: Courier pick-up	Condition/Cooler Temp:	Date/Time: 9/11/25 1428	Date/Time: 9/11/25 2:30	Date/Time: 9/11/25 1935	Date/Time:

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JE19045: Chain of Custody
Page 1 of 2

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # 55 5347

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30286060.PSSI3
Sampler's Printed Name: Shirley He	Sampler's Signature: Shirley He

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
						E		2	2	
FB091125KK1	9/11/25	0730		✓	W					X
MW-117-5	9/11/25	1145		✓	GW					X

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Shirley He	Printed Name: Evan Price	Printed Name:	Printed Name:
☑ Cooler packed with ice (✓)		Signature: Shirley He	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: ~~Katahdin Analytical Labs~~ SGS	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Priority Overnight	Condition/Cooler Temp: _____	Date/Time: 9/11/25	Date/Time: 9-12-25 0935	Date/Time:	Date/Time:

20730826 CofC AR Form 08.27.2015

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****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # SS5378

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30286060.PSSI3
Sampler's Printed Name: Kyra Kraus	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
						E		2	2	
FB091225KK1	9/12/25	0730		✓	W					X
RW-21_MW-12-1	9/12/25	1030		✓	GW					X
RW-21_MW-12-2	9/12/25	1045		✓	GW					X

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓)	Printed Name: Kyra Kraus	Printed Name: Evan Price	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)	☒ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: SGS ~~Katahdin Analytical Labs~~	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: 6.6°	Date/Time: 9/12/25	Date/Time: 9-15-25 0900	Date/Time:	Date/Time:

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GW FB
TB

****Program 5A****

pacm-TM-082525-170 JE19397

ARCADIS | ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	Project #: 30286060.PSSI3
Sampler's Printed Name: Shirley He	Sampler's Signature: Shirley He

	Preservative	B	B	C				
	Filtered (✓)							
	# of Containers	3	2	1				
	Container Information	1	1	4				

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil SE - Sediment NL - NAPL/Oil W - Water SL - Sludge SW - Sample Wipe T - Tissue A - Air Other: GW

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38P2+20_VM S+13BUTADN_VMS-F142	VC82603NG38P2+20_VM S+13BUTADN_VMS-F142	Total Iron via USPA 6010	REMARKS
1	TB091525SH1	9/15/25	—		X	W		X		
2	FB091525SH1	"	0730		X	W		X		
3	MW-109-3		0950		X	GW	X			
4	RW-2L_MW-6		1225		X	GW	X			
5	REP091525SH1	↓	—		X	GW	X			

Initial Assessment 3A

Lab Verification

Special Instructions/Comments:

AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Shirley He	Printed Name: Raymond F II	Printed Name: Raymond F I	Printed Name: Alejandro Cachazo
☑ Cooler packed with ice (✓)		Signature: Shirley He	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Equis	Firm/Courier: Equis	Firm: SGS
~~Shipping Tracking #~~ Lab provided courier	Condition/Cooler Temp:	Date/Time: 9/15/25 1335	Date/Time: 9/15/25 13:25	Date/Time: 9/15/25	Date/Time: 17:16

20730826 CofC AR Form 08.27.2015

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08°C IR50 9/15/25 18

5.2 5

JE19397: Chain of Custody
Page 1 of 2

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # SS5400

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30286060.PSSI3
Sampler's Printed Name: Shirley He	Sampler's Signature: Shirley He

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
FB091525SH1	9/15/25	0730		X	W	E		2	2	X	
MW-109-3	"	0950		X	GW					X	
RW-21_MW-6	↓	1225		X	GW					X	
REP091525SH1	↓	—		X	GW					X	

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Shirley He	Printed Name: Kim Vogel	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature: Shirley He	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 09/15/25	Date/Time: 9/16/25 0900	Date/Time:	Date/Time:

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****Program 5A**** REM-TM-082525-170

JE19453

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:	Contact & Company Name:	Telephone:
	Benjamin Wolf -Task Manager	631-829-0643 cell
	Address: 280 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
	City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@arcadis.com
	Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	Project #: 30286060.PSSI3
	Sampler's Printed Name: Benjamin Wolf	Sampler's Signature: Benjamin Wolf

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	B	B	C				
							Filtered (✓)							
							# of Containers	3	2	1				
							Container Information	1	1	4				
							PARAMETER ANALYSIS & METHOD: VC82603NG38P2-20, VM S+136UTADN, VMS+F142	VC82603NG38P2-20, VM S+136UTADN, VMS+F142	Total Iron via USPA 6010				REMARKS
1	TB091625SV1	9/16/25	—		✓	W		X						
2	FB091625SV1	9/16/25	0730		✓	W		X	X					
3	RW-21_MW-9	9/16/25	1000		✓	GW	X							
4	RW-21_MW-11	9/16/25	1155		✓	GW	X		X					

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil, W - Water, T - Tissue, SE - Sediment, SL - Sludge, A - Air, NL - NAPL/Oil, SW - Sample Wipe, Other: GW

Special Instructions/Comments:

AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Initial Assessment AP223

Label Verification

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Benjamin Wolf	Printed Name: Raymond H	Printed Name: Raymond H	Printed Name:
☑ Cooler packed with ice (✓)		Signature: Benjamin Wolf	Signature: AR	Signature: AR	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Lynalsa	Firm/Courier: Lynalsa	Firm:
Shipping Tracking #: lab provided courier	Condition/Cooler Temp:	Date/Time: 9/16/25 1330	Date/Time: 9/16/25 1:30	Date/Time:	Date/Time:

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E. Canfield

1.1 R250 C.P

5.2 5

JE19453: Chain of Custody

Page 1 of 2

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # SS 5439

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30286060.PSSI3
Sampler's Printed Name: Benjamin Wolf	Sampler's Signature: Benjamin Wolf

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
FB091625SV1	9/16/25	0730		✓	W	E		2	2	X	
RW-21_MW-9	"	1000		✓	GW					X	
RW-21_MW-11	"	1155		✓	GW					X	

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ **Special QA/QC Instructions(✓):**

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Benjamin Wolf	Printed Name: Evan Price	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature: Benjamin Wolf	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 9/16/25 1430	Date/Time: 9-17-25 1130	Date/Time:	Date/Time:

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JE19303

****Program 5A****

TB GW FB

PREM-TM-082525770

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:	Contact & Company Name	Telephone
	Benjamin Wolf -Task Manager	631-829-0643 cell
	Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
	City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@arcadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY

Project #: 30286060.PSSI3

Sampler's Printed Name: Alyssa R Hynes

Sampler's Signature:

	Sample ID	Collection Date	Collection Time	Filtered (✓) Comp	Filtered (✓) Grab	Matrix	Preservative	B	B	C				
							Filtered (✓)							
							# of Containers	3	2	1				
							Container Information	1	1	4				
1	TB091725SH1	9/17/25	—		X	W		X						
2	FB091725ARH1	9/17/25	0730		X	W		X						
3	RW-21_MW-8	9/17/25	1010		X	GW	X							
4	RW-21_MW-14	9/17/25	1210		X	GW	X							

PARAMETER ANALYSIS & METHOD

VCB2603NG38P2+20_VM S+13BUTADN_VMSF142

VCB2603NG38P2+20_VM S+13BUTADN_VMSF142

Total Iron via USPA 6010

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil W - Water T - Tissue SE - Sediment SL - Sludge A - Air NL - NAPL/Oil SW - Sample Wipe Other: GW

REMARKS

V423 S

Special Instructions/Comments:

AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Initial Assessment NB3B

Label Verification

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓): ☐ Intact ☐ Not Intact	Printed Name: Alyssa R Hynes	Printed Name: Raymond Ar 11	Printed Name: Raymond Ar 1	Printed Name: ZMon
☒ Cooler packed with ice (✓)		Signature:	Signature: AR	Signature: AR	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Impulse	Firm/Courier: Impulse	Firm: SGS
Shipping Tracking #:	Condition/Cooler Temp:	Date/Time: 9/17/25 1:05	Date/Time: 9/17/25 1:05	Date/Time: 9/17/25 1:05	Date/Time: 9/17/25 09:01

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5.2 5

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # 55 5462

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager

Telephone: 631-829-0643 cell

Address: 290 Broadhollow Road, Melville, NY 11747

Fax: 631-249-7610

City: Melville State: NY Zip: 11747

E-mail Address: Benjamin.Wolf@aracadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY

Project #: 30286060.PSSI3

Sampler's Printed Name: Alyssa R Hynes

Sampler's Signature: Alyssa R Hynes

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE
RW-21_MW-8	9/17/25	1010		X	GW	X
FB091725ARH1	9/17/25	0730		X	W	X
RW-21_MW-14	9/17/25	1210		X	GW	X

Preservative	E
Filtered (✓)	
# of Containers	2
Container Information	2

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: GW

REMARKS

Special Instructions/Comments:

Tier II QA/QC Deliverables Requested

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: Alyssa R Hynes	Printed Name: Evan Price	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature: Alyssa R Hynes	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: SGS ~~Katahdin Analytical Labs~~	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: 2.6°	Date/Time: 9/17/25	Date/Time: 9-18-25 0920	Date/Time:	Date/Time:

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****Program 5A**** JE19334 PRem-Tm - 082525-170

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: ~~290 Broadhollow Road,~~ Melville, NY 11747
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30286060.PSSI3
Sampler's Printed Name: Shirley He
Sampler's Signature: Shirley He

	Sample ID	Collection Date	Collection Time	Type (*) Water	Type (*) Grab	Matrix
1	TBD91825KK1	9/18/25	—		✓	W
2	FB091825KK1	9/18/25	0730		✓	W
3	RW-21-MW-1	9/18/25	1035		✓	GW
4	RW-21-MW-7	9/18/25	1212		✓	GW

Container Preservative: B B C
Total # of Containers: 3 2 1
Sample Volume: 1 1 4

PARAMETER ANALYSIS & METHOD

- VC/8260NG38P2+20, VM S+13BUTADN, VMS+F142
- VC/8260NG38P2+20, VM S+13BUTADN, VMS+F142
- Total Iron via USPA 6010

Keys

Preservative Key: A. None B. HCL C. NaOH D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. 5/more 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil WA - Water SE - Sediment SL - Sludge AIR - Air NL - NAPL/Oil SW - Swipe Other: GW

REMARKS

V424

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished by	Received by	Relinquished by	Laboratory Received by
Lab Name: SGS Accutest	Cooler Custody Seal (✓): ☐ Intact ☐ Not Intact	Printed Name: Shirley He	Printed Name: Raymond # 11	Printed Name: Raymond # II	Printed Name:
☑ Cooler packed with ice (✓)		Signature: Shirley He	Signature: AR	Signature: AR	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Impulse	Firm/Courier: Impulse	Firm:
Shipping Tracking #: Courier pick-up	Condition/Cooler Temp: _____	Date/Time: 9/18/25	Date/Time: 9/18/25 1:35	Date/Time: 9/18/25	Date/Time: 9/18/25 1805

20730826 CofC AR Form 08.27.2015

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SGS COURIER

2.0° IR50

5.2 5

JE19334: Chain of Custody
Page 1 of 2

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # 555501

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road, Melville, NY 11747	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30286060.PSSI3
Sampler's Printed Name: Shirley He	Sampler's Signature: Shirley He

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
						E		2	2	
FB091825KK 1	9/18/25	0730		✓	W					X
RW-21-MW-1	9/18/25	1035		✓	GW					X
RW-21_MW-7	9/18/25	1212		✓	GW					X

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ **Special QA/QC Instructions(✓):**

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Shirley He	Printed Name: Evan Price	Printed Name:	Printed Name:
☑ Cooler packed with ice (✓)		Signature: Shirley He	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: SGS ~~Katahdin Analytical Labs~~	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Priority Overnight	Condition/Cooler Temp: _____	Date/Time: 9/18/25	Date/Time: 9-19-25	Date/Time:	Date/Time:

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GW
FB TB

****Program 5A****

PRem - mm. 09/24-79

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JD98039

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Shirley He
Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	VC/8260NG/38P2+20_VM S+13BUTADN_VMS+F142	VC/8260NG/38P2+20_VM S+13BUTADN_VMS+F142	Total Iron via USEPA 6010	REMARKS
						B		3	1				
						B		2	1				
						C		1	4				
1 TB011124SH1	10/11/24	—		✓	W						X		V136
2 FB011124SH1	10/11/24	0730		✓	W						X		
3 RW-21_MW-16	10/11/24	1105		✓	GW					X			MS/MSD

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Initial Assessment — Laboratory Verification

BLCD

Laboratory Information and Receipt

Lab Name: SGS Accutest
☑ Cooler packed with ice (✓) 1.5°
Specify Turnaround Requirements: 5-Day TAT
Shipping Tracking #: Courier pick-up

Cooler Custody Seal (✓): ☐ Intact ☐ Not Intact
Sample Receipt:
Condition/Cooler Temp: _____

Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name: Shirley He	Printed Name: Otis Winfrey	Printed Name: Otis Winfrey	Printed Name: JAMES Kwon
Signature:	Signature:	Signature:	Signature:
Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm: SGS
Date/Time: 10/11/24 1245	Date/Time: 10/11/24 1245	Date/Time: 10/11/24 1730	Date/Time: 10/11/24 17:38

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5.2 5

JD98039: Chain of Custody
Page 1 of 2

****Program 5A****

GW TB FB

PREM-MM-092424-79

ARCADIS

ID#: JD98041

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Shirley Ho
Sampler's Signature:

Preservative	B	B	C				
Filtered (✓)							
# of Containers	3	2	1				
Container Information	1	1	4				

PARAMETER ANALYSIS & METHOD

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC8260NG38P2+20; VM S+13BUTADN, VMS+F142	VC8260NG38P2+20; VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010				
1	TB101D24SH1	10/1/24	—		✓	W		X					
2	FB101D24SH1	10/1/24	0730		✓	W		X					
3	RW-21_MW-13	10/10/24	0945		✓	GW	X						
4	REP101D24AH1	10/1/24	—		✓	GW	X						
5	RW-21_MW-15	10/10/24	1225		✓	GW	X						

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

V136
S

UB-50

SGS COURIER

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt

Lab Name: SGS Accutest
☑ Cooler packed with ice (✓)
Specify Turnaround Requirements: 5-Day TAT
Shipping Tracking #: Courier pick up

Cooler Custody Seal (✓): ☒ Intact ☐ Not Intact
Sample Receipt:
Condition/Cooler Temp: 2.4°; 4.3°; 5.0° IR50

Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name: Shirley Ho	Printed Name: Raymond Of II	Printed Name: Raymond Of II	Printed Name:
Signature:	Signature:	Signature:	Signature:
Firm: Arcadis	Firm/Courier: Lmobile	Firm/Courier: Lmobile	Firm:
Date/Time: 10/10/24 1449	Date/Time: 10/10/24 2:50	Date/Time: 10/10/24	Date/Time: 10/10/24 1940

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JD98041: Chain of Custody
Page 1 of 2

****Program 5A****

ARCADIS

ID#: SR5597

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip: Melville NY 11747	**E-mail Address:** Benjamin.Wolf@aracadis.com

Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY

Project #: 30223092.PSSI3

Sampler's Printed Name: Shirley He

Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
FB101024SH1	10/10/24	0730		✓	W	E		2	2	X
RW-21_MW-13	10/10/24	0945		✓	GW					X
REP101024AH1	10/10/24	—		✓	GW					X
RW-21_MW-15	10/10/24	1225		✓	GW					X

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other _____
G. Other _____
H. Other _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other. _____

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other. GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Shirley He	Printed Name: Jacob Bruce	Printed Name:	Printed Name:
☑ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: 5-day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Priority Overnight	Condition/Cooler Temp: _____	Date/Time: 10/10/24	Date/Time: 10-11-24 0920	Date/Time:	Date/Time:

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Katahdin Analytical Services SR5597 page 0000011 of 0000013

GW FB TB

PREM-mm-09424-79

ARCADIS

ID#:

****Program 5A****

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #: JE1348

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Kyra Krauss
Sampler's Signature:

Preservative	B	B	C				
Filtered (✓)							
# of Containers	3	2	1				
Container Information	1	1	4				

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key: A. H_2SO_4; B. HCL; C. HNO_3; D. NaOH; E. None; F. Other: ____; G. Other: ____; H. Other: ____

Container Information Key: 1. 40 ml Vial; 2. 1 L Amber; 3. 250 ml Plastic; 4. 500 ml Plastic; 5. Encore; 6. 2 oz. Glass; 7. 4 oz. Glass; 8. 8 oz. Glass; 9. Other: ____; 10. Other: ____

Matrix Key: SO - Soil; SE - Sediment; NL - NAPL/Oil; W - Water; SL - Sludge; SW - Sample Wipe; T - Tissue; A - Air; Other: GW

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38P2+20, VM S+13BUTADN, VMSF142	VC82603NG38P2+20, VM S+13BUTADN, VMSF142	Total Iron via USPA 6010	REMARKS
1	TB112224KK1	11/22/24	—		✓	W		X		
2	FB112224 KK1	11/22/24	0730		✓	W		X		
3	MW-116-5	11/22/24	1030		✓	GW	X			MS/MSD
4	RW-21-MW-5-1	11/22/24	1250		✓	GW	X			
5	RW-21-MW-5-2	11/22/24	1305		✓	GW	X			

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Initial Assessment NBYA
Label Verification

Laboratory Information and Receipt

Lab Name: SGS Accutest
Cooler packed with ice (✓): X
Specify Turnaround Requirements: STANDARD TAT
Shipping Tracking #: Lab Provided Courier
Cooler Custody Seal (✓): X Intact ☐ Not Intact
Sample Receipt:
Condition/Cooler Temp: ____

Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name: Kyra Krauss	Printed Name: Sean Cretin SG	Printed Name: Sean Cretin SG	Printed Name: Hasani Potter
Signature:	Signature:	Signature:	Signature:
Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm:
Date/Time: 11/22/24 1455	Date/Time: 11/23/24 14:55 7:45	Date/Time:	Date/Time: 11/22/24 19:48 pm

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JE1348: Chain of Custody
Page 1 of 2

****Program 5A****

ARCADIS

ID#: SR6496

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State):	Project #:
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name: Lyra Kraus	**Sampler's Signature:**

Preservative	E						
Filtered (✓)							
# of Containers	2						
Container Information	2						

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
FB112224KK1	11/22/24	0730		✓	W	X	
MW-116-5	11/22/24	1030		✓	GW	X	MS/MSD
RW-21_MW-5-1	11/22/24	1250		✓	GW	X	
RW-21_MW-5-2	11/22/24	1305		✓	GW	X	

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓)	Printed Name: Lyra Kraus	Printed Name: Bennett Flenker	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)	☒ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 11/22/24	Date/Time: 11/23/24 10:30	Date/Time:	Date/Time:

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Katahdin Analytical Services SR6496 page 0000014 of 0000016

GW TB FB ****Program 5A**** PREM-MM-111524-JR

ARCADIS — CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

ID#:

Page 1 of 1

Lab Work Order # JE1622

Send Results to:
Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name:
Sampler's Signature: Kyra Kraus

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix
1 TB112624KK1	11/26/24	—		✓	W
2 FB112624KK1	11/26/24	0730		✓	W
3 RW-21_MW-3-1	11/26/24	1000		✓	GW
4 RW-21_MW-3-2	11/26/24	1005		✓	GW
5 RW-21_MW-11	11/26/24	1145		✓	GW
6 REP112624KK1	11/26/24	—		✓	GW

Preservative	B	B	C					
Filtered (✓)								
# of Containers	3	2	1					
Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

Sample ID	VC8260NG38P2+20, VM S+13BUTADN, VMS+F142	VC8260NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010
1 TB112624KK1	X	X	
2 FB112624KK1	X	X	
3 RW-21_MW-3-1	X	X	X
4 RW-21_MW-3-2	X		X
5 RW-21_MW-11	X	X	X
6 REP112624KK1	X		

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other:
G. Other:
H. Other:

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other:
10. Other:

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: GW

REMARKS

A25
V531

Initial Assessment 24-700
Label Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: Raymond Ar 11	Printed Name: Raymond Ar 1	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature: AJ
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm: SGS
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp: 3.3 I1450	Date/Time: 11/26/24 1527	Date/Time: 11/26/24 1527	Date/Time: 11/26 24	Date/Time: 2022 11/26/24 17:00

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JE1622: Chain of Custody
Page 1 of 2

SR 6579

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com
Project Name/Location (City, State):	**Project #:**
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name:	**Sampler's Signature:**
Kyra Kraus	

Preservative	E							
Filtered (✓)								
# of Containers	2							
Container Information	2							

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE							REMARKS
FB112624 KK1	11/26/24	0730		✓	W	X							
RW-21_MW-3-1	11/26/24	1000		✓	GW	X							
RW-21-MW-3-2	11/26/24	1005		✓	GW	X							
RW-21_MW-11	11/26/24	1145		✓	GW	X							
REP112624 KK1	11/26/24	—		✓	GW	X							

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

Special Instructions/Comments:

Tier II QA/QC Deliverables Requested

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

[X] Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓)	Printed Name: Kyra Kraus	Printed Name:	Printed Name:	Printed Name: Evan Price
[X] Cooler packed with ice (✓)	[X] Intact [ ] Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm: SGS-KAS
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 11/26/24	Date/Time:	Date/Time:	Date/Time: 12-2-24 0910

20730826 CofC AR Form 08.27.2015

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Katahdin Analytical Services SR6579 page 0000013 of 0000015

****Program 5A**** GW PREM-EN-082024-159

ARCADIS ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JE1095

Send Results to:	Contact & Company Name:	Telephone:
	Benjamin Wolf -Task Manager	631-829-0643 cell
	Address:	Fax:
	105 Maxess Road Suite N108	631-249-7610
	City / State / Zip	E-mail Address:
	Melville NY 11747	Benjamin.Wolf@arcadis.com
	Project Name/Location (City, State):	Project #:
	OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	30223092.PSSI3
	Sampler's Printed Name:	Sampler's Signature:
	Kyra Kraus	

	Preservative	B	B	C				
	Filtered (✓)							
	# of Containers	3	2	1				
	Container Information	1	1	4				

PARAMETER ANALYSIS & METHOD

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC8260NG38P2+20, VM S+13BUTADN, VMS+F142	VC8260NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010	REMARKS
1	TB112024KK1	11/20/24	—		✓	W		X		
2	FB112024KK1	11/20/24	0730		✓	W		X		
3	RW-21_MW-1	11/20/24	1018		✓	GW	X			
4	RW-21_MW-6	11/20/24	1200		✓	GW	X			
5	RW-21_MW-9	11/20/24	1345		✓	GW	X			

Keys

Preservation Key: A: H2SO4, B: HCL, C: HNO3, D: NaOH, E: None, F: Other:, G: Other:, H: Other:

Container Information Key: 1: 40 ml Vial, 2: 1 L Amber, 3: 250 ml Plastic, 4: 500 ml Plastic, 5: Encore, 6: 2 oz. Glass, 7: 4 oz. Glass, 8: 8 oz. Glass, 9: Other:, 10: Other:

Matrix Key: SO - Soil, W - Water, T - Tissue, SE - Sediment, SL - Sludge, A - Air, NL - NAPL/Oil, SW - Sample Wipe, Other: GW

Initial Assessment BL 2B
Label Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: Raymond Arl	Printed Name: Raymond Arl	Printed Name: Alexandra Rodriguez
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm: SGS
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp:	Date/Time: 11/20/24	Date/Time: 11/20/24 2:27	Date/Time: 11/20/24	Date/Time: 11/20/24 19:04

20730826 CofC AR Form 08.27.2015

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KO on Ice 3.0 C IR2 TU

5.2 5

JE1095: Chain of Custody
Page 1 of 2

SR6432

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com
Project Name/Location (City, State):	**Project #:**
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name:	**Sampler's Signature:**
Kyra Kraus	

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix
FB112024KK1	11/20/24	0730		✓	W
RW-21_MW-1	11/20/24	1018		✓	W
RW-21_MW-6	11/20/24	1200		✓	GW
RW-21_MW-9	11/20/24	1345		✓	GW

Preservative	E
Filtered (✓)	
# of Containers	2
Container Information	2

PARAMETER ANALYSIS & METHOD

1,4-Dioxane, by 8270D SIM, CLLE

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

REMARKS

Special Instructions/Comments:

Tier II QA/QC Deliverables Requested

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name:	Printed Name:	Printed Name: Evan Price
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm: SGS-KAS
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 11/20/2024	Date/Time:	Date/Time:	Date/Time: 11-21-24 0925

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Katahdin Analytical Services SR6432 page 0000011 of 0000013

LW TB
FB

****Program 5A****

PREM-MM-082824-28

ARCADIS

ID#: —

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #: JE1356

Send Results to:		
Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell	
Address: 105 Maxess Road Suite N108	Fax: 631-249-7610	
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@arcadis.com	
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	Project #: 30223092.PSSI3	
Sampler's Printed Name: Lyra Kraus	Sampler's Signature:	

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	B	B	C										
							Filtered (✓)													
							# of Containers	3	2	1										
							Container Information	1	1	4										
							PARAMETER ANALYSIS & METHOD	VC92603NG38P2-20, VM S+13BUTADN, VMS-F142	VC92603NG38P2-20, VM S+13BUTADN, VMS-F142	Total Iron via USPA 6010										
1	TB112124KK1	11/21/24	—		✓	W			X											
2	FB112124KK1	11/21/24	0730		✓	W			X											
3	MW-109-3	11/21/24	1010		✓	GW	X													
4	RW-21_MW-4	11/21/24	1145		✓	GW	X													
5	REP112124AH1	11/21/24	—		✓	GW	X													

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil SE - Sediment NL - NAPL/Oil W - Water SL - Sludge SW - Sample Wipe T - Tissue A - Air Other: GW

REMARKS

Initial Assessment NJ33B
Label Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓): ☒ Intact ☐ Not Intact	Printed Name: Lyra Kraus	Printed Name: Daniel Mejia #CP	Printed Name:	Printed Name: Joshua Reitan
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Impulse Courier	Firm/Courier:	Firm: SGS
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp:	Date/Time: 11/21/2024	Date/Time: 11/21/2024 1531	Date/Time:	Date/Time: 11/21/24 1941

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4.1.c

JE1356: Chain of Custody
Page 1 of 2

SR 6499

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State):	Project #:
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name: Kyra Kraus	**Sampler's Signature:**

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE
FB112124 KK1	11/21/24	0730		✓	W	X
MW-109-3	11/21/24	1010		✓	GW	X
RW-21_MW-4	11/21/24	1145		✓	GW	X
REP112124AH1	11/21/24	—		✓	GW	X

Preservative	E
Filtered (✓)	
# of Containers	2
Container Information	2

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name:	Printed Name:	Printed Name: Evan Price
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm: Katahd. - SGS
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 11/21/2024	Date/Time:	Date/Time:	Date/Time: 11-25-24 0915

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Katahdin Analytical Services SR6499 page 0000011 of 0000013

GW TB

****Program 5A****

PREM-MM-042324-4

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #: JE1485

Send Results to	Contact & Company Name:	Telephone:
	Benjamin Wolf -Task Manager	631-829-0643 cell
	Address:	Fax:
	105 Maxess Road Suite N108	631-249-7610
	City / State / Zip: Melville NY 11747	E-mail Address: Benjamin.Wolf@arcadis.com
	Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	Project #: 30223092.PSSI3
	Sampler's Printed Name: Kyra Kraus	Sampler's Signature:

Preservative	B	B	C				
Filtered (✓)							
# of Containers	3	2	1				
Container Information	1	1	4				

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC8260NG38P2+20, VM S+13BUTADN, VMS+F142	VC8260NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010	REMARKS
1- TB112524 KK1	11/25/24	—		✓	W	X			
2- MW-118-5	11/25/24	1155		✓	GW	X			

Keys

Preservation Key: A: H2SO4; B: HCl; C: HNO3; D: NaOH; E: None; F: Other: ; G: Other: ; H: Other:

Container Information Key: 1: 40 ml Vial; 2: 1 L Amber; 3: 250 ml Plastic; 4: 500 ml Plastic; 5: Encore; 6: 2 oz. Glass; 7: 4 oz. Glass; 8: 8 oz. Glass; 9: Other: ; 10: Other:

Matrix Key: SO - Soil; W - Water; T - Tissue; SE - Sediment; SL - Sludge; A - Air; NL - NAPL/Oil; SW - Sample Wipe; Other: GW

VERIFIED SGS COURIER

Special Instructions/Comments:

AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓): Assessment AQA

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓): ☒ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name:	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm:
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp:	Date/Time: 11/25/24 1500	Date/Time:	Date/Time:	Date/Time: 11/25 19:13

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5.2 5

SR 6553

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: Kyra Kraus	Sampler's Signature:

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: GW

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	PARAMETER ANALYSIS & METHOD: 1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
MW-118-5	11/25/24	1155		✓	GW	E		2	2	X	

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name:	Printed Name:	Printed Name: Evan Price
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm: SGS-KAS
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 11/25/24	Date/Time:	Date/Time:	Date/Time: 11-27-24 1036

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Katahdin Analytical Services SR6553 page 0000008 of 0000010

****Program 5A**** JE1807 PREM-MM-09424-79

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Kyra Kraus
Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix
1 TB120324KK1	12/3/24	—		✓	N
2 FB120324KK1	12/3/24	0730		✓	W
3 RW-21-MW-7	12/3/24	0940		✓	GW
4 RW-21-MW-2	12/3/24	1125		✓	GW
5 RW-21-MW-8	12/3/24	1302		✓	GW

Preservative	B	B	C						
Filtered (✓)									
# of Containers	3	2	1						
Container Information	1	1	4						

PARAMETER ANALYSIS & METHOD

VC/8260NG38P2+20, VM S+13BUTADN, VMS+F142	VC/8260NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010						
	X							
	X							
X								
X								
X								

Keys:

Preservation Key: A. H_2SO_4 B. HCL C. HNO3 D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil W - Water T - Tissue SE - Sediment SL - Sludge A - Air NL - NAPL/OB SW - Sample Wipe Other: GW

REMARKS

VSSO

SGS COURIER Assessment NB3R Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓)	Printed Name: Kyra Kraus	Printed Name: K LAZ TORRES	Printed Name: LAZ TORRES	Printed Name:
☒ Cooler packed with ice (✓)	☒ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: IMPULSE	Firm/Courier: IMPULSE	Firm:
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp:	Date/Time: 12/3/2024	Date/Time: 12-3-24 1625	Date/Time: 12/3/24 7:28	Date/Time: 12/3 19:35

20°C

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5.2 5

JE1807: Chain of Custody
Page 1 of 2

SR 6661

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: Kyra Kraus	Sampler's Signature:

Preservative	E						
Filtered (✓)							
# of Containers	2						
Container Information	2						

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
FB120324KK1	12/3/24	0730		✓	W	X	
RW-21_MW-7	12/3/24	0940		✓	GW	X	
RW-21_MW-2	12/3/24	1125		✓	GW	X	
RW-21_MW-8	12/3/24	1302		✓	GW	X	

Special Instructions/Comments:

Tier II QA/QC Deliverables Requested

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓)	Printed Name: Kyra Kraus	Printed Name:	Printed Name:	Printed Name: Evan Price
☒ Cooler packed with ice (✓)	☒ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm: SGS-KAS
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 12/3/2024	Date/Time:	Date/Time:	Date/Time: 12-5-24 1020

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Katahdin Analytical Services SR6661 page 0000011 of 0000013

GW TB

ID#:

****Program 5A****

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

ARCADIS

Page 1 of 1

prem-mm-091424-79

Lab Work Order #: JE2468

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: Kyra Kraus	Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix
1- TB120924KK1	12/9/24	—		✓	W
2- MW-11.7-5	12/9/24	1155		✓	GW

	B	B	C					
Preservative								
Filtered (✓)								
# of Containers	3	2	1					
Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

VC826D3NG38P2+20, VM S+13BUTADN, VMS+F142	VC826D3NG38P2+20, VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010
X	X	

Preservation Key: A - H_2SO_4; B - HCL; C - HNO_3; D - NaOH; E - None; F - Other: ; G - Other: ; H - Other:

Container Information Key: 1 - 40 ml Vial; 2 - 1 L Amber; 3 - 250 ml Plastic; 4 - 500 ml Plastic; 5 - Encore; 6 - 2 oz. Glass; 7 - 4 oz. Glass; 8 - 8 oz. Glass; 9 - Other: ; 10 - Other:

Matrix Key: SO - Soil; W - Water; T - Tissue; SE - Sediment; SL - Sludge; A - Air; NL - NAPL/Oil; SW - Sample Wipe; Other: GW

REMARKS

Initial Assessment
Label Verification

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) X Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name: Raymond M	Printed Name: Raymond M	Printed Name:
X Cooler packed with Ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Impulse	Firm/Courier: Impulse	Firm:
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp:	Date/Time: 12/9/2024 1428	Date/Time: 12/9/24 2:25	Date/Time: 12/9/24	Date/Time: 12/09/24 18:54

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5.2 5

JE2468: Chain of Custody
Page 1 of 2

SR 6740

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com
Project Name/Location (City, State):	**Project #:**
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name:	**Sampler's Signature:**
Kyra Kraus	

Preservative	E						
Filtered (✓)							
# of Containers	2						
Container Information	2						

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE						REMARKS
MW-117-5	12/9/24	1155		✓	GW	X						

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

Special Instructions/Comments:

Tier II QA/QC Deliverables Requested

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: Kyra Kraus	Printed Name:	Printed Name:	Printed Name: Evan Price
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm: SGS-KAS
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 12/9/2024	Date/Time:	Date/Time:	Date/Time: 12-10-24 1020

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Katahdin Analytical Services SR6740 page 0000008 of 0000010

GW TB FB

RW-21 GW TREATMENT PLANT

Program 5A SAMPLES

Prem-mm-122224-38

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of ___

Lab Work Order #: JE2841

Send Results to:

Contact & Company Name: Benjamin Wolf

Telephone: 631-829-0643

Address: 290 Broadhollow Rd, S.307E ~~Melville, NY~~

Fax: 631-249-7610

City: Melville State: NY Zip: 11747

E-mail Address: benjamin.wolf@arcadis.com

Project Name/Location (City, State): OU3 Post Start-up GW Meeting

Project #: 30223092.PSSI3

Sampler's Printed Name: Alexander Hyman

Sampler's Signature:

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix
1	TB121624KK1	12/16/24			✓	W
2	FB121624KK1	"	1130		✓	W
3	RW-21_MW-12-1	"			✓	GW
4	RW-21_MW-12-2	"	1418		✓	GW

Preservative	B	B	C					
Filtered (✓)								
# of Containers	3	2	1					
Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

VC 8260 3NO 8260 + 20 VHS + 13 BTEX + MTBE + EDB

Total Iron via USEPA 6010

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: ___ G. Other: ___ H. Other: ___

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: ___ 10. Other: ___

Matrix Key: SO - Soil SE - Sediment NL - NAPL/Oil W - Water SL - Sludge SW - Sample Wipe T - Tissue A - Air Other: GW

REMARKS

SGS COC

Initial Assessment BLA

Label Verification ___

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydr // COC #9
EDD - ARCADIS_EQUIS (EQuIS7-4 file format).

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt

Lab Name: SGS Accutest

☒ Cooler packed with ice (✓)

Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact

Specify Turnaround Requirements: Standard TAT

Sample Receipt:

Shipping Tracking #: courier provided by lab

Condition/Cooler Temp: ___

	Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name:	Benjamin Wolf	Mr. Dly		Dly
Signature:	Benjamin Wolf			
Firm:	ARCADIS			SGS
Date/Time:	12/16/24 16:49	12/16/24 16:49		12/16 20:05

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SR 6914

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of ___

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com
Project Name/Location (City, State):	**Project #:**
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name:	**Sampler's Signature:**
Alexander Hellman	

Preservative	E						
Filtered (✓)							
# of Containers	2						
Container Information	2						

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE							REMARKS
FB121624KK1	12/16/24	1130		✓	W	X							
RW-21_MW-12-1	"	"		✓	GW	X							
RW-21_MW-12-2	"	1418		✓	GW	X							

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Alex Hellman	Printed Name:	Printed Name:	Printed Name: Evan Price
☑ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: STANDARD TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm: SGS-KAS
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time:	Date/Time:	Date/Time:	Date/Time: 12-18-24 1035

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Katahdin Analytical Services SR6914 Page 1 of 1

PREM MM 111524 28

GW 1V
FB

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # JE3010

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager	Telephone: 631-829-0643 cell
Address: 290 Broadhollow Road Suite 307E	Fax: 631-249-7610
City: Melville State: NY Zip: 11747	E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	Project #: 30223092.PSSI3
Sampler's Printed Name: Kyia Kraus	Sampler's Signature:

Preservative	B	B	C					
Filtered (✓)								
# of Containers	3	2	1					
Container Information	1	1	4					

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VC82603NG38P2+20, VM S*13BUTADN, VMS+F142	VC82603NG38P2+20, VM S*13BUTADN, VMS+F142	Total Iron via USPA 6010	REMARKS
TB121924KK1	12/19/24	—		✓	W		X		
FB121924KK1	12/19/24	0730		✓	W		X		
RW-21_MW-15	12/19/24	1135		✓	GW	X			
RW-21_MW-14	12/19/24	0945		✓	GW	X			* MS|MSD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

Initial ~~Assessment~~ SB VP
Label Verification _____

Special Instructions/Comments:
AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓)	Printed Name: Kyia Kraus	Printed Name: Sean Curtis	Printed Name: Sean Curtis	Printed Name: Joshua Reitan
☒ Cooler packed with ice (✓)	☒ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: 5-Day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Impulse	Firm/Courier:	Firm: SGS
Shipping Tracking #: Lab Provided courier	Condition/Cooler Temp: _____	Date/Time: 12/19/24	Date/Time: 1:35 12/19/24	Date/Time: 5:25	Date/Time: 12/19/24 1730

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JE3010: Chain of Custody
Page 1 of 2

SR6981

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:			
Contact & Company Name: Benjamin Wolf -Task Manager		Telephone: 631-829-0643 cell	
Address: 290 Broadhollow Road Suite 307E		Fax: 631-249-7610	
City: Melville	State: NY	Zip: 11747	E-mail Address: Benjamin.Wolf@aracadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/Bethpage, NY		Project #: 30223092.PSSI3	
Sampler's Printed Name: Kyla Kvalls		Sampler's Signature:	

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
						E		2	2		
FB121924KK1	0730	12/19/24		✓	W					X	
RW-21-MW-14	0945	12/19/24		✓	GW					X	* MS/MSD
RW-21-MW-15	1135	12/19/24		✓	GW					X	

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Labs	Cooler Custody Seal (✓)	Printed Name: Kyla Kvalls	Printed Name:	Printed Name:	Printed Name: Evan Price
☒ Cooler packed with ice (✓)	☒ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: 5-day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm: SGS-KAS
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 12/19/24	Date/Time:	Date/Time:	Date/Time: 12-20-24 1030

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****Program 5A****

JE 34430
PREM-MM-111524-28

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Benjamin Wolf -Task Manager
Telephone: 631-829-0643 cell
Address: 105 Maxess Road Suite N108
Fax: 631-249-7610
City: Melville State: NY Zip: 11747
E-mail Address: Benjamin.Wolf@arcadis.com
Project Name/Location (City, State): OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY
Project #: 30223092.PSSI3
Sampler's Printed Name: Alexander Hellman
Sampler's Signature:

Preservative	B	B	C							
Filtered (✓)										
# of Containers	3	2	1							
Container Information	1	1	4							

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VOC8260NG38PZ+20_VM S+13BUTADN_VMS+F142	VOC8260NG38PZ+20_VM S+13BUTADN_VMS+F142	Total Iron via USPA 6010
1 FB122624SH1	12/26/24	0730		✓	W		X	
2 TB122624SH1	12/26/24	—		✓	W		X	
3 RW-21_MW-16	12/26/24	1015		✓	GW	X		
4 RW-21_MW-15	12/26/24	1202		✓	GW	X		

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: GW

REMARKS

Initial Assessment BLA
Label Verification

Special Instructions/Comments:

AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: Alexander Hellman	Printed Name: Otis Winfrey	Printed Name: Otis Winfrey	Printed Name: Benny Lem
☑ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: ~~STANDARD TAT~~ 5-day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: SGS	Firm/Courier: SGS	Firm: SGS
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp: 1.3	Date/Time: 12/26/24 / 1300	Date/Time: 12/26/24 1340	Date/Time: 12/26/24 1620	Date/Time: 12/26/24 16.20

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5.2 5

JE3430: Chain of Custody
Page 1 of 2

SR 7047

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com

Project Name/Location (City, State):	Project #:
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name:	**Sampler's Signature:**
Alexander Hellman	

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	1,4-Dioxane, by 8270D SIM, CLLE
						E		2	2	
FB122624SH1	12/26/24	0730		✓	W					X
RW-21_MW-16	12/26/24	1015		✓	GW					X
RW-21_MW-15	12/26/24	1202		✓	GW					X

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

REMARKS

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Alexander Hellman	Printed Name:	Printed Name:	Printed Name: Evan Price
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: ~~STANDARD TAT~~ 5-day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm: SGS-KAS
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 12/26/24	Date/Time:	Date/Time:	Date/Time: 12-27-24 1020

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results | YELLOW – Lab copy | PINK – Retained by Arcadis

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Katahdin Analytical Services SR7047 page 0000010 of 0000012

TB

FB

****Program 5A****

PREM-MH-111524-28

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #: JE3461

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@arcadis.com
Project Name/Location (City, State):	**Project #:**
OU3 Post-Startup Groundwater Monitoring/ Bethpage, NY	30223092.PSSI3
Sampler's Printed Name: Alexander Hellman	**Sampler's Signature:**

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (Y)	# of Containers	Container Information	VC82603NG38PZ+20 VM S+13BUTADN, VMS+F142	VC82603NG38PZ+20 VM S+13BUTADN, VMS+F142	Total Iron via USPA 6010
						B	B	C				
								3	2	1		
								1	1	4		
TB122724SH1	12/27/24	—		✓	W					X		
FB122724SH1	12/27/24	0730		✓	W					X		
RW-21_MW-13	12/27/24	0945		✓	GW	X						

Keys

Preservation Key: A: H2SO4; B: HCL; C: HNO3; D: NaOH; E: None; F: Other:; G: Other:; H: Other:

Container Information Key: 1: 40 ml Vial; 2: 1 L Amber; 3: 250 ml Plastic; 4: 500 ml Plastic; 5: Encore; 6: 2 oz. Glass; 7: 4 oz. Glass; 8: 8 oz. Glass; 9: Other:; 10: Other:

Matrix Key: SO - Soil; W - Water; T - Tissue; SE - Sediment; SL - Sludge; A - Air; NL - NAPL/Oil; SW - Sample Wipe; Other: GW

REMARKS

Initial Assessment ZB NP

Label Verification

Special Instructions/Comments:

AGMNYM62237 // OU3 Hydro - Phase 2 Northrop Grumman OU3 Hydro // COC #9

EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS Accutest	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Alexander Hellman	Printed Name:	Printed Name:	Printed Name: Benny Yiem
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: ~~STANDARD TAT~~ 5-day TAT	Sample Receipt: (R30 2.8)	Firm: Arcadis	Firm/Courier: SGS	Firm/Courier: SGS	Firm: SGS
Shipping Tracking #: Lab Provided Courier	Condition/Cooler Temp:	Date/Time: 12/27/24 1130	Date/Time: 12/27/24 1130	Date/Time: 12/27/24 1656	Date/Time: 12/27/24 1656

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5.2

5

JE3461: Chain of Custody

Page 1 of 3

****Program 5A****

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # SR7062

Send Results to:

Contact & Company Name:	Telephone:
Benjamin Wolf -Task Manager	631-829-0643 cell
Address:	**Fax:**
105 Maxess Road Suite N108	631-249-7610
City / State / Zip:	**E-mail Address:**
Melville NY 11747	Benjamin.Wolf@aracadis.com
Project Name/Location (City, State):	**Project #:**
OU3 Post-Startup Groundwater Monitoring/Bethpage, NY	30223092.PSSI3
Sampler's Printed Name:	**Sampler's Signature:**
Alexander Hellman	

Preservative	E							
Filtered (✓)								
# of Containers	2							
Container Information	2							

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: GW

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane, by 8270D SIM, CLLE	REMARKS
FB122724SH1	12/27/24	0730		✓	W	X	
RW-21_MW-13	12/27/24	0945		✓	GW	X	

Special Instructions/Comments:
Tier II QA/QC Deliverables Requested
EDD-ARCADIS_EQUIS (EQuIS7-4 file format)

☒ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Laboratory	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: Alexander Hellman	Printed Name:	Printed Name:	Printed Name: Camden Worrall
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements: ~~STANDARD TAT~~ 5-day TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: Katahdin Analytical Labs	Firm/Courier:	Firm:
Shipping Tracking #: FedEx Overnight Priority	Condition/Cooler Temp: _____	Date/Time: 12/27/24	Date/Time:	Date/Time:	Date/Time: 12/28/24 10:32

20730826 CofC AR Form 08.27.2015

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Katahdin Analytical Services SR7062 page 0000009 of 0000011

ARCADIS Design & Consultancy for natural and built assets

Groundwater Sampling Log

Page 1 of 1

Project No. ~~30160620.PSSI2~~ 30223022.PSSI2 Well ID RW-21_MW-13 Date 07/30/24

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring Weather 90°F, Clear

Measuring Pt. Description: Top of Casing
Screen Interval (ft-bls): 716 - 726
Casing Diameter (in.): 4
Well Material: x PVC ___ SS

Static Water Level (ft-bmp): 37.55
Total Depth (ft-bls): 731
Water Column/ Gallons in Well: 683.45ft / 441.69gal

MP Elevation: NM
Pump Intake (ft-bls): Midscreen
Purge Method: Non-dedicated Bladder Pump ___ Peristaltic ___ Submersible X ___ Other
Sample Method: Micropurge/Low-flow + tubing volume

Pump On/Off: 0829 0950
Volume Purged (gal): 35L

Sample Time: Label: RW-21_MW-13 Start: 0945 End: 0950
Replicate/ Code No.: None

Sampled by: ANH, SV, CT

PID: 1.6 WH

0945

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
0829	0	450	37.57	0	5.91	0.036	2.68	7.12	17.2	219.9	clear	none
0834	5	450		3.5	5.58	0.031		5.67	16.4	199.0	"	"
0839	10	450	37.56	5.5	5.65	0.031		7.05	21.4	196.2	"	"
0844	15	450		7.75	5.58	0.032	0.58	6.37	18.1	205.0	"	"
0849	20	450	37.71	10.0	5.52	0.031	1.92	6.25	18.0	210.2	"	"
0854	25	450		12.25	5.42	0.030		6.15	17.7	209.2	"	"
0859	30	450	37.56	15.50	5.34	0.029		6.20	18.0	207.9	"	"
0904	35	450	37.55	17.75	5.32	0.029	0.85	6.20	17.9	209.7	"	"
0909	40	450		20.0	5.31	0.030		6.18	17.9	211.1	"	"
0914	45	450		22.25	5.31	0.030		6.13	18.0	211.7	"	"
0919	50	450	37.57	24.50	5.32	0.030	1.14	6.14	18.0	212.6	"	"
0924	55	450		26.75	5.32	0.031		5.97	22.2	212.9	"	"
0929	60	450	41.18	29.0	5.32	0.031	2.60	5.95	23.1	212.9	"	"
0934	65	300	41.29	30.5	5.31	0.031	4.78	5.91	23.8	212.6	"	"
0939	70	300	41.32	32.05	5.28	0.031	6.54	5.96	22.8	213.5	"	"
0944	75	300	41.32	33.5	5.30	0.031	1.25	5.99	21.6	215.4	"	"

TV ~

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270D SIM	1 L glass amber bottle	2	None

Notes:

Tubing Volume Equation: Volume (gal)= (Midscreen depth - static water level depth) x tubing size conversion factor (gal/ft)

TV = 121ft - 37.55ft = 683.45ft x 0.01 = 6834.5 x 3.785 = 25.86L

*Field Blank Required

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47; 1/2" = 0.01; 3/8" = 0.006

Well Information

Well Location:	73 Broadway (southside of property), Bethpage, NY	Well Locked at Arrival:	Yes / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	Yes / No
Well Completion:	**Flush Mount** / Stick Up	Key Number To Well:	NONE

ARCADIS Design & Consultancy for natural and built assets

Groundwater Sampling Log

Page 1 of 1

Project No. ~~30160626.PSS12~~ 30273040 PSS12 Well ID RW-21_MW-15 Date 7/31/24

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring Weather 850f, humid

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bls): 676 - 686 | Casing Diameter (in.): 4 | Well Material: x PVC, ___ SS

Static Water Level (ft-bmp): 43.42 | Total Depth (ft-bls): 691 | Water Column/ Gallons in Well: 637.58 ft / 1414.94 gal (6" = 1.47)

MP Elevation: NM | Pump Intake (ft-bls): Midscreen | Purge Method: Non-dedicated ~~Bladder Pump~~ Peristaltic ___ Submersible X Other ___ | Sample Method: Micropurge/Low-flow + tubing volume

Pump On/Off: 8:52 | Volume Purged (gal): 39L

Sample Time: Label RW-21MW-15 Start 1005 End 1016 | Replicate/ Code No.: n/a | Sampled by: ANH, CT, SV

PID: 0.7 WH / 0.0 B2

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
08:53	0	500	43.84	0	6.57	0.060	15.3	4.52	14.8	179.3	clear	none
0858	5	"		2.5	6.69	0.056		3.58	15.8	168.4	"	"
0903	10	"		5	6.71	0.053		3.39	15.7	183.2	"	"
0908	15	"	44.12	7.5	6.46	0.053	6.63	3.73	15.7	15.6	"	"
0913	20	"		10	6.13	0.053		3.47	15.6	165.0	"	"
0918	25	"	44.22	12.5	5.99	0.055	7.17	3.54	15.8	186.1	"	"
0923	30	"		15	5.87	0.055		3.68	15.8	201.5	"	"
0928	35	"	44.34	17.5	5.64	0.064	8.49	3.77	15.8	209.9	"	"
0933	40	"		20	5.57	0.053		3.86	15.9	209.9	"	"
0938	45	"	44.46	22.5	5.52	0.053	5.51	3.95	16	212.6		
0943	50	"		25	5.50	0.053		3.95	16.2	213.3		
0948	55	"	44.56	27.5	5.46	0.052	6.18	3.98	16.1	215.1		
0953	60	"		30	5.44	0.053		4.00	16.1	216.1		
~~0958~~	65	"	44.52	32.5	5.43	0.052	4.58	4.01	16.1	216.6		
~~0963~~	70	"	44.51	35	5.41	0.053	4.11	4.01	16.0	217.2		

TV – 0958 (C) 1003 (C)

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270D SIM	1 L glass amber bottle	2	None

Notes:

Tubing Volume Equation: Volume (gal)= (Midscreen depth - static water level depth) x tubing size conversion factor (gal/ft)

$\frac{681 - 43.42}{24.148} = 637.58$ gal x 0.01 = 6.38 gal (casing vol) x 3.785 = ~~1688.614~~

*Field Blank Required

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47 | 1/2" = 0.01 | 3/8" = 0.006

Well Information

Well Location:	Grass Field at intersection of Arthur Ave and Broadway, Bethpage, NY (115ft west and 57ft south of intersection)	Well Locked at Arrival:	Yes / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	Yes / No
Well Completion:	**Flush Mount** / Stick Up	Key Number To Well:	N/A

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Design & Consultancy for natural and built assets

Groundwater Sampling Log

Project No. ~~30160626.PS312~~ 30223692.P5512 Well ID RW-21_MW-16 Date 7/30/24

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring Weather 85° Humm.

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bls): 636 - 646 | Casing Diameter (in.): 4 | Well Material: x PVC, ___ SS

Static Water Level (ft-bmp): 41.93 | Total Depth (ft-bls): 651 | Water Column/ Gallons in Well: 599'

MP Elevation: NM | Pump Intake (ft-bls): Midscreen | Purge Method: Non-dedicated Bladder Pump, Peristaltic ___, Submersible X, Other ___ | Sample Method: Micropurge/Low-flow + tubing volume

Pump On/Off: 1023 1150 | Volume Purged (gal): 34L

Sample Time: Label: RW-21_MW-16 | Start: 1146 | End: 1150 | Replicate/ Code No.: N/A | 1146 | Sampled by: SV, CT. AH.

PID: 0.0

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance: Color	Appearance: Odor
1025	0	400	41.98	0	5.19	0.043	2.08	3.95	16.7	225.1	Clear	None
1030	5	400		2.0	4.98	0.043		2.72	19.1	229.9	"	"
1035	10	400		4.0	4.99	0.043	2.61	3.51	23.9	228.4	"	"
1040	15	400	42.17	6.0	5.00	0.043	1.56	5.62	23.2	227.2	"	"
1045	20	400		8.0	4.97	0.043		4.99	23.0	225.9	"	"
1050	25	400	42.24	10.0	4.97	0.043		4.79	22.7	226.5	"	"
1055	30	400		12.0	4.97	0.041	2.32	4.27	23.1	226.7	"	"
1100	35	400	42.25	14.0	4.96	0.039		3.91	23.6	226.8	"	"
1105	40	400		16.0	4.96	0.038	1.61	3.78	24.3	228.8	"	"
1110	45	400		18.0	4.96	0.038		3.65	24.4	229.4	"	"
1115	50	400	42.26	20.0	4.95	0.037		3.39	24.4	230.6	"	"
1120	55	400	42.26	22.0	4.95	0.037	1.49	3.26	24.6	230.7	"	"
1125	60	400		24.0	4.95	0.037		2.87	24.2	231.1	"	"
1130	65	400	42.34	26.0	4.95	0.037		2.66	24.5	231.1	"	"
1135	70	400	42.36	28.0	4.94	0.037	1.46	2.64	23.9	231.8	"	"
1140	75	400	42.36	30.0	4.94	0.037	1.71	2.57	23.8	233.1	"	"

TV

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270D SIM	1 L glass amber bottle	2	None

Notes:

Tubing Volume Equation: Volume (gal)= (Midscreen depth - static water level depth) x tubing size conversion factor (gal/ft)

641' - 41.93 = 599.07' x 0.01 Gal/ft = 5.99 Gal x 3.785 = 22.675 L ~~x 3 = 68.024 total~~

23L total

*Field Blank Required

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47 | 1/2" = 0.01 | 3/8" = 0.006

Well Information

Well Location:	Construction Access Road at intersection of Arthur Ave and Broadway, Bethpage, NY (in grass on N. side of road, approx. 347 feet east off Broadway)	Well Locked at Arrival:	Yes / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	Yes / No
Well Completion:	**Flush Mount** / Stick Up	Key Number To Well:	

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Design & Consultancy for natural and built assets

Groundwater Sampling Log

Project No. 30160626.PSSI2 Well ID RW-21 MW-16?

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring

Measuring Pt. Description: Top of Casing

Screen Interval (ft-bls): 636 - 646

Casing Diameter (in.): 4

Static Water Level (ft-bmp):

Total Depth (ft-bls): 651

Water Column/ Gallons in Well:

MP Elevation: NM

Pump Intake (ft-bls): Midscreen

Purge Method: Non-dedicated Bladder Pump ____ Peristaltic ____ Submersible X Other ____

Sample Method: Micropurge/Low-flow + tubing volume

Pump On/Off:

Volume Purged (gal):

Sample Time: Label ____ Start 1145 End ____

Replicate/ Code No.:

Date:

Weather:

Well Material: x PVC ___ SS

Sampled by:

PID:

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
1145	80	400	42.34	32L	4.64	0.037	1.86	2.51	23.9	233.7	Clear	none

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270D SIM	1 L glass amber bottle	2	None

Notes:

Tubing Volume Equation: Volume (gal)= (Midscreen depth - static water level depth) x tubing size conversion factor (gal/ft)

*Field Blank Required

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot						
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47	3/8" = 0.006
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	1/2" = 0.01	

Well Information

Well Location:	Construction Access Road at intersection of Arthur Ave and Broadway, Bethpage, NY (in grass on N. side of road, approx. 347 feet east off Broadway)	Well Locked at Arrival:	Yes / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	Yes / No
Well Completion:	**Flush Mount** / Stick Up	Key Number To Well:	

Groundwater Sampling Form

Location ID:	RW-21_MW-13	**Date(s):**	2024-08-27	**Work Order(s):**		08_21_24_OU3 RW21 Monitoring	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:76.21 °F, rH:73%, Clouds: 0%, Wind:4.61mph N			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	716.00-726.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	42.2	**Total Depth (ft-bmp):**	731	**Water Column(ft):**	688.8	**Liters in Well:**	1702.11
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	40	**Sample ID:**	RW-21_MW-13	**Sample Time:**	09:40
Purge End Time:	09:37	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:31	0	500	mL/min	42.20	6.01	0.035	1.83	6.4	16.7	12.3	Clear	No Odor
08:36	5	500	mL/min	42.20	4.94	0.031	1.82	9.48	17.1	84.6	Clear	No Odor
08:41	10	500	mL/min	42.20	4.91	0.031	1.82	9.45	17.1	95.4	Clear	No Odor
08:46	15	500	mL/min	42.57	4.85	0.031	1.42	9.06	17.2	125.4	Clear	No Odor
08:51	20	500	mL/min	42.57	4.83	0.031	1.42	7.83	17.2	130.9	Clear	No Odor
08:56	25	500	mL/min	42.57	4.83	0.031	1.42	7.79	17.1	140.1	Clear	No Odor
09:01	30	500	mL/min	42.60	4.85	0.031	2.24	7.86	17.2	151.5	Clear	No Odor
09:06	35	500	mL/min	42.60	4.85	0.031	2.24	7.78	17.2	156	Clear	No Odor
09:11	40	500	mL/min	42.60	4.85	0.031	2.24	7.52	17.1	166	Clear	No Odor
09:16	45	500	mL/min	42.60	4.86	0.03	1.7	7.1	17.1	176.8	Clear	No Odor
09:21	50	500	mL/min	42.60	4.86	0.03	1.7	7.06	17.2	178.2	Clear	No Odor
09:26	55	500	mL/min	42.60	4.85	0.03	1.32	6.99	17.2	180.2	Clear	No Odor
09:31	60	500	mL/min	42.60	4.86	0.03	1.22	6.97	17.1	186.2	Clear	No Odor
09:36	65	500	mL/min	42.60	4.84	0.03	1.39	6.9	17.2	188	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-15	**Date(s):**	2024-08-27	**Work Order(s):**		08_21_24_OU3 RW21 Monitoring	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:78.06 °F, rH:68%, Clouds: 0%, Wind:5.75mph N			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	676.00-686.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	42.53	**Total Depth (ft-bmp):**	691	**Water Column(ft):**	648.47	**Liters in Well:**	1602.45
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	40	**Sample ID:**	RW-21_MW-15	**Sample Time:**	11:30
Purge End Time:	11:29	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:18	0	500	mL/min	42.53	5.66	0.053	2.68	16	15.4	189.4	Clear	No Odor
10:23	5	500	mL/min	42.53	5.29	0.05	2.68	9.98	17	190.7	Clear	No Odor
10:28	10	500	mL/min	42.53	5.27	0.051	2.68	8.45	17.2	191.4	Clear	No Odor
10:33	15	500	mL/min	42.55	5.21	0.052	5.58	5.43	17.6	198.8	Clear	No Odor
10:38	20	500	mL/min	42.55	5.13	0.052	5.58	2.76	17.8	203.2	Clear	No Odor
10:43	25	500	mL/min	42.55	4.98	0.052	5.58	0.98	17.9	209.8	Clear	No Odor
10:48	30	500	mL/min	42.56	4.91	0.054	4.36	0.94	17.5	217.5	Clear	No Odor
10:53	35	500	mL/min	42.56	4.89	0.052	4.36	0.94	17.8	220	Clear	No Odor
10:58	40	500	mL/min	42.56	4.85	0.052	4.36	0.96	17.8	226	Clear	No Odor
11:03	45	500	mL/min	42.58	4.83	0.052	2.02	0.93	18	228.5	Clear	No Odor
11:08	50	500	mL/min	42.58	4.8	0.052	2.02	0.91	18	233	Clear	No Odor
11:13	55	500	mL/min	42.58	4.8	0.052	2.41	0.9	18.2	234.2	Clear	No Odor
11:18	60	500	mL/min	42.60	4.8	0.052	2.75	0.95	18	240.1	Clear	No Odor
11:23	65	500	mL/min	42.60	4.82	0.052	2.41	0.93	18.1	243.9	Clear	No Odor
11:28	70	500	mL/min	42.60	4.81	0.053	2.39	0.89	18.1	245.9	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Labeled Properly:	NA
Is Well in Good Condition?	NA
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-16	**Date(s):**	2024-08-28	**Work Order(s):**		08_21_24_OU3 RW21 Monitoring	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:74.77 °F, rH:79%, Clouds: 0%, Wind:10.36mph SW			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	636.00-646.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	42.7	**Total Depth (ft-bmp):**	651	**Water Column(ft):**	608.3	**Liters in Well:**	1503.18
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	38	**Sample ID:**	RW-21_MW-16	**Sample Time:**	09:30
Purge End Time:	09:27	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:21	0	500	mL/min	42.70	4.75	0.039	3.75	9.45	17.9	154	Clear	No Odor
08:26	5	500	mL/min	42.70	4.7	0.039	3.75	8.88	17.9	157.7	Clear	No Odor
08:31	10	500	mL/min	42.70	4.59	0.039	3.75	5.22	18	166	Clear	No Odor
08:36	15	500	mL/min	42.74	4.54	0.038	3.37	2.43	18	186.5	Clear	No Odor
08:41	20	500	mL/min	42.74	4.53	0.039	3.37	1.44	18	193.3	Clear	No Odor
08:46	25	500	mL/min	42.74	4.52	0.039	3.37	1.23	18.1	198.1	Clear	No Odor
08:51	30	500	mL/min	42.75	4.51	0.039	3.37	1.21	18.3	203.4	Clear	No Odor
08:56	35	500	mL/min	42.74	4.51	0.04	1.71	1.19	18.3	210.8	Clear	No Odor
09:01	40	500	mL/min	42.72	4.5	0.04	1.71	1.19	18.2	213.2	Clear	No Odor
09:06	45	500	mL/min	42.74	4.49	0.04	1.71	1.19	18.3	220	Clear	No Odor
09:11	50	500	mL/min	42.75	4.49	0.04	1.2	1.21	18.6	224.4	Clear	No Odor
09:16	55	500	mL/min	42.75	4.49	0.04	1.34	1.2	18.8	228.3	Clear	No Odor
09:21	60	500	mL/min	42.75	4.49	0.04	1.2	1.2	18.8	230.3	Clear	No Odor
09:26	65	500	mL/min	42.75	4.49	0.041	1.45	1.22	18.8	234	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Groundwater Sampling Form

Location ID:	MW-109-3	**Date(s):**	2024-09-12	**Work Order(s):**		RW21 LTM 2024 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:73.47 °F, rH:69%, Clouds: 0%, Wind:3mph SE			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	233.00-243.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	42.3	**Total Depth (ft-bmp):**	248	**Water Column(ft):**	205.7	**Liters in Well:**	508.31
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	25	**Sample ID:**	MW-109-3	**Sample Time:**	12:05
Purge End Time:	12:03	**Well Volumes Purged (total):**	0.05	**Replicate Type / Replicate ID:**	**Duplicate** / REP091224PQ1	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:23	0	450	mL/min	42.33	4.83	0.354	5.35	1.37	18.4	308	Clear	No Odor
11:28	5	450	mL/min	42.33	4.68	0.355	5.35	1.81	18.3	252.2	Clear	No Odor
11:33	10	450	mL/min	42.33	4.44	0.376	5.35	2.81	18.6	264.9	Clear	No Odor
11:38	15	450	mL/min	42.33	4.43	0.376	13.9	2.9	18.3	271.2	Clear	No Odor
11:43	20	450	mL/min	42.33	4.44	0.376	13.9	2.95	18.4	274.7	Clear	No Odor
11:48	25	450	mL/min	42.33	4.44	0.374	13.9	2.94	18.1	281.1	Clear	No Odor
11:53	30	450	mL/min	42.34	4.44	0.374	9.77	2.95	18.1	282.9	Clear	No Odor
11:58	35	450	mL/min	42.34	4.45	0.373	7.73	2.95	18.1	285.5	Clear	No Odor
12:03	40	450	mL/min	42.33	4.46	0.373	8.45	2.97	18.2	286.4	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	4	1 L	None
VOCs (SW8260)	Clear Glass	6	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	MW-111-4	**Date(s):**	2024-09-18	**Work Order(s):**		RW21 LTM 2024 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:65.62 °F, rH:92%, Clouds: 0%, Wind:4.61mph N-NE			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	448.00-468.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	40.01	**Total Depth (ft-bmp):**	473	**Water Column(ft):**	432.99	**Liters in Well:**	1069.97
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	28	**Sample ID:**	MW-111-4	**Sample Time:**	09:10
Purge End Time:	09:08	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:21	0	500	mL/min	40.05	4.97	0.175	5.74	7.12	18.9	268.5	Clear	No Odor
08:26	5	500	mL/min	40.05	4.59	0.178	5.74	6.53	18.9	319.3	Clear	No Odor
08:31	10	500	mL/min	40.05	4.52	0.187	5.74	5.99	18.7	346	Clear	No Odor
08:36	15	500	mL/min	40.05	4.52	0.187	2.87	5.98	18.8	346.4	Clear	No Odor
08:41	20	500	mL/min	40.05	4.51	0.187	2.87	5.94	18.9	348.1	Clear	No Odor
08:46	25	500	mL/min	40.05	4.48	0.187	2.87	5.68	19.1	353.4	Clear	No Odor
08:51	30	500	mL/min	40.07	4.47	0.187	1.61	5.65	18.9	354.9	Clear	No Odor
08:56	35	500	mL/min	40.07	4.46	0.187	2.02	5.45	19.2	357.4	Clear	No Odor
09:01	40	500	mL/min	40.07	4.45	0.187	0.89	5.31	19	359.3	Clear	No Odor
09:06	45	500	mL/min	40.07	4.44	0.187	0.78	5.05	18.8	361.1	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-1	**Date(s):**	2024-09-16	**Work Order(s):**		RW21 LTM 2024 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:64.4 °F, rH:83%, Clouds: 0%, Wind:5.01mph N			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	615.00-625.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	43.62	**Total Depth (ft-bmp):**	630	**Water Column(ft):**	586.38	**Liters in Well:**	1449.02
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	35	**Sample ID:**	RW-21_MW-1	**Sample Time:**	10:10
Purge End Time:	10:05	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:04	0	500	mL/min	43.55	7.84	0.192	4.7	2.12	15.6	258.7	Clear	No Odor
09:09	5	500	mL/min	43.55	7.92	0.2	4.7	1.91	16.2	254.7	Clear	No Odor
09:14	10	500	mL/min	43.55	8	0.207	4.7	1.83	16.1	247.7	Clear	No Odor
09:19	15	500	mL/min	43.70	7.97	0.21	2.45	1.77	16.2	245.8	Clear	No Odor
09:24	20	500	mL/min	43.70	7.65	0.213	2.45	1.78	16.3	250.5	Clear	No Odor
09:29	25	500	mL/min	43.70	7.34	0.213	2.45	1.8	16.3	255	Clear	No Odor
09:34	30	500	mL/min	43.74	6.88	0.21	3.03	1.92	15.8	260	Clear	No Odor
09:39	35	500	mL/min	43.74	6.5	0.189	3.03	2.01	15.7	260.4	Clear	No Odor
09:44	40	500	mL/min	43.74	6.48	0.182	3.03	2.04	15.9	262.2	Clear	No Odor
09:49	45	500	mL/min	43.75	6.48	0.181	6.57	2	16.1	267.3	Clear	No Odor
09:54	50	500	mL/min	43.75	6.43	0.181	7.01	1.98	15.7	265.4	Clear	No Odor
09:59	55	500	mL/min	43.73	6.42	0.182	5.54	2	15.8	264	Clear	No Odor
10:04	60	500	mL/min	43.73	6.4	0.182	3.33	1.87	15.8	263.4	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-11	**Date(s):**	2024-09-17	**Work Order(s):**		RW21 LTM 2024 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:71.35 °F, rH:78%, Clouds: 20%, Wind:5.75mph E-NE			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	638.00-648.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	47.05	**Total Depth (ft-bmp):**	653	**Water Column(ft):**	605.95	**Liters in Well:**	1497.38
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	30	**Sample ID:**	RW-21_MW-11	**Sample Time:**	11:40
Purge End Time:	11:35	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:49	0	500	mL/min	47.10	5.81	0.074	3.3	2.37	16.8	316.9	Clear	No Odor
10:54	5	500	mL/min	47.10	5.73	0.076	3.3	2	17.5	309.2	Clear	No Odor
10:59	10	500	mL/min	47.10	5.73	0.075	3.3	2.77	17.6	305.3	Clear	No Odor
11:04	15	500	mL/min	47.14	5.75	0.062	4.8	3.97	17.2	299.5	Clear	No Odor
11:09	20	500	mL/min	47.14	5.75	0.061	4.8	4.02	17.2	299.4	Clear	No Odor
11:14	25	500	mL/min	47.14	5.75	0.059	4.8	4.55	17.1	299.7	Clear	No Odor
11:19	30	500	mL/min	47.14	5.72	0.059	3.33	4.69	17.3	301.4	Clear	No Odor
11:24	35	500	mL/min	47.14	5.7	0.06	3.21	4.66	17.6	302.9	Clear	No Odor
11:29	40	500	mL/min	47.14	5.7	0.06	2.78	4.63	17.8	302.6	Clear	No Odor
11:34	45	500	mL/min	47.14	5.68	0.06	2.72	4.54	17.8	303.3	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-12-1	**Date(s):**	2024-09-26	**Work Order(s):**		RW21 LTM 2024 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:67.69 °F, rH:91%, Clouds: 100%, Wind:6.91mph E			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	415.00-425.00	**Casing Diameter (in):**	2.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	19.42	**Total Depth (ft-bmp):**	430	**Water Column(ft):**	410.58	**Liters in Well:**	253.65
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	420	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:30	**Total Volume Purged (liters):**	33	**Sample ID:**	RW-21_MW-12-1	**Sample Time:**	10:25
Purge End Time:	10:23	**Well Volumes Purged (total):**	0.13	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:31	0	500	mL/min	19.15	5.32	0.203	12.6	1.52	16.4	307.6	Clear	No Odor
09:36	5	500	mL/min	19.15	5.29	0.202	12.6	1.43	16.5	308	Clear	No Odor
09:41	10	500	mL/min	19.15	5.26	0.2	12.6	1.2	16.6	300.9	Clear	No Odor
09:46	15	500	mL/min	19.23	5.22	0.198	39	0.96	17	293.3	Clear	No Odor
09:51	20	500	mL/min	19.23	5.15	0.196	39	0.91	16.3	289.6	Clear	No Odor
09:56	25	500	mL/min	19.23	5.21	0.203	39	0.77	16.5	273.3	Clear	No Odor
10:01	30	500	mL/min	19.24	5.22	0.203	48.4	0.76	16.6	271.7	Clear	No Odor
10:06	35	500	mL/min	19.24	5.24	0.203	25.1	0.74	16.4	267	Clear	No Odor
10:11	40	500	mL/min	19.24	5.24	0.205	24.6	0.73	16.3	266.4	Clear	No Odor
10:16	45	500	mL/min	19.24	5.24	0.205	22.6	0.73	16.2	266.2	Clear	No Odor
10:21	50	500	mL/min	19.24	5.25	0.205	17.5	0.73	16.3	264.2	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: 425ft-19.42ft=405.5ftx.01gal/ft=4.05galx3.785=15.3Ltotal

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-13	**Date(s):**	2024-09-19	**Work Order(s):**		RW21 LTM 2024 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:67.46 °F, rH:82%, Clouds: 40%, Wind:8.05mph N			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	716.00-726.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	43.01	**Total Depth (ft-bmp):**	731	**Water Column(ft):**	687.99	**Liters in Well:**	1700.11
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:15	**Total Volume Purged (liters):**	36	**Sample ID:**	RW-21 MW-13	**Sample Time:**	09:45
Purge End Time:	09:53	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	**MS/MSD** / MS/MSD	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:20	0	400	mL/min	43.01	6.64	0.033	2.42	6.19	16.4	208.1	Clear	No Odor
08:25	5	400	mL/min	43.02	5.58	0.03	2.42	5.73	16.1	270	Clear	No Odor
08:30	10	400	mL/min	43.04	5.38	0.029	1.41	5.92	16	290.3	Clear	No Odor
08:35	15	400	mL/min	43.07	5.25	0.03	1.41	6.22	15.9	308.4	Clear	No Odor
08:40	20	400	mL/min	43.06	5.25	0.03	3.41	6.22	15.9	310.5	Clear	No Odor
08:45	25	400	mL/min	42.08	5.22	0.029	3.41	6.25	15.7	318.2	Clear	No Odor
08:50	30	400	mL/min	43.08	5.22	0.029	4.44	6.25	15.6	323.8	Clear	No Odor
08:55	35	400	mL/min	43.08	5.21	0.029	4.44	6.3	15.5	328.1	Clear	No Odor
09:00	40	400	mL/min	43.07	5.21	0.029	3.86	6.41	15.5	329.1	Clear	No Odor
09:05	45	400	mL/min	43.08	5.19	0.028	3.78	6.49	15.5	319.9	Clear	No Odor
09:10	50	400	mL/min	43.07	5.19	0.028	3.18	6.52	15.5	319.8	Clear	No Odor
09:15	55	400	mL/min	43.07	5.19	0.028	3.03	6.48	15.6	321.1	Clear	No Odor
09:20	60	400	mL/min	43.07	5.18	0.028	3.11	6.49	15.6	325.1	Clear	No Odor
09:25	65	400	mL/min	43.08	5.18	0.028	3.11	6.48	15.6	329.6	Clear	No Odor
09:30	70	400	mL/min	43.08	5.17	0.028	3.07	6.48	15.6	333.9	Clear	No Odor
09:35	75	400	mL/min	43.08	5.17	0.028	3.07	6.53	15.3	338.6	Clear	No Odor
09:40	80	400	mL/min	43.07	5.16	0.028	3.05	6.53	15.6	339	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Information:

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-14	**Date(s):**	2024-09-25	**Work Order(s):**		RW21 LTM 2024 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:62.8 °F, rH:78%, Clouds: 20%, Wind:5.01mph E			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	630.00-640.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	36.02	**Total Depth (ft-bmp):**	645	**Water Column(ft):**	608.98	**Liters in Well:**	1504.86
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	30	**Sample ID:**	RW-21 MW-14	**Sample Time:**	10:10
Purge End Time:	10:10	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	**MS/MSD** / None	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:55	0	400	mL/min	36.04	5.36	0.041	99.8	4.26	14.9	284.4	Clear	No Odor
09:00	5	400	mL/min	36.05	5.6	0.047	99.8	3.96	15.7	297	Clear	No Odor
09:05	10	400	mL/min	46.06	5.4	0.042	38.9	3.72	15.9	305.1	Clear	No Odor
09:10	15	400	mL/min	36.04	5.28	0.041	38.9	3.7	16.3	306.9	Clear	No Odor
09:15	20	400	mL/min	36.05	5.25	0.041	16.4	3.57	16.7	305.4	Clear	No Odor
09:20	25	400	mL/min	36.05	5.22	0.04	16.4	3.6	17.2	302.1	Clear	No Odor
09:25	30	400	mL/min	36.05	5.22	0.04	16.4	3.49	17.4	299.9	Clear	No Odor
09:30	35	400	mL/min	36.05	5.21	0.04	14.7	3.36	17.3	296.5	Clear	No Odor
09:35	40	400	mL/min	46.07	5.24	0.041	14.7	3.154	17.1	289.7	Clear	No Odor
09:40	45	400	mL/min	36.06	5.29	0.041	14.1	3.08	17.3	283.2	Clear	No Odor
09:45	50	400	mL/min	36.07	5.32	0.042	14.1	2.94	17.1	281.3	Clear	No Odor
09:50	55	400	mL/min	36.08	5.33	0.042	13.8	2.78	16.9	281.7	Clear	No Odor
09:55	60	400	mL/min	36.10	5.33	0.042	13.7	2.71	17.2	279.1	Clear	No Odor
10:00	65	400	mL/min	36.11	5.32	0.042	13.7	2.82	17.2	279.6	Clear	No Odor
10:05	70	400	mL/min	36.11	5.32	0.042	13.7	2.74	17.1	279.6	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: 640ft-36.02ft=603.9ftx.01gal/ft=6.03galx3.785=22.8Ltotal

Well Information:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-15	**Date(s):**	2024-09-20	**Work Order(s):**		RW21 LTM 2024 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:70.54 °F, rH:78%, Clouds: 40%, Wind:12.66mph N			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	676.00-686.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	44.76	**Total Depth (ft-bmp):**	691	**Water Column(ft):**	646.24	**Liters in Well:**	1596.94
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	42	**Sample ID:**	RW-21_MW-15	**Sample Time:**	10:25
Purge End Time:	10:23	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:13	0	500	mL/min	44.80	6.22	0.068	3.37	4.21	16.4	281	Clear	No Odor
09:18	5	500	mL/min	44.80	5.95	0.064	3.37	3.91	16	239.5	Clear	No Odor
09:23	10	500	mL/min	44.80	5.6	0.063	3.37	3.78	16.6	320.9	Clear	No Odor
09:28	15	500	mL/min	44.80	5.49	0.064	6.67	3.78	17.4	329.2	Clear	No Odor
09:33	20	500	mL/min	44.80	5.41	0.065	6.67	3.88	16.8	337.7	Clear	No Odor
09:38	25	500	mL/min	44.80	5.38	0.065	6.67	3.9	16.8	339.7	Clear	No Odor
09:43	30	500	mL/min	44.82	5.28	0.073	9.38	4.01	17.4	348.4	Clear	No Odor
09:48	35	500	mL/min	44.82	5.26	0.062	9.38	4.06	17.1	350.1	Clear	No Odor
09:53	40	500	mL/min	44.82	5.24	0.06	9.38	4.07	17.6	352.9	Clear	No Odor
09:58	45	500	mL/min	48.20	5.18	0.06	10	4.12	17.3	359	Clear	No Odor
10:03	50	500	mL/min	44.82	5.18	0.06	10	4.13	17	359.6	Clear	No Odor
10:08	55	500	mL/min	44.82	5.16	0.06	10	4.13	17.1	363	Clear	No Odor
10:13	60	500	mL/min	44.82	5.15	0.06	8.45	4.14	16.8	364.4	Clear	No Odor
10:18	65	500	mL/min	44.82	5.14	0.06	8.23	4.13	17.3	366.2	Clear	No Odor
10:23	70	500	mL/min	44.82	5.12	0.059	8.8	4.15	16.8	369.9	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Labeled Properly:	NA
Is Well in Good Condition?	NA
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-16	**Date(s):**	2024-09-25	**Work Order(s):**		RW21 LTM 2024 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:64.92 °F, rH:76%, Clouds: 75%, Wind:10.36mph E			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	636.00-646.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	42.28	**Total Depth (ft-bmp):**	651	**Water Column(ft):**	608.72	**Liters in Well:**	1504.22
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	641	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	10:34	**Total Volume Purged (liters):**	42	**Sample ID:**	RW-21_MW-16	**Sample Time:**	11:40
Purge End Time:	11:39	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:33	0	500	mL/min	42.30	5.08	0.045	9.23	5.34	16	370.5	Clear	No Odor
10:38	5	500	mL/min	42.30	5.14	0.047	9.23	4.06	16.6	359	Clear	No Odor
10:43	10	500	mL/min	42.30	4.89	0.045	9.23	1.09	15.7	329.8	Clear	No Odor
10:48	15	500	mL/min	42.30	4.9	0.042	4.79	0.97	15.7	322.5	Clear	No Odor
10:53	20	500	mL/min	42.30	4.88	0.04	4.79	0.9	16.5	322.6	Clear	No Odor
10:58	25	500	mL/min	42.30	4.87	0.039	4.79	0.86	15.6	324.5	Clear	No Odor
11:03	30	500	mL/min	42.31	4.85	0.04	3.45	0.82	15.6	327	Clear	No Odor
11:08	35	500	mL/min	42.31	4.83	0.04	3.45	0.81	15.5	329.1	Clear	No Odor
11:13	40	500	mL/min	42.31	4.74	0.04	3.45	0.8	15.5	336	Clear	No Odor
11:18	45	500	mL/min	42.30	4.67	0.04	0.89	0.77	15.5	340.3	Clear	No Odor
11:23	50	500	mL/min	42.30	4.77	0.04	0.89	0.79	15.6	343.3	Clear	No Odor
11:28	55	500	mL/min	42.30	4.71	0.04	1.11	0.78	15.6	343.2	Clear	No Odor
11:33	60	500	mL/min	42.30	4.69	0.04	2.01	0.76	15.7	342.1	Clear	No Odor
11:38	65	500	mL/min	42.30	4.68	0.04	0.77	0.74	15.6	342.5	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: 646ft-42.28ft=603.7ftx.01gal/ft= 6.03galx3.785=22.8Ltotal

Well Information:

Well Labeled Properly: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-2	**Date(s):**	2024-09-12	**Work Order(s):**		RW21 LTM 2024 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:69.35 °F, rH:82%, Clouds: 3%, Wind:1.01mph NW			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	600.00-610.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	39.03	**Total Depth (ft-bmp):**	615	**Water Column(ft):**	575.97	**Liters in Well:**	1423.29
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	35	**Sample ID:**	RW-21_MW-2	**Sample Time:**	10:50
Purge End Time:	10:46	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:46	0	500	mL/min	30.04	6	0.22	13.2	8.97	17.8	355.4	Clear	No Odor
09:51	5	500	mL/min	39.04	6.91	0.184	13.2	2.22	16.9	319.8	Clear	No Odor
09:56	10	500	mL/min	39.04	7.13	0.176	13.2	2.03	17.5	303.9	Clear	No Odor
10:01	15	500	mL/min	39.08	7.22	0.175	7.54	1.63	17.2	286.9	Clear	No Odor
10:06	20	500	mL/min	39.08	6.73	0.174	7.54	1.52	17.7	268.4	Clear	No Odor
10:11	25	500	mL/min	39.08	6.4	0.174	7.54	1.51	17.8	263.2	Clear	No Odor
10:16	30	500	mL/min	39.10	5.98	0.174	5.13	1.55	18.1	257.7	Clear	No Odor
10:21	35	500	mL/min	39.10	5.77	0.177	5.13	1.6	18.4	255.4	Clear	No Odor
10:26	40	500	mL/min	3.91	5.73	0.177	5.13	1.56	18.5	255.1	Clear	No Odor
10:31	45	500	mL/min	39.10	5.6	0.177	6.1	1.54	18.4	253.7	Clear	No Odor
10:36	50	500	mL/min	39.10	5.6	0.177	8.4	1.53	18.4	254	Clear	No Odor
10:41	55	500	mL/min	39.10	5.54	0.177	6.21	1.53	18.8	257.1	Clear	No Odor
10:46	60	500	mL/min	39.10	5.54	0.177	4.4	1.54	19	260.1	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-3-1	**Date(s):**	2024-09-17	**Work Order(s):**		RW21 LTM 2024 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:66.87 °F, rH:87%, Clouds: 100%, Wind:5.75mph N-NE			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	556.00-566.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	49.11	**Total Depth (ft-bmp):**	571	**Water Column(ft):**	521.89	**Liters in Well:**	1289.65
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	25	**Sample ID:**	RW-21_MW-3-1	**Sample Time:**	10:00
Purge End Time:	09:58	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:16	0	500	mL/min	49.06	5.72	0.108	2.63	7.75	17.2	253.3	Clear	No Odor
09:21	5	500	mL/min	49.06	5.56	0.109	2.63	7.28	17.7	202.1	Clear	No Odor
09:26	10	500	mL/min	49.06	5.35	0.114	2.63	5.49	18.2	219.9	Clear	No Odor
09:31	15	500	mL/min	49.15	4.93	0.124	3.21	4.54	18.8	234.1	Clear	No Odor
09:36	20	500	mL/min	49.15	4.7	0.128	3.21	4.68	17.9	232.2	Clear	No Odor
09:41	25	500	mL/min	49.15	4.66	0.129	3.21	2.96	17.9	235.6	Clear	No Odor
09:46	30	500	mL/min	49.16	4.56	0.129	1.09	2.68	17.6	264.7	Clear	No Odor
09:51	35	500	mL/min	49.16	4.55	0.128	1.01	2.66	17.7	271.9	Clear	No Odor
09:56	40	500	mL/min	49.16	4.56	0.128	1.93	2.65	17.7	273.1	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-5-1	**Date(s):**	2024-09-11	**Work Order(s):**		RW21 LTM 2024 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:66.09 °F, rH:67%, Clouds: 0%, Wind:5.75mph N			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	300.00-310.00	**Casing Diameter (in):**	2.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	36.71	**Total Depth (ft-bmp):**	315	**Water Column(ft):**	278.29	**Liters in Well:**	171.92
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	22	**Sample ID:**	RW-21_MW-5-1	**Sample Time:**	10:10
Purge End Time:	10:10	**Well Volumes Purged (total):**	0.13	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:19	0	400	mL/min	36.75	5.59	0.081	3.32	1.6	16.1	179.5	Clear	No Odor
09:24	5	400	mL/min	36.77	5.5	0.079	3.31	0.49	16.6	188	Clear	No Odor
09:29	10	400	mL/min	36.78	5.43	0.075	2.85	0.68	16.4	193.5	Clear	No Odor
09:34	15	400	mL/min	36.77	5.39	0.078	15.2	1.44	16.5	197.4	Clear	No Odor
09:39	20	400	mL/min	36.78	5.38	0.082	12.1	2.18	16.9	199.1	Clear	No Odor
09:44	25	400	mL/min	36.76	5.38	0.083	10	2.51	16.9	199.9	Clear	No Odor
09:49	30	400	mL/min	36.79	5.37	0.083	9.12	2.5	17	200.1	Clear	No Odor
09:54	35	400	mL/min	36.81	5.38	0.085	8.45	2.61	17.1	200.3	Clear	No Odor
09:59	40	400	mL/min	36.81	5.38	0.084	7.89	2.68	16.8	200.8	Clear	No Odor
10:04	45	400	mL/min	36.81	5.37	0.084	8.45	2.58	17.1	201.2	Clear	No Odor
10:09	50	400	mL/min	36.81	5.38	0.083	7.88	2.51	16.7	201.6	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-5-2	**Date(s):**	2024-09-11	**Work Order(s):**		RW21 LTM 2024 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:69.94 °F, rH:62%, Clouds: 0%, Wind:3.44mph N			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	560.00-570.00	**Casing Diameter (in):**	2.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	40.23	**Total Depth (ft-bmp):**	575	**Water Column(ft):**	534.77	**Liters in Well:**	330.37
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	35	**Sample ID:**	RW-21_MW-5-2	**Sample Time:**	11:40
Purge End Time:	11:39	**Well Volumes Purged (total):**	0.11	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:28	0	400	mL/min	40.45	11.5	0.927	15.8	1.01	17.9	65.5	Clear	No Odor
10:33	5	400	mL/min	40.45	11.53	0.902	15.8	0.58	18.2	56.9	Clear	No Odor
10:38	10	400	mL/min	40.45	11.59	0.904	15.8	0.39	18.3	43.7	Clear	No Odor
10:43	15	400	mL/min	40.50	11.58	0.864	3.87	0.38	19.6	33.9	Clear	No Odor
10:48	20	400	mL/min	40.50	11.54	0.844	3.87	0.41	19.3	26.6	Clear	No Odor
10:53	25	400	mL/min	40.50	11.58	0.795	3.87	0.39	19.1	24.4	Clear	No Odor
10:58	30	400	mL/min	40.52	11.52	0.612	12.4	0.18	18.2	22.2	Clear	No Odor
11:03	35	400	mL/min	40.52	11.48	0.548	12.4	0.16	18.4	22.3	Clear	No Odor
11:08	40	400	mL/min	40.52	11.59	0.55	12.4	0.16	18.8	18.8	Clear	No Odor
11:13	45	400	mL/min	40.51	11.54	0.551	21.5	0.17	19	18.4	Clear	No Odor
11:18	50	400	mL/min	40.51	11.56	0.551	21.5	0.18	19.2	18.5	Clear	No Odor
11:23	55	400	mL/min	40.51	11.55	0.552	21.5	0.17	19.3	18.7	Clear	No Odor
11:28	60	400	mL/min	40.53	11.56	0.552	11	0.17	19.4	19.2	Clear	No Odor
11:33	65	400	mL/min	40.53	11.55	0.545	10.4	0.16	19.5	19.9	Clear	No Odor
11:38	70	400	mL/min	40.53	11.55	0.545	12.3	0.18	19.1	20.3	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Labeled Properly:	NA
Is Well in Good Condition?	NA
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-6	**Date(s):**	2024-09-16	**Work Order(s):**		RW21 LTM 2024 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:69.82 °F, rH:71%, Clouds: 0%, Wind:10.36mph NE			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	604.00-624.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	40.23	**Total Depth (ft-bmp):**	629	**Water Column(ft):**	588.77	**Liters in Well:**	1454.92
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	10:42	**Total Volume Purged (liters):**	24	**Sample ID:**	RW-21 MW-6	**Sample Time:**	11:43
Purge End Time:	11:43	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:43	0	400	mL/min	40.26	5.56	0.14	9.37	3.52	17.6	251.1	Clear	No Odor
10:48	5	400	mL/min	40.26	5.33	0.141	9.22	1.01	17.4	257.4	Clear	No Odor
10:53	10	400	mL/min	40.27	5.26	0.139	8.78	0.87	17.9	257.1	Clear	No Odor
10:58	15	400	mL/min	40.27	5.23	0.139	10.1	0.8	18.9	258.8	Clear	No Odor
11:03	20	400	mL/min	40.27	5.22	0.139	9.89	0.79	19.5	259.7	Clear	No Odor
11:08	25	400	mL/min	40.29	5.23	0.14	9.78	0.79	18.7	260.9	Clear	No Odor
11:13	30	400	mL/min	20.31	5.23	0.139	10.2	0.78	18.4	262.8	Clear	No Odor
11:18	35	400	mL/min	40.30	5.19	0.137	10.28	0.84	20.1	264.9	Clear	No Odor
11:23	40	400	mL/min	40.31	5.18	0.138	10.22	0.84	20.3	262.1	Clear	No Odor
11:28	45	400	mL/min	40.31	5.17	0.137	10.3	0.81	20.3	265.8	Clear	No Odor
11:33	50	400	mL/min	40.31	5.18	0.139	10.1	0.86	20.3	265.2	Clear	No Odor
11:38	55	400	mL/min	40.29	5.19	0.139	10.2	0.89	20.3	264.7	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-7	**Date(s):**	2024-09-19	**Work Order(s):**		RW21 LTM 2024 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:73.06 °F, rH:66%, Clouds: 40%, Wind:12.66mph N			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	580.00-590.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	40.8	**Total Depth (ft-bmp):**	595	**Water Column(ft):**	554.2	**Liters in Well:**	1369.5
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	30	**Sample ID:**	RW-21_MW-7	**Sample Time:**	11:15
Purge End Time:	11:14	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:28	0	500	mL/min	40.82	5.75	0.146	5.1	4.09	17.9	345.9	Clear	No Odor
10:33	5	500	mL/min	40.82	5.07	0.148	5.1	1.06	18.1	355.5	Clear	No Odor
10:38	10	500	mL/min	40.82	4.99	0.143	5.1	0.97	18.1	298.5	Clear	No Odor
10:43	15	500	mL/min	40.85	4.88	0.149	23.2	1.85	18.1	275	Clear	No Odor
10:48	20	500	mL/min	40.85	4.85	0.15	23.2	1.97	18.1	279.3	Clear	No Odor
10:53	25	500	mL/min	40.85	4.77	0.151	23.2	2.22	18.1	293.9	Clear	No Odor
10:58	30	500	mL/min	40.87	4.73	0.152	11	2.23	18	241.2	Clear	No Odor
11:03	35	500	mL/min	40.87	4.7	0.152	10.4	2.3	18.1	244.5	Clear	No Odor
11:08	40	500	mL/min	40.87	4.68	0.152	8.8	2.22	18.2	249.9	Clear	No Odor
11:13	45	500	mL/min	40.87	4.67	0.152	10.5	2.28	17.9	251.3	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-8	**Date(s):**	2024-09-18	**Work Order(s):**		RW21 LTM 2024 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:67.71 °F, rH:86%, Clouds: 0%, Wind:5.99mph N-NE			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	460.00-470.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	42.63	**Total Depth (ft-bmp):**	475	**Water Column(ft):**	432.37	**Liters in Well:**	1068.44
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:48	**Total Volume Purged (liters):**	26	**Sample ID:**	RW-21 MW-8	**Sample Time:**	10:50
Purge End Time:	10:55	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:50	0	400	mL/min	42.65	6.48	0.343	2.04	7.69	16.9	348.1	Clear	No Odor
09:55	5	400	mL/min	42.65	8.09	0.328	2.04	1.98	16.8	297.5	Clear	No Odor
10:00	10	400	mL/min	42.66	8.39	0.323	2.11	1.24	16.9	275.1	Clear	No Odor
10:05	15	400	mL/min	42.66	8.44	0.318	2.11	1.02	17.2	258.1	Clear	No Odor
10:10	20	400	mL/min	42.64	8.44	0.317	2.43	0.98	17.2	254.2	Clear	No Odor
10:15	25	400	mL/min	42.64	8.71	0.319	2.43	0.89	17.4	235.8	Clear	No Odor
10:20	30	400	mL/min	42.61	8.82	0.321	2.31	0.88	17.2	230.1	Clear	No Odor
10:25	35	400	mL/min	42.59	8.96	0.326	2.37	0.81	16.6	218.1	Clear	No Odor
10:30	40	400	mL/min	42.59	8.92	0.328	1.66	0.81	16.6	214.3	Clear	No Odor
10:35	45	400	mL/min	42.60	8.86	0.329	1.66	0.82	16.7	211.8	Clear	No Odor
10:40	50	400	mL/min	42.60	8.87	0.329	1.7	0.83	16.7	209.5	Clear	No Odor
10:45	55	400	mL/min	42.60	8.79	0.329	1.71	0.84	16.9	208.2	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-9	**Date(s):**	2024-09-16	**Work Order(s):**		RW21 LTM 2024 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:72.55 °F, rH:67%, Clouds: 0%, Wind:6.91mph NE			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	630.00-640.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	40.9	**Total Depth (ft-bmp):**	645	**Water Column(ft):**	604.1	**Liters in Well:**	1492.8
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	34	**Sample ID:**	RW-21_MW-9	**Sample Time:**	13:15
Purge End Time:	13:02	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
12:13	0	500	mL/min	41.00	5.22	0.158	6.63	4	17.5	287.8	Clear	No Odor
12:18	5	500	mL/min	41.00	5.01	0.157	6.63	1.86	17.4	298.1	Clear	No Odor
12:23	10	500	mL/min	41.00	4.99	0.156	6.63	1.72	17.5	301.2	Clear	No Odor
12:28	15	500	mL/min	41.08	4.99	0.156	10.2	1.7	17.7	301.8	Clear	No Odor
12:33	20	500	mL/min	41.08	5.03	0.153	10.2	1.82	17.6	301.7	Clear	No Odor
12:38	25	500	mL/min	41.08	5.02	0.153	10.2	1.83	17.6	301.8	Clear	No Odor
12:43	30	500	mL/min	41.10	5	0.148	4.29	1.92	17.7	303	Clear	No Odor
12:48	35	500	mL/min	41.10	4.98	0.144	4.29	1.98	17.6	305	Clear	No Odor
12:53	40	500	mL/min	41.10	4.98	0.144	4.29	2	17.7	305.8	Clear	No Odor
12:58	45	500	mL/min	41.10	4.98	0.139	3.78	2.01	17.2	306.5	Clear	No Odor
13:03	50	500	mL/min	41.12	4.95	0.139	4.22	2.02	17.3	307.2	Clear	No Odor
13:08	55	500	mL/min	41.12	4.95	0.139	4.01	2.02	17.3	307.5	Clear	No Odor
13:13	60	500	mL/min	41.12	4.94	0.139	3.76	2.01	17.4	309.8	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

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Groundwater Sampling Log

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Project No. 30223092 Well ID MW-116-5 Date 9/13/24

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring Weather 80° SUNNY

Measuring Pt. Description: Top of Casing
Screen Interval (ft-bls): 570 - 590
Casing Diameter (in.): 4
Well Material: x PVC ___ SS

Static Water Level (ft-bmp): 41.26
Total Depth (ft-bls): 595
Water Column/ Gallons in Well: 360gal

MP Elevation: NM
Pump Intake (ft-bls): 482 (packer 480)
Purge Method: Peristaltic ___ Submersib Dedicated ___ Other ___
Sample Method: 3 Well Volume Below Packer

Pump On/Off: 0940 1050
Volume Purged (gal): 248 gal

Sample Time: Label MW-116-5 Start 1046 End 1050
Replicate/ Code No.: N/A
Sampled by: SV PQ BW

PID: 0.0 1040

Time	Minutes Elapsed	Rate (~~mL/min~~)	Depth to Water (ft)	Volume Purged (G)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
0940	0	4gpm	41.26	0	5.00	0.119	2.80	2.81	18.1	279.6	Clear	None
I 1001	21	5gpm	41.20	81	4.76	0.045	1.40	3.15	15.9	308.7	"	"
II 1016	36	4gpm	41.20	163	4.45	0.041	1.35	3.76	15.0	328.1	"	"
III 1037	57	4gpm	41.20	244	4.59	0.090	2.11	4.47	15.1	324.8	"	"

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270DSIM	1 L glass amber bottle	2	None

Notes:

Packer Pressure Equation: ((Depth to packer - static water level) x 0.43 PSI/ft) +50 PSI 480-41.26<438.7 · 0.43=188.6+50=238psi

Volume Equation: ((Total depth - packer depth) x 0.65 gal/ ft) + ((Midscreen depth - static water level depth) x 0.01 gal/ft)

595-480=115·0.65=75gal + (590-41.26(0.01)=80.5gal

NEED ROAD TRAFFIC CONTROL SIGNS* *CONE OFF EARLY OR DAY BEFORE

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47; 1/2" = 0.01; 3/8" = 0.006

Well Information

Well Location: 150 North Herman Ave, Bethpage, NY
Condition of Well: See Well Inspection Log
Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No
Well Locked at Departure: Yes / No
Key Number To Well: ___

ARCADIS Design & Consultancy for natural and built assets

Groundwater Sampling Log

Page 1 of 1

Project No. 30023092 Well ID MW-117-5 Date 9/23/24

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring Weather 55° overcast

Measuring Pt. Description: Top of Casing
Screen Interval (ft-bls): 737 - 757
Casing Diameter (in.): 4
Well Material: x PVC / SS

Static Water Level (ft-bmp): 43.25
Total Depth (ft-bls): 762
Water Column/ Gallons in Well: 170gal.

MP Elevation: NM
Pump Intake (ft-bls): 502 (packer 500)
Purge Method: Peristaltic / Submersib Dedicated / Other
Sample Method: 3 Well Volume Below Packer

Pump On/Off: 1213 / 1435
Volume Purged (gal): 538gal

Sample Time: Label MW 117-5 Start 1430 End 1435
Replicate/ Code No.: N/A
Sampled by: SV, PQ

PID: 0.3 1430

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (G)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor	Vol Purg
12 15	0	5gpm	43.31	~~171~~ 0	6.20	0.027	5.39	3.65	16.8	213.9	clear	None	0
I – 12 53	38	5gpm	43.32	~~342~~	5.45	0.037	3.95	9.43	16.1	249.9	"	"	171gal
II – 13 30	75	5gpm	43.32	~~855~~ 513	5.14	0.065	1.98	7.57	15.5	291.1	"	"	342g
III – 1430	135	5gpm	43.32	684	5.08	0.063	0.47	7.66	15.3	299.1	"	"	513gal

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270DSIM	1 L glass amber bottle	2	None

250psi

Notes:

Packer Pressure Equation: ((Depth to packer - static water level) x 0.43 PSI/ft) +50 PSI 500'-43.25' = 456.75' · 0.43 = 197+50

Volume Equation: ((Total depth - packer depth) x 0.65 gal/ ft) + ((Midscreen depth - static water level depth) x 0.01 gal/ft)

762-500' = 262' · 170gal = 1 well 757-43.25 = 713.75' · 0.01 = 7gal

NEED ROAD TRAFFIC CONTROL SIGNS* *CONE OFF EARLY OR DAY BEFORE

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47; 1/2" = 0.01; 3/8" = 0.006

Well Information

Well Location: Crestline Park, Bethpage, NY (approx. 24ft W/NW off NW corner of playgrpund fence)
Condition of Well: See Well Inspection Log
Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No
Well Locked at Departure: Yes / No
Key Number To Well:

ARCADIS Design & Consultancy for natural and built assets

Groundwater Sampling Log

Project No. 30223092 Well ID MW-118-5 Date 9/23/21

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring Weather 55° Overcast

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bls): 718 - 738 | Casing Diameter (in.): 4 | Well Material: x PVC, SS

Static Water Level (ft-bmp): 36.73 | Total Depth (ft-bls): 750 | Water Column/ Gallons in Well: 701ft / 455gal

MP Elevation: NM | Pump Intake (ft-bls): 505 | Purge Method: Peristaltic, Submersib Dedicated, Other | Sample Method: 3 Well Volume Below Packer

Pump On/Off: 0845 / 1118 | Volume Purged (gal): 535gal

Sample Time: Label MW-118-5, Start 1118, End 11:22 | Replicate/ Code No.: N/A | Sampled by: SV, PG

PID: 0.0

1118

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (G)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
0845	0	5gpm	36.69	0	5.56	0.044	2.29	2.52	16.6	159.3	Clear	none
I 0921	36	5gpm	36.69	170	5.44	0.057	2.01	7.08	14.7	271.9	"	"
II 0955	70	5gpm	36.69	340	5.22	0.057	1.26	6.78	15.1	292.2	"	"
III ~~1047~~ 1118	103	5gpm	36.69	510	5.42	0.056	1.11	7.05	15.0	290.1	"	"

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270DSIM	1 L glass amber bottle	2	None

Notes:

Packer Pressure Equation: ((Depth to packer - static water level) x 0.43 PSI/ft) +50 PSI 500 - 36.73 = 463.27' · 0.43 = 201.3 + 252 PSI

Volume Equation: ((Total depth - packer depth) x 0.65 gal/ ft) + ((Midscreen depth - static water level depth) x 0.01 gal/ft)

738 - 500 = 250 · 0.65 = 162.5 gal + (738 - 36.73) · 0.01 = 7 gal = 170 gal

NEED ROAD TRAFFIC CONTROL SIGNS* *CONE OFF EARLY OR DAY BEFORE

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47 | 1/2" = 0.01 | 3/8" = 0.006

Well Information

Well Location:	1 Hoover Lane, Bethpage, NY	Well Locked at Arrival:	Yes / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	Yes / No
Well Completion:	Flush Mount / Stick Up	Key Number To Well:	

Groundwater Sampling Log

Project No. 30223092 Well ID RW-21_MW-3-2 Date 9/17/24

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring Weather 70° sunny

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bmp): 595 - 605 | Casing Diameter (in.): 4 | Well Material: x PVC, ___ SS

Static Water Level (ft-bmp): 49.49 | Total Depth (ft-bls): 610 | Water Column/Gallons in Well: 560' 364 gal

MP Elevation: NM | Pump Intake (ft-bls): Midscreen | Purge Method: Non-dedicated Bladder Pump / Peristaltic / Submersible X / Other | Sample Method: Micropurge/Low-flow 1 hour + tubing volume

Pump On/Off: 848 1000 | Volume Purged ~~(gal)~~: 24 L

Sample Time: Label RW-21_MW-3-2 | Start 0950 | End 1000 | Replicate/Code No. REP091724SV1 | Sampled by SV + PG

PID: 0.0

0950

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
0850	0	400	49.51	0	7.12	0.046	12.3	6.86	17.3	145.5	clear	None
0855	5	400		2	5.76	0.041	9.44	2.78	16.4	142.4	"	"
0900	10	400	49.52	4	5.53	0.046	9.44	3.36	16.2	140.2	"	"
0905	15	400		6	5.35	0.036	2.24	4.01	16.1	157.8	"	"
0910	20	400	49.57	8	5.33	0.035	2.24	4.35	16.1	167.8	"	"
0915	25	400		10	5.34	0.035	2.63	4.32	16.1	167.1	"	"
0920	30	400	49.58	12	5.37	0.035	2.63	4.34	16.0	164.7	"	"
0925	35	400		14	5.35	0.034	2.55	4.34	16.0	169.3	"	"
0930	40	400	49.56	16	5.35	0.034	2.55	4.33	16.0	169.1	"	"
0935	45	400	49.56	18	5.36	0.034	5.11	4.35	16.1	168.8	"	"
0940	50	400	49.54	20	5.36	0.034	3.01	4.34	16.2	168.6	"	"
0945	55	400	49.55	22	5.37	0.034	2.98	4.33	16.1	168.4	"	"

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270D SIM	1 L glass amber bottle	2	None

Notes:

Tubing Volume Equation: Volume (gal)= (Midscreen depth - static water level depth) x tubing size conversion factor (gal/ft)

610 - 49.49 = 560.51' · 0.006 = 3.4 gal = 13 L

*Field Blank Required ***CONE OFF EARLY OR DAY BEFORE***

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47 | 1/2" = 0.01 | 3/8" = 0.006

Well Information

Well Location:	South corner of Parking Lot off Seamans Ave, Bethpage, NY	Well Locked at Arrival:	Yes / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	Yes / No
Well Completion:	**Flush Mount** / Stick Up	Key Number To Well:	

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Groundwater Sampling Log

Project No. 30023092 Well ID RW-21_MW-12-2 Date 9/26/24

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring Weather

Measuring Pt. Description: Top of Casing
Screen Interval (ft-bls): 590 - 600
Casing Diameter (in.): 2
Well Material: x PVC ___ SS

Static Water Level (ft-bmp): 20.08
Total Depth (ft-bls): 605
Water Column/ Gallons in Well: 584.92' 381 gal.

MP Elevation: NM
Pump Intake (ft-bls): Midscreen
Purge Method: Non-dedicated Bladder Pump ___ Peristaltic ___ Submersible X ___ Other
Sample Method: Micropurge/Low-flow + tubing volume

Pump On/Off: 0920 - 1050
Volume Purged (gal): 32 L

Sample Time: Label RW21_MW12-2 Replicate/ Code No. N/A
Start 1045
End 1050

Sampled by SV PG

PID: 0.1 ppm 1045

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
0925	0	400	20.10	0	10.34	0.130	16.5	5.07	15.1	84.1	Clear	None
0930	5	400	20.10	2	10.28	0.128	10.5	1.15	15.9	76.7	"	"
0935	10	400	20.11	4	10.25	0.128	7.64	1.36	17.1	70.7	"	"
0940	15	400	20.11	6	10.25	0.127	7.64	0.93	16.0	67.5	"	"
0945	20	400	20.11	8	10.25	0.126	6.11	0.65	15.6	61.5	"	"
0950	25	400	20.12	10	10.17	0.138	6.11	0.54	16.0	58.1	"	"
0955	30	400	20.12	12	10.03	0.132	19.4	0.47	15.8	47.3	"	"
1000	35	400	20.11	14	10.12	0.145	19.9	0.36	15.9	35.8	"	"
1005	40	400	20.11	16	10.11	0.240	16.3	0.35	15.7	34.5	"	"
1010	45	400	20.11	18	10.16	0.207	16.0	0.27	16.0	34.5	"	"
1015	50	400	20.11	20	9.98	0.189	16.8	0.22	16.1	35.6	"	"
1020	55	400	20.11	22	9.73	0.187	16.6	0.20	16.0	36.1	"	"
1025	60	400	20.11	24	9.76	0.185	16.6	0.19	16.1	37.1	"	"
1030	65	400	20.11	26	9.71	0.185	16.1	0.19	16.1	37.4	"	"
1035	70	400	20.10	28	9.72	0.185	15.9	0.18	16.1	36.8	"	"
1040	75	400	20.18	30	9.70	0.184	15.8	0.18	16.2	36.7	"	"

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270D SIM	1 L glass amber bottle	2	None

Notes:

Tubing Volume Equation: Volume (gal)= (Midscreen depth - static water level depth) x tubing size conversion factor (gal/ft)

605 - 20.08 = 584.92 = 22.5 L

*Field Blank Required

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47; 1/2" = 0.01; 3/8" = 0.006

Well Information

Well Location:	Dirt Road Off N. Bound Route 135, Bethpage, NY	Well Locked at Arrival:	Yes / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	Yes / No
Well Completion:	Flush Mount / Stick Up	Key Number To Well:	

ARCADIS Design & Consultancy for natural and built assets

Groundwater Sampling Log

Page 1 of 1

Project No. 30223092 Well ID RW-21_MW-4 Date 9/12/24

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring Weather 75° Sunny

Measuring Pt. Description: Top of Casing
Screen Interval (ft-bls): 369 - 384
Casing Diameter (in.): 4
Well Material: x PVC ___ SS

Static Water Level (ft-bmp): 41.78
Total Depth (ft-bls): 389
Water Column/ Gallons in Well: 226.2 gal

MP Elevation: NM
Pump Intake (ft-bls): Midscreen
Purge Method: Non-dedicated Bladder Pump ___ Peristaltic ___ Submersible X ___ Other
Sample Method: Micropurge/Low-flow + tubing volume

Pump On/Off: 0829 - 0925
Volume Purged ~~(gal)~~: 19L

Sample Time: Label RW-21-MW-4 Start 0915 End 0925
Replicate/ Code No.: N/A
Sampled by: SV

PID: 0.0

0915

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
0830	0	400	41.59	0	5.08	0.217	3.99	4.71	16.5	311.6	Clear	None
0835	5	400	41.56	2	4.56	0.220	7.23	1.35	16.2	314.9	"	"
0840	10	450	41.56	4	4.50	0.215	23.4	2.27	16.2	337.8	"	"
0845	15	450	41.58	6.25	4.50	0.219	23.8	4.45	16.5	344.3	"	"
0850	20	450	41.58	8.5	4.50	0.220	18.7	4.50	16.6	348.4	"	"
0855	25	450	41.61	10.75	4.49	0.220	16.3	4.49	16.5	350.1	"	"
0900	30	400	41.61	13.00	4.49	0.220	12.6	4.48	16.5	351.6	"	"
0905	35	400	41.64	15.0	4.46	0.220	9.8	4.51	16.4	353.9	"	"
0910	40	400	41.63	17	4.48	0.220	8.1	4.49	16.5	358.7	"	"

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270D SIM	1 L glass amber bottle	2	None

Notes:

Tubing Volume Equation: Volume (gal)= (Midscreen depth - static water level depth) x tubing size conversion factor (gal/ft)

389 - 41.78 = 347.22 = 7.6L

*Field Blank Required ***CONE OFF EARLY OR DAY BEFORE***

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; ~~3.5" = 0.50~~ 4" = 0.65; 6" = 1.47; 3/8" = 0.006; 1/2" = 0.01

Well Information

Well Location:	32 Lexington Avenue, Bethpage, NY	Well Locked at Arrival:	Yes / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	Yes / No
Well Completion:	**Flush Mount** / Stick Up	Key Number To Well:	

Groundwater Sampling Form

Location ID:	RW-21_MW-16	**Date(s):**	2024-10-11	**Work Order(s):**		10_10_24 Add Well Sampling	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:68.63 °F, rH:41%, Clouds: 0%, Wind:11.5mph W			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	636.00-646.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	41.51	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	609.49	**Liters in Well:**	1506.12
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:54	**Total Volume Purged (liters):**	31.85	**Sample ID:**	RW-21_MW-16	**Sample Time:**	11:05
Purge End Time:	11:02	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	**MS/MSD** / RW-21_MW-16	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:55	0	600	mL/min	41.59	5.12	0.046	1.86	3.28	14.8	263.8	Clear	No Odor
10:00	5	450	mL/min	41.54	4.9	0.045	0.63	0.95	14.7	267.2	Clear	No Odor
10:05	10	400	mL/min	41.53	4.9	0.045	0.63	0.71	14.8	258.9	Clear	No Odor
10:10	15	400	mL/min	41.53	4.9	0.045	0.36	0.6	14.8	250.7	Clear	No Odor
10:15	20	500	mL/min	41.53	4.89	0.044	0.36	0.53	14.9	246.3	Clear	No Odor
10:20	25	500	mL/min	41.53	4.9	0.042	1.72	0.49	14.8	242.5	Clear	No Odor
10:25	30	500	mL/min	41.53	4.91	0.041	1.72	0.45	15	221.1	Clear	No Odor
10:30	35	500	mL/min	41.53	4.91	0.041	6.56	0.43	15	207.5	Clear	No Odor
10:35	40	500	mL/min	41.53	4.91	0.042	6.56	0.41	15.3	197.2	Clear	No Odor
10:40	45	500	mL/min	41.53	4.91	0.042	6.31	0.4	15.3	195	Clear	No Odor
10:45	50	500	mL/min	41.53	4.9	0.043	6.53	0.39	15.4	192.2	Clear	No Odor
10:50	55	500	mL/min	41.53	4.9	0.043	5.07	0.39	15.4	191.4	Clear	No Odor
10:55	60	500	mL/min	41.53	4.89	0.044	4.9	0.38	15.5	190.8	Clear	No Odor
11:00	65	500	mL/min	41.54	4.88	0.044	4.58	0.37	15.6	189.6	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-15	**Date(s):**	2024-10-10	**Work Order(s):**		10_10_24 Add Well Sampling	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:54.84 °F, rH:59%, Clouds: 0%, Wind:9.22mph N-NW			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	676.00-686.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	42.83	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	648.17	**Liters in Well:**	1601.71
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	11:04	**Total Volume Purged (liters):**	33.4	**Sample ID:**	RW-21_MW-15	**Sample Time:**	12:25
Purge End Time:	12:22	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:05	0	600	mL/min	43.82	5.66	0.066	1.45	4.91	16.3	244.7	Clear	No Odor
11:10	5	450	mL/min	43.82	5.38	0.055	1.45	4.17	15.8	269.4	Clear	No Odor
11:15	10	450	mL/min	43.82	5.14	0.054	1.8	4.05	16.1	277.5	Clear	No Odor
11:20	15	450	mL/min	43.82	4.99	0.054	1.8	4.03	16.3	278.1	Clear	No Odor
11:25	20	450	mL/min	43.82	4.95	0.055	2.34	4.06	16.4	277.8	Clear	No Odor
11:30	25	450	mL/min	43.00	4.88	0.054	2.34	4.11	16.5	276.5	Clear	No Odor
11:35	30	450	mL/min	43.82	4.85	0.054	3.32	4.17	16.4	272.7	Clear	No Odor
11:40	35	450	mL/min	43.82	4.85	0.054	3.32	4.2	16.4	268.6	Clear	No Odor
11:45	40	450	mL/min	43.82	4.84	0.053	3.43	4.22	16.4	265.1	Clear	No Odor
11:50	45	450	mL/min	43.82	4.85	0.053	3.43	4.15	16.5	261.9	Clear	No Odor
11:55	50	450	mL/min	43.80	4.85	0.053	3.43	4.14	16.5	259.6	Clear	No Odor
12:00	55	450	mL/min	43.82	4.85	0.054	4.23	4.13	16.4	257	Clear	No Odor
12:05	60	250	mL/min	43.79	4.85	0.054	3.35	4.12	16.4	255	Clear	No Odor
12:10	65	450	mL/min	43.79	4.86	0.054	3.53	4.1	16.4	252	Clear	No Odor
12:15	70	450	mL/min	43.79	4.87	0.053	3.27	4.08	16.5	250.1	Clear	No Odor
12:20	75	450	mL/min	43.79	4.87	0.053	2.38	4.07	16.5	249.1	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Information:

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-13	**Date(s):**	2024-10-10	**Work Order(s):**		10_10_24 Add Well Sampling	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:49.64 °F, rH:72%, Clouds: 0%, Wind:5.75mph N-NW			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	716.00-726.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	42.58	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	688.42	**Liters in Well:**	1701.17
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:30	**Total Volume Purged (liters):**	36	**Sample ID:**	RW-21_MW-13	**Sample Time:**	09:45
Purge End Time:	09:44	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	**Duplicate** / REP101024AH1	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:32	0	500	mL/min	39.14	5.4	0.036	1.62	5.78	15.3	138.4	Clear	No Odor
08:37	5	500	mL/min	38.95	4.93	0.03	1.62	4.66	15.6	178.2	Clear	No Odor
08:47	15	500	mL/min	38.71	4.83	0.029	0.75	4.3	15.6	199.3	Clear	No Odor
08:52	20	500	mL/min	38.61	4.71	0.029	0.75	3.94	15.6	208	Clear	No Odor
08:57	25	500	mL/min	38.61	4.7	0.028	0.7	3.76	15.6	211.6	Clear	No Odor
09:02	30	500	mL/min	38.61	4.74	0.028	0.7	3.44	15.6	215.1	Clear	No Odor
09:07	35	500	mL/min	38.61	4.78	0.028	1.2	3.15	15.7	220.4	Clear	No Odor
09:12	40	500	mL/min	38.61	4.79	0.028	1.2	2.97	15.6	223.8	Clear	No Odor
09:17	45	500	mL/min	38.61	4.8	0.028	1.02	2.56	15.7	228	Clear	No Odor
09:22	50	500	mL/min	38.42	4.81	0.027	1.02	2.22	15.8	231.3	Clear	No Odor
09:27	55	500	mL/min	38.41	4.82	0.027	1.1	2.2	15.6	233.1	Clear	No Odor
09:32	60	500	mL/min	38.41	4.83	0.027	1.19	2.23	15.5	235.9	Clear	No Odor
09:37	65	500	mL/min	38.41	4.84	0.027	1.19	2.21	15.6	237.6	Clear	No Odor
09:42	70	500	mL/min	38.36	4.84	0.027	1.53	2.23	15.6	240	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	4	1 L	None
VOCs (SW8260)	Clear Glass	6	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-16	**Date(s):**	2024-08-28	**Work Order(s):**		08_21_24_OU3 RW21 Monitoring	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:74.77 °F, rH:79%, Clouds: 0%, Wind:10.36mph SW			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	636.00-646.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	42.7	**Total Depth (ft-bmp):**	651	**Water Column(ft):**	608.3	**Liters in Well:**	1503.18
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	38	**Sample ID:**	RW-21_MW-16	**Sample Time:**	09:30
Purge End Time:	09:27	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:21	0	500	mL/min	42.70	4.75	0.039	3.75	9.45	17.9	154	Clear	No Odor
08:26	5	500	mL/min	42.70	4.7	0.039	3.75	8.88	17.9	157.7	Clear	No Odor
08:31	10	500	mL/min	42.70	4.59	0.039	3.75	5.22	18	166	Clear	No Odor
08:36	15	500	mL/min	42.74	4.54	0.038	3.37	2.43	18	186.5	Clear	No Odor
08:41	20	500	mL/min	42.74	4.53	0.039	3.37	1.44	18	193.3	Clear	No Odor
08:46	25	500	mL/min	42.74	4.52	0.039	3.37	1.23	18.1	198.1	Clear	No Odor
08:51	30	500	mL/min	42.75	4.51	0.039	3.37	1.21	18.3	203.4	Clear	No Odor
08:56	35	500	mL/min	42.74	4.51	0.04	1.71	1.19	18.3	210.8	Clear	No Odor
09:01	40	500	mL/min	42.72	4.5	0.04	1.71	1.19	18.2	213.2	Clear	No Odor
09:06	45	500	mL/min	42.74	4.49	0.04	1.71	1.19	18.3	220	Clear	No Odor
09:11	50	500	mL/min	42.75	4.49	0.04	1.2	1.21	18.6	224.4	Clear	No Odor
09:16	55	500	mL/min	42.75	4.49	0.04	1.34	1.2	18.8	228.3	Clear	No Odor
09:21	60	500	mL/min	42.75	4.49	0.04	1.2	1.2	18.8	230.3	Clear	No Odor
09:26	65	500	mL/min	42.75	4.49	0.041	1.45	1.22	18.8	234	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-13	**Date(s):**	2024-08-27	**Work Order(s):**		08_21_24_OU3 RW21 Monitoring	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:76.21 °F, rH:73%, Clouds: 0%, Wind:4.61mph N			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	716.00-726.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	42.2	**Total Depth (ft-bmp):**	731	**Water Column(ft):**	688.8	**Liters in Well:**	1702.11
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	40	**Sample ID:**	RW-21_MW-13	**Sample Time:**	09:40
Purge End Time:	09:37	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:31	0	500	mL/min	42.20	6.01	0.035	1.83	6.4	16.7	12.3	Clear	No Odor
08:36	5	500	mL/min	42.20	4.94	0.031	1.82	9.48	17.1	84.6	Clear	No Odor
08:41	10	500	mL/min	42.20	4.91	0.031	1.82	9.45	17.1	95.4	Clear	No Odor
08:46	15	500	mL/min	42.57	4.85	0.031	1.42	9.06	17.2	125.4	Clear	No Odor
08:51	20	500	mL/min	42.57	4.83	0.031	1.42	7.83	17.2	130.9	Clear	No Odor
08:56	25	500	mL/min	42.57	4.83	0.031	1.42	7.79	17.1	140.1	Clear	No Odor
09:01	30	500	mL/min	42.60	4.85	0.031	2.24	7.86	17.2	151.5	Clear	No Odor
09:06	35	500	mL/min	42.60	4.85	0.031	2.24	7.78	17.2	156	Clear	No Odor
09:11	40	500	mL/min	42.60	4.85	0.031	2.24	7.52	17.1	166	Clear	No Odor
09:16	45	500	mL/min	42.60	4.86	0.03	1.7	7.1	17.1	176.8	Clear	No Odor
09:21	50	500	mL/min	42.60	4.86	0.03	1.7	7.06	17.2	178.2	Clear	No Odor
09:26	55	500	mL/min	42.60	4.85	0.03	1.32	6.99	17.2	180.2	Clear	No Odor
09:31	60	500	mL/min	42.60	4.86	0.03	1.22	6.97	17.1	186.2	Clear	No Odor
09:36	65	500	mL/min	42.60	4.84	0.03	1.39	6.9	17.2	188	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-15	**Date(s):**	2024-08-27	**Work Order(s):**		08_21_24_OU3 RW21 Monitoring	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:78.06 °F, rH:68%, Clouds: 0%, Wind:5.75mph N			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	676.00-686.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	42.53	**Total Depth (ft-bmp):**	691	**Water Column(ft):**	648.47	**Liters in Well:**	1602.45
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	NA	**Total Volume Purged (liters):**	40	**Sample ID:**	RW-21_MW-15	**Sample Time:**	11:30
Purge End Time:	11:29	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:18	0	500	mL/min	42.53	5.66	0.053	2.68	16	15.4	189.4	Clear	No Odor
10:23	5	500	mL/min	42.53	5.29	0.05	2.68	9.98	17	190.7	Clear	No Odor
10:28	10	500	mL/min	42.53	5.27	0.051	2.68	8.45	17.2	191.4	Clear	No Odor
10:33	15	500	mL/min	42.55	5.21	0.052	5.58	5.43	17.6	198.8	Clear	No Odor
10:38	20	500	mL/min	42.55	5.13	0.052	5.58	2.76	17.8	203.2	Clear	No Odor
10:43	25	500	mL/min	42.55	4.98	0.052	5.58	0.98	17.9	209.8	Clear	No Odor
10:48	30	500	mL/min	42.56	4.91	0.054	4.36	0.94	17.5	217.5	Clear	No Odor
10:53	35	500	mL/min	42.56	4.89	0.052	4.36	0.94	17.8	220	Clear	No Odor
10:58	40	500	mL/min	42.56	4.85	0.052	4.36	0.96	17.8	226	Clear	No Odor
11:03	45	500	mL/min	42.58	4.83	0.052	2.02	0.93	18	228.5	Clear	No Odor
11:08	50	500	mL/min	42.58	4.8	0.052	2.02	0.91	18	233	Clear	No Odor
11:13	55	500	mL/min	42.58	4.8	0.052	2.41	0.9	18.2	234.2	Clear	No Odor
11:18	60	500	mL/min	42.60	4.8	0.052	2.75	0.95	18	240.1	Clear	No Odor
11:23	65	500	mL/min	42.60	4.82	0.052	2.41	0.93	18.1	243.9	Clear	No Odor
11:28	70	500	mL/min	42.60	4.81	0.053	2.39	0.89	18.1	245.9	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Labeled Properly:	NA
Is Well in Good Condition?	NA
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Groundwater Sampling Form

Location ID:	MW-109-3	**Date(s):**	2024-11-21	**Work Order(s):**		RW21 LTM 2024 Quarter 4	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather(°F):	RAIN, T:46.36 °F, rH:90%, Clouds: 100%, Wind:12.66mph N-NE			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	233.00-243.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	43.46	**Total Depth (ft-bmp):**	248	**Water Column(ft):**	204.54	**Liters in Well:**	505.44
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:15	**Total Volume Purged (liters):**	25	**Sample ID:**	MW-109-3	**Sample Time:**	10:10
Purge End Time:	10:05	**Well Volumes Purged (total):**	0.05	**Replicate Type / Replicate ID:**	**Duplicate** / REP112124AH1	**Water Quality Meter/ ID:**	YSI ProPlus,Hach 2100-Q / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:15	0	400	mL/min	43.49	6.21	0.465	5.18	7.99	14.3	194.2	Clear	No Odor
09:20	5	400	mL/min	43.49	4.4	0.396	5.72	1.18	15.2	234.1	Clear	No Odor
09:25	10	400	mL/min	43.5	4.43	0.397	4.66	1.64	15.2	192.8	Clear	No Odor
09:30	15	400	mL/min	43.5	4.48	0.397	5.2	2.32	15.3	212	Clear	No Odor
09:35	20	400	mL/min	43.5	4.5	0.397	5.17	2.32	15.3	212.5	Clear	No Odor
09:40	25	400	mL/min	43.49	4.55	0.396	4.3	2.32	15.3	217	Clear	No Odor
09:45	30	400	mL/min	43.49	4.58	0.395	9.41	2.31	15.4	223.7	Clear	No Odor
09:50	35	400	mL/min	43.48	4.58	0.394	7.3	2.28	15.3	230	Clear	No Odor
09:55	40	400	mL/min	43.48	4.58	0.394	5.77	2.26	15.4	231.7	Clear	No Odor
10:00	45	400	mL/min	43.48	4.59	0.394	4.37	2.25	15.4	236.1	Clear	No Odor
10:05	50	400	mL/min	43.48	4.59	0.394	4.12	2.23	15.5	239.1	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	4	1 L	None
VOCs (SW8260)	Clear Glass	6	40 mL	HCL

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

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Groundwater Sampling Log

Page 1 of 1

Project No. ~~3022 NB-NAV12~~ 30223092.P512 Well ID MW-111-4 Date 12/04/24

Project Name/Location ~~GSE 04 2024 GW Sampling~~ RW-21 LTM GW Sampling Weather 30°F, Sunny

Measuring Pt. Description TOC Screen Interval (ft-bmp) 448-468 Casing Diameter (in.) 4 Well Material X PVC ___ SS

Static Water Level (ft-bmp) 40.95 Total Depth (ft-bmp) 473 Water Column/ Gallons in Well 417.05ft/271.0825gal

MP Elevation — Pump Intake (ft-bn mp screen Purge Metho non-dedicated Peristaltic Submersib Geosub Other Sample Method LF

Pump On/Off 0902 Volume Purged (gal) 20L

Sample Time: Label MW-111-4 Start 0955 End 1002 Replicate/ Code No. N/a Sampled by ANH KK

PID: 1.8 WH/0.0 BZ

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
0903	0	350	40.95	0	8.65	0.163		6.70	11.2	106.2	Clear	none
0908	5	350		1.75	5.59	0.184	8.11	5.43	14.8	184.4	"	"
0913	10	350	40.95	3.5	4.55	0.186		4.94	15.2	275.5	"	"
0918	15	350		5.25	4.56	0.126	4.22	5.03	15.3	288.7	"	"
0923	20	350	40.95	7.0	4.52	0.180		4.84	15.3	292.2	"	"
0928	25	350		8.75	4.50	0.180	3.53	4.62	15.3	295.6	"	"
0933	30	350	40.95	10.50	4.48	0.181		4.64	15.2	299.4	"	"
0938	35	350		12.25	4.47	0.181	1.96	4.60	15.4	303.2	"	"
0943	40	350	40.95	14.0	4.45	0.181	2.18	4.57	15.4	306.7	"	"
0948	45	350		15.75	4.45	0.182	3.71	4.53	15.5	307.1	"	"
0953	50	350	40.95	17.5	4.45	0.182	2.48	4.52	15.4	304.6	"	"

TV

Constituents Sampled	Container	Number	Preservative
8270 D SIM	1L Amber	2	none
8260 C VOC's	glass vial	3	HCL

Notes:
458ft - 40.95ft = 417.05ft X 0.006gal/ft = 2.5023L X 3.785 = 9.5L

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47; 1/2" = 0.01; (3/8" = 0.006)

Well Information

Well Location: MTA parking Lot
Condition of Well: Fair
Well Completion: Flush Mount / Stick Up
Well Locked at Arrival: (Yes) / No
Well Locked at Departure: Yes / No
Key Number To Well: n/a

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Groundwater Sampling Log

Project No. 30223092.PSSI2 | Well ID MW-116-5 | Date 11/22/2024

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring | Weather 39°F | windy

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bls): 570 - 590 | Casing Diameter (in.): 4 | Well Material: x PVC, ___ SS

Static Water Level (ft-bmp): 40.87 | Total Depth (ft-bls): 595 | Water Column/ Gallons in Well: 554.13ft / 354.6gal

MP Elevation: NM | Pump Intake (ft-bls): 482 (packer 480) | Purge Method: Peristaltic ___ / Submersib Dedicated / Other ___ | Sample Method: 3 Well Volume Below Packer

Pump On/Off: 0915 / 1040 | Volume Purged (gal): 270

Sample Time: Label MW-116-5 | Start 1030 | End 1040 | Replicate/ Code No.: MS/MSD | Sampled by: KK, AWH

PID: 0.0 ppm

	Time	Minutes Elapsed	Rate (~~mL/min~~)	Depth to Water (ft)	Volume Purged (G)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
												Color	Odor
	0910	0	3.5 gal	40.13	0	4.98	0.097	2.35	6.64	14.1	275.1	clear	None
* 1WV	0939	23	3.5 gal	40.70	80.5	5.41	0.085	2.60	8.56	13.1	302.2	clear	None
* 2WV	1002	46	3.5 gal	40.70	161	5.06	0.092	1.90	8.15	12.8	321.2	clear	None
* 3WV	1025	69	3.5 gal	40.70	242	4.68	0.093	2.31	2.95	12.7	255.8	clear	None

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270DSIM	1 L glass amber bottle	2	None

Notes:

Packer Pressure Equation: ((Depth to packer - static water level) x 0.43 PSI/ft) +50 PSI 480ft - 40.87ft = 439.13ft x 0.43 = 188.8 +50 = 238

1 ≈ 240

Volume Equation: ((Total depth - packer depth) x 0.65 gal/ ft) + ((Midscreen depth - static water level depth) x 0.01 gal/ft)

(595 - 480 = 115 x 0.65) 75 + (590 - 40.87 = 549.13 x 0.01 = 5.49 gal = 80.5 gal

NEED ROAD TRAFFIC CONTROL SIGNS* *CONE OFF EARLY OR DAY BEFORE

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot						
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47	3/8" = 0.006
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	1/2" = 0.01	

Well Information

Well Location:	150 North Herman Ave, Bethpage, NY	Well Locked at Arrival:	Yes / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	Yes / No
Well Completion:	**Flush Mount** / Stick Up	Key Number To Well:	N/A

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Groundwater Sampling Log

Project No. 30223092.PSSI2 | Well ID MW-117-5 | Date 12/9/2024

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring | Weather 45°F/overcast

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bls): 737 - 757 | Casing Diameter (in.): 4 | Well Material: x PVC, SS

Static Water Level (ft-bmp): 39.99 | Total Depth (ft-bls): 762 | Water Column/Gallons in Well: 722.01ft/469.3 gal

MP Elevation: NM | Pump Intake (ft-bls): 502 (packer 500) | Purge Method: Peristaltic, Submersib Dedicated, Other | Sample Method: 3 Well Volume Below Packer

Pump On/Off: 0905/1200 | Volume Purged (gal): 550

Sample Time: Label MW-117-5; Start 1155; End 1200 | Replicate/Code No.: N/A | Sampled by: KK, ANH

PID: 0.0 ppm

	Time	Minutes Elapsed	Rate (~~ml/min~~) gal/min	Depth to Water (ft)	Volume Purged (G)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
*1WV	0906	0	5	39.78	0	6.28	0.060	21.2	11.69	13.37	142.0	clear	None
	0937	31	5	39.79	172	5.40	0.057	9.70	7.00	13.50	228.8	clear	None
*2WV	1008	62	5	39.79	344	5.80	0.061	+++	11.01	13.11	307.1	cloudy	None
*3WV	1150	164	5	39.78	530	4.95	0.057	120	7.09	13.04	242.8	cloudy	None

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270DSIM	1 L glass amber bottle	2	None

Notes: * pause pump @ 1008 for discharge
* resume purge @ 1110. NL is 39.78 ft

Packer Pressure Equation: ((Depth to packer - static water level) x 0.43 PSI/ft) +50 PSI 500ft - 39.99ft = 460.01ft x 0.43 = 197.8 + 50 = 250

Volume Equation: ((Total depth - packer depth) x 0.65 gal/ ft) + ((Midscreen depth - static water level depth) x 0.01 gal/ft)

762ft - 500ft = 262ft x 0.65 = 170.3 gal | 757 - 39.99 = 717.01 x 0.01 = 7.17 gal | 510.9 gal Total 3WV

NEED ROAD TRAFFIC CONTROL SIGNS* *CONE OFF EARLY OR DAY BEFORE

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot						
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47	3/8" = 0.006
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	12" = 0.01	

Well Information

Well Location:	Crestline Park, Bethpage, NY (approx. 24ft W/NW off NW corner of playgrpund fence)	Well Locked at Arrival:	Yes / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	Yes / No
Well Completion:	**Flush Mount** / Stick Up	Key Number To Well:	contact town

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Groundwater Sampling Log

Project No. 30223092.PSSI2 | Well ID MW-118-S ~~MW-117-S~~ | Date 11/25/2024

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring | Weather 40°F / clear

Well Material x PVC ___ SS

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bls): 718 - 738 ~~737 - 757~~ | Casing Diameter (in.): 4

Static Water Level (ft-bmp): 34.45 | Total Depth (ft-bls): ~~762~~ 750 ~~505~~ | Water Column/ Gallons in Well: 715.55ft / 465.10gal

MP Elevation: NM | Pump Intake (ft-bls): ~~502~~ (packer 500) | Purge Method: Peristaltic ___ Submersib Dedicated Other ___ | Sample Method: 3 Well Volume Below Packer

Pump On/Off: 0907 / 1200 | Volume Purged (gal): 565

Sample Time: Label MW-118-S Start 1155 End 1200 | Replicate/ Code No.: N/A | Sampled by: KF, ANH

PID: 0.0 ppm

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (G)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
0908	0	6 gal	34.34	0	8.13	0.089	12.0	9.70	13.5	198.4	clear	None
* 1NV 0938	30	5 gal	34.34	180	6.46	0.051	7.14	7.78	12.6	252.3	clear	None
* 2NV ~~1013~~ 1003	~~66~~ 56	5 gal	34.34	350	5.55	0.017	6.05	10.59	12.6	234.6	clear	None
~~1050~~	—	—	36.11	—	—	—	—	—	—	—	—	—
resume purge → 1052	* pause pump to	reinflate	packer	—	—	—	—	—	—	—	—	—
1057	* resume	35.60	—	—	—	0.037	—	—	—	—	—	—
* 3WV 1150	162	5 gal	35.54	555	5.02		7.12	8.29	12.5	241.4	clear	None

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270DSIM	1 L glass amber bottle	2	None

Notes: * pause pump @ 1052 to reinflate packer

Packer Pressure Equation: ((Depth to packer - static water level) x 0.43 PSI/ft) +50 PSI 500ft - 34.45ft = 465.55ft x 0.43 = 200 + 50 = 250psi

Volume Equation: ((Total depth - packer depth) x 0.65 gal/ ft) + ((Midscreen depth - static water level depth) x 0.01 gal/ft)

750ft - 500ft = 250ft x 0.65gal/ft = 162.5gal + (738ft - 34.45) x 0.01gal/ft = 7.03 + 162.5 = 170gal Total

NEED ROAD TRAFFIC CONTROL SIGNS* *CONE OFF EARLY OR DAY BEFORE

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot						
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47	3/8" = 0.006
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	1/2" = 0.01	

Well Information

Well Location:	Crestline Park, Bethpage, NY (approx. 24ft W/NW off NW corner of playgrpund fence)	Well Locked at Arrival:	(Yes) / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	(Yes) / No
Well Completion:	**Flush Mount** / Stick Up	Key Number To Well:	N/A

ARCADIS Design & Consultancy for natural and built assets

Groundwater Sampling Log

Project No. 30223092.PSS12 | Well ID RW-21_MW-1 | Date 11/20/24

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring | Weather 50°F / clear

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bmp): 615 - 625 | Casing Diameter (in.): 4 | Well Material: x PVC, ___ SS

Static Water Level (ft-bmp): 43.92 | Total Depth (ft-bls): 630 | Water Column/Gallons in Well: 586.08 ft / 380.95 gal

MP Elevation: NM | Pump Intake (ft-bls): Midscreen | Purge Method: Non-dedicated Bladder Pump ___, Peristaltic ___, Submersible X, Other ___ | Sample Method: Micropurge/Low-flow 1 hour + tubing volume

Pump On/Off: 0855 / 1023 | Volume Purged (gal): 35 L

Sample Time: Label RW-21_MW-1, Start 1018, End 1023 | Replicate/Code No.: N/A | Sampled by: KK, ANH

PID: 0.0 ppm

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (gal)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance: Color	Appearance: Odor
0856	0	300	44.89	0	7.95	0.177	5.18	5.76	14.9	160.7	Clear	None
0901	5	300	44.18	1.5	7.42	0.165		1.77	15.0	171.7	"	"
0906	10	300	44.18	3.0	7.34	0.163		1.57	15.1	175.9		
0911	15	300	44.18	4.5	6.89	0.162	4.60	1.59	15.2	187.7		
0916	20	400	44.16	6.5	6.42	0.160		1.68	15.2	196.6		
0921	25	400	44.16	8.5	6.00	0.161		1.70	15.3	201.8		
0926	30	400	44.16	10.5	5.91	0.159	9.20	1.72	15.3	202.9		
0931	35	400	44.15	12.5	5.84	0.157		1.76	15.3	205.2		
0936	40	400	44.14	14.5	5.80	0.156		1.77	15.3	207.3		
0941	45	400	44.14	16.5	5.77	0.155	7.25	1.78	15.3	210.4		
0946	50	400	44.14	18.5	5.74	0.154		1.78	15.3	213.9		
0951	55	400	44.14	20.5	5.73	0.154		1.78	15.4	215.6		
TV 0956	60	400	44.14	22.5	5.72	0.153	6.50	1.78	15.4	217.5		
1001	65	400	44.13	24.5	5.71	0.152	5.08	1.79	15.4	220.3		
1006	70	400	44.13	26.5	5.69	0.152	4.33	1.81	15.4	222.2		
1011	75	400	44.13	28.5	5.68	0.152	4.85	1.81	15.5	223.2		

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270D SIM	1 L glass amber bottle	2	None

Notes:

Tubing Volume Equation: Volume (gal)= (Midscreen depth - static water level depth) x tubing size conversion factor (gal/ft)

TV= 620ft - 43.92ft = 576.08ft x 0.01gal/ft = 5.76gal x 3.785 = 21.8 L

*Field Blank Required ***REQUIRES BASIN KEY***

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47; 1/2" = 0.01; 3/8" = 0.006

Well Information

Well Location:	Central Ave Basin - across from S. Perishing Ave, Bethpage, NY	Well Locked at Arrival:	Yes / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	Yes / No
Well Completion:	**Flush Mount** / Stick Up	Key Number To Well:	2035

ARCADIS Design & Consultancy for natural and built assets

Groundwater Sampling Log

Project No. 30223092.PSS12 | Well ID RW-21_MW-1 | Date 11/20/2024

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring | Weather 50°F | Clear

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bmp): 615 - 625 | Casing Diameter (in.): 4 | Well Material: x PVC, SS

Static Water Level (ft-bmp): 43.92 | Total Depth (ft-bls): 630 | Water Column/ Gallons in Well: 586.08 ft / 380.95 gal

MP Elevation: NM | Pump Intake (ft-bls): Midscreen | Purge Method: Non-dedicated Bladder Pump; Peristaltic; Submersible X; Other | Sample Method: Micropurge/Low-flow 1 hour + tubing volume

Pump On/Off: 0855 / 1023 | Volume Purged (gal): 35L

Sample Time: Label RW-21_MW-1 | Start 1018 | End 1023 | Replicate/ Code No.: N/A | Sampled by: KF, ANH

PID: 0.0 ppm

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (gal)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
1016	80	400	44.13	30.5	5.67	0.151	3.25	1.81	15.5	225.8	clear	None

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270D SIM	1 L glass amber bottle	2	None
TM			

Notes:

Tubing Volume Equation: Volume (gal)= (Midscreen depth - static water level depth) x tubing size conversion factor (gal/ft)

TV = 620ft - 43.92 ft = 576.08ft x 0.01gal/ft = 5.76gal x 3.785 = 21.8L

*Field Blank Required ***REQUIRES BASIN KEY***

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot						
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47	3/8" = 0.006
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	1/2" = 0.01	

Well Information

Well Location:	Central Ave Basin - across from S. Perishing Ave, Bethpage, NY	Well Locked at Arrival:	Yes / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	Yes / No
Well Completion:	**Flush Mount** / Stick Up	Key Number To Well:	2035

Groundwater Sampling Form

Location ID:	RW-21_MW-11	**Date(s):**	2024-11-26	**Work Order(s):**		RW21 LTM 2024 Quarter 4	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather(°F):	RAIN, T:53.91 °F, rH:93%, Clouds: 100%, Wind:8.99mph S-SW			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	638.00-648.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	46.71	**Total Depth (ft-bmp):**	653	**Water Column(ft):**	606.29	**Liters in Well:**	1498.22
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	10:50	**Total Volume Purged (liters):**	25	**Sample ID:**	RW-21_MW-11	**Sample Time:**	11:45
Purge End Time:	11:40	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	NA / NA	**Water Quality Meter/ ID:**	YSI ProPlus / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:50	0	350	mL/min	46.91	5.72	0.067	4.35	4.64	14.77	220.1	Clear	No Odor
10:55	5	400	mL/min	46.93	5.68	0.067	4.5	30.9	14.97	222.2	Clear	No Odor
11:00	10	400	mL/min	46.95	5.7	0.063	7.3	3.78	14.97	223.6	Clear	No Odor
11:05	15	400	mL/min	46.95	5.7	0.059	12.3	4.55	14.97	225.8	Clear	No Odor
11:10	20	400	mL/min	46.96	5.66	0.059	8.25	4.96	14.99	228.3	Clear	No Odor
11:15	25	400	mL/min	49.89	5.6	0.062	11.5	5.24	15.05	233.7	Clear	No Odor
11:20	30	400	mL/min	46.89	5.58	0.063	12.2	5.16	15.05	234.2	Clear	No Odor
11:25	35	400	mL/min	46.89	5.56	0.056	7.5	5.06	15.11	236.2	Clear	No Odor
11:30	40	400	mL/min	46.89	5.51	0.056	8.7	4.98	15.1	237.7	Clear	No Odor
11:35	45	400	mL/min	46.89	5.5	0.056	12.2	4.84	15.09	239.7	Clear	No Odor
11:40	50	400	mL/min	46.89	5.47	0.056	11.2	4.68	15.11	242.2	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCL

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

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Groundwater Sampling Log

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Project No. 30223092.PSS12
Project Name/Location RW-21 LTM GW Sampling
Well ID RW-21_MW-12-21
Date 12/10/2024
Weather 40°F, Cloudy
Measuring Pt. Description Top of Casing
Screen Interval (ft-bmp) 415-425
Casing Diameter (in.) 2"
Well Material x PVC ___ SS
Static Water Level (ft-bmp) 19.98
Total Depth (ft-bmp) 430
Water Column/ Gallons in Well 410.02ft | 65.6gal
MP Elevation —
Pump Intake (ft-bmp) Midscreen
Purge Method: Non-dedicated ___ Peristaltic ___ Submersible Grundfos ___ Other
Sample Method LF TV
Pump On/Off 1429 | 1534
Volume Purged (gal) 27L
Sample Time: Label RW21MW-12-1
Start 1532
End 1538
Replicate/ Code No. N/A
Sampled by KK, ANH

PID: 0.1 ppm (NH) 0.0 ppm (IBT)

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
1430	0	~~300~~ 400	20.03	0	7.52	0.152	321.7	5.44	13.75	98.9	Clear	None
1435	5	400		2.0	6.21	0.150	83.8	2.2	13.23	102.7	Cloudy	"
1440	10	400	19.20	4.0	5.31	0.149		0.64	12.56	134.0	"	"
1445	15	400	19.17	6.0	5.35	0.151	62.3	0.56	12.59	137.2	"	"
1450	20	400	19.15	8.0	5.36	0.151		0.56	12.26	138.6		
1455	25	400		10.0	5.40	0.153		0.52	13.23	142.7		
1500	30	400		12.0	5.41	0.157		0.41	13.45	142.9		
1505	35	400		14.0	5.41	0.158		0.36	13.58	144.1		
TV 1510	40	400	19.19	16.0	5.41	0.158		0.35	13.86	144.2		
1515	45	400		18.0	5.42	0.159		0.33	13.76	145.3		
1520	50	400	19.20	20.0	5.44	0.160		0.30	14.03	145.7		
1525	55	400	19.21	22.0	5.43	0.160		0.30	14.25	146.4		
1530	60	400	19.22	24.0	5.40	0.159		0.28	14.29	147.9		

Constituents Sampled	Container	Number	Preservative
VOCs 8260	40 mL glass vial	3	HCl
1,4- Dioxane 8270 SIM	1 L amber bottle	2	None

Notes:

Tubing Volume Equation: Volume (gal)=(Midscreen depth - static water level depth) x tubing conversion factor (gal/ft)

TV = 420ft - 19.98ft = 400.02ft x 0.01 gal/ft = 4.0gal x 3.785 = 15.14L

NO Turbidity Meter 12-1

*Field Blank Required *Cone off early or day before

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 5" = 1.47; 1/2" = 0.01; 3/8" = 0.006

Well Information

Well Location: ___
Condition of Well: ___
Well Completion: Flush Mount / Stick Up
Well Locked at Arrival: Yes / No
Well Locked at Departure: Yes / No
Key Number To Well: N/A

ARCADIS Design & Consultancy for natural and built assets

Groundwater Sampling Log

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Project No. RW-21_MW-12-2 (30223092.PS512) Well ID RW-21-MW-12-2 Date 12/16/24

Project Name/Location 2024 Q4 RW-21 LTM Weather 30° Overcast

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bmp): 590-600 | Casing Diameter (in.): 2" | Well Material: x PVC, ___ SS

Static Water Level (ft-bmp): 14.90 | Total Depth (ft-bmp): 605 | Water Column/ Gallons in Well: 585.6ft

MP Elevation: | Pump Intake (ft-bmp): Midscreen | Purge Method: Non-dedicated, Peristaltic, Submersible, Other | Sample Method: LF + TV

Pump On/Off: 1301 / 1422 | Volume Purged (gal): 45

Sample Time: Label: RW-21-MW-12-2 | Start: 1418 | End: 1422 | Replicate/ Code No.: N/A | Sampled by: KK, ANH, BW

PID: 0.6 ppm

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
1301	0	800		0	5.14	0.012	6.5	9.68	12.96	140.4	Clear	none
1306	5	500	19.41	3.75	5.01	0.014	[redacted]	9.48	13.06	136.2	"	"
1311	10	500		5.75	5.48	0.018		1.64	12.80	108.1	"	"
1316	15	500		9.25	5.45	0.018		12.74	12.88	105.4	"	"
1321	20	500	19.45	10.75	5.46	0.001		12.78	12.84	112.3		
1326	25	500		13.25	10.24	0.082	22.6	13.22	12.61	98.1		
1331	30	500		15.75	10.21	0.082		2.21	12.69	95.8		
1336	35	500	19.46	18.25	10.17	0.083	11.6	0.93	12.77	80.3		
1341	40	500		20.75	10.12	0.082		0.83	12.81	75.4		
1346	45	500	19.48	23.25	10.02	0.079	8.5	0.73	12.86	72.7		
1351	50	500		25.75	9.93	0.078		0.58	12.86	69.6		
1356	55	500		28.25	9.87	0.077	5.8	0.59	12.76	68.0		
1401	60	500	19.47	30.75	9.80	0.075	4.7	0.49	12.78	65.7		
1406	65	500	19.48	33.25	9.63	0.073		0.41	12.73	65.6		
1411	70	500	19.48	35.75	9.61	0.072		0.42	12.76	65.4		
1416	75	500	19.48	38.25	9.57	0.072		0.37	12.66	65.0		

*Back in YSI

*TV

Constituents Sampled	Container	Number	Preservative
VOCs 8260	40 mL glass vial	3	HCl
1,4- Dioxane 8270 SIM	1 L amber bottle	2	None

Notes:

Tubing Volume Equation: Volume (gal)=(Midscreen depth - static water level depth) x tubing conversion factor (gal/ft)

595 - 14.90 = 585.6 X 0.01 = 5.75 X 3.785 = 21.84 [redacted]

*Turbidity Meter lamp issue - taking

*Field Blank Required *Cone off early or day before

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot						
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47	3/8" = 0.006
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	12" = 0.01	

Well Information

Well Location:	Rt 135 Side ditch	Well Locked at Arrival:	(Yes) / No
Condition of Well:	good	Well Locked at Departure:	(Yes) / No
Well Completion:	Flush Mount / Stick Up	Key Number To Well:	NA

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Groundwater Sampling Log

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Project No. 30023097.RS12 | Well ID RW-21_MW-13 | Date 12/27/21

Project Name/Location RW-21 LTM GW sampling | Weather 20's, sunny

Measuring Pt. Description: TOC | Screen Interval (ft-bmp): 716-726 | Casing Diameter (in.): 4 | Well Material: X PVC / ___ SS

Static Water Level (ft-bmp): 38.01 | Total Depth (ft-bmp): 731 | Water Column/ Gallons in Well: 682.99 ft / 443.94 gal

MP Elevation: — | Pump Intake (ft-bn): MW screen | Purge Method: non-dedicated Peristaltic / Submersible ~~redflow~~ Geotech / Other | Sample Method: DF

Pump On/Off: 0853 / 0952 | Volume Purged (gal): 24L

Sample Time: Label: RW-21_MW-13 | Start: ~~0945~~ | End: ~~0952~~ | Replicate/ Code No.: n/a

Sampled by: Amit, Siri

PID: 0.0 wH

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
0853	0	500	38.15	0	7.13	0.028		9.38	12.68	246.7	Clear	none
0858	5	500		2.5	6.01	0.027	35.8	6.52	11.29	273.2	"	"
0903	10	500		5.0	5.89	0.025		5.45	10.19	276.0	"	"
0908	15	500	38.19	7.5	5.84	0.031		4.64	9.94	277.9	"	"
0913	20	500		10.0	5.90	0.033	18.6	4.19	9.36	275.0	"	"
0918	25	500		12.5	5.83	0.033		3.59	8.30	274.0	"	"
0923	30	500	38.23	15.0	5.79	0.031		3.51	7.96	273.0	"	"
0928	35	500		17.5	5.64	0.028	17.1	3.26	6.91	277.3	"	"
0933	40	500	34.84	19.25	5.59	0.028	11.9	3.21	7.65	271.6	"	"
0938	45	500	39.99	20.75	5.63	0.027	9.09	3.24	5.65	273.5	"	"
0943	50	500	41.60	21.25	5.65	0.026	14.7	3.29	5.41	277.1	"	"

TV -

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40mL glass vial	3	HCl
1,4 Dioxane 8270D SIM	1L glass amber bottle	2	None

Notes: 731 ft - 38.01 ft = 692.99 ft X 0.006 Gal/Ft = 4.09 X 3.785 = 15.5L

Well Casing Volumes

Gallons/Foot: 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47 | 1/2" = 0.01 | 3/8" = 0.006

Well Information

Well Location: 23 Broadway

Condition of Well: Fair

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Key Number To Well: NA

ARCADIS Design & Consultancy for natural and built assets

Groundwater Sampling Log

Project No. 30223092. PSS12 | Well ID RW-21_MW-15 | Date 12/4/2024

Project Name/Location 2024 Q4 LTM RW-21 | Weather 39°F / clear

Measuring Pt. Description: TOC | Screen Interval (ft-bmp): 676 - 686 | Casing Diameter (in.): 4" | Well Material: X PVC / ___ SS

Static Water Level (ft-bmp): 43.65 | Total Depth (ft-bmp): 691 | Water Column/ Gallons in Well: 647.35ft / 420.7 gal

MP Elevation: — | Pump Intake (ft-bn): ___ | Purge Method: non-dedicated / Peristaltic / Submersib rediflow / Other ___ | Sample Method: LF+TV

Pump On/Off: 1149 / 1310 | Volume Purged (gal): 42 L

Sample Time: Label RW-21_MW-15 | Start 1305 | End 1310 | Replicate/ Code No.: N/A

Sampled by: KK, ANH

PID: 0.2 ppm (WH) 0.0 ppm (BZ)

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
1150	0	500	43.71	0	7.82	0.124	152	8.63	12.0	234.5	cloudy	none
1155	5	500	43.68	2.5	8.57	0.132		4.95	15.3	172.1	"	"
1200	10	500	43.68	5.0	7.11	0.100		7.30	15.7	199.5	"	"
1205	15	500	43.68	7.5	5.55	0.081	63.7	6.17	16.1	233.1	↓	" "
1210	20	500	43.68	10.0	5.23	0.074		5.38	16.0	240.3	↓	" "
1215	25	500		12.5	5.11	0.070		~~8.4~~ 4.80	15.9	245.9	↓	" "
1220	30	500	43.68	15.0	5.07	0.069	35.5	4.59	14.0	249.4	clear	" "
1225	35	500		17.5	5.03	0.068		4.55	16.1	253.8	"	"
1230	40	500	43.72 (2)	20.0	5.01	0.067		4.35	16.0	256.1	↓	↓
1235	45	500	~~43.68~~ 43.73	22.5	5.00	0.067	19.8	4.29	15.8	257.2	↓	↓
TV 1240	50	500		25.0	5.00	0.067		4.22	15.9	261.9	↓	↓
1245	55	500	43.78 (2)	27.5	4.99	0.067		4.18	15.7	264.4	↓	↓
1250	60	500	~~43.78~~ 43.71	30.0	4.98	0.068	20.0	4.13	15.7	264.9	↓	↓
1255	65	500	43.76	32.5	4.97	0.068	9.76	4.11	15.9	260.2	↓	↓
1300	70	500	43.75	35.0	4.97	0.068	9.30	4.11	15.7	257.7	↓	↓

Constituents Sampled	Container	Number	Preservative
1,4 - Dioxane (8270D SIM)	1 L glass bottle	2	None
VOCs USEPA Method 8260C	40 mL glass vial	3	HCl
Total Iron USEPA Method 6010			

Notes:

TV = 681ft - 43.65ft = 637.35ft x 0.01 gal/ft = 6.37 gal x 3.785 = 24.12 L

Well Casing Volumes

Gallons/Foot: 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | ~~3.5" = 0.50~~ 4" = 0.65 | 6" = 1.47 | 1/2" = 0.01 | 3/8" = 0.006

Well Information

Well Location: Arthur & Broadway | Well Locked at Arrival: (Yes) / No

Condition of Well: Good | Well Locked at Departure: ~~Yes~~ / No

Well Completion: Flush Mount / Stick Up | Key Number To Well: N/A

Groundwater Sampling Form

Location ID:	RW-21_MW-16	**Date(s):**	2024-12-26	**Work Order(s):**			12_26_2024 Additional Well Sampling
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather(°F):	CLEAR, T:26.46 °F, rH:79%, Clouds: 0%, Wind:4mph NE			**Field Technician:**			Shirley He
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	636.00-646.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	36.72	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	614.28	**Liters in Well:**	1517.96
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:07	**Total Volume Purged (liters):**	33.2	**Sample ID:**	RW-21_MW-16	**Sample Time:**	10:15
Purge End Time:	10:13	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	NA / NA	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:08	0	700	mL/min	36.73	5.24	0.031	0	6.5	13.18	143.6	Clear	No Odor
09:13	5	500	mL/min	36.73	5.03	0.03	0	1.93	12.08	157.5	Clear	No Odor
09:18	10	500	mL/min	36.73	4.96	0.03	0	0.96	12.5	161.2	Clear	No Odor
09:23	15	500	mL/min	36.73	4.91	0.03	0	0.88	12.57	159.8	Clear	No Odor
09:28	20	500	mL/min	36.73	4.92	0.03	0	0.75	12.75	150.6	Clear	No Odor
09:33	25	500	mL/min	36.73	4.94	0.031	0	0.65	12.6	142.5	Clear	No Odor
09:38	30	500	mL/min	36.73	4.9	0.031	0	0.61	12.64	144.2	Clear	No Odor
09:43	35	500	mL/min	36.73	4.84	0.031	0	0.51	12.62	146.8	Clear	No Odor
09:48	40	500	mL/min	36.72	4.89	0.031	0	0.47	12.51	150.1	Clear	No Odor
09:53	45	500	mL/min	36.73	4.87	0.031	0	0.45	12.49	152.5	Clear	No Odor
09:58	50	500	mL/min	36.73	4.93	0.031	0	0.43	12.41	153.6	Clear	No Odor
10:03	55	500	mL/min	36.73	4.84	0.031	0	0.44	12.49	154.7	Clear	No Odor
10:08	60	500	mL/min	36.73	4.84	0.031	0	0.43	12.29	155.3	Clear	No Odor
10:13	65	500	mL/min	36.75	4.84	0.031	0	0.38	12.3	155.5	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCL

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

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Groundwater Sampling Log

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Project No. 30273092.PSS12 | Well ID RW-21-MW-2 | Date 12/03/24

Project Name/Location RW-21 LTM 2024 GW Sampling | Weather 30°F, Clear

Measuring Pt. Description TOC | Screen Interval (ft-bmp) 600-610 ft | Casing Diameter (in.) 4 in | Well Material X PVC ___ SS

Static Water Level (ft-bmp) 40.02 Ft | Total Depth (ft-bmp) 615 ft | Water Column/ Gallons in Well 584.98 Ft / 367.237 gal

MP Elevation — | Pump Intake (ft-bn midscreen | Purge Metho non-dedicated

Pump On/Off 1013/1131 | Volume Purged (gal) 33L | Peristaltic | Submersib ~~redflow~~ Geosub | Other | Sample Method LF

Sample Time: Label RW-21-MW-2 | Start 1125 | End 1131 | Replicate/ Code No. N/A | Sampled by AMH

PID: 0.7 wtl / 0.0 BZ

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
1013	0	450	40.21	0	6.10	0.172		2.85	14.8	255.8	Clear	none
1018	5	450		2.25	6.56	0.168	7.94	0.51	14.2	231.2	"	"
1023	10	450	40.23	4.50	6.79	0.167		0.39	14.6	209.1	"	"
1028	15	450		6.75	6.14	0.168	7.08	0.33	14.5	198.1	"	"
1033	20	450	40.15	9.0	5.73	0.176		0.51	14.7	197.8	"	"
1038	25	450		11.25	5.36	0.174	32.8	0.79	14.8	201.3	"	"
1043	30	450	40.18	13.50	5.27	0.173		0.85	14.7	207.8	"	"
1048	35	450		15.75	5.21	0.171	23.9	0.89	14.5	215.0	"	"
1053	40	450	40.19	18.0	5.17	0.170		0.92	14.8	220.3	"	"
1058	45	450		20.25	5.15	0.169		0.95	14.7	224.3	"	"
1103	50	450	40.19	22.50	5.14	0.168	16.3	0.95	14.7	227.3	"	"
1108	55	450	40.19	24.75	5.12	0.167	9.17	0.96	14.6	229.5	"	"
1113	60	450	40.20	27.0	5.11	0.167	11.9	0.97	14.8	236.4	"	"
1118	65	450	40.18	29.25	5.10	0.167	12.6	0.97	14.6	238.9	"	"
1123	70	450	40.18	31.50	5.09	0.166	12.7	0.98	14.7	240.7	"	"

+V

Constituents Sampled	Container	Number	Preservative
8270D SIM	1L Amber bottle	2	None
~~8260C~~ VOCs	Glass vial	3	HCl

Notes: 605 Ft − 40.02 Ft = 564.98 Ft X 0.01 = 5.6498 Gal ~~X~~ X 3.785 = 21.4

Well Casing Volumes

Gallons/Foot: 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47 | 12" = 0.04 | 3/8" = 0.006

Well Information

Well Location: Stewart / Central Guard booth Lot

Condition of Well: Good

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Key Number To Well: N/A

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Groundwater Sampling Log

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Project No. ~~30223~~ 30223282.0552 Well ID RW-21_MW-3-1 Date 11/26/24

Project Name/Location ~~OU2 GWTP GW Sampling~~ RW-21 LTM Weather Sook, rainy

Measuring Pt. Description TOC | Screen Interval (ft-bmp) 556-566 | Casing Diameter (in.) 4 | Well Material X PVC ___ SS

Static Water Level (ft-bmp) 49.46 | Total Depth (ft-bmp) 571 | Water Column/ Gallons in Well 521.54ft / 339.00 Gal

MP Elevation — | Pump Intake (ft-bn midscreen | Purge Metho non-dedicated / Peristaltic / Submersib Geosub / Other | Sample Method LF ANM

Pump On/Off 0854/1106 | Volume Purged (gal) 27L

Sample Time: Label RW-21_MW-3-1 | Start 1000 | End 1106 | Replicate/ Code No. N/A | Sampled by LF ANM

PID: 0.6 wk/0.0 Bz

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
0856	0	400	49.57	0	5.60	0.118		7.92	15.06	153.9	clear	none
0901	5	400		2.0	5.57	0.119	1.13	7.64	15.07	187.1	"	"
0906	10	400	49.57	4.0	5.33	0.114		5.54	14.82	168.4	"	"
0911	15	400		6.0	5.04	0.129		4.05	14.96	179.7	"	"
0916	20	400	49.56	8.0	4.96	0.136	2.81	3.14	14.88	195.4	"	"
0921	25	400		10.0	4.83	0.135		3.03	15.02	201.9	"	"
0926	30	400		12.0	4.87	0.133		2.80	15.01	212.1	"	"
0931	35	400	49.57	14.0	4.86	0.133	1.44	2.73	15.07	217.9	"	"
0936	40	400	49.57	16.0	4.89	0.131	1.61	2.66	15.06	226.6	"	"
0941	45	400	49.58	18.0	4.82	0.131	1.03	2.62	15.05	229.0	"	"
0946	50	400	49.58	20.0	4.89	0.131	1.41	2.57	15.01	237.2	"	"
0951	55	400	49.57	22.0	4.89	0.131	0.97	2.54	15.11	243.3	"	"
0956	60	400	49.5	24.0	4.60	0.131	1.28	2.50	15.12	245.1	"	"

TV –

Constituents Sampled	Container	Number	Preservative
1,4 D 8270 DSIM	1L Amber	2	none
VOCs 8260C	9/40ssvial	3	HCl
Total Iron	1-liter bottle	1	HNO3

Notes:

561 - 49.46 = 511.54 X 0.006 = 3.06924 X 3.785 = 11.62L

Well Casing Volumes

Gallons/Foot: 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47 | 1/2" = 0.01 | 3/8" = 0.006

Well Information

Well Location: Seaman Ave St. Martin Church

Condition of Well: Good

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Key Number To Well: N/A

Groundwater Sampling Form

Location ID:	RW-21_MW-3-2	**Date(s):**	2024-11-26	**Work Order(s):**		RW21 LTM 2024 Quarter 4	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather(°F):	RAIN, T:55.02 °F, rH:92%, Clouds: 100%, Wind:9.22mph E-SE			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	595.00-605.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	49.86	**Total Depth (ft-bmp):**	610	**Water Column(ft):**	560.14	**Liters in Well:**	1384.17
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:55	**Total Volume Purged (liters):**	40	**Sample ID:**	RW-21_MW-3-2	**Sample Time:**	10:05
Purge End Time:	10:00	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	**Duplicate** / REP112624KK1	**Water Quality Meter/ ID:**	YSI ProPlus / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:55	0	500	mL/min	49.95	4.7	0.039	1.25	6.56	15.4	214.9	Clear	No Odor
09:00	5	500	mL/min	49.95	5.54	0.035	0.9	2.56	15.4	236	Clear	No Odor
09:05	10	500	mL/min	49.96	5.19	0.042	1.13	2.99	15.2	241.5	Clear	No Odor
09:10	15	500	mL/min	49.96	5.13	0.037	3.2	3.89	15.1	200.9	Clear	No Odor
09:15	20	500	mL/min	49.97	5.1	0.035	1.6	4.25	15.1	202.3	Clear	No Odor
09:20	25	500	mL/min	49.97	5.09	0.034	0.91	4.34	15.1	205.5	Clear	No Odor
09:25	30	500	mL/min	49.97	5.08	0.033	1.7	4.43	15.1	211.9	Clear	No Odor
09:30	35	500	mL/min	49.98	5.07	0.033	1.9	4.43	15.3	212.3	Clear	No Odor
09:35	40	500	mL/min	49.98	5.07	0.033	1.3	4.42	15.3	214.1	Clear	No Odor
09:40	45	500	mL/min	49.98	5.07	0.033	0.96	4.42	15.1	216.3	Clear	No Odor
09:45	50	500	mL/min	49.98	5.05	0.033	0.92	4.39	15	220.3	Clear	No Odor
09:50	55	500	mL/min	49.98	5.05	0.033	0.96	4.36	15.3	224.2	Clear	No Odor
09:55	60	500	mL/min	49.98	5.05	0.033	1.1	4.36	15.1	216.1	Clear	No Odor
10:00	65	500	mL/min	49.98	5.04	0.033	1.12	4.35	15	216.3	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	4	1 L	None
VOCs (SW8260)	Clear Glass	6	40 mL	HCL

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form

Location ID:	RW-21_MW-4	**Date(s):**	2024-11-21	**Work Order(s):**		RW21 LTM 2024 Quarter 4	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather(°F):	CLOUDS, T:47.88 °F, rH:91%, Clouds: 100%, Wind:12.66mph N-NE			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	369.00-384.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	42.63	**Total Depth (ft-bmp):**	389	**Water Column(ft):**	346.37	**Liters in Well:**	855.92
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	10:59	**Total Volume Purged (liters):**	25	**Sample ID:**	RW-21_MW-4	**Sample Time:**	11:45
Purge End Time:	11:44	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	NA / NA	**Water Quality Meter/ ID:**	YSI ProPlus,Hach 2100-Q / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:59	0	450	mL/min	43.12	5.57	0.224	7.09	8.46	14.6	233.7	Clear	No Odor
11:04	5	450	mL/min	43.11	4.66	0.238	7.1	1.75	15.2	267.6	Clear	No Odor
11:09	10	450	mL/min	43.11	4.59	0.235	12.5	0.7	15.2	292.3	Clear	No Odor
11:14	15	450	mL/min	43.11	4.58	0.236	13.5	2.6	15.4	311.5	Clear	No Odor
11:19	20	450	mL/min	43.11	4.58	0.239	12.7	3.9	15.2	325.9	Clear	No Odor
11:24	25	450	mL/min	43.11	4.58	0.239	7.19	4.34	15.2	332.1	Clear	No Odor
11:29	30	400	mL/min	43.09	4.57	0.239	7.01	4.5	15.4	336.7	Clear	No Odor
11:34	35	400	mL/min	43.08	4.57	0.24	7.65	4.65	15.1	339.7	Clear	No Odor
11:39	40	400	mL/min	43.08	4.56	0.24	7.22	4.74	15.2	341.7	Clear	No Odor
11:44	45	400	mL/min	43.08	4.56	0.24	5.6	4.81	15.2	342.6	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCL

Comments: None

Well Information:

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Log

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Project No. ~~3029-4125 NAVY~~ 30273092.PS12 Well ID RW-21-MW-5-1

Project Name/Location ~~OU2 Q4 2024 GW Sampling~~ RW-21 LTM

Date 12/27/24

Weather 40°F, windy

Well Material X PVC ___ SS

Measuring Pt. Description TOC

Screen Interval (ft-bmp) 300-310

Casing Diameter (in.) 2in

Static Water Level (ft-bmp) 37.77

Total Depth (ft-bmp) 315

Water Column/ Gallons in Well 267.23 ft / 173.6930 gal

MP Elevation ~

Pump Intake (ft-bn midscreen

Purge Method non-dedicated / Peristaltic / Submersib Geosub / Other

Sample Method LF

Pump On/Off 1158/1257

Volume Purged (gal) 23L

Sample Time: Label RW-21_MW-5-1 Start 1240 End 1257

Replicate/ Code No. N/A

Sampled by AMH

PID: 0.4 WH / 0.0 BZ

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
1158	0	400	37.86	0	6.27	0.123		10.67	12.42	146.9	clear	none
1203	5	400	37.86	2.0	5.37	0.080	5.07	1.85	12.52	171.3	"	"
1208	10	400	37.87	4.0	5.52	0.078		1.81	12.70	173.9	"	"
1213	15	400	37.87	6.0	5.53	0.082		2.59	12.81	181.5	"	"
1218	20	400	37.86	8.0	5.40	0.082	16.6	2.08	13.05	182.7	"	"
1223	25	400	37.85	10.0	5.34	0.083		2.76	12.71	184.0	"	"
1228	30	400	37.86	12.0	5.42	0.083		2.83	12.85	186.6	"	"
1233	35	400	37.87	14.0	5.36	0.083	8.18	2.85	12.83	186.1	"	"
1238	40	400	37.87	16.0	5.35	0.083	6.47	2.86	12.81	184.1	"	"
1243	45	400	37.87	18.0	5.32	0.083	5.50	2.84	12.63	190.1	"	"
1246	50	400	37.87	20.0	5.36	0.083	4.98	2.82	12.76	191.0	"	"

TV – Sample

Constituents Sampled	Container	Number	Preservative
1,4 Dioxane 8270.D SIM	1L Amber	2	none
VOC's	glass VOA	3	HCl

Notes: 305 - 37.77 = 267.23 X 0.01 = 2.67 X 3.785 = 10.1L

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47; 1/2" = 0.01; 3/8" = 0.006

Well Information

Well Location: 1 Ramsdo St.

Condition of Well: Good

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Key Number To Well: n/a

Groundwater Sampling Form

Location ID:	RW-21_MW-5-2	**Date(s):**	2024-11-22	**Work Order(s):**		RW21 LTM 2024 Quarter 4	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather(°F):	CLOUDS, T:41.29 °F, rH:78%, Clouds: 100%, Wind:13mph S-SW			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	560.00-570.00	**Casing Diameter (in):**	2.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	41.21	**Total Depth (ft-bmp):**	575	**Water Column(ft):**	533.79	**Liters in Well:**	329.76
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	11:57	**Total Volume Purged (liters):**	35	**Sample ID:**	RW-21_MW-5-2	**Sample Time:**	13:05
Purge End Time:	13:02	**Well Volumes Purged (total):**	0.11	**Replicate Type / Replicate ID:**	NA / NA	**Water Quality Meter/ ID:**	YSI ProPlus / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:57	0	500	mL/min	41.32	11.33	1.665	12.3	2.52	14.5	78.9	Clear	No Odor
12:02	5	500	mL/min	41.32	11.45	1.226	15.5	0.53	13.3	21.7	Clear	No Odor
12:07	10	500	mL/min	41.32	11.4	1.185	24.8	0.39	14.2	9	Clear	No Odor
12:12	15	500	mL/min	41.31	11.68	2.622	27.3	0.39	13.9	-12.7	Clear	No Odor
12:17	20	500	mL/min	41.31	11.85	3.059	24.4	0.42	13.6	-48.9	Clear	No Odor
12:22	25	400	mL/min	41.3	11.96	3.004	16.6	0.47	12.5	-74.9	Clear	No Odor
12:27	30	400	mL/min	41.3	12.02	2.906	75	0.48	12.6	-77.5	Clear	No Odor
12:32	35	400	mL/min	41.28	12.04	2.851	10.7	0.51	12.7	-83.3	Clear	No Odor
12:37	40	400	mL/min	41.27	12.07	2.854	11.6	0.52	12.4	-86.7	Clear	No Odor
12:42	45	400	mL/min	41.28	12.08	2.873	11.2	0.52	12	-87.6	Clear	No Odor
12:47	50	350	mL/min	41.27	12.11	2.9	14.3	0.52	11.7	-89.2	Clear	No Odor
12:52	55	350	mL/min	41.28	12.13	2.924	14.7	0.53	11.4	-90	Clear	No Odor
12:57	60	350	mL/min	41.28	12.13	2.934	15.5	0.53	11.7	-90.6	Clear	No Odor
13:02	65	350	mL/min	41.28	12.14	2.938	14.7	0.55	11.5	-90.6	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCL

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

ARCADIS Design & Consultancy for natural and built assets

Groundwater Sampling Log

Project No. 30223092.PS12 | Well ID RW-21_MW-6 | Date 11/20/24

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring | Weather 60°F, Clear

Well Material x PVC ___ SS

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bls): 604 - 624 | Casing Diameter (in.): 4

Static Water Level (ft-bmp): 40.15 | Total Depth (ft-bls): 629 | Water Column/ Gallons in Well: 573.85ft / 371.5gal (668.46)

MP Elevation: NM | Pump Intake (ft-bls): Midscreen | Purge Method: Non-dedicated ~~Bladder Pump~~ Peristaltic ___ Submersible X Other ___

Pump On/Off: 1054/1205 | Volume Purged (gal): 35L | Sample Method: Micropurge/Low-flow 1 hour + tubing volume

Sample Time: Label RW-21_MW-6 Start 1200 End 1205 | Replicate/ Code No.: N/A | Sampled by: AMH

PID: 0.3 NH / 0.0 Bz

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
1054	0	500	40.28	0	5.57	0.147		5.86	15.8	212.0	Clear	None
1059	5		40.27	2.5	5.06	0.148	5.34	5.46	15.7	248.8	"	"
1104	10		40.28	5.0	5.05	0.148		0.35	15.7	254.6	"	"
1109	15		40.28	7.5	5.05	0.148		0.27	15.9	253.9	"	"
1114	20		40.29	10.0	5.05	0.148	11.4	0.24	15.8	251.8	"	"
1119	25		40.24	12.5	5.01	0.145		0.41	16.0	255.4	"	"
1124	30		40.29	15.0	5.03	0.148		0.61	16.1	256.9	"	"
1129	35		40.28	17.5	5.07	0.153	19.0	1.13	16.5	254.7	"	"
1134	40		40.28	20.0	5.10	0.156		1.36	16.5	252.8	"	"
1139	45		40.28	22.5	5.14	0.157		1.48	16.5	250.4	"	"
1144	50		40.28	25.0	5.15	0.158	15.4	1.51	16.7	249.4	"	"
1149	55		40.26	27.5	5.17	0.158	16.3	1.54	16.5	247.5	"	"
1154	60		40.24	30.0	5.18	0.158	12.1	1.56	16.5	247.3	"	"
1159	65		40.24	32.5	5.18	0.159	12.7	1.59	16.3	247.7	"	"

tv

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270D SIM	1 L glass amber bottle	2	None

Notes:

Tubing Volume Equation: Volume (gal)= (Midscreen depth - static water level depth) x tubing size conversion factor (gal/ft)

614ft - 40.15ft = 573.85ft X 0.01 = 5.7385 gal/ft X 3.785 = 21.7L

*Rate will not drop below 500 mL/min, one below 15 125mL/min

*Field Blank Required

CONE OFF EARLY OR DAY BEFORE

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47; 3/8" = 0.006

Well Information

Well Location: 184 Park Avenue, Bethpage, NY | Well Locked at Arrival: (Yes) / No

Condition of Well: See Well Inspection Log Good | Well Locked at Departure: (Yes) / No

Well Completion: **Flush Mount** / Stick Up | Key Number To Well: N/A

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Groundwater Sampling Log

Project No. 30223092.PSS12 | Well ID RW-21-MW-7 | Date 12/3/2024

Project Name/Location RW21 LTM 2024 Q4 | Weather 30°F | clear

Measuring Pt. Description: TOC | Screen Interval (ft-bmp): 580-590 | Casing Diameter (in.): 4" | Well Material: X PVC / SS

Static Water Level (ft-bmp): 43.09 | Total Depth (ft-bmp): 595 | Water Column/ Gallons in Well: 551.91 ft / 358.7 gal

MP Elevation: — | Pump Intake (ft-bmp): — | Purge Method: non-dedicated / Peristaltic / Submersible rediflow / Other | Sample Method: TV / LF

Pump On/Off: 0841 / 0944 | Volume Purged (gal): 25L

Sample Time: Label RW-21-MW-7, Start 0940, End 0944 | Replicate/ Code No.: N/A | Sampled by: KK, ANH

PID: 0.0 ppm

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
0848	0	400	43.58	0	7.05	0.107	4.62	11.90	8.5	133.5	clear	none
0853	5	400		2	4.80	0.145		0.19	15.2	217.6	"	"
0858	10	400	43.51	4	4.87	0.154	32.7	2.32	14.8	212.6		
0903	15	400		6	4.82	0.154		2.40	14.9	230.7		
0908	20	400	43.49	8	4.74	0.152	21.1	2.40	15.0	242.0		
0913	25	400		10	4.72	0.152		2.40	15.0	249.6		
0918	30	400	43.50	12	4.70	0.152	17.5	2.36	14.9	260.5		
0923	35	400		14	4.70	0.152		2.32	14.8	266.1		
0928	40	400	43.52	16	4.69	0.151	21.5	2.29	14.7	274.2		
0933	45	400	43.53	18	4.68	0.150	17.3	2.28	15.0	281.0		
0938	50	400	43.53	20	4.68	0.150	9.42	2.29	14.7	283.7		

Constituents Sampled	Container	Number	Preservative

Notes:

TV = 585 ft - 43.09 ft = 541.91 ft x 0.0025 gal/ft = 81.35 gal x 3.785 = 5.12 L TOTAL

Well Casing Volumes

Gallons/Foot: 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47 | 1/2" = 0.01 | 3/8" = 0.006

Well Information

Well Location: Emma St. | Well Locked at Arrival: Yes / No

Condition of Well: Good | Well Locked at Departure: Yes / No

Well Completion: Flush Mount / Stick Up | Key Number To Well: N/A

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Groundwater Sampling Log

Page 1 of 1

Project No. 30223012.PS12 | Well ID RW-21_MW-8 | Date 12/03/24

Project Name/Location RW-21 LTM GW Sampling | Weather 40°F, Clear

Measuring Pt. Description: TOC | Screen Interval (ft-bmp): 460-470 | Casing Diameter (in.): 4 | Well Material: X PVC ___ SS

Static Water Level (ft-bmp): 43.30 | Total Depth (ft-bmp): 475 | Water Column/ Gallons in Well: 421.7ft / 274.105 Gal

MP Elevation: — | Pump Intake (ft-bmp): mid screen | Purge Method: non-dedicated | Sample Method: LF

Pump On/Off: 1159/1308 | Volume Purged (gal): 27L | Peristaltic / ~~Submersible~~ Bladder Pump / Other

Sample Time: Label RW-21_MW-8 | Start ~~1302~~ 1303 | End ~~1308~~ 1308 | Replicate/ Code No.: N/A | Sampled by: ANH

PID: 1.1 WH / 0.0B2

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
1200	0	400	44.05	0	6.77	0.341		6.78	12.4	236.9	Clear	none
1205	5	400	43.66	2.0	8.26	0.323	5.31	≥9.8	13.5	190.6	"	"
1210	10	400	43.64	4.0	8.44	0.322		3.27	13.5	181.4	"	"
1215	15	400		6.0	8.01	0.326	7.89	2.56	13.5	159.5	"	"
1220	20	400	43.64	8.0	7.85	0.369		2.18	13.7	181.4	"	"
1225	25	400	43.67	10.0	7.46	0.372	76.1	1.90	13.4	185.2	Cloudy	Cl.
1230	30	400		12.0	7.33	0.359		1.50	13.5	182.3	"	"
1235	35	400	43.67	14.0	7.25	0.341	32.9	1.15	13.7	177.7	Clear	none
1240	40	400	43.68	16.0	7.10	0.329		0.98	13.4	176.2	"	"
1245	45	400	43.69	18.0	6.89	0.318	30.6	0.88	14.0	175.0	"	"
1250	50	400	43.70	20.0	6.75	0.316	23.1	0.80	13.9	173.0	"	"
1255	55	400	43.69	22.0	6.70	0.316	16.4	0.75	13.8	169.6	"	"
1300	60	400	43.69	24.0	6.67	0.314	15.1	0.72	13.5	168.3	"	"

TV—

Constituents Sampled	Container	Number	Preservative
8260D SIM	1L Amber glass vial	~~3~~ 2	none
8290C VOCs		3	HCl

Notes:
465ft − 43.30ft = 421.7ft X 0.01 Gal/ft = 4.217gal X 3.785 = 15.9L
* ±5±2 pH reading at Sampling: 6.51

Well Casing Volumes

Gallons/Foot: 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = ~~1.47~~ | 1/2" = 0.01 | 3/8" = 0.006

Well Information

Well Location: VAULT corridor
Condition of Well: Good
Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No
Well Locked at Departure: Yes / No
Key Number To Well: N/A

ARCADIS Design & Consultancy for natural and built assets

Groundwater Sampling Log

Project No. 30223092.PSS12 | Well ID RW-21_MW-9 | Date 11/20/2024

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring | Weather 58°F / clear

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bls): 630 - 640 | Casing Diameter (in.): 4 | Well Material: x PVC, SS

Static Water Level (ft-bmp): 40.22 ft | Total Depth (ft-bls): 645 | Water Column/ Gallons in Well: 604.78ft / 393.1 gal

MP Elevation: NM | Pump Intake (ft-bls): Midscreen | Purge Method: Non-dedicated Bladder Pump, Peristaltic, Submersible X, Other | Sample Method: Micropurge/Low-flow 1 hour + tubing volume

Pump On/Off: 1227 / 1350 | Volume Purged (gal): 40L

Sample Time: Label RW-21_MW-9 Replicate/ Start 1345 End 1350 | Code No.: N/A | Sampled by KK, ANH

PID: 0.1 ppm (WH) 0.0ppm (BZ)

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
1228	0	450	40.34	0	4.93	0.144	2.82	1.98	15.8	264.0	clear	None
1233	5	450	40.32	2.25	4.86	0.143		1.47	15.8	276.1	"	"
1238	10	450	40.31	4.5	4.87	0.144		1.39	15.8	289.5		
1243	15	450	40.31	6.75	4.89	0.142	3.34	1.55	15.9	296.4		
1248	20	450	40.31	9.0	4.87	0.141		1.60	15.9	297.3		
1253	25	450	40.29	11.25	4.86	0.140		1.63	15.9	299.9		
1258	30	450	40.28	13.5	4.85	0.140	4.12	1.64	15.9	302.3		
1303	35	450	40.26	15.75	4.84	0.139		1.66	15.9	306.4		
1308	40	450	40.26	17.0	4.85	0.139		1.66	15.8	307.8		
1313	45	450	40.25	19.25	4.85	0.139	2.96	1.64	15.8	309.4		
1318	50	450	40.25	21.5	4.86	0.139		1.62	15.9	310.8		
TV 1323	55	450	40.25	23.75	4.86	0.139		1.61	15.9	311.5		
1328	60	450	40.25	26.0	4.87	0.140	4.14	1.57	15.9	312.3		
1333	65	450	40.24	28.25	4.87	0.140	3.18	1.55	15.8	312.3		
1338	70	450	40.23	30.5	4.88	0.140	2.76	1.54	15.8	312.4		
1343	75	450	40.23	32.75	4.88	0.141	2.51	1.49	15.9	311.5		

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270D SIM	1 L glass amber bottle	2	None

Notes:

Tubing Volume Equation: Volume (gal)= (Midscreen depth - static water level depth) x tubing size conversion factor (gal/ft)

TV = 635 ft - 40.22 ft = 594.78 ft x 0.01 gal/ft = 5.95 gal x 3.785 = 22.5 L

*Field Blank Required

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47; 1/2" = 0.01; 3/8" = 0.006

Well Information

Well Location:	NE Corner of William St. and John St., Bethpage, NY	Well Locked at Arrival:	Yes / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	Yes / No
Well Completion:	**Flush Mount** / Stick Up	Key Number To Well:	N/A

Groundwater Sampling Form

Location ID:	RW-21_MW-14	**Date(s):**	2024-12-19	**Work Order(s):**		12_19_2024 Additional Well Sampling	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:39.78 °F, rH:78%, Clouds: 0%, Wind:7mph N-NW			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	630.00-640.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	31.4	**Total Depth (ft-bmp):**	645	**Water Column(ft):**	613.6	**Liters in Well:**	1516.28
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:21	**Total Volume Purged (liters):**	40	**Sample ID:**	RW-21_MW-14	**Sample Time:**	09:45
Purge End Time:	09:41	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	**MS/MSD** / RW-21_MW-14	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:21	0	400	mL/min	31.42	5.36	0.054	31.42	3.51	13	211.2	Clear	No Odor
08:26	5	400	mL/min	31.40	5.16	0.046	14.1	1.98	13.1	225.3	Clear	No Odor
08:31	10	400	mL/min	31.40	5.23	0.049	7.2	1.05	13.2	226.3	Clear	No Odor
08:36	15	400	mL/min	31.40	5.13	0.048	21.7	0.6	13.4	221	Clear	No Odor
08:41	20	400	mL/min	31.40	5.13	0.047	16.6	0.43	13.5	191.3	Clear	No Odor
08:46	25	400	mL/min	31.42	5.23	0.049	16.5	0.35	13.5	134.1	Clear	No Odor
08:51	30	400	mL/min	31.41	5.33	0.054	99.8	0.27	12.7	109.9	Clear	No Odor
08:56	35	400	mL/min	31.41	5.33	0.054	79.8	0.26	12.7	108.6	Clear	No Odor
09:01	40	400	mL/min	31.41	5.31	0.054	79.8	0.25	12.7	110.3	Clear	No Odor
09:06	45	400	mL/min	31.41	5.29	0.054	67.7	0.24	12.8	112.2	Clear	No Odor
09:11	50	400	mL/min	31.41	5.28	0.054	144	0.24	12.8	113.5	Clear	No Odor
09:16	55	400	mL/min	31.41	5.27	0.053	74.4	0.23	12.9	116	Clear	No Odor
09:21	60	400	mL/min	31.41	5.26	0.053	74.4	0.23	12.9	118.6	Clear	No Odor
09:26	65	400	mL/min	31.41	5.24	0.053	57.3	0.21	13	121.8	Clear	No Odor
09:31	70	400	mL/min	31.41	5.23	0.053	38.9	0.21	12.9	123.8	Clear	No Odor
09:36	75	400	mL/min	31.41	5.23	0.053	33.5	0.2	13	125.6	Clear	No Odor
09:41	80	400	mL/min	31.41	5.22	0.053	27.8	0.2	13.1	126.7	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Information:

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Groundwater Sampling Form

Location ID:	RW-21_MW-15	**Date(s):**	2024-12-26	**Work Order(s):**		12_26_2024 Additional Well Sampling	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:32.25 °F, rH:68%, Clouds: 0%, Wind:9.22mph N			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	676.00-686.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	41.93	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	649.07	**Liters in Well:**	1603.93
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	10:53	**Total Volume Purged (liters):**	33.9	**Sample ID:**	RW-21_MW-15	**Sample Time:**	12:02
Purge End Time:	12:00	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:55	0	700	mL/min	41.06	5.56	0.065	0	3.36	14.49	188.4	Clear	No Odor
11:00	5	500	mL/min	41.06	5.19	0.06	0	3.87	13.45	199.1	Clear	No Odor
11:05	10	500	mL/min	41.06	5.13	0.06	0	5.18	13.65	202.9	Clear	No Odor
11:10	15	500	mL/min	41.06	5.08	0.06	0	5.61	13.99	209.6	Clear	No Odor
11:15	20	500	mL/min	41.06	5.09	0.061	0	5.53	14.46	214.9	Clear	No Odor
11:20	25	500	mL/min	41.06	5.07	0.059	0	5.24	14.29	219.3	Clear	No Odor
11:25	30	500	mL/min	41.11	5.06	0.056	0	4.97	14.14	220.9	Clear	No Odor
11:30	35	500	mL/min	41.11	5.06	0.054	0	4.89	13.76	222.4	Clear	No Odor
11:35	40	500	mL/min	41.11	5.08	0.052	5.57	4.76	14.04	224.2	Clear	No Odor
11:40	45	500	mL/min	41.11	5.06	0.052	7.13	4.66	14.91	227.1	Clear	No Odor
11:45	50	500	mL/min	41.11	5.07	0.051	5.41	4.64	14.73	227.6	Clear	No Odor
11:50	55	500	mL/min	41.11	5.1	0.051	8.45	4.61	14.81	228.9	Clear	No Odor
11:55	60	500	mL/min	41.11	5.03	0.051	8.01	4.57	14.62	231.9	Clear	No Odor
12:00	65	500	mL/min	41.11	5.05	0.052	6.23	4.52	14.91	233.2	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Groundwater Sampling Form

Location ID:	RW-21_MW-16	**Date(s):**	2024-12-26	**Work Order(s):**		12_26_2024 Additional Well Sampling	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:26.46 °F, rH:79%, Clouds: 0%, Wind:4mph NE			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	636.00-646.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	36.72	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	614.28	**Liters in Well:**	1517.96
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:07	**Total Volume Purged (liters):**	33.2	**Sample ID:**	RW-21_MW-16	**Sample Time:**	10:15
Purge End Time:	10:13	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:08	0	700	mL/min	36.73	5.24	0.031	0	6.5	13.18	143.6	Clear	No Odor
09:13	5	500	mL/min	36.73	5.03	0.03	0	1.93	12.08	157.5	Clear	No Odor
09:18	10	500	mL/min	36.73	4.96	0.03	0	0.96	12.5	161.2	Clear	No Odor
09:23	15	500	mL/min	36.73	4.91	0.03	0	0.88	12.57	159.8	Clear	No Odor
09:28	20	500	mL/min	36.73	4.92	0.03	0	0.75	12.75	150.6	Clear	No Odor
09:33	25	500	mL/min	36.73	4.94	0.031	0	0.65	12.6	142.5	Clear	No Odor
09:38	30	500	mL/min	36.73	4.9	0.031	0	0.61	12.64	144.2	Clear	No Odor
09:43	35	500	mL/min	36.73	4.84	0.031	0	0.51	12.62	146.8	Clear	No Odor
09:48	40	500	mL/min	36.72	4.89	0.031	0	0.47	12.51	150.1	Clear	No Odor
09:53	45	500	mL/min	36.73	4.87	0.031	0	0.45	12.49	152.5	Clear	No Odor
09:58	50	500	mL/min	36.73	4.93	0.031	0	0.43	12.41	153.6	Clear	No Odor
10:03	55	500	mL/min	36.73	4.84	0.031	0	0.44	12.49	154.7	Clear	No Odor
10:08	60	500	mL/min	36.73	4.84	0.031	0	0.43	12.29	155.3	Clear	No Odor
10:13	65	500	mL/min	36.75	4.84	0.031	0	0.38	12.3	155.5	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

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Groundwater Sampling Log

Project No. 30223042 Well ID RW-21 MW 13 Date 11/2/25

Project Name/Location RW 21 Bathpage Weather 32° Sunny

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bmp): 716-726 | Casing Diameter (in.): 4" | Well Material: x PVC ___ SS

Static Water Level (ft-bmp): 37.68 | Total Depth (ft-bmp): 731 | Water Column/ Gallons in Well: 4

MP Elevation: ___ | Pump Intake (ft-bmp): Midscreen | Purge Method: Non-dedicated Grab Sub; Peristaltic ___; Submersible ___; Other ___ | Sample Method: BLF + MP + TV

Pump On/Off: 0856 - 0955 | Volume Purged (gal): 20L

Sample Time: Label RW21 MW13 | Start 0950 | End 0955 | Replicate/ Code No. ~~RWP01022555V1~~ REP01022555V1 | Sampled by SVA/BM

0950 (duplicate)

PID: 0.3

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
0900	0	400	38.00	0	7.11	0.054	8.39	13.02	12.7	184.2	Clear	None
0905	5	400		2	5.91	0.042		14.09	10.4	217.1	"	"
0910	10	400	38.02	4	5.70	0.046	12.1	12.04	9.6	226.5	"	"
0915	15	400		6	5.69	0.049		13.45	8.8	229.6	"	"
0920	20	400	38.02	8	5.73	0.055	9.23	13.28	8.0	232.0	"	"
0925	25	400		10	5.77	0.058		12.25	7.8	235.8	"	"
0930	30	400	38.03	12	5.76	0.058	8.22	12.85	7.1	235.7	"	"
0935	35	400	38.05	14	5.73	0.056	6.41	12.91	7.4	239.3	"	"
0940	40	400	38.06	16	5.76	0.057	7.11	12.88	7.6	238.9	"	"
0945	45	400	38.05	18	5.75	0.057	7.03	12.89	7.5	238.7	"	"

Constituents Sampled	Container	Number	Preservative
VOCs 8260	40 mL glass vial	3	HCl
1,4- Dioxane 8270 SIM	1 L amber bottle	2	None

Notes:

Tubing Volume Equation: Volume (gal)=(Midscreen depth - static water level depth) x tubing conversion factor (gal/ft)

731 - 37.68 = 693.32 · 0.006 = 4.2 gal = 16L

*Field Blank Required *Cone off early or day before

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47; 1/2" = 0.01; 3/8" = 0.006

Well Information

Well Location: Wilson Ln & Broadway

Condition of Well: Good

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Key Number To Well:

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Groundwater Sampling Log

Page 1 of 1

Project No. 30223092 | Well ID RW21MW16 | Date 1/2/25

Project Name/Location RW-21 Bethpage NY | Weather 32° Sun / Wind

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bmp): 636-646 | Casing Diameter (in.): 4 | Well Material: x PVC ___ SS

Static Water Level (ft-bmp): 42.67 | Total Depth (ft-bmp): 651 | Water Column/Gallons in Well: 600' 390 gal

MP Elevation: | Pump Intake (ft-bmp): Midscreen | Purge Method: Non-dedicated GeoSub- Peristaltic ___ Submersible ___ Other ___ | Sample Method: LF + TV + MP

Pump On/Off: 1038 - 1150 | Volume Purged ~~(gal)~~: ~~20~~ 26L

Sample Time: Label RW21 MW 16 | Start 1145 | End 1156 | Replicate/Code No.: N/A | Sampled by: SV BM

PID: 0.2

1145

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
1040	0	400	42.68	0	6.42	0.052	9.48	8.34	11.1	267.2	clear	None
1045	5	400		2	4.90	0.052		2.28	13.6	266.6	"	"
1050	10	400	42.64	4	4.91	0.049	8.36	1.76	13.7	233.1	"	"
1055	15	400		6	4.89	0.053		0.91	13.8	223.1	"	"
1100	20	400	42.66	8	4.87	0.056	11.2	0.79	13.6	216.8	"	"
1105	25	400		10	4.88	0.056		0.67	13.8	209.4	"	"
1110	30	400	42.68	12	4.91	0.059	9.43	0.47	13.7	~~198.7~~	"	"
1115	35	400		14	4.90	0.059		0.43	13.8	~~199.1~~	"	"
1120	40	400	42.67	16	4.90	0.060	6.81	0.41	13.7	200.0	"	"
1125	45	400	42.66	18	4.86	0.060	4.41	0.32	13.6	202.4	"	"
1130	50	400	42.65	20	4.85	0.060	4.31	0.31	13.6	205.9	"	"
1135	55	400	42.65	22	4.84	0.060	3.99	0.31	13.6	206.1	"	"
1140	60	400	42.66	24	4.85	0.060	3.97	0.31	13.6	206.4	"	"

Constituents Sampled	Container	Number	Preservative
VOCs 8260	40 mL glass vial	3	HCl
1,4- Dioxane 8270 SIM	1 L amber bottle	2	None

Notes:

Tubing Volume Equation: Volume (gal)=(Midscreen depth - static water level depth) x tubing conversion factor (gal/ft)

651 - 42.67 = 609 · 0.01 = 6 gal ≈ 23 L

*Field Blank Required *Cone off early or day before

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47 | 1/2" = 0.01? | 3/8" = 0.006

Well Information

Well Location: Service Rd off of Broadway.

Condition of Well: Good

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Key Number To Well: —

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Groundwater Sampling Log

Page 1 of 1

Project No. 30123092 | Well ID RW-21_MW-15 | Date 11/3/25

Project Name/Location RW-21 Bethpage | Weather 32° Sunny

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bmp): 676-686 | Casing Diameter (in.): 4 | Well Material: x PVC, ___ SS

Static Water Level (ft-bmp): 43.14 | Total Depth (ft-bmp): 691 | Water Column/ Gallons in Well: 647.86

MP Elevation: ——— | Pump Intake (ft-bmp): Midscreen | Purge Method: Non-dedicated Geo Sub, Peristaltic, Submersible, Other | Sample Method: LF TV MP

Pump On/Off: 0528 / 0940 | Volume Purged (gal): 28L

Sample Time: Label RW-21AW15 | Start 0935 | End 0940 | Replicate/ Code No.: MS/MSD | Sampled by: SV BM

PID: 0.3

0935

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
0830	0	400	43.16	0	7.07	0.177	1	12.09	6.87	143.1	Clear	None
0835	5	400		2	6.45	0.109	16.0	11.12	9.25	164.3	"	"
0840	10	400	43.18	4	5.81	0.078		6.37	12.9	198.1	"	"
0845	15	400	43.18	8	5.55	0.078	7.21	6.26	13.41	201.6	"	"
0850	20	400		10	5.34	0.079		6.31	14.13	211.6	"	"
0855	25	400	43.17	12	5.30	0.075	7.01	5.77	14.20	223.8	"	"
0900	30	400		14	5.31	0.051		5.42	14.26	226.9	"	"
0905	35	400	43.18	16	5.31	0.047	6.83	5.23	14.26	228.5	"	"
0910	40	400		18	5.31	0.045		5.18	14.38	229.5	"	"
0915	45	400	43.19	20	5.35	0.053	5.11	5.02	14.21	232.3	"	"
0920	50	400	43.19	22	5.29	0.053	5.03	4.99	14.16	234.1	"	"
0925	55	400	43.21	24	5.31	0.053	4.98	4.97	14.14	236.1	"	"
0930	60	400	43.20	26	5.30	0.052	5.01	4.96	14.11	235.4	"	"

Constituents Sampled	Container	Number	Preservative
VOCs 8260	40 mL glass vial	3	HCl
1,4- Dioxane 8270 SIM	1 L amber bottle	2	None

Notes:

Tubing Volume Equation: Volume (gal)=(Midscreen depth - static water level depth) x tubing conversion factor (gal/ft)

691 - 43.14 = 650 · 0.01 = 6.5 gal = 25L

*Field Blank Required *Cone off early or day before

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47 | 1/2" = 0.01 | 3/8" = 0.006

Well Information

Well Location: | Well Locked at Arrival: Yes / No

Condition of Well: Good | Well Locked at Departure: Yes / No

Well Completion: Flush Mount / Stick Up | Key Number To Well:

Groundwater Sampling Form

Location ID:	RW-21_MW-13	**Date(s):**	2025-01-07	**Work Order(s):**		01_07_2025 Additional Well Sampling	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:23.59 °F, rH:59%, Clouds: 5%, Wind:18.01mph W-NW			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	716.00-726.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	41.79	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	689.21	**Liters in Well:**	1703.12
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:11	**Total Volume Purged (liters):**	18.8	**Sample ID:**	RW-21_MW-13	**Sample Time:**	10:20
Purge End Time:	10:19	**Well Volumes Purged (total):**	0.01	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:12	0	800	mL/min	42.19	6.1	0.041	11.8	12.64	10.3	238.5	Clear	No Odor
09:17	5	500	mL/min	42.22	5.85	0.039	11.8	14.12	7.5	242.7	Clear	No Odor
09:22	10	500	mL/min	42.28	5.58	0.037	5.14	14.32	4.9	253.6	Clear	No Odor
09:27	15	500	mL/min	42.29	5.48	0.038	14.2	14.19	4.6	258.7	Clear	No Odor
09:32	20	200	mL/min	42.29	5.42	0.043	14.2	14.05	3	266.4	Clear	No Odor
09:37	25	200	mL/min	42.39	5.34	0.045	5.8	13.64	1.8	272.9	Clear	No Odor
09:42	30	200	mL/min	42.39	5.3	0.044	5.8	13.21	1.8	276.5	Clear	No Odor
09:47	35	300	mL/min	42.46	5.27	0.043	4.81	12.84	1.5	278.1	Clear	No Odor
09:52	40	200	mL/min	42.52	5.2	0.042	4.41	12.7	0.5	282.2	Clear	No Odor
09:57	45	200	mL/min	42.56	5.16	0.04	4.82	11.95	4.4	282.8	Clear	No Odor
10:02	50	200	mL/min	42.56	5.17	0.039	4.82	11.34	4.6	282.1	Clear	No Odor
10:07	55	200	mL/min	42.63	5.19	0.039	3.24	11.19	3.5	282.1	Clear	No Odor
10:12	60	200	mL/min	42.68	5.19	0.038	3.39	11.04	3.4	283.5	Clear	No Odor
10:17	65	200	mL/min	42.71	5.19	0.038	3.42	11.06	3.4	285.3	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-15	**Date(s):**	2025-01-08	**Work Order(s):**		01_07_2025 Additional Well Sampling	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:26.65 °F, rH:49%, Clouds: 0%, Wind:19.57mph W-NW			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	676.00-686.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	43.67	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	647.33	**Liters in Well:**	1599.63
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	10:34	**Total Volume Purged (liters):**	33	**Sample ID:**	RW-21_MW-15	**Sample Time:**	11:45
Purge End Time:	11:44	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:39	0	400	mL/min	43.65	5.09	0.065	2.79	4.07	10.5	214.1	Clear	No Odor
10:44	5	400	mL/min	43.65	5.03	0.064	2.79	4.86	8.6	229.9	Clear	No Odor
10:49	10	400	mL/min	43.65	4.99	0.065	2.22	4.97	9	240.5	Clear	No Odor
10:54	15	400	mL/min	43.65	4.95	0.065	2.22	4.73	9.7	250.5	Clear	No Odor
10:59	20	500	mL/min	43.65	4.94	0.064	3.64	4.57	10.1	257.5	Clear	No Odor
11:04	25	500	mL/min	43.65	4.93	0.064	3.64	4.54	10	261.1	Clear	No Odor
11:09	30	500	mL/min	43.63	4.93	0.063	5.86	4.52	10.3	265	Clear	No Odor
11:14	35	500	mL/min	43.63	4.93	0.063	5.86	4.52	9.3	267.5	Clear	No Odor
11:19	40	500	mL/min	43.63	4.93	0.062	4.09	4.51	9.5	269.7	Clear	No Odor
11:24	45	500	mL/min	43.63	4.92	0.062	4.09	4.49	10.1	272.2	Clear	No Odor
11:29	50	500	mL/min	43.63	4.92	0.063	4.04	4.49	9.2	273.4	Clear	No Odor
11:34	55	500	mL/min	43.62	4.92	0.063	2.95	4.47	9.5	275.5	Clear	No Odor
11:39	60	500	mL/min	43.63	4.91	0.062	2.16	4.46	9.5	277.6	Clear	No Odor
11:44	65	500	mL/min	43.63	4.91	0.063	2.34	4.47	9.2	278.8	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-16	**Date(s):**	2025-01-08	**Work Order(s):**		01_07_2025 Additional Well Sampling	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:23.7 °F, rH:53%, Clouds: 0%, Wind:15.01mph NW			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	636.00-646.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	41.3	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	609.7	**Liters in Well:**	1506.64
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:50	**Total Volume Purged (liters):**	33	**Sample ID:**	RW-21_MW-16	**Sample Time:**	10:00
Purge End Time:	09:58	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:51	0	500	mL/min	41.33	4.8	0.059	4.42	2.24	12.3	214.1	Clear	No Odor
08:56	5	500	mL/min	41.33	4.61	0.058	4.42	1.06	11.6	239.7	Clear	No Odor
09:01	10	500	mL/min	41.33	4.59	0.058	2.73	0.51	11.7	230.4	Clear	No Odor
09:06	15	500	mL/min	41.33	4.6	0.058	2.73	0.39	12.1	219.6	Clear	No Odor
09:11	20	500	mL/min	41.33	4.59	0.057	3.06	0.32	11.9	217.4	Clear	No Odor
09:16	25	500	mL/min	41.33	4.61	0.053	3.06	0.27	12	220.1	Clear	No Odor
09:21	30	500	mL/min	41.33	4.64	0.052	17.9	0.24	12.2	201.8	Clear	No Odor
09:26	35	500	mL/min	41.33	4.66	0.053	17.9	0.22	11.8	186.1	Clear	No Odor
09:31	40	500	mL/min	41.33	4.66	0.054	19.4	0.2	12.1	181.1	Clear	No Odor
09:36	45	500	mL/min	41.33	4.67	0.054	19.4	0.19	11.8	178.6	Clear	No Odor
09:41	50	500	mL/min	41.33	4.67	0.054	17	0.18	11.5	178.1	Clear	No Odor
09:46	55	500	mL/min	41.33	4.67	0.054	16.4	0.17	11.6	179	Clear	No Odor
09:51	60	500	mL/min	41.33	4.66	0.054	12.5	0.17	11.6	181.6	Clear	No Odor
09:56	65	500	mL/min	41.33	4.65	0.054	13.6	0.16	11.8	182.8	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Groundwater Sampling Form

Location ID:	RW-21_MW-13	**Date(s):**	2025-01-13	**Work Order(s):**		01_13_2025 Additional Well Sampling	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:1.76 °C, rH:71%, Clouds: 4%, Wind:2.24m/s W-SW			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (m-bgs):**	716.00-726.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (m-bmp):	38.09	**Total Depth (m-bmp):**	731	**Water Column(m):**	692.91	**Liters in Well:**	5617.67
Depth to Product (m-bmp):	NA	**Pump Intake Depth(m-bmp):**	721	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:53	**Total Volume Purged (liters):**	32	**Sample ID:**	RW-21_MW-13	**Sample Time:**	09:50
Purge End Time:	09:49	**Well Volumes Purged (total):**	0.01	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:53	0	500	mL/min	38.180	5.65	0.055	3.13	12.08	12.2	162.2	Clear	No Odor
08:58	5	500	mL/min	38.180	5.16	0.041	3.13	12.13	12.5	195	Clear	No Odor
09:03	10	500	mL/min	38.180	5.06	0.041	3.13	11.87	12.3	203.1	Clear	No Odor
09:08	15	500	mL/min	38.210	5.1	0.05	5.11	11.16	11	211.8	Clear	No Odor
09:13	20	500	mL/min	38.210	5.07	0.048	5.11	11	10.9	215.7	Clear	No Odor
09:18	25	500	mL/min	38.210	4.98	0.045	5.11	10.45	10.2	223.2	Clear	No Odor
09:23	30	500	mL/min	38.260	4.94	0.044	3.28	10.4	10.2	227.5	Clear	No Odor
09:28	35	500	mL/min	38.260	4.92	0.044	3.28	10.04	9.7	235.6	Clear	No Odor
09:33	40	500	mL/min	38.260	4.93	0.044	3.28	10.05	9.7	237.6	Clear	No Odor
09:38	45	500	mL/min	38.260	4.94	0.044	2.63	9.97	9.6	239.6	Clear	No Odor
09:43	50	500	mL/min	38.260	4.93	0.044	2.13	9.94	9.6	239.4	Clear	No Odor
09:48	55	500	mL/min	38.260	4.9	0.044	2.01	9.98	9.5	240.1	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: 726-38.09=687.9x.006=4.12x3.785=15.5L TV

Well Information:

Well Labeled Properly:	NA
Is Well in Good Condition?	NA
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-15	**Date(s):**	2025-01-14	**Work Order(s):**		01_13_2025 Additional Well Sampling	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:-0.82 °C, rH:43%, Clouds: 0%, Wind:6.71m/s NW			**Field Technician:**		Patrick Quinlan	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (m-bgs):**	676.00-686.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (m-bmp):	45.2	**Total Depth (m-bmp):**	691	**Water Column(m):**	645.8	**Liters in Well:**	5235.73
Depth to Product (m-bmp):	NA	**Pump Intake Depth(m-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	10:38	**Total Volume Purged (liters):**	36	**Sample ID:**	RW-21_MW-15	**Sample Time:**	11:45
Purge End Time:	11:44	**Well Volumes Purged (total):**	0.01	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:38	0	500	mL/min	45.300	6.17	0.117	9.14	3.79	12.1	150	Clear	No Odor
10:43	5	500	mL/min	45.300	6.09	0.088	9.14	3.05	10.5	147.2	Clear	No Odor
10:48	10	500	mL/min	45.300	5.42	0.072	9.14	3.24	10.3	165.4	Clear	No Odor
10:53	15	500	mL/min	45.450	5.25	0.071	5.25	4.35	11.3	183.7	Clear	No Odor
10:58	20	500	mL/min	45.450	5.24	0.071	4.38	4.4	11.5	185	Clear	No Odor
11:03	25	500	mL/min	45.450	5.2	0.072	4.38	4.5	10.9	197.8	Clear	No Odor
11:08	30	500	mL/min	45.490	5.18	0.073	4.06	4.49	9.2	206.7	Clear	No Odor
11:13	35	500	mL/min	45.490	5.17	0.072	4.06	4.5	9	208.7	Clear	No Odor
11:18	40	500	mL/min	45.490	5.17	0.072	4.06	4.51	9.1	210.1	Clear	No Odor
11:23	45	500	mL/min	45.490	5.16	0.072	4.48	4.53	8.9	217.4	Clear	No Odor
11:28	50	500	mL/min	45.500	5.16	0.072	4.33	4.54	8.7	219.4	Clear	No Odor
11:33	55	500	mL/min	45.500	5.16	0.072	4.14	4.54	8.8	221.3	Clear	No Odor
11:38	60	500	mL/min	45.500	5.15	0.072	4.03	4.53	10	223.1	Clear	No Odor
11:43	65	500	mL/min	45.500	5.15	0.072	3.76	4.54	10.7	222	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: 686-45.2=640.8x.01=6.4x3.785=24.2L TV

Well Information:

Well Labeled Properly: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-16	**Date(s):**	2025-01-14	**Work Order(s):**		01_13_2025 Additional Well Sampling	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:29.01 °F, rH:46%, Clouds: 0%, Wind:11.5mph W-NW			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	636.00-646.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	41.5	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	609.5	**Liters in Well:**	1506.15
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:52	**Total Volume Purged (liters):**	33.1	**Sample ID:**	RW-21_MW-16	**Sample Time:**	10:00
Purge End Time:	09:59	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:53	0	600	mL/min	41.51	4.86	0.067	4.31	3.21	12	176.6	Clear	No Odor
08:58	5	500	mL/min	41.51	4.81	0.065	4.31	1.65	12.2	202	Clear	No Odor
09:03	10	500	mL/min	41.51	4.84	0.065	4.31	0.75	12.5	176	Clear	No Odor
09:08	15	500	mL/min	41.51	4.85	0.061	6.65	0.69	12.8	175	Clear	No Odor
09:13	20	500	mL/min	41.55	4.88	0.062	6.65	0.6	12.9	168.2	Clear	No Odor
09:18	25	500	mL/min	41.55	4.88	0.064	6.65	0.47	13.1	159.6	Clear	No Odor
09:23	30	500	mL/min	41.51	4.87	0.064	9.42	0.42	13	159.7	Clear	No Odor
09:28	35	500	mL/min	41.61	4.88	0.064	9.42	0.45	12.6	157.7	Clear	No Odor
09:33	40	500	mL/min	41.61	4.88	0.064	9.42	0.4	12.4	157	Clear	No Odor
09:38	45	500	mL/min	41.61	4.88	0.064	7.1	0.39	12.3	157.9	Clear	No Odor
09:43	50	500	mL/min	41.61	4.88	0.065	6.61	0.37	12.3	158.7	Clear	No Odor
09:48	55	500	mL/min	41.61	4.88	0.065	4.93	0.36	12.3	159.5	Clear	No Odor
09:53	60	500	mL/min	41.61	4.88	0.065	4.76	0.35	12.2	161.6	Clear	No Odor
09:58	65	500	mL/min	41.61	4.88	0.066	4.58	0.33	12.1	163.8	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Groundwater Sampling Form

Location ID:	RW-21_MW-13	**Date(s):**	2025-01-23	**Work Order(s):**		01_23_2025 Additional Well Sampling	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:25.81 °F, rH:59%, Clouds: 0%, Wind:4mph SW			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	716.00-726.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	40.77	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	690.23	**Liters in Well:**	1705.64
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	10:42	**Total Volume Purged (liters):**	28	**Sample ID:**	RW-21_MW-13	**Sample Time:**	11:40
Purge End Time:	11:39	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:43	0	500	mL/min	41.88	6.05	0.046	5.96	10.87	11.7	190.4	Clear	No Odor
10:48	5	500	mL/min	41.88	5.67	0.037	5.96	11.29	12.2	203.2	Clear	No Odor
10:53	10	500	mL/min	41.88	5.51	0.039	14.3	12.45	12	206.6	Clear	No Odor
10:58	15	500	mL/min	42.08	5.42	0.043	14.3	10.23	11.5	212.4	Clear	No Odor
11:03	20	500	mL/min	42.08	5.25	0.039	14.3	8.39	11.5	221.9	Clear	No Odor
11:08	25	500	mL/min	42.08	5.25	0.038	4.48	8.55	11.3	223.8	Clear	No Odor
11:13	30	500	mL/min	42.08	5.23	0.038	4.48	7.94	11.4	228.2	Clear	No Odor
11:18	35	500	mL/min	42.28	5.23	0.038	4.46	7.81	11.5	229.2	Clear	No Odor
11:23	40	500	mL/min	42.28	5.22	0.037	5.1	8.03	11.1	231.7	Clear	No Odor
11:28	45	500	mL/min	42.28	5.22	0.037	3.94	7.72	11.3	236	Clear	No Odor
11:33	50	500	mL/min	40.49	5.21	0.037	4.77	7.65	11.4	240.2	Clear	No Odor
11:38	55	500	mL/min	40.49	5.21	0.037	5.53	7.55	11.5	245.6	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-15	**Date(s):**	2025-01-24	**Work Order(s):**		01_23_2025 Additional Well Sampling	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:28.96 °F, rH:55%, Clouds: 0%, Wind:10mph N			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	676.00-686.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	45.01	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	645.99	**Liters in Well:**	1596.32
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	10:58	**Total Volume Purged (liters):**	31.8	**Sample ID:**	RW-21_MW-15	**Sample Time:**	12:10
Purge End Time:	12:09	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:59	0	800	mL/min	45.21	5.54	0.071	5.14	3.81	15	196.8	Clear	No Odor
11:04	5	400	mL/min	45.21	5.38	0.064	5.14	2.98	13.7	200	Clear	No Odor
11:09	10	400	mL/min	45.21	5.16	0.064	5.14	3.95	13.6	214.3	Clear	No Odor
11:14	15	400	mL/min	45.21	5.11	0.064	5.98	4.22	13.5	228.2	Clear	No Odor
11:19	20	400	mL/min	45.21	5.11	0.064	5.98	4.17	14.1	237.7	Clear	No Odor
11:24	25	400	mL/min	45.21	5.08	0.064	5.98	4.14	14.2	247.2	Clear	No Odor
11:29	30	400	mL/min	45.21	5.11	0.063	5.85	4.19	14.6	252.4	Clear	No Odor
11:34	35	400	mL/min	45.21	5.16	0.063	5.85	4.26	14.5	254.5	Clear	No Odor
11:39	40	400	mL/min	45.21	5.17	0.062	5.2	4.31	14.7	257.8	Clear	No Odor
11:44	45	500	mL/min	45.01	5.16	0.061	5.2	4.35	15.2	263.8	Clear	No Odor
11:49	50	500	mL/min	45.01	5.16	0.06	5.2	4.37	15.4	268.3	Clear	No Odor
11:54	55	500	mL/min	45.01	5.16	0.06	5.98	4.38	15.6	270.2	Clear	No Odor
11:59	60	500	mL/min	45.01	5.16	0.06	5.46	4.39	15.5	273.3	Clear	No Odor
12:04	65	500	mL/min	45.01	5.15	0.06	5.95	4.39	15.3	276.5	Clear	No Odor
12:09	70	500	mL/min	45.01	5.14	0.06	5.56	4.4	15.4	279.6	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-16	**Date(s):**	2025-01-24	**Work Order(s):**		01_23_2025 Additional Well Sampling	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:25.18 °F, rH:67%, Clouds: 2%, Wind:5.01mph NW			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	636.00-646.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	40.94	**Total Depth (ft-bmp):**	651	**Water Column(ft):**	610.06	**Liters in Well:**	1507.53
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:47	**Total Volume Purged (liters):**	29.095	**Sample ID:**	RW-21_MW-16	**Sample Time:**	10:00
Purge End Time:	09:56	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:55	0	400	mL/min	41.08	6.2	0.06	4.23	7.61	8.8	131.2	Clear	No Odor
09:00	5	450	mL/min	41.08	4.9	0.06	2.15	4.38	9.9	203.2	Clear	No Odor
09:05	10	450	mL/min	41.08	4.73	0.059	11.7	1.54	10.8	219.7	Clear	No Odor
09:10	15	450	mL/min	41.08	4.71	0.058	14.2	1.37	12.1	218.4	Clear	No Odor
09:15	20	450	mL/min	41.08	4.8	0.056	72.5	0.34	13.4	182.8	Clear	No Odor
09:20	25	450	mL/min	41.08	4.82	0.058	57.4	2.22	12	174.7	Clear	No Odor
09:25	30	450	mL/min	41.08	4.73	0.058	42.7	0.36	12.8	179.2	Clear	No Odor
09:30	35	450	mL/min	41.08	4.72	0.057	26.7	0.36	13.5	182.5	Clear	No Odor
09:35	40	500	mL/min	41.08	4.78	0.057	22.1	0.18	11.6	179.8	Clear	No Odor
09:40	45	500	mL/min	41.08	4.78	0.056	19.5	0.18	9.1	182.3	Clear	No Odor
09:45	50	500	mL/min	41.08	4.79	0.056	17.4	0.18	8.1	183.6	Clear	No Odor
09:50	55	500	mL/min	41.08	4.79	0.056	16.2	0.22	6.3	185.6	Clear	No Odor
09:55	60	500	mL/min	41.08	4.79	0.055	12.9	0.18	5.3	187.6	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-2	**Date(s):**	2025-02-21	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:25.88 °F, rH:59%, Clouds: 0%, Wind:17mph NW			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	600-610	**Casing Diameter (in):**	4	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	40.28	**Total Depth (ft-bmp):**	615	**Water Column(ft):**	574.72	**Liters in Well:**	1420.2
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:22	**Total Volume Purged (liters):**	60	**Sample ID:**	RW-21_MW-2	**Sample Time:**	11:30
Purge End Time:	11:27	**Well Volumes Purged (total):**	0.04	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm²)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:22	0	500	mL/min	40.36	7.46	0.205	10.8	10.4	10.7	162.2	Clear	No Odor
09:27	5	500	mL/min	40.36	7.26	0.173	12.3	2.4	9.9	167.6	Clear	No Odor
09:32	10	400	mL/min	40.35	7.44	0.164	5.93	1.6	7.4	165.9	Clear	No Odor
09:37	15	500	mL/min	40.35	7.36	0.16	5.93	1.1	11.6	164.9	Clear	No Odor
09:42	20	500	mL/min	40.35	7.23	0.16	4.32	1	11.6	165.3	Clear	No Odor
09:47	25	500	mL/min	40.35	7.1	0.16	4.5	1	11.5	166.7	Clear	No Odor
09:52	30	500	mL/min	40.35	6.65	0.16	5.71	0.9	11.3	172.4	Clear	No Odor
09:57	35	500	mL/min	40.38	6.17	0.164	4.32	0.9	11.2	174.8	Clear	No Odor
10:02	40	500	mL/min	40.39	5.89	0.172	4.32	0.9	11	181.9	Clear	No Odor
10:07	45	350	mL/min	40.40	5.86	0.176	5.13	1	8.9	183.9	Clear	No Odor
10:12	50	350	mL/min	40.40	5.87	0.177	23.3	1.1	5.9	185.8	Clear	No Odor
10:17	55	350	mL/min	40.42	5.84	0.113	36.4	1.1	5.4	186.1	Clear	No Odor
10:22	60	350	mL/min	40.50	5.75	0.181	17.8	1.1	11.3	185.2	Clear	No Odor
10:27	65	350	mL/min	40.51	5.74	0.181	15.2	1	11.2	185.3	Clear	No Odor
10:32	70	350	mL/min	40.51	5.67	0.182	55.8	1.1	11.4	185.5	Clear	No Odor
10:37	75	350	mL/min	40.52	5.62	0.182	48.6	1.1	11.7	185.9	Clear	No Odor
10:42	80	350	mL/min	40.52	5.59	0.182	34.8	1.1	11.4	186	Clear	No Odor
10:47	85	350	mL/min	40.52	5.55	0.182	31	1.1	11.5	186.1	Clear	No Odor
10:52	90	350	mL/min	40.54	5.54	0.181	28.7	1.1	11.6	186.1	Clear	No Odor
10:57	95	350	mL/min	40.55	5.51	0.18	25.6	1.1	11.4	186.5	Clear	No Odor
11:02	100	350	mL/min	40.58	5.49	0.178	22.3	1.1	11.2	187	Clear	No Odor
11:07	105	350	mL/min	40.55	5.47	0.177	23.4	1.2	11.1	187.5	Clear	No Odor
11:12	110	350	mL/min	40.59	5.46	0.177	21	1.2	10.9	187.7	Clear	No Odor
11:17	115	350	mL/min	40.60	5.45	0.177	20.12	1.2	11	187.9	Clear	No Odor
11:22	120	350	mL/min	40.60	5.52	0.177	15.5	1.2	11.2	188.1	Clear	No Odor
11:27	125	350	mL/min	40.60	5.45	0.176	14.3	1.2	11	188.2	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF = 605ft - 40.28 ft = 564.72ft x 0.01 gal/ft = 5.6 gal x 3.785 = 21.3 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form

Location ID:	RW-21_MW-3-1	**Date(s):**	2025-03-06	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:52.56 °F, rH:78%, Clouds: 100%, Wind:13.8mph W-NW			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	556-566	**Casing Diameter (in):**	4	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	39.49	**Total Depth (ft-bmp):**	568	**Water Column(ft):**	528.51	**Liters in Well:**	1306.01
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	11:35	**Total Volume Purged (liters):**	32	**Sample ID:**	RW-21_MW-3-1	**Sample Time:**	12:50
Purge End Time:	12:45	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:35	0	400	mL/min	39.64	5.47	0.138	12.3	8.08	14.94	228	Clear	No Odor
11:40	5	400	mL/min	39.64	5.63	0.086	0.2	7.61	15.16	229	Clear	No Odor
11:45	10	350	mL/min	39.62	5.62	0.123	0	7.24	15.19	234	Clear	No Odor
11:50	15	400	mL/min	39.62	5.52	0.13	0.1	6.83	15.2	243	Clear	No Odor
11:55	20	350	mL/min	39.60	5.34	0.141	0.1	6.27	15.23	256	Clear	No Odor
12:00	25	400	mL/min	39.60	5.25	0.145	0.2	5.71	15.52	266	Clear	No Odor
12:05	30	400	mL/min	39.60	5.23	0.145	0	5.31	15.43	270	Clear	No Odor
12:10	35	400	mL/min	39.60	5.21	0.145	0.1	4.88	15.74	274	Clear	No Odor
12:15	40	400	mL/min	39.60	5.18	0.144	0.1	4.47	15.44	280	Clear	No Odor
12:20	45	400	mL/min	39.60	5.17	0.143	0	4.25	15.41	282	Clear	No Odor
12:25	50	400	mL/min	39.60	5.16	0.143	2.2	3.87	15.66	285	Clear	No Odor
12:30	55	400	mL/min	39.60	5.16	0.143	1.7	3.57	15.87	287	Clear	No Odor
12:35	60	400	mL/min	36.59	5.16	0.142	0	3.31	15.73	288	Clear	No Odor
12:40	65	400	mL/min	39.59	5.16	0.142	0.1	3.21	15.6	290	Clear	No Odor
12:45	70	400	mL/min	39.59	5.14	0.141	0	2.98	15.86	291	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF = 561ft - 39.49ft = 521.51ft x 0.006 gal/ft = 3.12 gal x 3.785 = 11.8 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form

Location ID:	RW-21_MW-3-2	**Date(s):**	2025-03-06	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:52.75 °F, rH:79%, Clouds: 100%, Wind:13.8mph W-NW			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	595-605	**Casing Diameter (in):**	4	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	39.6	**Total Depth (ft-bmp):**		**Water Column(ft):**	570.4	**Liters in Well:**	1409.53
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	11:32	**Total Volume Purged (liters):**	30	**Sample ID:**	RW-21_MW-3-2	**Sample Time:**	12:57
Purge End Time:	12:52	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	Duplicate / REP03062025BM1	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:32	0	375	mL/min	39.79	5.41	0.044	30.9	7.57	13.84	318	Clear	No Odor
11:37	5	375	mL/min	39.75	5.79	0.035	2.3	3.14	14.52	309	Clear	No Odor
11:42	10	375	mL/min	39.70	5.61	0.033	1.2	2.67	14.09	309	Clear	No Odor
11:47	15	375	mL/min	39.66	5.39	0.032	1.3	1.88	14.53	287	Clear	No Odor
11:52	20	375	mL/min	39.66	5.4	0.032	1	1.88	14.56	285	Clear	No Odor
11:57	25	375	mL/min	39.66	5.38	0.032	0.9	1.74	14.75	279	Clear	No Odor
12:02	30	375	mL/min	39.66	5.42	0.033	1.4	1.66	15.03	271	Clear	No Odor
12:07	35	375	mL/min	39.66	5.49	0.038	2.9	1.75	15.07	264	Clear	No Odor
12:12	40	375	mL/min	39.66	5.56	0.042	3.6	1.85	15.13	259	Clear	No Odor
12:17	45	375	mL/min	39.66	5.59	0.044	5.6	1.93	14.95	256	Clear	No Odor
12:22	50	375	mL/min	39.66	5.59	0.045	8	1.99	15.01	254	Clear	No Odor
12:27	55	375	mL/min	39.66	5.63	0.046	7.1	2.07	15.27	251	Clear	No Odor
12:32	60	375	mL/min	39.66	5.63	0.046	7.1	2.05	15.29	251	Clear	No Odor
12:37	65	375	mL/min	39.66	5.63	0.046	6	2.09	15.27	251	Clear	No Odor
12:42	70	375	mL/min	39.66	5.63	0.046	5.2	2.29	15.23	251	Clear	No Odor
12:47	75	375	mL/min	39.66	5.63	0.046	4.7	2.35	15.27	250	Clear	No Odor
12:52	80	375	mL/min	39.66	5.63	0.046	4.9	2.18	15.22	251	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	4	1 L	None
VOCs (SW8260)	Clear Glass	6	40 mL	HCl

Comments: TV: 600ft-39.6ft=560.4ftx0.01=5.604ft/Lx3.785L=21.211L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Location ID:	RW-21_MW-4	**Date(s):**	2025-02-24	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:43.59 °F, rH:65%, Clouds: 2%, Wind:7mph SE			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	369-384	**Casing Diameter (in):**	4	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	43.48	**Total Depth (ft-bmp):**	389	**Water Column(ft):**	345.52	**Liters in Well:**	853.82
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	10:42	**Total Volume Purged (liters):**	30	**Sample ID:**	RW-21_MW-4	**Sample Time:**	11:30
Purge End Time:	11:27	**Well Volumes Purged (total):**	0.04	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:42	0	500	mL/min	43.83	5.96	0.215	5.58	7.65	13.4	157.6	Clear	No Odor
10:47	5	500	mL/min	43.73	4.74	0.227	4.2	1.78	13.8	225.3	Clear	No Odor
10:52	10	500	mL/min	43.71	4.73	0.226	6.32	1.63	13.9	228	Clear	No Odor
10:57	15	500	mL/min	43.69	4.74	0.221	16.8	2.27	13.8	231.7	Clear	No Odor
11:02	20	500	mL/min	43.68	4.71	0.224	16.3	3.75	14	240.3	Clear	No Odor
11:07	25	500	mL/min	43.67	4.7	0.226	12.3	4.23	14	243.3	Clear	No Odor
11:12	30	500	mL/min	43.68	4.69	0.227	11.6	4.67	13.9	246.7	Clear	No Odor
11:17	35	500	mL/min	43.69	4.68	0.226	8.6	4.83	13.9	248.8	Clear	No Odor
11:22	40	500	mL/min	43.68	4.66	0.227	7.5	5.02	13.8	252.2	Clear	No Odor
11:27	45	500	mL/min	43.67	4.66	0.227	7.71	5.08	13.7	253.7	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF= 376.5 ft - 43.48ft = 333.02 ft x 0.01 gal/ft= 3.3 gal x 3.785 = 12.5 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments:



Description:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Location ID:	RW-21_MW-5-1	**Date(s):**	2025-03-07	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:45.77 °F, rH:35%, Clouds: 0%, Wind:18.41mph NW			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	300-310	**Casing Diameter (in):**	2	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	38.51	**Total Depth (ft-bmp):**		**Water Column(ft):**	276.49	**Liters in Well:**	170.81
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	13:05	**Total Volume Purged (liters):**	20.25	**Sample ID:**	RW-21_MW-5-1	**Sample Time:**	13:55
Purge End Time:	13:50	**Well Volumes Purged (total):**	0.12	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
13:05	0	450	mL/min	38.60	6.05	0.084	39.2	0.41	14.56	240	Clear	No Odor
13:10	5	450	mL/min	38.60	5.94	0.083	38	0.27	14.46	239	Clear	No Odor
13:15	10	450	mL/min	38.61	5.98	0.078	28.9	0.18	14.68	241	Clear	No Odor
13:20	15	450	mL/min	38.61	5.96	0.071	17.4	0.31	15.04	244	Clear	No Odor
13:25	20	450	mL/min	38.61	5.94	0.048	8.8	0.96	15.14	252	Clear	No Odor
13:30	25	450	mL/min	38.61	5.94	0.048	8.9	0.84	15.13	250	Clear	No Odor
13:35	30	450	mL/min	38.61	5.95	0.049	7.8	0.92	15.12	254	Clear	No Odor
13:40	35	450	mL/min	38.61	5.93	0.049	5	0.97	15.14	256	Clear	No Odor
13:45	40	450	mL/min	38.61	5.91	0.05	4.3	1	15.12	255	Clear	No Odor
13:50	45	450	mL/min	38.61	5.95	0.05	3.3	1.03	15.19	258	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV: 305ft-38.51ft=266.49ftx0.01=2.665ft/Lx3.785L=10.087L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Location ID:	RW-21_MW-5-2	**Date(s):**	2025-03-07	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:45.95 °F, rH:35%, Clouds: 0%, Wind:18.41mph NW			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	560-570	**Casing Diameter (in):**	2	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	40.65	**Total Depth (ft-bmp):**	575	**Water Column(ft):**	534.35	**Liters in Well:**	330.11
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	13:05	**Total Volume Purged (liters):**	35	**Sample ID:**	RW-21_MW-5-2	**Sample Time:**	14:10
Purge End Time:	14:05	**Well Volumes Purged (total):**	0.11	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
13:05	0	500	mL/min	40.75	12.06	1.7	17.8	2.03	14.06	-27	Clear	No Odor
13:10	5	500	mL/min	40.75	12.09	1.64	14.4	0.12	13.88	-48	Clear	No Odor
13:15	10	500	mL/min	40.72	12.08	1.56	14.1	0	14.33	-64	Clear	No Odor
13:20	15	500	mL/min	40.70	12.05	1.46	10.4	0	14.62	-79	Clear	No Odor
13:25	20	500	mL/min	40.67	12.06	1.41	4.6	0	14.38	-88	Clear	No Odor
13:30	25	500	mL/min	40.66	12.05	1.4	4.6	0	14.35	-91	Clear	No Odor
13:35	30	500	mL/min	40.64	12.05	1.4	3.8	0	14.24	-94	Clear	No Odor
13:40	35	500	mL/min	40.64	12.06	1.4	3.6	0	14.16	-95	Clear	No Odor
13:45	40	500	mL/min	40.64	12.06	1.39	3.8	0	14.07	-95	Clear	No Odor
13:50	45	500	mL/min	40.64	12.06	1.39	3	0	14	-95	Clear	No Odor
13:55	50	400	mL/min	40.62	12.06	1.39	2.9	0	14.15	-95	Clear	No Odor
14:00	55	400	mL/min	40.62	12.07	1.39	3.5	0	13.81	-94	Clear	No Odor
14:05	60	400	mL/min	40.62	12.08	1.4	3.1	0	13.79	-95	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF 565ft - 40.65ft = 524.35ft x 0.01 gal/ft = 5.2 gal x 3.785 = 19.8 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Location ID:	RW-21_MW-6	**Date(s):**	2025-03-03	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:33.98 °F, rH:38%, Clouds: 2%, Wind:7mph S-SW			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	604-624	**Casing Diameter (in):**	4	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	40.89	**Total Depth (ft-bmp):**	629	**Water Column(ft):**	588.11	**Liters in Well:**	1453.29
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	13:03	**Total Volume Purged (liters):**	35	**Sample ID:**	RW-21_MW-6	**Sample Time:**	14:20
Purge End Time:	14:18	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
13:03	0	400	mL/min	40.95	5.58	0.134	23	5.6	13.5	183.2	Clear	No Odor
13:08	5	400	mL/min	40.95	5.55	0.144	17.9	1.5	13.3	181.8	Clear	No Odor
13:13	10	400	mL/min	40.97	5.52	0.142	14.3	0.9	14.4	181.9	Clear	No Odor
13:18	15	400	mL/min	40.98	5.52	0.142	12.7	0.8	14.5	181.2	Clear	No Odor
13:23	20	400	mL/min	40.98	5.55	0.143	12.3	0.7	14.3	180.3	Clear	No Odor
13:28	25	400	mL/min	40.98	5.55	0.141	12.5	0.6	14.6	180.1	Clear	No Odor
13:33	30	400	mL/min	40.98	5.48	0.137	12.3	0.7	14.4	181.1	Clear	No Odor
13:38	35	400	mL/min	40.98	5.43	0.136	14.2	0.9	14.7	182.5	Clear	No Odor
13:43	40	400	mL/min	40.98	5.41	0.141	10.32	1.6	15.1	184.5	Clear	No Odor
13:48	45	400	mL/min	40.98	5.42	0.143	11.76	1.9	15.1	185.5	Clear	No Odor
13:53	50	400	mL/min	40.98	5.45	0.145	10.97	2.1	15	186.7	Clear	No Odor
13:58	55	400	mL/min	40.98	5.48	0.145	8.73	2.2	14.9	187.6	Clear	No Odor
14:03	60	400	mL/min	40.98	5.49	0.146	8.7	2.2	14.9	188.4	Clear	No Odor
14:08	65	400	mL/min	40.98	5.5	0.146	8.32	2.2	15	188.8	Clear	No Odor
14:13	70	400	mL/min	40.98	5.51	0.146	8.12	2.2	14.8	189.4	Clear	No Odor
14:18	75	400	mL/min	40.98	5.52	0.147	7.9	2.2	14.4	189.8	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF = 614ft - 40.89ft = 573.11 ft x 0.01 gal/ft = 5.7 gal x 3.785 = 21.7 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Groundwater Sampling Form

Location ID:	RW-21_MW-7	**Date(s):**	2025-03-04	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:38.88 °F, rH:75%, Clouds: 100%, Wind:8.05mph S-SW			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	580-590	**Casing Diameter (in):**	4	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	43.52	**Total Depth (ft-bmp):**	595	**Water Column(ft):**	551.48	**Liters in Well:**	1362.77
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:02	**Total Volume Purged (liters):**	30	**Sample ID:**	RW-21_MW-7	**Sample Time:**	10:05
Purge End Time:	10:02	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm²)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:02	0	400	mL/min	43.89	6.98	0.165	24.5	8.8	11.1	136.9	Clear	No Odor
09:07	5	400	mL/min	43.89	5.42	0.141	12.4	4	14.4	160.4	Clear	No Odor
09:12	10	400	mL/min	43.92	4.86	0.142	8.76	1.5	14.5	180.9	Clear	No Odor
09:17	15	400	mL/min	43.94	4.73	0.142	7.5	1	14.2	188.4	Clear	No Odor
09:22	20	400	mL/min	43.94	4.76	0.14	7.65	0.8	13.9	189.1	Clear	No Odor
09:27	25	400	mL/min	43.93	4.82	0.137	7.65	0.9	14	190.5	Clear	No Odor
09:32	30	400	mL/min	43.93	4.78	0.139	7.6	1.2	13.9	192.8	Clear	No Odor
09:37	35	400	mL/min	43.94	4.74	0.14	7.6	1.4	14	196.1	Clear	No Odor
09:42	40	400	mL/min	43.94	4.73	0.141	7.12	1.6	14	198	Clear	No Odor
09:47	45	400	mL/min	43.94	4.68	0.142	7.4	1.8	14.9	201.7	Clear	No Odor
09:52	50	400	mL/min	43.94	4.65	0.142	7.08	2	14.9	203.6	Clear	No Odor
09:57	55	400	mL/min	43.94	4.64	0.143	6.7	2	14.7	205.2	Clear	No Odor
10:02	60	400	mL/min	43.94	4.61	0.143	6.98	2.1	14.7	208.3	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF = 585ft - 43.52 ft = 541.48ft x 0.006 gal/ft = 3.24 gal x 3.785 = 12.29 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments:



Description:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Location ID:	RW-21_MW-8	**Date(s):**	2025-02-24	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:39.07 °F, rH:65%, Clouds: 0%, Wind:11.01mph E-NE			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	460-470	**Casing Diameter (in):**	4	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	43.12	**Total Depth (ft-bmp):**		**Water Column(ft):**	431.88	**Liters in Well:**	1067.23
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:45	**Total Volume Purged (liters):**	30	**Sample ID:**	RW-21_MW-8	**Sample Time:**	09:55
Purge End Time:	09:50	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:45	0	500	mL/min	43.65	8.54	0.326	9.58	4.19	12.9	149.9	Clear	No Odor
08:50	5	500	mL/min	43.65	8.75	0.328	11.27	1.9	13.3	154.1	Clear	No Odor
08:55	10	500	mL/min	43.65	8.76	0.296	2.61	1.52	13.3	155.2	Clear	No Odor
09:00	15	500	mL/min	43.45	8.85	0.291	3.41	1.4	13.3	156.2	Clear	No Odor
09:05	20	500	mL/min	43.45	9.44	0.311	2.96	0.312	13.2	149.5	Clear	No Odor
09:10	25	500	mL/min	43.45	8.5	0.315	3.12	1.31	13.1	150	Clear	No Odor
09:15	30	500	mL/min	43.47	8.76	0.334	22.5	1.28	12.9	160.6	Clear	No Odor
09:20	35	500	mL/min	43.47	8.4	0.342	26	1.27	13.2	166	Clear	No Odor
09:25	40	500	mL/min	43.48	8.03	0.35	29	1.26	12.9	132.5	Clear	No Odor
09:30	45	400	mL/min	43.48	7.84	0.351	27.7	1.26	13.2	140.8	Clear	No Odor
09:35	50	400	mL/min	43.48	7.7	0.349	22.4	1.28	13.2	148.1	Clear	No Odor
09:40	55	400	mL/min	43.48	7.53	0.344	20.4	1.32	13.2	152.6	Clear	No Odor
09:45	60	400	mL/min	43.48	7.46	0.339	22.4	1.37	13.2	155.3	Clear	No Odor
09:50	65	400	mL/min	43.48	7.44	0.337	21.8	1.39	13.2	156.1	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV: 465-43.12=421.88x0.01=4.219x3.785=15.969L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Location ID:	RW-21_MW-9	**Date(s):**	2025-03-04	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:43.88 °F, rH:74%, Clouds: 100%, Wind:13.8mph S-SW			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	630-640	**Casing Diameter (in):**	4	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	41.11	**Total Depth (ft-bmp):**		**Water Column(ft):**	603.89	**Liters in Well:**	1492.29
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	11:07	**Total Volume Purged (liters):**	30	**Sample ID:**	RW-21_MW-9	**Sample Time:**	12:27
Purge End Time:	12:22	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:07	0	400	mL/min	41.31	5.01	0.133	17.4	4	13.3	208.7	Clear	No Odor
11:12	5	400	mL/min	41.35	4.96	0.133	16.9	2.7	13.5	209	Clear	No Odor
11:17	10	400	mL/min	41.39	4.96	0.133	14.3	2.1	13.9	208.9	Clear	No Odor
11:22	15	400	mL/min	41.43	4.96	0.134	14.1	1.9	14.1	208.8	Clear	No Odor
11:27	20	400	mL/min	41.46	5.02	0.136	13.5	1.7	14.6	209.7	Clear	No Odor
11:32	25	400	mL/min	41.48	4.93	0.136	12.8	2.1	14.4	212.5	Clear	No Odor
11:37	30	400	mL/min	41.49	4.89	0.136	12.9	2.3	14.5	214.8	Clear	No Odor
11:42	35	400	mL/min	41.48	4.86	0.137	12.2	2.4	14.4	215.9	Clear	No Odor
11:47	40	400	mL/min	41.47	4.85	0.137	12.2	2.5	14.2	216.9	Clear	No Odor
11:52	45	400	mL/min	41.46	4.86	0.137	12.1	2.5	14.5	217.5	Clear	No Odor
11:57	50	400	mL/min	41.45	4.86	0.138	11.9	2.5	14.6	218	Clear	No Odor
12:02	55	400	mL/min	41.43	4.86	0.138	11.7	2.5	14.5	218.6	Clear	No Odor
12:07	60	400	mL/min	41.41	4.86	0.138	11.8	2.4	14.6	218.9	Clear	No Odor
12:12	65	400	mL/min	41.40	4.87	0.138	11.5	2.4	14.4	219.2	Clear	No Odor
12:17	70	400	mL/min	41.40	4.87	0.138	11.8	2.4	14.8	219.6	Clear	No Odor
12:22	75	400	mL/min	41.39	4.88	0.139	11.6	2.3	14.8	219.8	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV:635ft-41.11ft=593.89ctx0.01=5.939ft/Lx3.785L=22.479L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Location ID:	MW-109-3	**Date(s):**	2025-03-03	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:25.81 °F, rH:53%, Clouds: 0%, Wind:5.01mph W-NW			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	233-243	**Casing Diameter (in):**	4	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	44.5	**Total Depth (ft-bmp):**		**Water Column(ft):**	203.5	**Liters in Well:**	502.87
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	11:04	**Total Volume Purged (liters):**	12.3	**Sample ID:**	MW-109-3	**Sample Time:**	11:50
Purge End Time:	11:45	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	Duplicate / REPMMDDYYIntials1	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:05	0	300	mL/min	44.60	5.08	0.316	22.7	2.5	13.1	163	Clear	No Odor
11:10	5	300	mL/min	44.60	4.8	0.346	19.6	2.2	14.3	177.2	Clear	No Odor
11:15	10	300	mL/min	44.60	4.66	0.355	20.45	3	15.1	187.8	Clear	No Odor
11:20	15	300	mL/min	44.60	4.64	0.354	20.6	3	14.7	193	Clear	No Odor
11:25	20	300	mL/min	44.60	4.64	0.354	12.1	2.9	14.8	196.8	Clear	No Odor
11:30	25	300	mL/min	44.60	4.6	0.354	9.28	2.8	15.1	200.5	Clear	No Odor
11:35	30	300	mL/min	44.60	4.59	0.355	8.63	2.7	15.1	202.4	Clear	No Odor
11:40	35	300	mL/min	44.60	4.59	0.356	8.11	2.7	15.1	204.6	Clear	No Odor
11:45	40	300	mL/min	44.60	4.59	0.356	7.97	2.8	15.2	205.8	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	4	1 L	None
VOCs (SW8260)	Clear Glass	6	40 mL	HCl

Comments: TV: 238ft-44.5ft=193.5ftx0.006=1.161gal/ftx3.785L=4.394 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Location ID:	MW-111-4	**Date(s):**	2025-03-06	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:49.24 °F, rH:97%, Clouds: 75%, Wind:4.61mph W			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	448-468	**Casing Diameter (in):**	4	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	41.11	**Total Depth (ft-bmp):**	473	**Water Column(ft):**	431.89	**Liters in Well:**	1067.25
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:19	**Total Volume Purged (liters):**	25	**Sample ID:**	MW-111-4	**Sample Time:**	10:08
Purge End Time:	10:04	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:19	0	400	mL/min	41.12	5.11	0.212	2.5	4.51	15.24	294	Clear	No Odor
09:24	5	400	mL/min	41.11	4.92	0.19	0.2	2.92	15.24	288	Clear	No Odor
09:29	10	400	mL/min	41.11	4.72	0.184	0.2	2.94	15.16	301	Clear	No Odor
09:34	15	400	mL/min	41.11	4.57	0.246	2.1	2.93	15.21	312	Clear	No Odor
09:39	20	400	mL/min	41.12	4.54	0.251	2.9	2.99	15.33	311	Clear	No Odor
09:44	25	400	mL/min	41.12	4.45	0.233	1.6	3.03	15.41	317	Clear	No Odor
09:49	30	400	mL/min	41.12	4.43	0.231	1.5	3.02	15.51	319	Clear	No Odor
09:54	35	400	mL/min	41.12	4.43	0.229	1.1	3.03	15.56	321	Clear	No Odor
09:59	40	400	mL/min	41.13	4.43	0.226	1.1	3.01	15.56	323	Clear	No Odor
10:04	45	400	mL/min	41.12	4.44	0.223	1.1	3.01	15.44	324	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF= 458ft - 41.11ft = 416.89 ft x 0.006 gal/ft = 2.5 gal x 3.785 = 9.46 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments:



Description:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

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Groundwater Sampling Log

Project No. 30223092.PSSI2 | Well ID MW-116-5 | Date 2/25/2025

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring | Weather 49°F/clear

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bls): 570 - 590 | Casing Diameter (in.): 4 | Well Material: x PVC, ___ SS

Static Water Level (ft-bmp): 41.07 * | Total Depth (ft-bls): 595 | Water Column/Gallons in Well: 553.93ft / 360.05gal

MP Elevation: NM | Pump Intake (ft-bls): 482 (packer 480) | Purge Method: Peristaltic ___ / Submersib Dedicated / Other ___ | Sample Method: 3 Well Volume Below Packer

Pump On/Off: 1004 / 1130 | Volume Purged (gal): 250

Sample Time: Label MW-116-5, Start 1120, End 1130 | Replicate/Code No.: *MS/MSD* | Sampled by: KK, BM, BW

PID: 0.3ppm (WH) 0.0ppm (BZ)

Time	Minutes Elapsed	Rate (~~mL/min~~ gal)	Depth to Water (ft)	Volume Purged (G)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
1005	0	3gal	41.08	0	5.21	0.087	2.55	7.51	15.3	195.9	clear	None
1027	22	3.4	41.08	1V	5.10	0.013	0.87	7.24	14.2	221.4	"	"
1051	46	3.4	41.08	2V	4.90	0.077	1.36	8.33	13.8	291.4	"	"
1118	73	3.4	41.08	3V	4.83	0.092	2.12	7.13	14.3	228.7	"	"
#20 * sample time												

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270DSIM	1 L glass amber bottle	2	None

Notes:

Packer Pressure Equation: ((Depth to packer - static water level) x 0.43 PSI/ft) +50 PSI 480ft - 41.07ft = 438.93ft x 0.43 = 188.7ft + 50 = 240psi

Volume Equation: ((Total depth - packer depth) x 0.65 gal/ ft) + ((Midscreen depth - static water level depth) x 0.01 gal/ft)

VE = 595ft - 480ft = 115ft x 0.65gal/ft = 75 (DW) + (570ft - 41.07ft = 528.93ft x 0.01gal/ft = 5.4gal) = 80.5gal (1 WV)

NEED ROAD TRAFFIC CONTROL SIGNS* *CONE OFF EARLY OR DAY BEFORE 225gal + 5.4gal = 230.4 total

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04, 1.25" = 0.06, 1.5" = 0.09, 2" = 0.16, 2.5" = 0.26, 3" = 0.37, 3.5" = 0.50, 4" = 0.65, 6" = 1.47, 1/2" = 0.01, 3/8" = 0.006

41.18

*DTW directly before Nitrogen tank turned on 41.25

Well Information

Well Location:	150 North Herman Ave, Bethpage, NY	Well Locked at Arrival:	(Yes) / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	(Yes) / No
Well Completion:	**Flush Mount** / Stick Up	Key Number To Well:	N/A

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Groundwater Sampling Log

Page 1 of 1

Project No. 30223092.PSSI2 | Well ID MW-118-5 | Date 2/26/25

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring | Weather 48°F/clear

Measuring Pt. Description Top of Casing | Screen Interval (ft-bls) 718 - 738 | Casing Diameter (in.) 4 | Well Material x PVC ___ SS

Static Water Level (ft-bmp) ~~34.89~~ 35.60 | Total Depth (ft-bls) 750 | Water Column/ Gallons in Well 714.4ft / 464.36 gal

MP Elevation NM | Pump Intake (ft-bls) 505 | Purge Method: Peristaltic ___ Submersib Dedicated ___ Other ___ | Sample Method 3 Well Volume Below Packer

Pump On/Off ~~34.89~~ 0955 | Volume Purged (gal) 525

Sample Time: Label MW-118-5 Start ~~0955~~ 1237 End 1242 | Replicate/Code No. N/A | Sampled by EK, BM

PID: 0.0 ppm

Time	Minutes Elapsed	Rate (~~mL/min~~ gal)	Depth to Water (ft)	Volume Purged (G)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
0957	0	.43gal	35.55	0	6.64	0.092	2.92	12.25	11.4	176.4	clear	None
1035	38	4.3	35.52	1V	5.44	0.060	2.58	7.38	13.0	205.4	"	"
1107	70		35.50	2V	5.21	0.047	1.27	9.67	12.7	174.0	"	"
1108 *	pause purge for discharge											
1200 *	Resume purge			WL - 35.40 ft								
1234	157		35.39	3V	5.20	0.057	1.28	10.64	13.1	315.4	clear	None
1237 *	Begin sampling											

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270DSIM	1 L glass amber bottle	2	None

Notes: PPE = 500ft - 34.89 ft = 465.11 ft x 0.43 PSI/ft = 199.9 psi/ft + 50 psi = 250 psi

Packer Pressure Equation: ((Depth to packer - static water level) x 0.43 PSI/ft) +50 PSI

1162.5 gal x 3 + 6.9 gal = 494.4 gal total

Volume Equation: ((Total depth - packer depth) x 0.65 gal/ ft) + ((Midscreen depth - static water level depth) x 0.01 gal/ft)

VE = 750ft - 500ft = 250ft x 0.65 gal/ft = 162.5 gal + (728 ft - 34.89 ft) x 0.01 gal/ft = 6.9 gal

NEED ROAD TRAFFIC CONTROL SIGNS* *CONE OFF EARLY OR DAY BEFORE

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot						
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47	3/8" = 0.006
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	1/2" = 0.01	

Well Information

Well Location:	1 Hoover Lane, Bethpage, NY	Well Locked at Arrival:	Yes / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	Yes / No
Well Completion:	**Flush Mount** / Stick Up	Key Number To Well:	N/A

Groundwater Sampling Form

Location ID:	RW-21_MW-1	**Date(s):**	2025-03-07	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:38.03 °F, rH:44%, Clouds: 0%, Wind:17.27mph W-NW			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	615-625	**Casing Diameter (in):**	4	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	43.12	**Total Depth (ft-bmp):**		**Water Column(ft):**	586.88	**Liters in Well:**	1450.25
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:36	**Total Volume Purged (liters):**	32.5	**Sample ID:**	RW-21_MW-1	**Sample Time:**	10:46
Purge End Time:	10:41	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:36	0	500	mL/min	43.35	6.75	0.158	22.6	3.01	11.73	283	Clear	No Odor
09:41	5	500	mL/min	43.38	7.14	0.149	15.2	2.01	12.08	271	Clear	No Odor
09:46	10	500	mL/min	43.38	7.63	0.14	0	1.16	12.94	247	Clear	No Odor
09:51	15	500	mL/min	43.38	7.59	0.139	0	1.13	13.18	246	Clear	No Odor
09:56	20	500	mL/min	43.38	7.03	0.14	0	1.2	13.22	256	Clear	No Odor
10:01	25	500	mL/min	43.38	6.91	0.141	0	1.19	13.26	257	Clear	No Odor
10:06	30	500	mL/min	43.38	6.48	0.144	1.3	1.28	13.26	259	Clear	No Odor
10:11	35	500	mL/min	43.38	6.37	0.145	8.4	1.26	13.26	259	Clear	No Odor
10:16	40	500	mL/min	43.38	6.31	0.145	11.8	1.23	13.25	258	Clear	No Odor
10:21	45	500	mL/min	43.38	6.29	0.145	10.5	1.23	13.31	258	Clear	No Odor
10:26	50	500	mL/min	43.38	6.26	0.144	9.1	1.22	13.33	258	Clear	No Odor
10:31	55	500	mL/min	43.38	6.24	0.144	8.9	1.2	13.38	257	Clear	No Odor
10:36	60	500	mL/min	43.38	6.22	0.144	6.2	1.18	13.42	257	Clear	No Odor
10:41	65	500	mL/min	43.38	6.2	0.144	6	1.18	13.38	256	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV: 620ft-43.12ft=576.88ftx0.01=5.769ft/Lx3.785L=21.836L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Location ID:	RW-21_MW-11	**Date(s):**	2025-03-04	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:47.64 °F, rH:86%, Clouds: 100%, Wind:19.57mph S			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	638-648	**Casing Diameter (in):**	4	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	47.58	**Total Depth (ft-bmp):**	653	**Water Column(ft):**	605.42	**Liters in Well:**	1496.07
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	13:27	**Total Volume Purged (liters):**	30	**Sample ID:**	RW-21_MW-11	**Sample Time:**	14:30
Purge End Time:	14:27	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm^2)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
13:27	0	400	mL/min	47.56	5.34	0.07	19.8	9.5	10	245.3	Clear	No Odor
13:32	5	400	mL/min	47.56	5.68	0.058	11.9	3.1	14.1	226.4	Clear	No Odor
13:37	10	400	mL/min	47.54	5.68	0.073	14.3	3.1	14.1	226.1	Clear	No Odor
13:42	15	400	mL/min	47.54	5.68	0.074	7.6	3.2	14	225.2	Clear	No Odor
13:47	20	400	mL/min	47.54	5.68	0.073	7.43	3.4	14	224.2	Clear	No Odor
13:52	25	400	mL/min	47.54	5.71	0.067	6.76	3.7	14.6	221.8	Clear	No Odor
13:57	30	400	mL/min	47.54	5.72	0.064	7.4	3.9	14.6	220.8	Clear	No Odor
14:02	35	400	mL/min	47.54	5.73	0.062	7.5	3.9	13.7	218.5	Clear	No Odor
14:07	40	400	mL/min	47.54	5.73	0.058	7.12	4	14.4	220.8	Clear	No Odor
14:12	45	400	mL/min	47.54	5.73	0.058	6.7	4.7	14.9	219.9	Clear	No Odor
14:17	50	400	mL/min	47.54	5.74	0.055	6.7	4.7	14.9	219.3	Clear	No Odor
14:22	55	400	mL/min	47.54	5.74	0.054	7.1	4.9	14.9	219	Clear	No Odor
14:27	60	400	mL/min	47.54	5.74	0.054	6.12	5	15	218.7	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF = 643ft - 47.58ft = 595.42ft x 0.006 gal/ft = 3.57 gal x 3.785 = 13.5 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments:



Description:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Location ID:	RW-21_MW-12-1	**Date(s):**	2025-03-05	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:48.47 °F, rH:84%, Clouds: 100%, Wind:14.97mph S			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	415-425	**Casing Diameter (in):**	2	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	20.3	**Total Depth (ft-bmp):**	430	**Water Column(ft):**	409.7	**Liters in Well:**	253.1
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:40	**Total Volume Purged (liters):**	32	**Sample ID:**	RW-21_MW-12-1	**Sample Time:**	10:50
Purge End Time:	10:45	**Well Volumes Purged (total):**	0.13	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:40	0	400	mL/min	20.66	5.26	0.215	22.7	1.7	14.2	181.7	Clear	No Odor
09:45	5	400	mL/min	20.66	5.16	0.214	25.62	1	13.9	192.2	Clear	No Odor
09:50	10	400	mL/min	20.65	4.98	0.203	77.8	0.8	13.9	199.9	Clear	No Odor
09:55	15	400	mL/min	20.65	5.05	0.208	124	0.7	14.1	200.4	Clear	No Odor
10:00	20	300	mL/min	20.55	5.06	0.209	127.4	0.7	14	200.8	Clear	No Odor
10:05	25	350	mL/min	20.56	5.03	0.207	71.2	0.6	14.1	202.3	Clear	No Odor
10:10	30	400	mL/min	20.60	5.09	0.21	53.2	0.6	14.2	201.8	Clear	No Odor
10:15	35	400	mL/min	20.62	5.12	0.211	27.5	0.6	14.1	201.8	Clear	No Odor
10:20	40	400	mL/min	20.66	5.15	0.212	27.5	0.5	14.2	201.7	Clear	No Odor
10:25	45	400	mL/min	20.66	5.16	0.212	18.7	0.5	14.2	201.9	Clear	No Odor
10:30	50	400	mL/min	20.65	5.15	0.211	24.2	0.5	14.2	202.7	Clear	No Odor
10:35	55	400	mL/min	20.66	5.14	0.21	17.5	0.5	14.2	203.2	Clear	No Odor
10:40	60	400	mL/min	20.65	5.14	0.21	20.2	0.5	14.2	203.4	Clear	No Odor
10:45	65	400	mL/min	20.65	5.15	0.21	15	0.5	14.2	203.6	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF = 421ft - 20.30ft = 400.7 ft x 0.01 gal/ ft = 4.0 gal x 3.785 = 15.1 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Location ID:	RW-21_MW-12-2	**Date(s):**	2025-03-05	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:48.47 °F, rH:84%, Clouds: 100%, Wind:14.97mph S			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	590-600	**Casing Diameter (in):**	2	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	21.3	**Total Depth (ft-bmp):**		**Water Column(ft):**	583.7	**Liters in Well:**	360.6
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:44	**Total Volume Purged (liters):**	43.2	**Sample ID:**	RW-21_MW-12-2	**Sample Time:**	11:25
Purge End Time:	11:20	**Well Volumes Purged (total):**	0.12	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:45	0	450	mL/min	21.38	9.58	0.099	28.9	10.54	13.7	135.3	Clear	No Odor
09:50	5	450	mL/min	21.38	9.63	0.095	17.38	11.03	14	133.5	Clear	No Odor
09:55	10	450	mL/min	21.38	9.57	0.094	21.3	11.34	14.2	131.8	Clear	No Odor
10:00	15	450	mL/min	21.38	9.51	0.093	26.4	11.5	14.2	127.1	Clear	No Odor
10:05	20	450	mL/min	21.39	9.61	0.094	22.6	11.59	14.1	120.2	Clear	No Odor
10:10	25	450	mL/min	21.39	10.27	0.108	24.9	11.66	14.2	104.2	Clear	No Odor
10:15	30	450	mL/min	21.39	10.39	0.11	24.8	11.72	14.2	99.4	Clear	No Odor
10:20	35	450	mL/min	21.39	10.36	0.108	26.5	11.73	14.2	92.6	Clear	No Odor
10:25	40	450	mL/min	21.39	10.3	0.106	21.8	11.77	14.2	87.7	Clear	No Odor
10:30	45	450	mL/min	21.39	10.16	0.101	19.4	11.83	14.2	83.9	Clear	No Odor
10:35	50	450	mL/min	21.39	10.13	0.1	19.1	11.84	14.2	83.8	Clear	No Odor
10:40	55	450	mL/min	21.39	10.07	0.098	18.9	11.85	14.2	82.1	Clear	No Odor
10:45	60	450	mL/min	21.39	10.02	0.097	18.7	11.87	14.2	79.3	Clear	No Odor
10:50	65	450	mL/min	21.39	9.91	0.095	18.6	11.89	14.2	72.8	Clear	No Odor
10:55	70	450	mL/min	21.39	9.97	0.096	18.1	11.92	14.2	68.3	Clear	No Odor
11:00	75	450	mL/min	21.39	10.07	0.099	18.2	11.93	14.2	60.8	Clear	No Odor
11:05	80	450	mL/min	21.39	10.11	0.099	18.1	11.94	14.2	54.5	Clear	No Odor
11:10	85	450	mL/min	21.39	9.92	0.095	17.9	11.93	14.2	53.5	Clear	No Odor
11:15	90	450	mL/min	21.39	9.84	0.093	17.7	11.94	14.2	51.2	Clear	No Odor
11:20	95	450	mL/min	21.40	9.85	0.094	17.7	11.97	14.2	47.6	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV: 595ft-21.3ft=573.7ftx0.01=5.737ft/Lx3.785L=21.715L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Location ID:	RW-21_MW-13	**Date(s):**	2025-02-20	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:26.82 °F, rH:53%, Clouds: 0%, Wind:9.22mph N-NW			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	716-726	**Casing Diameter (in):**	4	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	39.7	**Total Depth (ft-bmp):**	731	**Water Column(ft):**	691.3	**Liters in Well:**	1708.29
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	11:44	**Total Volume Purged (liters):**	35	**Sample ID:**	RW-21_MW-13	**Sample Time:**	12:42
Purge End Time:	12:39	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	**MS/MSD** / RW-21_MW-13	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:44	0	500	mL/min	39.35	6.25	0.037	1.85	11.57	8.6	231.1	Clear	No Odor
11:49	5	500	mL/min	39.01	6.22	0.033	2.55	11.18	8.4	227.6	Clear	No Odor
11:54	10	500	mL/min	38.95	6.01	0.003	5.43	11.27	7.9	227.2	Clear	No Odor
11:59	15	500	mL/min	38.85	5.88	0.035	4.6	11.05	6.8	228.7	Clear	No Odor
12:04	20	500	mL/min	38.78	5.8	0.037	1.54	10.79	6.1	229.8	Clear	No Odor
12:09	25	500	mL/min	38.70	5.7	0.036	1.72	10.31	6.1	230.1	Clear	No Odor
12:14	30	500	mL/min	38.69	5.65	0.035	1.7	10.04	6.1	230.4	Clear	No Odor
12:19	35	500	mL/min	28.65	5.59	0.034	1.21	9.74	7.6	229.8	Clear	No Odor
12:24	40	500	mL/min	38.55	5.6	0.035	0.89	9.57	7.5	229.2	Clear	No Odor
12:29	45	500	mL/min	38.56	5.6	0.035	2.44	9.5	7.2	229.2	Clear	No Odor
12:34	50	500	mL/min	38.55	5.57	0.035	2.13	10.07	1.8	232.9	Clear	No Odor
12:39	55	500	mL/min	38.55	5.59	0.036	1.78	10.07	1.8	234.1	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF = 721ft - 39.7ft = 681.3ft x 0.006 gal/ft = 4.0 L x 3.785 = 15.47 L Total

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Location ID:	RW-21_MW-14	**Date(s):**	2025-02-19	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:26.28 °F, rH:46%, Clouds: 0%, Wind:10mph NW			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	630-640	**Casing Diameter (in):**	4	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	35.2	**Total Depth (ft-bmp):**		**Water Column(ft):**	609.8	**Liters in Well:**	1506.89
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	12:04	**Total Volume Purged (liters):**	28.5	**Sample ID:**	RW-21_MW-14	**Sample Time:**	13:45
Purge End Time:	13:21	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
12:05	0	300	mL/min	35.19	5.14	0.083	4.95	3.1	14.2	186.4	Clear	No Odor
12:10	5	300	mL/min	35.20	5.26	0.083	5.94	1.3	11.1	179.1	Clear	No Odor
12:15	10	300	mL/min	35.20	5.29	0.083	5.33	1	11.1	176.3	Clear	No Odor
12:20	15	300	mL/min	34.40	5.36	0.083	6.21	0.8	11.8	169.8	Clear	No Odor
12:25	20	300	mL/min	33.96	5.37	0.073	4.54	0.7	12.6	250.74	Clear	No Odor
12:30	25	300	mL/min	33.78	5.41	0.075	28.9	0.7	12.7	246.83	Clear	No Odor
12:35	30	300	mL/min	33.68	5.47	0.08	24.2	0.6	13.1	147.2	Clear	No Odor
12:40	35	300	mL/min	33.56	5.47	0.082	19.6	0.6	13	140.3	Clear	No Odor
12:45	40	300	mL/min	33.50	5.46	0.082	14.5	0.6	12.9	137.6	Clear	No Odor
12:50	45	300	mL/min	35.42	5.45	0.081	12.72	0.5	13.1	135.5	Clear	No Odor
12:55	50	300	mL/min	33.34	5.43	0.081	9.2	0.5	13.2	134.5	Clear	No Odor
13:00	55	300	mL/min	32.79	5.41	0.081	9.2	0.5	13.4	134.1	Clear	No Odor
13:05	60	300	mL/min	32.78	5.4	0.081	20	0.5	13.4	134.1	Clear	No Odor
13:10	65	300	mL/min	32.75	5.38	0.08	17.9	0.5	13.4	134.2	Clear	No Odor
13:15	70	300	mL/min	32.75	5.38	0.08	17.2	0.5	13.2	134.4	Clear	No Odor
13:20	75	300	mL/min	32.75	5.36	0.08	16.7	0.5	13.1	134.8	Clear	No Odor
13:25	80	300	mL/min	32.75	5.33	0.08	13.9	0.6	13.2	137.6	Clear	No Odor
13:30	85	300	mL/min	32.75	5.32	0.08	14.9	0.5	13.1	137.8	Clear	No Odor
13:35	90	300	mL/min	32.75	5.32	0.08	15.8	0.5	12.9	137.7	Clear	No Odor
13:40	95	300	mL/min	32.75	5.32	0.08	15.1	0.5	13.1	137.8	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV: 635-35.20=599.8x.01=5.998x3.785=22.702 L

Well Information:

Well Labeled Properly: _____

Is Well in Good Condition? _____

Well Inspection Comments: _____

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

Location ID:	RW-21_MW-15	**Date(s):**	2025-02-20	**Work Order(s):**		RW21 LTM 2025 Quarter 1	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:22.05 °F, rH:64%, Clouds: 0%, Wind:10mph N-NW			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	676-686	**Casing Diameter (in):**	4	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	43.35	**Total Depth (ft-bmp):**		**Water Column(ft):**	647.65	**Liters in Well:**	1600.42
Depth to Product (ft-bmp):		**Pump Intake Depth(ft-bmp):**		**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:19	**Total Volume Purged (liters):**	34.25	**Sample ID:**	RW-21_MW-15	**Sample Time:**	10:35
Purge End Time:	10:30	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI ProPlus /
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:20	0	250	mL/min	44.55	5.72	0.053	8.5	4.26	13.6	133.97	Clear	No Odor
09:25	5	500	mL/min	44.55	5.48	0.052	11.21	4.24	14.2	133.71	Clear	No Odor
09:30	10	500	mL/min	44.56	5.46	0.053	3.37	4.2	14.9	133.55	Clear	No Odor
09:35	15	500	mL/min	44.56	5.4	0.053	3.72	4.26	14.9	231.76	Clear	No Odor
09:40	20	500	mL/min	44.56	5.37	0.052	3.52	4.43	14.9	233.6	Clear	No Odor
09:45	25	500	mL/min	44.56	5.38	0.052	3.68	4.53	14.8	234.6	Clear	No Odor
09:50	30	500	mL/min	44.56	5.37	0.051	4.11	4.58	14.9	145.2	Clear	No Odor
09:55	35	500	mL/min	44.32	5.38	0.052	3.02	4.59	14.6	179.5	Clear	No Odor
10:00	40	500	mL/min	44.38	5.38	0.052	3.23	4.69	12.4	189.8	Clear	No Odor
10:05	45	500	mL/min	44.38	5.39	0.052	3.67	4.76	10.9	195	Clear	No Odor
10:10	50	500	mL/min	44.38	5.4	0.052	3.87	4.77	10.7	198	Clear	No Odor
10:15	55	500	mL/min	44.70	5.41	0.054	2.14	4.73	11	201.5	Clear	No Odor
10:20	60	500	mL/min	44.70	5.34	0.049	2.97	4.58	15.4	205.3	Clear	No Odor
10:25	65	400	mL/min	44.80	5.38	0.049	2.81	4.87	14.9	208.7	Clear	No Odor
10:30	70	400	mL/min	44.80	5.31	0.049	1.69	4.73	15.3	212.3	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV: 681-43.48=637.52x0.01=6.3752x3.785=24.13L

Well Information:

Well Labeled Properly: _____

Is Well in Good Condition? _____

Well Inspection Comments: _____

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milli

ARCADIS Design & Consultancy for natural and built assets

Groundwater Sampling Log

Project No. 30223092 PSS12 | Well ID RW-21-MW-16 | Date 2/19/2025

Project Name/Location 2025Q1 RW-21 LTM | Weather 19°F / clear

Measuring Pt. Description: TOC | Screen Interval (ft-bmp): 636-646 | Casing Diameter (in.): 4 | Well Material: X PVC / SS

Static Water Level (ft-bmp): 40.52 | Total Depth (ft-bmp): 651 | Water Column/ Gallons in Well: 610.48ft / 3968 gal

MP Elevation: — | Pump Intake (ft-bn): Midscreen | Purge Metho: non-dedicated / Peristaltic / Submersib rediflow / Other | Sample Method: LF + TV

Pump On/Off: 0902 / 1110 | Volume Purged (gal): 40L

Sample Time: Label RW21-MW-16 | Start 1105 | End 1110 | Replicate/ Code No.: N/A | Sampled by: KK, BM

PID: 0.0 ppm

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
0904	0	350	40.78	0	7.18	0.095	7.1	8.6	12.8	1199	clear	none
0909	5	350	40.78	1.75	5.12	0.094	4.2	6.2	10.5	169.6	"	"
0914	10	350	40.74	3.5	5.01	0.092	10.8	3.0	10.8	177.7		
0919	15	350	40.74	5.25	5.01	0.092	8.96	2.8	9	180.7		
0924	20	350	40.78	7	5.09	0.092	5.14	9.4	4.2	180.7		
0929	25	350	40.79	8.75	5.15	0.093	6.7	8.6	4.7	184.6		
0930 *	pause pump - generator turned off											
0939	35	400	41.11	10.75	5.19	0.055	5.21	9.8	2.9	191.2		
0944	40	400	41.32	12.75	5.00	0.057	3.2	7.47.5	4.4	193.1		
0949	45	400	41.53	14.75	5.4.97	0.058	3.1	6.7	4.2	193.9		
0954	* pause pump 41.66ft											
		- pause for 15 min as per Ben. Wolf										
1022	78	400	42.05	16.75	5.79	0.096	5.81	12.5	1.0	209.0	clear	none
1027	83	400	42.14	18.75	4.88	0.091	3.0	4.1	10.0	205.2	"	"
1032	88	400	42.20	20.75	4.95	0.086	2.97	2.9	10.4	197.7		
1037	93	400	42.24	22.75	4.99	0.083	2.42	2.4	10.5	195.3		

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4-Dioxane 8270 DSIM	1 L glass amber bottle	2	None

Notes:
LF = 641 ft - 40.52ft = 600.48 x 0.01 gal/ft = 6.0 gal x 3.785 = 22.7 L TV

Well Casing Volumes

Gallons/Foot: 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | ~~6" = 1.47~~ 1/2" = 0.01 | 3/8" = 0.006

Well Information

Well Location: Utility corridor | Well Locked at Arrival: (Yes) / No

Condition of Well: good - see well inspection sheet | Well Locked at Departure: (Yes) / No

Well Completion: Flush Mount / Stick Up | Key Number To Well: N/A

ARCADIS Design & Consultancy for natural and built assets

Groundwater Sampling Log

Project No. 30223092.PS512 Well ID RW-21_MW-16 Date 2/19/2025

Project Name/Location 2025 Q1 RW-21 LTM Weather 19°F/clear

Measuring Pt. Description TOC Screen Interval (ft-bmp) 636-646 Casing Diameter (in.) 4 Well Material X PVC ___ SS

Static Water Level (ft-bmp) 40.52 Total Depth (ft-bmp) 651 Water Column/ Gallons in Well 616.48ft/396.8gal

MP Elevation ___ Pump Intake (ft-bmp) Midscreen Purge Method non-dedicated / Peristaltic / Submersible rediflow / Other ___ Sample Method LF+TV

Pump On/Off 0902/1110 Volume Purged (gal) 40L

Sample Time: Label RW21MW16 Start 1105 End 1110 Replicate/ Code No. N/A Sampled by KK, BM

PID: 0.0 ppm

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
1042	98	400	42.29	24.75	4.99	0.061	2.50	2.5	16.5	+195.1	clear	None
1049	103	400	42.32	26.75	5.00	0.059	2.41	2.2	10.0	194.1	"	"
1052	108	400	42.37	28.75	5.01	0.059	2.16	2.1	10.0	193.7		
~~1054~~ 1057	113	400	42.40	30.75	5.02	0.059	2.01	1.9	10.5	192.3		
1102	118	400	42.42	32.75	5.02	0.059	1.97	1.9	10.5	192.7		
1105 * Begin sampling												

Constituents Sampled	Container	Number	Preservative

Notes:

LF = 22.1 L

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47; 12" = 0.01; 3/8" = 0.006

Well Information

Well Location:	good Utility Condor	Well Locked at Arrival:	Yes / No
Condition of Well:	good	Well Locked at Departure:	Yes / No
Well Completion:	Flush Mount / Stick Up	Key Number To Well:	NA

Groundwater Sampling Form

Location ID:	MW-109-3	**Date(s):**	2025-06-16	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:61 °F, rH:92%, Clouds: 100%, Wind:6.91mph N-NE			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	233.00-243.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	45.3	**Total Depth (ft-bmp):**	248	**Water Column(ft):**	202.7	**Liters in Well:**	500.9
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:35	**Total Volume Purged (liters):**	15	**Sample ID:**	MW-109-3	**Sample Time:**	09:10
Purge End Time:	09:05	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	**Duplicate** / REP061625BM1	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:35	0	500	mL/min	45.34	5.09	0.381	18.5	2.58	15.7	203.1	Clear	No Odor
08:40	5	500	mL/min	45.34	4.16	0.43	16.2	2.66	16	277.3	Clear	No Odor
08:45	10	500	mL/min	45.34	4.52	0.409	12.9	2.99	16.1	256.1	Clear	No Odor
08:50	15	500	gpm	45.34	4.62	0.404	9.87	3.05	16.2	255	Clear	No Odor
08:55	20	500	gpm	45.34	4.67	0.402	8.28	3.06	16.2	258.5	Clear	No Odor
09:00	25	500	gpm	45.34	4.7	0.4	7.99	3.09	16.3	264.9	Clear	No Odor
09:05	30	500	gpm	45.34	4.7	0.4	7.87	3.16	16.3	268.3	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	4	1 L	None
VOCs (SW8260)	Clear Glass	6	40 mL	HCl

Comments: TV:248ft-45.3ft=202.7ftx0.006=1.22galx3.785=4.62L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	MW-111-4	**Date(s):**	2025-06-19	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	MIST, T:72.03 °F, rH:97%, Clouds: 40%, Wind:4.61mph SW			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	448.00-468.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	42.76	**Total Depth (ft-bmp):**	473	**Water Column(ft):**	430.24	**Liters in Well:**	1063.18
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	07:52	**Total Volume Purged (liters):**	27	**Sample ID:**	MW-111-4	**Sample Time:**	08:37
Purge End Time:	08:32	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
07:52	0	500	mL/min	42.79	5.54	0.211	7.32	4.69	18	306.3	Clear	No Odor
07:57	5	500	mL/min	42.79	4.85	0.208	12.3	4.84	18.1	374.9	Clear	No Odor
08:02	10	500	mL/min	42.79	4.82	0.263	7.06	4.5	18.1	374.8	Clear	No Odor
08:07	15	500	mL/min	42.79	4.78	0.222	6.87	4.75	18	381.7	Clear	No Odor
08:12	20	500	mL/min	42.79	4.74	0.212	3.47	4.86	18.1	387.1	Clear	No Odor
08:17	25	500	mL/min	42.79	4.74	0.207	4.12	4.89	18.2	390.3	Clear	No Odor
08:22	30	500	mL/min	42.79	4.73	0.202	3.24	4.91	18.1	392.9	Clear	No Odor
08:27	35	500	mL/min	42.79	4.72	0.2	2.34	4.91	18.2	394	Clear	No Odor
08:32	40	500	mL/min	42.79	4.71	0.2	2.12	4.92	18.3	394.3	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF= 458ft - 42.76ft = 415.24x0.006=2.491x3.785=9.428 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-1	**Date(s):**	2025-06-20	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:71.35 °F, rH:63%, Clouds: 0%, Wind:17.27mph W-NW			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	615.00-625.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	46.25	**Total Depth (ft-bmp):**	630	**Water Column(ft):**	583.75	**Liters in Well:**	1442.52
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:35	**Total Volume Purged (liters):**	32.5	**Sample ID:**	RW-21_MW-1	**Sample Time:**	09:45
Purge End Time:	09:40	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:35	0	500	mL/min	46.54	8.74	0.188	11.7	8.15	15.5	216.2	Clear	No Odor
08:40	5	500	mL/min	46.54	8.06	0.144	10.3	3.07	14.4	246	Clear	No Odor
08:45	10	500	mL/min	46.54	8.08	0.142	9.73	2.77	14.4	247.6	Clear	No Odor
08:50	15	500	mL/min	46.54	7.92	0.142	9.12	2.72	14.5	257	Clear	No Odor
08:55	20	500	mL/min	46.54	7.24	0.145	8.23	2.75	14.6	278.8	Clear	No Odor
09:00	25	500	mL/min	46.54	6.5	0.144	7.94	2.84	14.6	307.6	Clear	No Odor
09:05	30	500	mL/min	46.54	6.4	0.142	7.33	2.85	14.5	313.9	Clear	No Odor
09:10	35	500	mL/min	46.54	6.28	0.139	8.11	2.84	14.7	321.7	Clear	No Odor
09:15	40	500	mL/min	46.54	6.18	0.137	7.45	2.8	14.7	331.1	Clear	No Odor
09:20	45	500	mL/min	46.54	6.16	0.136	7.78	2.79	14.7	333.7	Clear	No Odor
09:25	50	500	mL/min	46.54	6.13	0.136	8.27	2.76	14.7	337.8	Clear	No Odor
09:30	55	500	mL/min	46.54	6.1	0.135	6.9	2.73	14.7	341.1	Clear	No Odor
09:35	60	500	mL/min	46.54	6.08	0.134	6.71	2.66	14.8	343.5	Clear	No Odor
09:40	65	500	mL/min	46.54	6.03	0.132	6.54	2.65	14.9	347.3	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV:620ft-46.25ft=573.75ftx0.01=5.74galx3.785=21.73L

Well Information:

Well Labeled Properly: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-11	**Date(s):**	2025-06-17	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	MIST, T:62.92 °F, rH:96%, Clouds: 100%, Wind:4.61mph E-NE			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	638.00-648.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	49.2	**Total Depth (ft-bmp):**	653	**Water Column(ft):**	603.8	**Liters in Well:**	1492.06
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:37	**Total Volume Purged (liters):**	29	**Sample ID:**	RW-21_MW-11	**Sample Time:**	09:27
Purge End Time:	09:22	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:37	0	450	mL/min	49.19	5.82	0.058	8.61	2.77	16.1	211	Clear	No Odor
08:42	5	450	mL/min	49.19	2.44	0.059	12.2	2.47	16.4	215.2	Clear	No Odor
08:47	10	450	mL/min	49.15	5.77	0.06	11.7	2.84	16.4	217	Clear	No Odor
08:52	15	450	mL/min	49.13	5.76	0.059	10.3	3.47	16.4	220.2	Clear	No Odor
08:57	20	450	mL/min	49.11	5.73	0.057	6.26	4	16.4	223.8	Clear	No Odor
09:02	25	450	mL/min	49.10	5.7	0.057	4.7	4.31	16.4	227.3	Clear	No Odor
09:07	30	450	mL/min	49.09	5.67	0.058	5.58	4.54	16.4	231.8	Clear	No Odor
09:12	35	450	mL/min	49.07	5.65	0.058	5.12	4.68	16.4	236.3	Clear	No Odor
09:17	40	450	mL/min	49.06	5.63	0.059	5.65	4.76	16.4	240.5	Clear	No Odor
09:22	45	450	mL/min	49.05	5.61	0.059	4.87	4.75	16.4	243.5	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF= 643ft-49.2ft = 593.8ft x 0.006gal/ft = 3.563gal x 3.785 =13.486 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-12-1	**Date(s):**	2025-06-18	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:65.46 °F, rH:98%, Clouds: 81%, Wind:5.99mph S			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	415.00-425.00	**Casing Diameter (in):**	2.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	21.72	**Total Depth (ft-bmp):**	430	**Water Column(ft):**	408.28	**Liters in Well:**	252.23
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:01	**Total Volume Purged (liters):**	30	**Sample ID:**	RW-21_MW-12-1	**Sample Time:**	10:05
Purge End Time:	10:01	**Well Volumes Purged (total):**	0.12	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:01	0	450	mL/min	21.91	5.71	0.223	11.4	3.21	14.9	141.6	Clear	No Odor
09:06	5	400	mL/min	21.91	5.33	0.207	14.3	1.24	15.4	194	Clear	No Odor
09:11	10	400	mL/min	21.91	5.29	0.205	8.74	0.89	15.5	201.1	Clear	No Odor
09:16	15	400	mL/min	21.91	5.19	0.2	19.6	0.53	15.6	211.6	Clear	No Odor
09:21	20	400	mL/min	21.91	5.19	0.2	195	0.42	15.6	216.3	Clear	No Odor
09:26	25	400	mL/min	21.91	5.2	0.201	263	0.3	15.5	217	Clear	No Odor
09:31	30	400	mL/min	21.91	5.23	0.203	170	0.28	15.6	216.8	Clear	No Odor
09:36	35	400	mL/min	21.91	5.27	0.206	114	0.24	15.6	216.6	Clear	No Odor
09:41	40	400	mL/min	21.91	5.3	0.207	70.8	0.21	15.6	216.6	Clear	No Odor
09:46	45	400	mL/min	21.91	5.31	0.208	58.2	0.19	15.8	217	Clear	No Odor
09:51	50	400	mL/min	21.91	5.31	0.208	43.9	0.18	15.8	217.2	Clear	No Odor
09:56	55	400	mL/min	21.91	5.32	0.208	34.9	0.18	15.7	217.3	Clear	No Odor
10:01	60	400	mL/min	21.91	5.32	0.207	26.7	0.17	15.7	218.1	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF=420ft -21.72ft = 398.28ft x 0.01gal/ft =3.983gal x 3.785= 15.0757 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-12-2	**Date(s):**	2025-06-18	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	FOG, T:65.52 °F, rH:97%, Clouds: 100%, Wind:8.05mph S-SE			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	590.00-600.00	**Casing Diameter (in):**	2.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	22.8	**Total Depth (ft-bmp):**	605	**Water Column(ft):**	582.2	**Liters in Well:**	359.67
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:02	**Total Volume Purged (liters):**	65	**Sample ID:**	RW-21_MW-12-2	**Sample Time:**	11:17
Purge End Time:	11:12	**Well Volumes Purged (total):**	0.18	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:02	0	500	mL/min	22.86	8.79	0.086	6.9	1.73	14.6	182.7	Clear	No Odor
09:07	5	500	mL/min	22.86	8.76	0.085	7.81	0.87	15	181.6	Clear	No Odor
09:12	10	500	mL/min	22.89	8.89	0.084	7.92	0.55	15.1	50.6	Clear	No Odor
09:17	15	500	mL/min	22.90	9.68	0.099	5.59	0.49	15.2	168.9	Clear	No Odor
09:22	20	500	mL/min	22.90	9.83	0.105	5.11	0.46	15.3	94.6	Clear	No Odor
09:27	25	500	mL/min	22.90	10.11	0.121	5.34	0.43	15.3	94	Clear	No Odor
09:32	30	500	mL/min	22.90	10.11	0.123	5.43	0.41	15.3	191.7	Clear	No Odor
09:37	35	500	mL/min	22.91	10.07	0.121	5.94	0.4	15.3	80.2	Clear	No Odor
09:42	40	500	mL/min	22.91	10.03	0.12	6.13	0.39	15.3	76.4	Clear	No Odor
09:47	45	500	mL/min	22.91	9.94	0.116	6.27	0.38	15.3	69.5	Clear	No Odor
09:52	50	500	mL/min	22.91	9.83	0.111	6.72	0.37	15.3	60.7	Clear	No Odor
09:57	55	500	mL/min	22.91	9.76	0.108	6.45	0.36	15.3	54.4	Clear	No Odor
10:02	60	500	mL/min	22.91	9.64	0.105	5.91	0.36	15.3	43.6	Clear	No Odor
10:07	65	500	mL/min	22.91	9.51	0.103	6.01	0.35	15.3	32.7	Clear	No Odor
10:12	70	500	mL/min	22.91	9.42	0.101	6.37	0.35	15.3	24.1	Clear	No Odor
10:17	75	500	mL/min	22.91	9.33	0.1	6.46	1.36	15.3	93.3	Clear	No Odor
10:22	80	500	mL/min	22.91	9.32	0.1	6.89	1.02	15.2	84.7	Clear	No Odor
10:27	85	500	mL/min	22.92	9.36	0.1	6.92	0.47	15.2	43.5	Clear	No Odor
10:32	90	500	mL/min	22.92	9.13	0.094	6.78	0.39	15.2	48.7	Clear	No Odor
10:37	95	500	mL/min	22.92	8.91	0.091	8.47	0.36	15.3	51.7	Clear	No Odor
10:42	100	500	mL/min	22.92	8.6	0.089	12.62	0.35	15.3	51.1	Clear	No Odor
10:47	105	500	mL/min	22.92	8.74	0.088	16.1	0.34	15.3	50.8	Clear	No Odor
10:52	110	500	mL/min	22.92	8.47	0.085	15.7	0.34	15.3	55.7	Clear	No Odor
10:57	115	500	mL/min	22.93	8.06	0.084	9.84	0.33	15.4	59.4	Clear	No Odor

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:02	120	500	mL/min	22.93	7.86	0.083	9.04	0.33	15.3	61.1	Clear	No Odor
11:07	125	500	mL/min	22.93	7.78	0.084	8.87	0.33	15.4	60.1	Clear	No Odor
11:12	130	500	mL/min	22.93	7.83	0.085	9.13	0.33	15.3	55.7	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV:595ft-22.8ft=572.2ftx0.01=5.722galx3.785=21.66L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-13	**Date(s):**	2025-06-03	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:73.83 °F, rH:36%, Clouds: 0%, Wind:4.61mph S-SE			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	716.00-726.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	45.19	**Total Depth (ft-bmp):**	731	**Water Column(ft):**	685.81	**Liters in Well:**	1694.72
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:59	**Total Volume Purged (liters):**	30	**Sample ID:**	RW-21_MW-13	**Sample Time:**	10:02
Purge End Time:	09:59	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	**MS/MSD** / RW-21_MW-13	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:59	0	400	mL/min	45.19	6.26	0.086	4.42	8.24	16.2	176.5	Clear	No Odor
09:04	5	400	mL/min	45.19	5.97	0.084	3.92	7.02	18.3	259.9	Clear	No Odor
09:09	10	400	mL/min	45.21	5.93	0.074	3.2	6.96	18.5	277.7	Clear	No Odor
09:14	15	400	mL/min	45.21	5.86	0.067	2.07	6.66	18.6	284.4	Clear	No Odor
09:19	20	400	mL/min	45.21	5.81	0.061	3.98	6.53	18.5	286.4	Clear	No Odor
09:24	25	400	mL/min	45.21	5.24	0.047	3.23	6.34	18.6	284.6	Clear	No Odor
09:29	30	400	mL/min	45.21	5.51	0.039	3.2	6.16	19.1	264.8	Clear	No Odor
09:34	35	400	mL/min	45.22	5.47	0.037	3.16	6.28	19.2	245	Clear	No Odor
09:39	40	400	mL/min	45.22	5.44	0.035	4.47	6.12	19.3	224.6	Clear	No Odor
09:44	45	400	mL/min	45.22	5.41	0.033	4.2	6.1	19.2	203.5	Clear	No Odor
09:49	50	400	mL/min	45.22	5.39	0.033	3.8	6.08	19.2	198	Clear	No Odor
09:54	55	400	mL/min	45.22	5.37	0.033	2.7	6.07	18.7	198.9	Clear	No Odor
09:59	60	400	mL/min	45.22	5.36	0.033	2.31	6.05	18.8	190.6	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV =721ft - 45.19ft =675.81 ft x 0.006 gal/ft =4.05 gal x 3.785 = 15.3 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-15	**Date(s):**	2025-06-03	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:73.62 °F, rH:35%, Clouds: 0%, Wind:5.01mph S-SW			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	676.00-686.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	47.49	**Total Depth (ft-bmp):**	691	**Water Column(ft):**	643.51	**Liters in Well:**	1590.19
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	11:29	**Total Volume Purged (liters):**	32.5	**Sample ID:**	RW-21_MW-15	**Sample Time:**	12:39
Purge End Time:	12:34	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:29	0	250	mL/min	47.62	6.17	0.054	3.51	5.05	17.9	229.6	Clear	No Odor
11:34	5	500	mL/min	47.62	6.23	0.047	4.07	3.44	17.9	213.8	Clear	No Odor
11:39	10	500	mL/min	47.62	6.12	0.047	3.98	3.44	18	217.4	Clear	No Odor
11:44	15	500	mL/min	47.62	5.52	0.05	3.79	3.84	17.9	247.3	Clear	No Odor
11:49	20	500	mL/min	47.64	5.45	0.05	3.66	3.97	17.9	248	Clear	No Odor
11:54	25	500	mL/min	47.64	5.4	0.05	3.74	4.07	18	249.3	Clear	No Odor
11:59	30	500	mL/min	47.65	5.35	0.05	3.49	4.09	18	253.3	Clear	No Odor
12:04	35	500	mL/min	47.65	5.31	0.05	3.47	4.09	17.9	256.4	Clear	No Odor
12:09	40	500	mL/min	47.65	5.28	0.051	3.39	4.06	18	260.7	Clear	No Odor
12:14	45	500	mL/min	47.65	5.22	0.052	3.55	4.01	18.1	266.5	Clear	No Odor
12:19	50	500	mL/min	47.65	5.18	0.053	2.86	3.97	18.3	272	Clear	No Odor
12:24	55	500	mL/min	47.65	5.16	0.055	2.79	3.96	18.4	275.4	Clear	No Odor
12:29	60	500	mL/min	47.65	5.15	0.055	2.68	3.94	18.5	278.2	Clear	No Odor
12:34	65	500	mL/min	47.65	5.13	0.055	2.63	3.97	18.5	282.8	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV: 691ft-47.49ft=643.51ftx0.01=6.44galx3.785=24.38L

Well Information:

Well Labeled Properly: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-16	**Date(s):**	2025-06-04	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:67.19 °F, rH:79%, Clouds: 27%, Wind:3mph S-SE			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	636.00-646.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	36.96	**Total Depth (ft-bmp):**	651	**Water Column(ft):**	614.04	**Liters in Well:**	1517.37
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:40	**Total Volume Purged (liters):**	34.375	**Sample ID:**	RW-21_MW-16	**Sample Time:**	09:55
Purge End Time:	09:50	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:40	0	375	mL/min	37.16	5.92	0.037	9.66	6.14	14.5	237.8	Clear	No Odor
08:45	5	375	mL/min	37.16	5.61	0.049	9.12	1.16	15.2	242.2	Clear	No Odor
08:50	10	500	mL/min	37.16	5.52	0.045	8.79	0.81	15.1	239.7	Clear	No Odor
08:55	15	500	mL/min	37.16	5.32	0.042	7.64	0.49	14.7	221.9	Clear	No Odor
09:00	20	500	mL/min	37.25	5.36	0.043	7.11	0.31	15.1	173.7	Clear	No Odor
09:05	25	500	mL/min	37.27	5.35	0.041	6.99	0.29	15.2	168.6	Clear	No Odor
09:10	30	500	mL/min	37.27	5.37	0.04	6.65	0.28	15	159	Clear	No Odor
09:15	35	500	mL/min	37.30	5.45	0.043	6.22	0.28	15.3	132.2	Clear	No Odor
09:20	40	500	mL/min	37.32	5.5	0.046	6.03	0.26	15.3	120	Clear	No Odor
09:25	45	500	mL/min	37.34	5.5	0.047	5.91	0.25	15.3	118.2	Clear	No Odor
09:30	50	500	mL/min	37.35	5.47	0.047	5.77	0.24	15.4	120.9	Clear	No Odor
09:35	55	500	mL/min	37.36	5.44	0.047	5.44	0.23	15.3	124.5	Clear	No Odor
09:40	60	500	mL/min	37.37	5.43	0.047	5.38	0.23	15.4	125.8	Clear	No Odor
09:45	65	500	mL/min	37.38	5.43	0.047	5.19	0.22	15.5	126.9	Clear	No Odor
09:50	70	500	mL/min	37.39	5.42	0.047	5.12	0.22	15.5	128.1	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV:651ft-36.96ft=614.04ftx0.01=6.14galx3.785=23.24L

Well Information:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Labeled Properly:	NA
Is Well in Good Condition?	NA
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-16	**Date(s):**	2025-06-09	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	MIST, T:60.04 °F, rH:93%, Clouds: 100%, Wind:11.5mph E			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	636.00-646.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	43.88	**Total Depth (ft-bmp):**	651	**Water Column(ft):**	607.12	**Liters in Well:**	1500.27
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:45	**Total Volume Purged (liters):**	35	**Sample ID:**	RW-21_MW-16	**Sample Time:**	10:00
Purge End Time:	09:55	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:45	0	500	mL/min	43.86	5.43	0.068	3.02	6.17	14.9	245.8	Clear	No Odor
08:50	5	500	mL/min	43.86	5.19	0.046	4.17	1.22	15	303.1	Clear	No Odor
08:55	10	500	mL/min	43.86	4.84	0.042	3.98	0.33	15	291.3	Clear	No Odor
09:00	15	500	mL/min	43.86	4.65	0.062	3.77	0.25	15	285.1	Clear	No Odor
09:05	20	500	mL/min	43.86	4.65	0.066	3.59	0.22	14.9	280.9	Clear	No Odor
09:10	25	500	mL/min	43.86	4.66	0.065	3.47	0.19	14.9	267	Clear	No Odor
09:15	30	500	mL/min	43.86	4.69	0.061	3.55	0.18	14.9	251.3	Clear	No Odor
09:20	35	500	mL/min	43.86	4.72	0.054	3.41	0.16	14.9	250.9	Clear	No Odor
09:25	40	500	mL/min	43.82	4.72	0.052	3.68	0.15	15	254.4	Clear	No Odor
09:30	45	500	mL/min	43.80	4.72	0.05	3.73	0.14	15	254.7	Clear	No Odor
09:35	50	500	mL/min	43.80	4.72	0.05	3.66	0.14	15	256.1	Clear	No Odor
09:40	55	500	mL/min	43.86	4.72	0.049	3.14	0.13	15	257.5	Clear	No Odor
09:45	60	500	mL/min	43.79	4.72	0.048	2.79	0.13	15.1	260	Clear	No Odor
09:50	65	500	mL/min	43.79	4.73	0.048	2.55	0.12	15	262.6	Clear	No Odor
09:55	70	500	mL/min	43.79	4.74	0.047	2.31	0.11	15.1	264.7	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV:651ft-43.88ft=607.12ftx0.01=6.07galx3.785=22.98L

Well Information:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Labeled Properly:	NA
Is Well in Good Condition?	NA
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-2	**Date(s):**	2025-06-06	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:79.43 °F, rH:71%, Clouds: 0%, Wind:10.36mph S			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	600.00-610.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	42.17	**Total Depth (ft-bmp):**	615	**Water Column(ft):**	572.83	**Liters in Well:**	1415.53
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	11:43	**Total Volume Purged (liters):**	32	**Sample ID:**	RW-21_MW-2	**Sample Time:**	12:58
Purge End Time:	12:53	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:43	0	400	mL/min	42.24	6.68	0.186	24.2	1.25	16.2	217	Clear	No Odor
11:48	5	400	mL/min	42.17	7.18	0.176	6.87	0.32	17.1	205.1	Clear	No Odor
11:53	10	400	mL/min	42.17	6.88	0.176	5.2	0.3	17	208.2	Clear	No Odor
11:58	15	400	mL/min	42.17	6.14	0.176	12.3	2.8	17.1	205.5	Clear	No Odor
12:03	20	400	mL/min	42.17	5.86	0.179	12.3	0.29	17	199.4	Clear	No Odor
12:08	25	400	mL/min	42.18	5.82	0.187	7.14	0.33	17.1	199.2	Clear	No Odor
12:13	30	400	mL/min	42.18	5.67	0.197	6.32	0.55	17.1	199.4	Clear	No Odor
12:18	35	400	mL/min	42.18	5.55	0.199	10.27	0.68	17.1	207	Clear	No Odor
12:23	40	400	mL/min	42.18	5.36	0.199	8.6	0.69	17.1	217.8	Clear	No Odor
12:28	45	400	mL/min	42.18	5.35	0.199	7.89	0.7	17.1	228.5	Clear	No Odor
12:33	50	400	mL/min	42.18	5.35	0.198	7.8	0.7	17.1	229.1	Clear	No Odor
12:38	55	400	mL/min	42.18	5.32	0.198	7.6	0.72	17.1	234.3	Clear	No Odor
12:43	60	400	mL/min	42.18	5.3	0.197	5.43	0.74	17.2	238	Clear	No Odor
12:48	65	400	mL/min	42.18	5.29	0.196	5.34	0.75	17.3	239.9	Clear	No Odor
12:53	70	400	mL/min	42.18	5.27	0.195	5.12	0.77	17.2	243.4	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF= 605ft - 42.17ft = 562.83ft x 0.01gal/ft = 5.628gal x 3.785 = 21.302 L

Well Information:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-3-1	**Date(s):**	2025-06-06	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:73.9 °F, rH:80%, Clouds: 100%, Wind:3mph S-SW			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	556.00-566.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	51.83	**Total Depth (ft-bmp):**	568	**Water Column(ft):**	516.17	**Liters in Well:**	1275.52
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:10	**Total Volume Purged (liters):**	26	**Sample ID:**	RW-21_MW-3-1	**Sample Time:**	10:05
Purge End Time:	10:00	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:10	0	400	mL/min	52.04	6.72	0.094	17.2	6.15	17	133.4	Clear	No Odor
09:15	5	400	mL/min	52.05	5.57	0.131	15.63	3.65	16.8	185.3	Clear	No Odor
09:20	10	400	mL/min	52.05	4.75	0.143	12.3	2.85	16.8	260.7	Clear	No Odor
09:25	15	400	mL/min	52.05	4.76	0.142	8.22	2.74	16.5	109.8	Clear	No Odor
09:30	20	400	mL/min	52.05	4.77	0.142	10.7	2.6	16.7	296.7	Clear	No Odor
09:35	25	400	mL/min	52.05	4.75	0.14	12.12	2.47	16.6	309.4	Clear	No Odor
09:40	30	400	mL/min	52.05	4.76	0.14	11.6	2.43	16.7	315.9	Clear	No Odor
09:45	35	400	mL/min	52.04	4.78	0.141	7.3	2.42	17.2	109.3	Clear	No Odor
09:50	40	400	mL/min	52.04	4.77	0.14	5.78	2.39	17.2	327.2	Clear	No Odor
09:55	45	400	mL/min	52.04	4.76	0.14	5.3	2.39	17.2	332.1	Clear	No Odor
10:00	50	400	mL/min	52.04	4.76	0.14	5.4	2.3	17.1	334.7	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV= 561ft - 51.83ft = 509.17ft x 0.006gal/ft = 3.055 gal x 3.785 = 11.563 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-3-2	**Date(s):**	2025-06-06	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:73.9 °F, rH:80%, Clouds: 100%, Wind:3mph S-SW			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	595.00-605.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	52.35	**Total Depth (ft-bmp):**	610	**Water Column(ft):**	557.65	**Liters in Well:**	1378.02
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:10	**Total Volume Purged (liters):**	36	**Sample ID:**	RW-21_MW-3-2	**Sample Time:**	10:35
Purge End Time:	10:30	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	**Duplicate** / REP060625BM1	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:10	0	450	mL/min	52.36	5.49	0.054	8.49	6.56	17.8	122.4	Clear	No Odor
09:15	5	450	mL/min	52.36	5.61	0.052	7.92	4.68	17.5	167.9	Clear	No Odor
09:20	10	450	mL/min	52.36	5.6	0.052	7.89	3.71	17.8	188.9	Clear	No Odor
09:25	15	450	mL/min	52.36	5.59	0.053	7.63	3.52	17.5	194.7	Clear	No Odor
09:30	20	450	mL/min	52.36	5.59	0.053	7.44	3.73	17.7	199.2	Clear	No Odor
09:35	25	450	mL/min	52.36	5.59	0.043	7.37	4.2	17.6	204.5	Clear	No Odor
09:40	30	450	mL/min	52.36	5.59	0.043	7.11	4.21	17.7	205.1	Clear	No Odor
09:45	35	450	mL/min	52.36	5.59	0.038	6.96	4.25	18.1	213.4	Clear	No Odor
09:50	40	450	mL/min	52.36	5.59	0.037	6.88	4.28	18.1	217.7	Clear	No Odor
09:55	45	450	mL/min	52.36	5.59	0.036	6.69	4.29	18.4	220.4	Clear	No Odor
10:00	50	450	mL/min	52.36	5.59	0.035	6.58	4.33	18.3	222.7	Clear	No Odor
10:05	55	450	mL/min	52.36	5.58	0.034	6.44	4.35	18.2	225.7	Clear	No Odor
10:10	60	450	mL/min	52.36	5.57	0.032	4.53	4.37	18.4	228.7	Clear	No Odor
10:15	65	450	mL/min	52.36	5.57	0.032	4.5	4.43	18.4	232.3	Clear	No Odor
10:20	70	450	mL/min	52.35	5.57	0.031	4.4	4.41	18.6	234.4	Clear	No Odor
10:25	75	450	mL/min	52.35	5.56	0.031	4.08	4.38	18.5	236.4	Clear	No Odor
10:30	80	450	mL/min	52.35	5.56	0.031	3.21	4.4	18.4	240.2	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	4	1 L	None
VOCs (SW8260)	Clear Glass	6	40 mL	HCl

Comments: TV: 610ft-52.35ft=557.65ftx0.01=5.58galx3.785=21.12L

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Information:

Well Labeled Properly:	NA
Is Well in Good Condition?	NA
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-4	**Date(s):**	2025-06-09	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	MIST, T:60.91 °F, rH:94%, Clouds: 100%, Wind:8.05mph E-NE			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	369.00-384.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	44.79	**Total Depth (ft-bmp):**	389	**Water Column(ft):**	344.21	**Liters in Well:**	850.58
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	10:40	**Total Volume Purged (liters):**	24	**Sample ID:**	RW-21_MW-4	**Sample Time:**	11:30
Purge End Time:	11:25	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:40	0	400	mL/min	44.91	5.07	0.219	4.32	7.21	15.9	268.9	Clear	No Odor
10:45	5	400	mL/min	44.91	4.61	0.224	4.32	1.08	15.8	297.6	Clear	No Odor
10:50	10	400	mL/min	44.91	4.67	0.218	7.87	0.59	16	300.7	Clear	No Odor
10:55	15	400	mL/min	44.92	4.65	0.22	12.3	1.93	16.1	307.8	Clear	No Odor
11:00	20	400	mL/min	44.92	4.59	0.227	12.8	4.22	16.1	318.6	Clear	No Odor
11:05	25	400	mL/min	44.92	4.59	0.228	16.3	4.61	16.1	322.8	Clear	No Odor
11:10	30	400	mL/min	44.92	4.57	0.228	8.12	4.98	16.1	330.6	Clear	No Odor
11:15	35	400	mL/min	44.86	4.56	0.229	11.3	5.17	16.2	335.4	Clear	No Odor
11:20	40	400	mL/min	44.86	4.55	0.229	10.43	5.26	16.1	340.4	Clear	No Odor
11:25	45	400	mL/min	44.86	4.54	0.23	10.8	5.33	16.2	345.1	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV= 376.5ft - 44.79ft = 331.71ft x 0.01gal/ft = 3.317gal x 3.785 = 12.555 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-5-1	**Date(s):**	2025-06-10	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	RAIN, T:63.68 °F, rH:96%, Clouds: 100%, Wind:4mph S			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	300.00-310.00	**Casing Diameter (in):**	2.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	39.8	**Total Depth (ft-bmp):**	315	**Water Column(ft):**	275.2	**Liters in Well:**	170.01
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:00	**Total Volume Purged (liters):**	27	**Sample ID:**	RW-21_MW-5-1	**Sample Time:**	09:50
Purge End Time:	09:45	**Well Volumes Purged (total):**	0.16	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:00	0	500	mL/min	39.89	5.64	0.083	6.89	1.63	15.8	218.2	Clear	No Odor
09:05	5	500	mL/min	39.89	5.47	0.077	10.2	0.39	16	226.7	Clear	No Odor
09:10	10	500	mL/min	39.85	5.41	0.074	13.1	0.74	16.1	245.2	Clear	No Odor
09:15	15	500	mL/min	39.85	5.4	0.076	9.71	1.12	16.1	250.4	Clear	No Odor
09:20	20	500	mL/min	39.85	5.4	0.078	8.12	1.4	16.1	253.7	Clear	No Odor
09:25	25	500	mL/min	39.86	5.4	0.079	7.23	1.47	16.1	255	Clear	No Odor
09:30	30	500	mL/min	39.86	5.4	0.079	4.8	1.53	16.8	257.3	Clear	No Odor
09:35	35	500	mL/min	39.86	5.41	0.079	4.83	1.55	16.8	258	Clear	No Odor
09:40	40	500	mL/min	39.85	5.41	0.08	4.5	1.58	16.8	259.8	Clear	No Odor
09:45	45	500	mL/min	39.86	5.41	0.08	4.23	1.58	16.8	260.7	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF= 305ft - 39.80ft = 265.2ft x 0.01gal/ft = 2.652gal x 3.785 = 10.0378 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-5-2	**Date(s):**	2025-06-10	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	RAIN, T:64.38 °F, rH:96%, Clouds: 100%, Wind:4mph E-NE			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	560.00-570.00	**Casing Diameter (in):**	2.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	43.51	**Total Depth (ft-bmp):**	575	**Water Column(ft):**	531.49	**Liters in Well:**	328.34
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:00	**Total Volume Purged (liters):**	32.5	**Sample ID:**	RW-21_MW-5-2	**Sample Time:**	10:10
Purge End Time:	10:41	**Well Volumes Purged (total):**	0.10	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:00	0	500	mL/min	43.68	11.83	1.956	9.57	3.35	16.1	100.6	Clear	No Odor
09:05	5	500	mL/min	43.68	12.05	3.134	8.77	0.82	16	86.9	Clear	No Odor
09:10	10	500	mL/min	43.68	12.06	3.12	8.11	0.76	16.2	84.4	Clear	No Odor
09:15	15	500	mL/min	43.68	12.06	2.937	7.55	0.69	16.5	76.5	Clear	No Odor
09:20	20	500	mL/min	43.66	12.05	2.838	7.26	0.66	16.5	74.3	Clear	No Odor
09:25	25	500	mL/min	43.66	12.03	2.781	6.98	0.66	17.2	68	Clear	No Odor
09:30	30	500	mL/min	43.63	12.02	2.774	7.32	0.66	17.5	62.7	Clear	No Odor
09:35	35	500	mL/min	43.61	12.01	2.774	7.15	0.71	17.9	57.2	Clear	No Odor
09:40	40	500	mL/min	43.59	12.01	2.79	7.23	0.77	18.1	55.1	Clear	No Odor
09:45	45	500	mL/min	43.59	12.01	2.798	7.33	0.75	18.3	52.7	Clear	No Odor
09:50	50	500	mL/min	43.59	12	2.821	7.41	0.74	18.6	49.1	Clear	No Odor
09:55	55	500	mL/min	43.59	12	2.812	7.29	0.76	18.8	45.4	Clear	No Odor
10:00	60	500	mL/min	43.59	11.99	2.785	7.41	0.8	19.1	43.6	Clear	No Odor
10:05	65	500	mL/min	43.59	11.99	2.849	7.38	0.83	19.1	40.6	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV: 575ft-43.51ft=531.49ftx0.01=5.315galx3.785=20.12L

Well Information:

Well Labeled Properly: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-6	**Date(s):**	2025-06-16	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:61.7 °F, rH:93%, Clouds: 100%, Wind:5.01mph E-NE			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	604.00-624.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	42.58	**Total Depth (ft-bmp):**	629	**Water Column(ft):**	586.42	**Liters in Well:**	1449.11
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	10:05	**Total Volume Purged (liters):**	35	**Sample ID:**	RW-21_MW-6	**Sample Time:**	11:25
Purge End Time:	11:20	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:05	0	400	mL/min	43.02	5.6	0.161	9.53	5.75	16.2	239.9	Clear	No Odor
10:10	5	400	mL/min	43.02	5.55	0.162	8.62	0.52	15.9	255.3	Clear	No Odor
10:15	10	400	mL/min	43.00	5.52	0.16	9.2	0.38	16	249.7	Clear	No Odor
10:20	15	400	mL/min	43.97	5.52	0.16	4.22	0.32	16.1	248	Clear	No Odor
10:25	20	400	mL/min	42.85	5.51	0.159	6.12	0.28	16.1	247.1	Clear	No Odor
10:30	25	400	mL/min	42.74	5.43	0.152	12.32	0.43	16.1	248.3	Clear	No Odor
10:35	30	400	mL/min	42.74	5.38	0.154	14.32	0.98	16.1	252.7	Clear	No Odor
10:40	35	400	mL/min	42.74	5.35	0.158	8.12	1.76	16.1	257.9	Clear	No Odor
10:45	40	400	mL/min	42.74	5.33	0.16	11.5	2.3	16.2	261.7	Clear	No Odor
10:50	45	400	mL/min	42.74	5.33	0.161	10.7	2.46	16.2	262.8	Clear	No Odor
10:55	50	400	mL/min	42.73	5.32	0.162	11.31	2.7	16.2	264.8	Clear	No Odor
11:00	55	400	mL/min	42.74	5.3	0.162	10.8	2.9	16.2	266.7	Clear	No Odor
11:05	60	400	mL/min	42.73	5.3	0.163	6.8	3.03	16.2	268.2	Clear	No Odor
11:10	65	400	mL/min	42.73	5.29	0.163	6.02	3.13	16.3	269.8	Clear	No Odor
11:15	70	400	mL/min	42.73	5.27	0.163	5.71	3.24	16.2	271.7	Clear	No Odor
11:20	75	400	mL/min	42.72	5.27	0.163	5.12	3.3	16.3	272.8	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF= 614ft - 42.58ft = 571.42ft x 0.01gal/ft = 5.714gal x 3.785 = 21.627 L

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Information:

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-7	**Date(s):**	2025-06-10	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	MIST, T:64.63 °F, rH:96%, Clouds: 100%, Wind:9.22mph N			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	580.00-590.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	45.09	**Total Depth (ft-bmp):**	595	**Water Column(ft):**	549.91	**Liters in Well:**	1358.89
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	11:20	**Total Volume Purged (liters):**	32	**Sample ID:**	RW-21_MW-7	**Sample Time:**	12:20
Purge End Time:	12:15	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:20	0	500	mL/min	44.52	8.81	0.172	2.77	6.33	17	255.6	Clear	No Odor
11:25	5	500	mL/min	44.45	5.63	0.164	14.5	1.61	17.2	339.1	Clear	No Odor
11:30	10	500	mL/min	44.42	5.22	0.163	17	0.69	17.2	330.8	Clear	No Odor
11:35	15	500	mL/min	44.44	5.21	0.158	14	0.54	17.2	314.7	Clear	No Odor
11:40	20	500	mL/min	44.42	5.29	0.156	28	0.69	17.2	284.1	Clear	No Odor
11:45	25	500	mL/min	44.42	5.25	0.159	25.9	1.03	17.4	285.8	Clear	No Odor
11:50	30	500	mL/min	44.42	5.19	0.16	18.3	1.37	17.4	303.2	Clear	No Odor
11:55	35	500	mL/min	44.39	5.15	0.16	12.3	1.54	17.5	317	Clear	No Odor
12:00	40	400	mL/min	44.36	5.11	0.16	13.9	1.79	17.6	322.4	Clear	No Odor
12:05	45	400	mL/min	44.34	5.09	0.16	11.7	1.81	17.5	329.5	Clear	No Odor
12:10	50	400	mL/min	44.34	5.06	0.159	10.8	1.83	17.5	338.1	Clear	No Odor
12:15	55	400	mL/min	44.34	5.05	0.159	10.65	1.82	17.6	332.4	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF=585ft - 45.09ft = 539.91ft x 0.006gal/ft = 3.239gal x 3.785=12.26 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-8	**Date(s):**	2025-06-04	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:73.53 °F, rH:64%, Clouds: 0%, Wind:5.75mph SW			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	460.00-470.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	45.75	**Total Depth (ft-bmp):**	475	**Water Column(ft):**	429.25	**Liters in Well:**	1060.73
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	10:35	**Total Volume Purged (liters):**	39	**Sample ID:**	RW-21_MW-8	**Sample Time:**	12:05
Purge End Time:	12:00	**Well Volumes Purged (total):**	0.04	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:35	0	400	mL/min	45.09	8.28	0.315	9.25	0.46	15.6	88.6	Clear	No Odor
10:40	5	400	mL/min	45.09	8.3	0.314	22	0.41	15.6	87.3	Clear	No Odor
10:45	10	400	mL/min	45.09	8.6	0.31	17.4	0.27	15.7	65.5	Clear	No Odor
10:50	15	400	mL/min	45.09	8.73	0.313	64.7	0.26	15.7	62	Clear	No Odor
10:55	20	400	mL/min	45.09	7.81	0.347	81.1	0.23	15.8	94.2	Clear	No Odor
11:00	25	400	mL/min	45.10	7.45	0.356	82.7	0.21	15.8	103.9	Clear	No Odor
11:05	30	400	mL/min	45.10	7.35	0.353	75.6	0.23	15.8	102.9	Clear	No Odor
11:10	35	400	mL/min	45.10	7.24	0.342	51.9	0.32	15.8	101.5	Clear	No Odor
11:15	40	400	mL/min	45.10	7.03	0.323	42.9	0.54	16.1	100.6	Clear	No Odor
11:20	45	400	mL/min	45.10	7.01	0.322	37.9	0.56	16.2	100.7	Clear	No Odor
11:25	50	400	mL/min	45.10	6.91	0.313	22.3	0.71	15.9	102	Clear	No Odor
11:30	55	400	mL/min	45.10	6.77	0.299	17.8	0.94	15.9	106.5	Clear	No Odor
11:35	60	400	mL/min	45.10	6.76	0.298	15.2	0.98	15.9	107.5	Clear	No Odor
11:40	65	400	mL/min	45.10	6.72	0.292	12.2	1.04	15.9	108.9	Clear	No Odor
11:45	70	400	mL/min	45.10	6.61	0.276	9.1	1.29	15.9	114.3	Clear	No Odor
11:50	75	400	mL/min	45.10	6.49	0.263	8.97	1.51	16.7	124.1	Clear	No Odor
11:55	80	400	mL/min	45.11	6.47	0.261	8.2	1.55	16.4	128.4	Clear	No Odor
12:00	85	400	mL/min	45.12	6.46	0.261	8.49	1.56	16.4	129.6	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Comments: LF = 465ft - 45.75ft = 419.25 ft x 0.01 gal/ft = 4.193 gal x 3.785 = 15.871 L

Well Information:

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-9	**Date(s):**	2025-06-17	**Work Order(s):**		RW21 LTM 2025 Quarter 2	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	MIST, T:63.27 °F, rH:96%, Clouds: 100%, Wind:7mph E			**Field Technician:**		Brandon Monegro	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	630.00-640.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	42.67	**Total Depth (ft-bmp):**	645	**Water Column(ft):**	602.33	**Liters in Well:**	1488.43
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	10:03	**Total Volume Purged (liters):**	31.5	**Sample ID:**	RW-21_MW-9	**Sample Time:**	11:18
Purge End Time:	11:13	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:03	0	450	mL/min	42.94	5.1	0.146	3.11	2.73	16.3	260.3	Clear	No Odor
10:08	5	450	mL/min	42.94	5.05	0.146	3.64	1.52	16.4	263.8	Clear	No Odor
10:13	10	450	mL/min	43.94	5.04	0.146	4.22	1.11	16.4	266.7	Clear	No Odor
10:18	15	450	mL/min	42.94	5.05	0.146	4.01	1.03	16.6	268.5	Clear	No Odor
10:23	20	450	mL/min	42.94	5.08	0.147	3.97	1.05	16.6	272.2	Clear	No Odor
10:28	25	450	mL/min	42.94	5.15	0.149	3.87	1.1	16.7	278.3	Clear	No Odor
10:33	30	450	mL/min	42.94	5.15	0.149	4.15	1.16	16.7	280.6	Clear	No Odor
10:38	35	450	mL/min	42.94	5.14	0.149	4.23	1.22	16.7	285.7	Clear	No Odor
10:43	40	450	mL/min	42.94	5.14	0.149	3.94	1.23	16.8	289.9	Clear	No Odor
10:48	45	450	mL/min	42.94	5.15	0.15	4.07	1.25	16.8	294.1	Clear	No Odor
10:53	50	450	mL/min	42.94	5.16	0.151	4.26	1.26	16.8	295.4	Clear	No Odor
10:58	55	450	mL/min	42.94	5.16	0.151	4.33	1.27	16.8	296.1	Clear	No Odor
11:03	60	450	mL/min	42.94	5.17	0.152	4.32	1.28	16.9	295.8	Clear	No Odor
11:08	65	450	mL/min	42.94	5.17	0.153	4.34	1.3	16.9	295.5	Clear	No Odor
11:13	70	450	mL/min	42.94	5.16	0.153	4.4	1.33	16.9	295.1	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV: 635ft-42.67ft=592.33ftx0.01=5.92galx3.785=22.41L

Well Information:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

ARCADIS Design & Consultancy for natural and built assets

Groundwater Sampling Log

Project No. 30223092.PSSI2 | Well ID MW-116-5 | Date 6/13/2025

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring | Weather 75°F / overcast

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bls): 570 - 590 | Casing Diameter (in.): 4 | Well Material: x PVC / SS

Static Water Level (ft-bmp): 43.76 | Total Depth (ft-bls): 595 | Water Column/ Gallons in Well: 551.24ft / 358.3gal

MP Elevation: NM | Pump Intake (ft-bls): 482 (packer 480) | Purge Method: Peristaltic / Submersib Dedicated / Other | Sample Method: 3 Well Volume Below Packer

Pump On/Off: 1147 / 1255 | Volume Purged (gal): 250 gal

Sample Time: Label MW-116-S | Replicate/ Start 1250 | Code No. MS/MSD | End 1255

Sampled by KK, BM

PID: 0.0 ppm

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (G)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
1148	0	4 gal	43.71	0	5.02	0.071	1.01	4.12	15.8	375.8	clear	None
1208	20	4 gal	43.71	1WV	4.80	0.076	0.57	3.95	14.2	428.2	clear	None
1228	40	4 gal	43.71	2WV	4.65	0.079	0.79	4.39	14.1	411.5	clear	None
1245	57	4.3 gal	43.71	3WV	4.64	0.077	0.79	2.86	13.9	421.3	clear	None

1WV
2WV
3WV

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270DSIM	1 L glass amber bottle	2	None

Notes:

PPE = 480ft - 43.76ft (436.24ft x 0.43PSI/ft) = 187.5PSI + 50PSI = 240PSI

Packer Pressure Equation: ((Depth to packer - static water level) x 0.43 PSI/ft) +50 PSI

3WV

1WV = 74.75gal x 3 = 224.25 + 5.3 = 230 gal total

Volume Equation: ((Total depth - packer depth) x 0.65 gal/ ft.) + ((Midscreen depth - static water level depth) x 0.01 gal/ft)

VE = (595ft - 480ft) (115ft x 0.65gal/ft) + 74.75gal | 580ft - 43.76ft = 536.24 x 0.01gal/ft = 5.3gal

NEED ROAD TRAFFIC CONTROL SIGNS* *CONE OFF EARLY OR DAY BEFORE

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47 | 1/2" = 0.01 | 3/8" = 0.006

Well Information

Well Location:	150 North Herman Ave, Bethpage, NY	Well Locked at Arrival:	Yes / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	Yes / No
Well Completion:	**Flush Mount** / Stick Up	Key Number To Well:	N/A

ARCADIS Design & Consultancy for natural and built assets

Groundwater Sampling Log

Project No. 30223092.PSSI2 | Well ID MW-117-5 | Date 6/12/2025

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring | Weather 78°F/sunny

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bls): 737 - 757 | Casing Diameter (in.): 4 | Well Material: x PVC, ___ SS

Static Water Level (ft-bmp): 45.60 | Total Depth (ft-bls): 762 | Water Column/ Gallons in Well: 716.4ft / 465.66 gal

MP Elevation: NM | Pump Intake (ft-bls): 502 (packer 500) | Purge Method: Peristaltic ___, Submersib Dedicated, Other ___ | Sample Method: 3 Well Volume Below Packer

Pump On/Off: 0911 / 1153 | Volume Purged (gal): 530 gal

Resume: 11:11

Sample Time: Label MW-117-5 | Start 1148 1130 | End 1153 | Replicate/ Code No.: N/A | Sampled by: KK, BM

PID: 0.0 ppm

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (G)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
0912	0	4.8	45.56	0	5.76	0.062	2.36	6.71	17.0	314.1	clear	None
1WV 0948	36	4.8	45.56	175	5.15	0.071	2.31	5.77	14.7	424.8	clear	None
2WV 1024	72	4.8	45.56	2WV	5.20	0.065	1.01	6.69	14.7	441.7	Clear	None
3WV 1145	133	4.8	45.56	3WV	5.26	0.064	2.40	7.16	14.6	445.9	clear	None

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270DSIM	1 L glass amber bottle	2	None

Notes:

PPE - 500ft - 45.58 ft = 454.42ft x 0.43 PSI/ft = 195.4 PSI + 50 PSI = 250 PSI

Packer Pressure Equation: ((Depth to packer - static water level) x 0.43 PSI/ft) +50 PSI

170.3 x 3 = 510.9 + 7 = 517.9

Volume Equation: ((Total depth - packer depth) x 0.65 gal/ ft) + ((Midscreen depth - static water level depth) x 0.01 gal/ft)

VE = (762ft - 500ft) = (262ft x 0.65 gal/ft) = 170.3 gal + (747ft - 45.58ft) = 701.42 x 0.01 gal/ft = 701 gal

NEED ROAD TRAFFIC CONTROL SIGNS* *CONE OFF EARLY OR DAY BEFORE

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47 | 1/2" = 0.01 | 3/8" = 0.006

Well Information

Well Location: Crestline Park, Bethpage, NY (approx. 24ft W/NW off NW corner of playground fence)

Condition of Well: See Well Inspection Log

Well Completion: **Flush Mount** / Stick Up

Well Locked at Arrival: (Yes) / No

Well Locked at Departure: (Yes) / No

Key Number To Well: N/A

ARCADIS Design & Consultancy for natural and built assets

Groundwater Sampling Log

Project No. 30223092.PSSI2 | Well ID MW-118-5 | Date 6/11/2025

Project Name/Location OU3.5 RW-21 Post-Startup Groundwater Monitoring | Weather 76°F | clear

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bls): 718 - 738 | Casing Diameter (in.): 4 | Well Material: x PVC / SS

Static Water Level (ft-bmp): 38.31 BTMP | Total Depth (ft-bls): 750 | Water Column/ Gallons in Well: 711.69ft | 462.5

MP Elevation: NM | Pump Intake (ft-bls): 505 | Purge Method: Peristaltic / Submersib Dedicated / Other | Sample Method: 3 Well Volume Below Packer

Pump On/Off: 1006 | 1247 | Volume Purged (gal): 520gal

Sample Time: Label MW-118-5 | Start 1243 | End 1247 | Replicate/ Code No.: N/A | Sampled by: KK, BM

PID: 0.0 ppm

*1WV = 162.5gal
*3WV + TV = 487.5, 494.4 total

Time	Minutes Elapsed	Rate (~~mL/min~~) gal	Depth to Water (ft)	Volume Purged (G)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
1007	0	4.1	38.24	0	7.21	0.071	2.92	7.15	16.4	311.1	clear	none
1047	40	4.1	38.24	165	6.54	0.061	3.33	8.00	14.8	281.5	clear	none
1120	73	4.0	38.24	330	5.27	0.061	2.29	6.70	13.9	371.6	clear	none
	pause purge for discharge											
1205	*	resume purge		WL:	38.24							
1240	153	4.0	38.24	505	5.27	0.061	2.79	6.63	14.7	383.2	clear	none

1WV
2WV
3WV

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL glass vial	3	HCl
1,4- Dioxane 8270DSIM	1 L glass amber bottle	2	None

Notes:
PPE = 500ft - 37.41ft = 462.59ft x 0.43PSI/ft = 198.9PSI + 50 = 250PSI
Packer Pressure Equation: ((Depth to packer - static water level) x 0.43 PSI/ft) +50 PSI

494.4gal total
162.5gal x 3 = 487.5 + 6.9 =

Volume Equation: ((Total depth - packer depth) x 0.65 gal/ ft) + ((Midscreen depth - static water level depth) x 0.01 gal/ft)
VE ((750ft - 500ft) = 250ft x 0.65gal/ft) = 162.5gal + (728ft - 37.41 ft) = 690.59 ft x 0.01gal/ft = 6.9gal

NEED ROAD TRAFFIC CONTROL SIGNS* *CONE OFF EARLY OR DAY BEFORE

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47 | 1/2" = 0.01 | 3/8" = 0.006

Well Information

Well Location:	1 Hoover Lane, Bethpage, NY	Well Locked at Arrival:	(Yes) / No
Condition of Well:	See Well Inspection Log	Well Locked at Departure:	(Yes) / No
Well Completion:	**Flush Mount** / Stick Up	Key Number To Well:	N/A

Groundwater Sampling Form

Location ID:	MW-109-3	**Date(s):**	2025-09-15	**Work Order(s):**		RW21 LTM 2025 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:68.38 °F, rH:90%, Clouds: 0%, Wind:8.05mph N			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	233.00-243.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	46.63	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	201.37	**Liters in Well:**	497.61
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:52	**Total Volume Purged (liters):**	22.8	**Sample ID:**	MW-109-3	**Sample Time:**	09:50
Purge End Time:	09:49	**Well Volumes Purged (total):**	0.05	**Replicate Type / Replicate ID:**	**Duplicate** / REP091525SH1	**Water Quality Meter/ ID:**	YSI Pro DSS,Hach 2100-Q / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:54	0	400	mL/min	46.68	5.07	0.406	5.84	6.14	19.3	185.3	Clear	No Odor
08:59	5	400	mL/min	46.68	5.1	0.358	5.84	3.78	18.1	190.5	Clear	No Odor
09:04	10	400	mL/min	46.68	4.73	0.385	9.93	3.9	18.7	204.1	Clear	No Odor
09:09	15	400	mL/min	46.68	4.66	0.396	9.93	4.04	18.7	208.5	Clear	No Odor
09:14	20	400	mL/min	46.68	4.61	0.404	11.3	4.11	18.7	217.3	Clear	No Odor
09:19	25	400	mL/min	46.68	4.59	0.408	11.3	4.09	18.6	226.8	Clear	No Odor
09:24	30	400	mL/min	46.69	4.6	0.409	4.65	3.97	18.7	235.2	Clear	No Odor
09:29	35	400	mL/min	46.69	4.61	0.409	3.51	3.88	19	243.3	Clear	No Odor
09:34	40	400	mL/min	46.69	4.62	0.409	3.36	3.86	19.1	245.5	Clear	No Odor
09:39	45	400	mL/min	46.69	4.63	0.408	0.7	3.73	18.9	248	Clear	No Odor
09:44	50	400	mL/min	46.69	4.63	0.408	0.4	3.64	18.8	250.1	Clear	No Odor
09:49	55	400	mL/min	46.69	4.63	0.408	0.9	3.58	18.8	252	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	4	1 L	None
VOCs (SW8260)	Clear Glass	6	40 mL	HCl

Comments: TV:238-46.63=191.37ft*.006=1.14gal*3.785=4.34L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	MW-111-4	**Date(s):**	2025-09-19	**Work Order(s):**		RW21 LTM 2025 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:19.51 °C, rH:79%, Clouds: 0%, Wind:1.34m/s N			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	448.00-468.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	44.61	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	428.39	**Liters in Well:**	1058.6
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	07:50	**Total Volume Purged (liters):**	16.8	**Sample ID:**	MW-111-4	**Sample Time:**	08:50
Purge End Time:	08:46	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS,Hach 2100-Q / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
07:51	0	300	mL/min	44.63	4.72	0.2	0.86	5.14	17	233.2	Clear	No Odor
07:56	5	300	mL/min	44.63	4.58	0.2	0.86	4.84	18.4	246.1	Clear	No Odor
08:01	10	300	mL/min	44.63	4.55	0.207	0.5	4.83	18.6	258.6	Clear	No Odor
08:06	15	300	mL/min	44.63	4.56	0.215	0.5	4.92	19.1	274.9	Clear	No Odor
08:11	20	300	mL/min	44.63	4.56	0.214	3.18	4.95	19.2	276.2	Clear	No Odor
08:16	25	300	mL/min	44.63	4.55	0.211	3.18	5	19.3	280.3	Clear	No Odor
08:21	30	300	mL/min	44.63	4.55	0.209	1.48	5.05	19.9	286.6	Clear	No Odor
08:26	35	300	mL/min	44.63	4.54	0.208	0.02	5.08	20	291.3	Clear	No Odor
08:31	40	300	mL/min	44.63	4.54	0.209	0.05	5.09	20	294.1	Clear	No Odor
08:36	45	300	mL/min	44.63	4.54	0.208	0.01	5.11	20.5	301.5	Clear	No Odor
08:41	50	300	mL/min	44.63	4.54	0.207	4.23	5.12	20.4	305.7	Clear	No Odor
08:46	55	300	mL/min	44.63	4.54	0.207	3.93	5.13	20.7	307.4	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV: 458-44.61=413.39*.006=2.48gal*3.785=9.38L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	MW-116-5	**Date(s):**	2025-09-09	**Work Order(s):**		RW21 LTM 2025 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:66.92 °F, rH:67%, Clouds: 0%, Wind:10.36mph NE			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	570.00-590.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	45.23	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	549.77	**Liters in Well:**	1358.55
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:52	**Total Volume Purged (liters):**	33	**Sample ID:**	MW-116-5	**Sample Time:**	11:00
Purge End Time:	11:59	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	**MS/MSD** / MW-116-5	**Water Quality Meter/ ID:**	YSI Pro DSS,Hach 2100-Q / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:53	0	500	mL/min	45.30	5	0.093	11.5	2.06	16.8	235.6	Clear	No Odor
09:58	5	500	mL/min	45.30	4.95	0.09	11.5	1.51	18	245.2	Clear	No Odor
10:03	10	500	mL/min	45.30	4.92	0.088	18.8	1.29	18.2	247.9	Clear	No Odor
10:08	15	500	mL/min	45.23	4.88	0.086	18.8	1.19	18.2	219.9	Clear	No Odor
10:13	20	500	mL/min	45.23	5	0.093	710	0.95	18.4	162.6	Clear	No Odor
10:18	25	500	mL/min	45.30	4.75	0.093	710	0.66	18.3	172.1	Clear	No Odor
10:23	30	500	mL/min	45.33	4.63	0.091	101	0.66	18.4	185.7	Clear	No Odor
10:28	35	500	mL/min	45.33	4.59	0.091	28.3	0.66	18.4	193.7	Clear	No Odor
10:33	40	500	mL/min	45.33	4.56	0.091	18.6	0.65	18.4	205.1	Clear	No Odor
10:38	45	500	mL/min	45.33	4.56	0.091	9.96	0.64	18.5	207.9	Clear	No Odor
10:43	50	500	mL/min	45.33	4.55	0.091	8.2	0.62	18.5	213.7	Clear	No Odor
10:48	55	500	mL/min	45.33	4.55	0.091	9.06	0.61	18.5	218.4	Clear	No Odor
10:53	60	500	mL/min	45.33	4.55	0.091	10	0.6	18.6	221.5	Clear	No Odor
10:58	65	500	mL/min	45.33	4.55	0.091	15.6	0.57	18.7	227.7	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV: 580-45.23=534.77*.006=3.2gal*3.785=12.14L

Well Information:

Well Labeled Properly: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	MW-117-5	**Date(s):**	2025-09-11	**Work Order(s):**		RW21 LTM 2025 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:69.03 °F, rH:65%, Clouds: 0%, Wind:8.01mph N			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	737.00-757.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	46.89	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	715.11	**Liters in Well:**	1767.12
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:42	**Total Volume Purged (liters):**	60.5	**Sample ID:**	MW-117-5	**Sample Time:**	11:45
Purge End Time:	11:44	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS,Hach 2100-Q / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:43	0	500	mL/min	47.01	5.91	0.057	49	6.46	16.7	144.5	Clear	No Odor
09:48	5	500	mL/min	47.01	5.63	0.054	49	2.7	16.5	163.3	Clear	No Odor
09:53	10	500	mL/min	46.95	5.61	0.054	53.1	2.13	16.6	169.7	Clear	No Odor
09:58	15	500	mL/min	46.95	5.51	0.056	53.1	2.32	16.7	180	Clear	No Odor
10:03	20	500	mL/min	46.95	5.42	0.058	61.1	2.92	16.8	181.5	Orange	No Odor
10:08	25	500	mL/min	46.95	5.4	0.065	61.1	4.02	17.1	133	Clear	No Odor
10:13	30	500	mL/min	46.95	5.68	0.086	Over range	3.41	17.1	81.4	Reddish brown	No Odor
10:18	35	500	mL/min	46.95	5.85	0.095	Over range	2.65	17.1	60.5	Clear	No Odor
10:23	40	500	mL/min	46.95	5.69	0.089	634	4.58	17.1	80.5	Reddish brown	No Odor
10:28	45	500	mL/min	46.95	5.66	0.089	634	4.71	17.2	84.9	Clear	No Odor
10:33	50	500	mL/min	46.95	5.62	0.088	471	4.89	17.2	91.7	Brown	No Odor
10:38	55	500	mL/min	47.10	5.56	0.086	471	5.01	17.4	99.7	Clear	No Odor
10:43	60	500	mL/min	47.10	5.54	0.086	439	5.08	17.4	104.3	Clear	No Odor
10:48	65	500	mL/min	47.10	5.37	0.082	253	5.32	17.5	129.9	Clear	No Odor
10:53	70	500	mL/min	47.10	5.36	0.082	253	5.33	17.6	131.4	Clear	No Odor
10:58	75	500	mL/min	47.10	5.35	0.082	228	5.35	17.6	132.7	cloudy	No Odor
11:03	80	500	mL/min	47.10	5.33	0.082	180	5.38	17.6	136.6	cloudy	No Odor
11:08	85	500	mL/min	47.10	5.3	0.081	187	5.42	17.7	142.2	cloudy	No Odor
11:13	90	500	mL/min	47.10	5.28	0.081	172	5.45	17.8	145.6	cloudy	No Odor
11:18	95	500	mL/min	47.10	5.27	0.08	157	5.67	17.4	145.9	Clear	No Odor
11:23	100	500	mL/min	47.10	5.24	0.08	122	5.57	17.4	151.9	Clear	No Odor
11:28	105	500	mL/min	47.10	5.23	0.079	125	5.56	17.5	153.8	Clear	No Odor
11:33	110	500	mL/min	47.10	5.21	0.079	107	5.57	17.6	157.9	Clear	No Odor

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:38	115	500	mL/min	47.10	5.2	0.079	99.3	5.57	17.6	161.1	Clear	No Odor
11:43	120	500	mL/min	47.10	5.18	0.079	101	5.57	17.8	164.9	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV: 747-46.89=700.11ft*.006=4.2gal*3.785=15.89L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	MW-118-5	**Date(s):**	2025-09-10	**Work Order(s):**		RW21 LTM 2025 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:62.28 °F, rH:90%, Clouds: 100%, Wind:10.36mph N-NE			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	713.00-738.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	41.03	**Total Depth (ft-bmp):**	743	**Water Column(ft):**	701.97	**Liters in Well:**	1734.65
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:02	**Total Volume Purged (liters):**	61	**Sample ID:**	MW-118-5	**Sample Time:**	11:00
Purge End Time:	10:57	**Well Volumes Purged (total):**	0.04	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:02	0	500	mL/min	41.09	6	0.076	4.54	7.31	17.5	170	Clear	No Odor
09:07	5	500	mL/min	41.09	5.93	0.072	15.7	2.17	16.4	174.6	Clear	No Odor
09:12	10	500	mL/min	41.09	5.8	0.068	21.3	2.15	16.6	176.5	Clear	No Odor
09:17	15	500	mL/min	41.09	5.69	0.066	24.7	2.57	16.7	160.5	Clear	No Odor
09:22	20	500	mL/min	41.09	5.68	0.071	516	3	16.8	92.4	Clear	No Odor
09:27	25	500	mL/min	41.09	6.02	0.104	#	1.69	16.9	34.8	Clear	No Odor
09:32	30	500	mL/min	41.09	6.2	0.117	#	1.66	16.9	11.1	Clear	No Odor
09:37	35	500	mL/min	41.09	5.95	0.089	#	4.14	16.8	55.8	Clear	No Odor
09:42	40	500	mL/min	41.09	5.66	0.086	264	4.45	16.8	72.5	Clear	No Odor
09:47	45	500	mL/min	41.10	5.54	0.083	199	4.64	16.7	93.2	Clear	No Odor
09:52	50	500	mL/min	41.10	5.48	0.081	175	4.7	16.8	100.4	Clear	No Odor
09:57	55	500	mL/min	41.10	5.44	0.081	255	4.68	16.8	48.4	Clear	No Odor
10:02	60	400	mL/min	41.10	5.38	0.079	231	4.78	16.9	117.8	Clear	No Odor
10:07	65	400	mL/min	41.09	5.35	0.079	185	4.79	17	124.9	Clear	No Odor
10:12	70	400	mL/min	41.09	5.31	0.077	113	4.87	17	133.9	Clear	No Odor
10:17	75	400	mL/min	41.10	5.29	0.077	101	4.93	17.1	137.7	Clear	No Odor
10:22	80	400	mL/min	41.10	5.27	0.077	101	4.98	17.1	142.6	Clear	No Odor
10:27	85	400	mL/min	41.10	5.26	0.077	60.6	4.98	17	143.9	Clear	No Odor
10:32	90	400	mL/min	41.10	5.25	0.076	58.7	5	17.1	146.4	Clear	No Odor
10:37	95	400	mL/min	41.10	5.25	0.076	59.2	4.99	17.1	147.3	Clear	No Odor
10:42	100	400	mL/min	41.10	5.23	0.076	55	5.04	17.1	150.2	Clear	No Odor
10:47	105	400	mL/min	41.10	5.23	0.076	52.1	5.03	17.1	152.3	Clear	No Odor
10:52	110	400	mL/min	41.10	5.23	0.076	50.8	5.06	17.1	153.3	Clear	No Odor
10:57	115	400	mL/min	41.10	5.23	0.076	48.7	5.05	17.1	153.5	Clear	No Odor

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV= 728ft - 41.03ft = 686.97ft x 0.006gal/ft = 4.122gal x 3.785L/gal=15.602 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-1	**Date(s):**	2025-09-18	**Work Order(s):**		RW21 LTM 2025 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:66.81 °F, rH:86%, Clouds: 100%, Wind:5.01mph NW			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	615.00-625.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	47.73	**Total Depth (ft-bmp):**	630	**Water Column(ft):**	582.27	**Liters in Well:**	1438.86
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:22	**Total Volume Purged (liters):**	42	**Sample ID:**	RW-21_MW-1	**Sample Time:**	10:35
Purge End Time:	10:32	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:22	0	500	mL/min	48.01	6.17	0.15	8.3	8.15	17.84	289	Clear	No Odor
09:27	5	500	mL/min	48.01	6.82	0.109	7.56	5.01	16.97	272	Clear	No Odor
09:32	10	500	mL/min	48.01	7.06	0.105	12.3	3.89	16.82	265	Clear	No Odor
09:37	15	500	mL/min	48.01	7.16	0.104	11.23	3.24	17.01	265	Clear	No Odor
09:42	20	500	mL/min	48.01	7.02	0.106	3.04	2.56	16.94	273	Clear	No Odor
09:47	25	500	mL/min	48.01	6.72	0.109	2.89	2.28	16.96	275	Clear	No Odor
09:52	30	500	mL/min	48.01	6.43	0.109	2.87	2.28	17.01	277	Clear	No Odor
09:57	35	500	mL/min	48.01	6.29	0.112	2.75	2.09	16.95	272	Clear	No Odor
10:02	40	500	mL/min	48.01	6.22	0.112	2.98	2	16.97	266	Clear	No Odor
10:07	45	500	mL/min	48.01	6.19	0.112	2.1	1.93	17	265	Clear	No Odor
10:12	50	500	mL/min	48.01	6.1	0.109	4.36	1.89	17.02	266	Clear	No Odor
10:17	55	500	mL/min	48.01	6.09	0.109	9.88	1.89	17.11	266	Clear	No Odor
10:22	60	500	mL/min	48.01	6.02	0.109	6.3	1.93	16.77	264	Clear	No Odor
10:27	65	500	mL/min	48.01	6.07	0.109	7.55	1.91	16.74	265	Clear	No Odor
10:32	70	500	mL/min	48.01	6.08	0.109	6.06	1.89	16.71	265	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: LF=620ft - 47.73ft = 572.27ft x 0.01gal/ft = 5.723gal x3.785L/gal = 21.662 L

Well Information:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-12-1	**Date(s):**	2025-09-12	**Work Order(s):**		RW21 LTM 2025 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:68.22 °F, rH:69%, Clouds: 75%, Wind:8.05mph N-NE			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	415.00-425.00	**Casing Diameter (in):**	2.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	23.72	**Total Depth (ft-bmp):**	430	**Water Column(ft):**	406.28	**Liters in Well:**	250.99
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:25	**Total Volume Purged (liters):**	32	**Sample ID:**	RW-21_MW-12-1	**Sample Time:**	10:30
Purge End Time:	10:25	**Well Volumes Purged (total):**	0.13	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:25	0	400	mL/min	23.90	5.48	0.22	11.5	4.2	15.2	186.3	Clear	No Odor
09:30	5	400	mL/min	23.90	5.12	0.204	10.2	8.3	15.5	205.5	Clear	No Odor
09:35	10	400	mL/min	23.90	5.13	0.204	21.5	7.8	16.1	215.6	Clear	No Odor
09:40	15	400	mL/min	23.90	5.09	0.205	87.8	7.1	16.1	219.9	Clear	No Odor
09:45	20	400	mL/min	23.90	5.13	0.209	92.3	0.58	16.2	224	Clear	No Odor
09:50	25	400	mL/min	23.91	5.13	0.208	137	0.56	16.3	224.9	Clear	No Odor
09:55	30	400	mL/min	23.91	5.14	0.209	87	4.9	16.3	228.2	Clear	No Odor
10:00	35	400	mL/min	23.91	5.19	0.21	78.3	0.43	16.3	228.2	Clear	No Odor
10:05	40	400	mL/min	23.92	5.24	0.213	76.4	0.41	16.3	227.1	Clear	No Odor
10:10	45	400	mL/min	23.92	5.29	0.216	67.7	0.38	16.4	224.6	Clear	No Odor
10:15	50	400	mL/min	23.92	5.32	0.217	42.7	0.36	16.4	222.3	Clear	No Odor
10:20	55	400	mL/min	23.92	5.33	0.217	39.7	0.35	16.3	220.6	Clear	No Odor
10:25	60	400	mL/min	23.93	5.33	0.217	33.4	0.34	16.5	219.4	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV=420ft - 23.72ft = 396.28ft x 0.01gal/ft = 3.963gal x 3.785L/gal = 15 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-13	**Date(s):**	2025-09-04	**Work Order(s):**		RW21 LTM 2025 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:70.79 °F, rH:80%, Clouds: 0%, Wind:5.01mph S			**Field Technician:**		Kyra Kraus	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	716.00-726.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	47.16	**Total Depth (ft-bmp):**	731	**Water Column(ft):**	683.84	**Liters in Well:**	1689.85
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:32	**Total Volume Purged (liters):**	30	**Sample ID:**	RW-21_MW-13	**Sample Time:**	10:25
Purge End Time:	10:22	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	**MS/MSD** / RW-21_MW-13	**Water Quality Meter/ ID:**	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:32	0	500	mL/min	47.20	6.08	0.07	4.21	9.04	19.7	167.2	Clear	No Odor
09:37	5	500	mL/min	47.20	5.72	0.039	4.2	7.3	17.9	206.1	Clear	No Odor
09:42	10	500	mL/min	47.20	5.74	0.041	7.2	6.75	17.9	217.8	Clear	No Odor
09:47	15	500	mL/min	47.20	5.68	0.05	5.07	6.47	18	199.2	Clear	No Odor
09:52	20	500	mL/min	47.19	5.55	0.044	6.11	6.38	18.2	188.8	Clear	No Odor
09:57	25	500	mL/min	47.19	5.36	0.038	5.14	6.31	18.2	170.3	Clear	No Odor
10:02	30	400	mL/min	47.19	5.31	0.036	3.24	6.22	18.8	164.8	Clear	No Odor
10:07	35	400	mL/min	47.19	5.28	0.034	4.12	6.15	19.2	163.2	Clear	No Odor
10:12	40	400	mL/min	47.19	5.28	0.033	4.07	6.14	19	161.5	Clear	No Odor
10:17	45	400	mL/min	47.19	5.27	0.033	3.24	6.1	19.1	161.3	Clear	No Odor
10:22	50	400	mL/min	47.19	5.27	0.033	2.12	6.08	19.1	161.9	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV=721ft - 47.16ft = 673.84ft x 0.006gal/ft = 4.043gal x 3.785L/gal = 15.303 L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-14	**Date(s):**	2025-09-17	**Work Order(s):**		RW21 LTM 2025 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	RAIN, T:68.09 °F, rH:78%, Clouds: 100%, Wind:8.05mph NE			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	630.00-640.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	39.5	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	605.5	**Liters in Well:**	1496.26
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	10:52	**Total Volume Purged (liters):**	30.8	**Sample ID:**	RW-21_MW-14	**Sample Time:**	12:10
Purge End Time:	12:09	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS,Hach 2100-Q / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:54	0	400	mL/min	39.55	6.47	0.044	14.8	2.46	16.53	321	Clear	No Odor
10:59	5	400	mL/min	39.55	6.05	0.042	14.8	1.62	16.6	320	Clear	No Odor
11:04	10	400	mL/min	39.55	5.58	0.04	14.9	0.5	16.77	314	Clear	No Odor
11:09	15	400	mL/min	39.55	5.55	0.04	14.9	0.01	16.7	305	Clear	No Odor
11:14	20	400	mL/min	39.55	5.51	0.04	5.28	0	16.7	305	Clear	No Odor
11:19	25	400	mL/min	39.55	5.45	0.038	5.28	0	16.77	291	Clear	No Odor
11:24	30	400	mL/min	39.55	5.48	0.037	51.5	0.03	16.7	192	Clear	No Odor
11:29	35	400	mL/min	39.55	5.53	0.037	51.5	0	16.7	174	Clear	No Odor
11:34	40	400	mL/min	39.55	5.67	0.041	252	0	16.8	123	cloudy	No Odor
11:39	45	400	mL/min	39.55	5.98	0.055	252	0	16.8	63	Clear	No Odor
11:44	50	400	mL/min	39.55	6.04	0.056	92.9	0	16.8	68	Clear	No Odor
11:49	55	400	mL/min	39.55	5.86	0.053	48.7	0	16.84	87	Clear	No Odor
11:54	60	400	mL/min	39.55	5.76	0.052	31.2	0	16.8	96	Clear	No Odor
11:59	65	400	mL/min	39.62	5.72	0.051	23.7	0	16.8	98	Clear	No Odor
12:04	70	400	mL/min	39.62	5.7	0.05	18.6	0	16.9	103	Clear	No Odor
12:09	75	400	mL/min	39.62	5.66	0.05	21.3	0	16.8	106	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV: 635-39.5=595.5*.01=5.95gal*3.785=22.5

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Information:

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-15	**Date(s):**	2025-09-04	**Work Order(s):**		RW21 LTM 2025 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:73.85 °F, rH:74%, Clouds: 40%, Wind:13mph S			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	676.00-686.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	49.65	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	641.35	**Liters in Well:**	1584.85
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	11:36	**Total Volume Purged (liters):**	36	**Sample ID:**	RW-21_MW-15	**Sample Time:**	12:50
Purge End Time:	12:50	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS,Hach 2100-Q / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:38	0	500	mL/min	49.70	6.13	0.063	2.96	3.85	15.8	176.6	Clear	No Odor
11:43	5	500	mL/min	49.70	6.05	0.059	2.96	3.81	16.7	177.6	Clear	No Odor
11:48	10	500	mL/min	49.70	5.7	0.065	1.91	3.65	16.8	193.3	Clear	No Odor
11:53	15	500	mL/min	49.70	5.37	0.06	1.91	3.6	17.1	233	Clear	No Odor
11:58	20	500	mL/min	49.70	5.21	0.058	1.3	3.74	16.8	244.9	Clear	No Odor
12:03	25	500	mL/min	49.70	5.11	0.055	1.3	3.98	16.9	249.6	Clear	No Odor
12:08	30	500	mL/min	49.70	5.09	0.054	3.28	4.05	17	250	Clear	No Odor
12:13	35	500	mL/min	49.70	5.09	0.053	3.28	4.1	17	250.7	Clear	No Odor
12:18	40	500	mL/min	49.70	5.1	0.053	1.57	4.15	17	251.2	Clear	No Odor
12:23	45	500	mL/min	49.70	5.12	0.053	1.57	4.14	17.1	251.5	Clear	No Odor
12:28	50	500	mL/min	49.70	5.13	0.053	1.14	4.18	17.1	251.8	Clear	No Odor
12:33	55	500	mL/min	49.70	5.13	0.053	0.65	4.16	17.2	253.1	Clear	No Odor
12:38	60	500	mL/min	49.70	5.13	0.053	0.95	4.19	17.1	253.6	Clear	No Odor
12:43	65	500	mL/min	49.70	5.12	0.053	0.96	4.16	17.2	255.2	Clear	No Odor
12:48	70	500	mL/min	49.70	5.11	0.053	1.59	4.15	17.4	256.2	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV: 683.5-49.65=633.85*.01=6.338gal*3.785=23.99L

Well Information:

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-16	**Date(s):**	2025-09-05	**Work Order(s):**		RW21 LTM 2025 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:70.59 °F, rH:88%, Clouds: 0%, Wind:5.01mph S-SW			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	636.00-646.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	47.23	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	603.77	**Liters in Well:**	1491.99
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:54	**Total Volume Purged (liters):**	34.6	**Sample ID:**	RW-21_MW-16	**Sample Time:**	10:23
Purge End Time:	10:21	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS,Hach 2100-Q / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:55	0	600	mL/min	47.24	5.48	0.054	0.37	6.11	18.2	258.1	Clear	No Odor
09:00	5	400	mL/min	47.24	5.03	0.046	0.37	4.3	18.3	251.5	Clear	No Odor
09:05	10	400	mL/min	47.24	5.07	0.121	Over range	3.07	17.5	85.4	Clear	No Odor
09:10	15	400	mL/min	47.24	5.51	0.082	Over range	2.84	17.5	122.4	Clear	No Odor
09:15	20	400	mL/min	47.24	5.04	0.065	28.2	2.66	17.7	148.3	Clear	No Odor
09:20	25	400	mL/min	47.24	4.79	0.059	28.2	2.44	17.6	184.8	Clear	No Odor
09:25	30	400	mL/min	47.24	4.79	0.05	10.2	2.25	17.7	203.1	Clear	No Odor
09:30	35	400	mL/min	47.24	4.83	0.044	10.2	1.94	17.8	211.1	Clear	No Odor
09:35	40	400	mL/min	47.29	4.85	0.043	5.33	1.79	17.7	216.1	Clear	No Odor
09:40	45	400	mL/min	47.29	4.87	0.042	5.33	1.61	17.8	219.7	Clear	No Odor
09:45	50	400	mL/min	47.29	4.87	0.042	2.28	1.44	17.9	223.1	Clear	No Odor
09:50	55	400	mL/min	47.29	4.91	0.041	2.28	2.28	17.8	228.5	Clear	No Odor
09:55	60	400	mL/min	47.29	4.91	0.041	1.37	1.15	17.9	230.1	Clear	No Odor
10:00	65	400	mL/min	47.29	4.93	0.041	1.77	1.05	18.1	232.8	Clear	No Odor
10:05	70	400	mL/min	47.29	4.93	0.041	1.29	0.95	17.9	234.6	Clear	No Odor
10:10	75	400	mL/min	47.29	4.95	0.041	0.92	0.85	18.1	238	Clear	No Odor
10:15	80	400	mL/min	47.29	4.96	0.041	1.68	0.83	18.1	239.7	Clear	No Odor
10:20	85	400	mL/min	47.29	4.97	0.041	2.13	0.77	18.2	240.1	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Comments: TV: 658.5-47.23=611.27ft*.01=6.11gal*3.785=23.13L

Well Information:

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-2	**Date(s):**	2025-09-08	**Work Order(s):**		RW21 LTM 2025 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:65.03 °F, rH:62%, Clouds: 0%, Wind:11.99mph N			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	600.00-610.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	43.88	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	571.12	**Liters in Well:**	1411.31
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	11:28	**Total Volume Purged (liters):**	31	**Sample ID:**	RW-21_MW-2	**Sample Time:**	12:37
Purge End Time:	12:36	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS,Hach 2100-Q / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:30	0	500	mL/min	43.96	6.79	0.207	8.03	2.13	16.4	118.6	Clear	No Odor
11:35	5	500	mL/min	43.96	7.03	0.196	8.03	0.81	16.7	114.4	Clear	No Odor
11:40	10	500	mL/min	43.96	7.1	0.193	7.72	0.64	16.7	112.7	Clear	No Odor
11:45	15	500	mL/min	43.96	6.54	0.193	7.72	0.48	17.1	119.9	Clear	No Odor
11:50	20	500	mL/min	43.96	6.31	0.193	4.79	0.46	17.4	122.6	Clear	No Odor
11:55	25	500	mL/min	43.96	5.96	0.199	4.79	0.45	17.5	130.9	Clear	No Odor
12:00	30	500	mL/min	43.96	5.91	0.206	6.88	0.48	17.4	136	Clear	No Odor
12:05	35	500	mL/min	43.96	5.83	0.211	6.88	0.53	17.4	143.1	Clear	No Odor
12:10	40	500	mL/min	43.96	5.73	0.212	29.4	0.61	17.6	149.3	Clear	No Odor
12:15	45	400	mL/min	43.96	5.63	0.211	29.4	0.67	17.7	153.4	Clear	No Odor
12:20	50	400	mL/min	43.96	5.49	0.209	30.5	0.75	17.9	161.8	Clear	No Odor
12:25	55	400	mL/min	43.96	5.47	0.209	27.6	0.76	17.8	164.5	Clear	No Odor
12:30	60	400	mL/min	43.96	5.41	0.207	22.3	0.79	17.7	171.7	Clear	No Odor
12:35	65	400	mL/min	43.96	5.38	0.206	21.4	0.81	17.8	173.6	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV: 605-43.88=561.12ft*.01=5.6gal*3.785=21.23L

Well Information:

Well Labeled Properly: yes

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-3-2	**Date(s):**	2025-09-08	**Work Order(s):**		RW21 LTM 2025 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:59.61 °F, rH:76%, Clouds: 21%, Wind:3mph NE			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	595.00-605.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	53.92	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	556.08	**Liters in Well:**	1374.14
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:16	**Total Volume Purged (liters):**	30.4	**Sample ID:**	RW-21_MW-3-2	**Sample Time:**	10:35
Purge End Time:	10:32	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	**Duplicate** / REP090825SH1	**Water Quality Meter/ ID:**	YSI Pro DSS,Hach 2100-Q / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:17	0	400	mL/min	53.95	5.97	0.036	3.05	5.91	17.6	220.9	Clear	No Odor
09:22	5	400	mL/min	53.95	5.78	0.03	3.05	4.88	17.7	231	Clear	No Odor
09:27	10	400	mL/min	53.98	5.38	0.028	2.02	3.93	17.7	227.3	Clear	No Odor
09:32	15	400	mL/min	53.98	5.32	0.028	2.02	3.99	18.1	224	Clear	No Odor
09:37	20	400	mL/min	53.98	5.3	0.028	1.37	4.03	18.7	223.3	Clear	No Odor
09:42	25	400	mL/min	53.98	5.33	0.031	1.37	4.19	18.7	221.6	Clear	No Odor
09:47	30	400	mL/min	53.98	5.37	0.032	1.59	4.31	18.5	219.2	Clear	No Odor
09:52	35	400	mL/min	53.98	5.36	0.035	1.59	4.51	18.6	175.3	Clear	No Odor
09:57	40	400	mL/min	53.98	5.36	0.036	2.3	4.58	18.6	138.6	Clear	No Odor
10:02	45	400	mL/min	53.98	5.34	0.036	2.3	4.72	18	116.6	Clear	No Odor
10:07	50	400	mL/min	53.98	5.3	0.034	2.3	4.88	17.8	107.1	Clear	No Odor
10:12	55	400	mL/min	53.98	5.28	0.033	0.04	5.03	17.8	105.6	Clear	No Odor
10:17	60	400	mL/min	53.98	5.26	0.032	0.98	5.13	17.7	107.2	Clear	No Odor
10:22	65	400	mL/min	53.98	5.25	0.031	0.8	5.25	17.7	110.2	Clear	No Odor
10:27	70	400	mL/min	53.98	5.25	0.031	0.7	5.29	17.7	110.8	Clear	No Odor
10:32	75	400	mL/min	53.98	5.23	0.031	0.75	5.35	17.6	113.9	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	4	1 L	None
VOCs (SW8260)	Clear Glass	6	40 mL	HCl

Comments: TV: 600-53.92=546.08*.01=5.46gal*3.785=20.67L

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Well Information:

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-4	**Date(s):**	2025-09-05	**Work Order(s):**		RW21 LTM 2025 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:77.25 °F, rH:77%, Clouds: 0%, Wind:11.99mph S			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	369.00-384.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	46.44	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	342.56	**Liters in Well:**	846.51
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	11:19	**Total Volume Purged (liters):**	22.4	**Sample ID:**	RW-21_MW-4	**Sample Time:**	12:18
Purge End Time:	12:16	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS,Hach 2100-Q / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:20	0	400	mL/min	46.63	5.19	0.222	3.09	2.64	17.1	247.1	Clear	No Odor
11:25	5	400	mL/min	46.63	4.6	0.227	3.09	1.21	18.5	281.8	Clear	No Odor
11:30	10	400	mL/min	46.63	4.75	0.223	3.89	0.74	19.2	295.8	Clear	No Odor
11:35	15	400	mL/min	46.63	4.87	0.216	3.89	1.12	19.2	300.2	Clear	No Odor
11:40	20	400	mL/min	46.63	4.8	0.222	75.4	3.22	19.1	311.9	Clear	No Odor
11:45	25	400	mL/min	46.62	4.78	0.223	75.4	3.59	19.1	313.6	Clear	No Odor
11:50	30	400	mL/min	46.62	4.73	0.227	58.3	4.59	19.1	320.7	Clear	No Odor
11:55	35	400	mL/min	46.62	4.7	0.229	58.3	5.1	19.1	328.5	Clear	No Odor
12:00	40	400	mL/min	46.62	4.69	0.229	24.3	5.27	19	333.1	Clear	No Odor
12:05	45	400	mL/min	46.62	4.69	0.229	19.7	5.31	19.1	334.7	Clear	No Odor
12:10	50	400	mL/min	46.62	4.68	0.23	15.4	5.4	19.1	338.2	Clear	No Odor
12:15	55	400	mL/min	46.62	4.67	0.23	15	5.43	19.1	339.9	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV: 384-46.44=337.56*.01=3.37gal*3.785=12.78L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-5-1	**Date(s):**	2025-09-19	**Work Order(s):**		RW21 LTM 2025 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:23.75 °C, rH:67%, Clouds: 0%, Wind:3.13m/s W-NW			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	300.00-310.00	**Casing Diameter (in):**	2.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	41.45	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	273.55	**Liters in Well:**	168.99
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	09:34	**Total Volume Purged (liters):**	20.3	**Sample ID:**	RW-21_MW-5-1	**Sample Time:**	10:28
Purge End Time:	10:26	**Well Volumes Purged (total):**	0.12	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS,Hach 2100-Q / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
09:35	0	300	mL/min	41.48	5.88	0.069	0	1.32	20.17	300	Clear	No Odor
09:40	5	400	mL/min	41.48	5.94	0.067	0	8.12	21.41	292	Clear	No Odor
09:45	10	400	mL/min	41.48	5.77	0.064	0.19	7.75	21.6	292	Clear	No Odor
09:50	15	400	mL/min	41.48	5.6	0.064	0.19	0.39	18.79	287	Clear	No Odor
09:55	20	400	mL/min	41.40	5.56	0.064	4.39	0.43	19.02	286	Clear	No Odor
10:00	25	400	mL/min	41.48	5.45	0.065	4.39	0.7	19.7	288	Clear	No Odor
10:05	30	400	mL/min	41.54	5.44	0.065	7.73	0.65	19.74	289	Clear	No Odor
10:10	35	400	mL/min	41.54	5.43	0.066	7.87	0.7	20.24	289	Clear	No Odor
10:15	40	400	mL/min	41.54	5.45	0.066	5.88	0.7	20.35	288	Clear	No Odor
10:20	45	400	mL/min	41.54	5.45	0.066	4.91	0.72	20.78	287	Clear	No Odor
10:25	50	400	mL/min	41.54	5.46	0.066	4	0.72	20.8	287	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV:305-41.45=263.55*.01=2.63gal*3.785=9.98L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-6	**Date(s):**	2025-09-15	**Work Order(s):**			RW21 LTM 2025 Quarter 3
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:74.16 °F, rH:73%, Clouds: 0%, Wind:8.05mph NE			**Field Technician:**			Shirley He
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	604.00-624.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	40.29	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	588.71	**Liters in Well:**	1454.77
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	10:48	**Total Volume Purged (liters):**	38	**Sample ID:**	RW-21_MW-6	**Sample Time:**	12:25
Purge End Time:	12:23	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS,Hach 2100-Q / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:48	0	600	mL/min	40.38	5.39	0.174	1.43	1.94	17.1	244.4	Clear	No Odor
10:53	5	400	mL/min	40.38	5.28	0.17	1.43	1.78	19.1	242.2	Clear	No Odor
10:58	10	400	mL/min	40.38	5.26	0.17	2.02	1.49	19.6	235.6	Clear	No Odor
11:03	15	400	mL/min	40.41	5.29	0.17	2.02	1.11	19.9	228	Clear	No Odor
11:08	20	400	mL/min	40.41	5.31	0.17	4.89	0.95	19.8	224.5	Clear	No Odor
11:13	25	400	mL/min	40.41	5.32	0.17	4.89	0.88	20.6	224.6	Clear	No Odor
11:18	30	400	mL/min	40.41	5.32	0.166	5.88	0.83	20.6	225.6	Clear	No Odor
11:23	35	400	mL/min	40.40	5.3	0.162	5.88	0.77	20.3	228.1	Clear	No Odor
11:28	40	400	mL/min	40.40	5.3	0.161	4.64	0.8	20.5	229.2	Clear	No Odor
11:33	45	400	mL/min	40.40	5.29	0.161	4.95	0.92	20.9	230.8	Clear	No Odor
11:38	50	400	mL/min	40.40	5.3	0.162	9.36	1.14	21.5	232.5	Clear	No Odor
11:43	55	400	mL/min	40.41	5.3	0.164	9.21	1.32	21.9	233.8	Clear	No Odor
11:48	60	400	mL/min	40.41	5.31	0.165	11.5	1.55	21.9	235.5	Clear	No Odor
11:53	65	400	mL/min	40.41	5.31	0.166	10.8	1.81	22	236.9	Clear	No Odor
11:58	70	400	mL/min	40.41	5.31	0.167	12.4	1.95	22.5	238	Clear	No Odor
12:03	75	400	mL/min	40.41	5.31	0.168	15	2.18	22.6	238.4	Clear	No Odor
12:08	80	400	mL/min	40.41	5.31	0.169	13.9	2.22	22.9	238.8	Clear	No Odor
12:13	85	400	mL/min	40.41	5.32	0.17	14.6	2.29	23	239	Clear	No Odor
12:18	90	400	mL/min	40.41	5.32	0.17	13.6	2.4	23.2	239.2	Clear	No Odor
12:23	95	400	mL/min	40.41	5.32	0.171	11.6	2.46	23.3	239.5	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Comments: TV:614-40.29=573.71*.01=5.73gal*3.785=21.7L

Well Information:

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-7	**Date(s):**	2025-09-18	**Work Order(s):**		RW21 LTM 2025 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLOUDS, T:73.26 °F, rH:72%, Clouds: 20%, Wind:5.01mph NW			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	580.00-590.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	47.13	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	547.87	**Liters in Well:**	1353.85
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	11:19	**Total Volume Purged (liters):**	25.5	**Sample ID:**	RW-21_MW-7	**Sample Time:**	12:12
Purge End Time:	12:11	**Well Volumes Purged (total):**	0.02	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS,Hach 2100-Q / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:20	0	500	mL/min	47.45	6.09	0.152	12.8	6.34	18	155.9	Clear	No Odor
11:25	5	500	mL/min	47.45	4.91	0.15	12.8	0.87	18.3	188.5	Clear	No Odor
11:30	10	500	mL/min	47.45	4.9	0.15	4.93	0.81	18.5	190.5	Clear	No Odor
11:35	15	500	mL/min	47.45	4.96	0.146	4.93	0.71	18.4	194.5	Clear	No Odor
11:40	20	500	mL/min	47.45	5.05	0.145	12.5	1	18.6	196.2	Clear	No Odor
11:45	25	500	mL/min	47.45	4.94	0.144	12.5	1.72	18.7	201.2	Clear	No Odor
11:50	30	500	mL/min	47.45	4.89	0.144	4.2	1.96	18.8	206.3	Clear	No Odor
11:55	35	500	mL/min	47.45	4.84	0.145	2.52	2.11	18.7	211.5	Clear	No Odor
12:00	40	500	mL/min	47.45	4.78	0.145	3.28	2.25	18.7	219.8	Clear	No Odor
12:05	45	500	mL/min	47.45	4.75	0.145	0.6	2.3	18.9	223.4	Clear	No Odor
12:10	50	500	mL/min	47.45	4.73	0.145	0.58	2.35	18.8	228.8	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

Comments: TV: 585-47.13=537.87ft*.006=3.22gal*3.785=12.2L

Well Information:

Well Labeled Properly: yes

Is Well in Good Condition? good

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RW-21_MW-8	**Date(s):**	2025-09-17	**Work Order(s):**		RW21 LTM 2025 Quarter 3	
Client:	Northrop Grumman	**Facility:**	OU3	**Facility Location:**	606 Hicksville Road, Bethpage, NY, US	**Area:**	RW-21
Weather:	CLEAR, T:65.32 °F, rH:82%, Clouds: 0%, Wind:14mph N-NE			**Field Technician:**		Shirley He	
Measuring Pt. Description:	Top of Inner Casing	**Screen Setting (ft-bgs):**	460.00-470.00	**Casing Diameter (in):**	4.00	**Well Casing Material:**	PVC
Static Water Level (ft-bmp):	46.31	**Total Depth (ft-bmp):**	NA	**Water Column(ft):**	428.69	**Liters in Well:**	1059.34
Depth to Product (ft-bmp):	NA	**Pump Intake Depth(ft-bmp):**	NA	**Purge Method:**	Low Flow	**Purging Equipment:**	Submersible Pump
Purge Start Time:	08:41	**Total Volume Purged (liters):**	34.4	**Sample ID:**	RW-21_MW-8	**Sample Time:**	10:10
Purge End Time:	10:08	**Well Volumes Purged (total):**	0.03	**Replicate Type / Replicate ID:**	N/A	**Water Quality Meter/ ID:**	YSI Pro DSS,Hach 2100-Q / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (µS/cm[c])	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
08:42	0	400	mL/min	46.74	6.91	0.311	1.79	2.16	17.41	323	Clear	No Odor
08:47	5	400	mL/min	46.74	7.63	0.269	1.79	1.22	16.8	290	Clear	No Odor
08:52	10	400	mL/min	46.61	8.14	0.219	0.19	0.87	16.71	262	Clear	No Odor
08:57	15	400	mL/min	46.61	8.33	0.214	0.19	0.74	16.69	255	Clear	No Odor
09:02	20	400	mL/min	46.61	8.78	0.224	7.2	0.69	16.72	242	Clear	No Odor
09:07	25	400	mL/min	46.63	8.95	0.237	7.2	0.63	16.8	229	Clear	No Odor
09:12	30	400	mL/min	46.63	8.6	0.253	82.7	0.59	16.79	235	cloudy	No Odor
09:17	35	400	mL/min	46.63	8.17	0.259	82.7	0.49	16.8	240	Clear	No Odor
09:22	40	400	mL/min	46.63	7.88	0.261	67.2	0.42	16.7	237	Clear	No Odor
09:27	45	400	mL/min	46.63	7.47	0.26	42.3	0.3	16.7	225	Clear	No Odor
09:32	50	400	mL/min	46.63	7.3	0.258	37.6	0.28	16.8	217	Clear	No Odor
09:37	55	400	mL/min	46.69	7.22	0.254	34.7	0.24	16.8	207	Clear	No Odor
09:42	60	400	mL/min	46.69	7.17	0.253	32.2	0.22	16.8	199	Clear	No Odor
09:47	65	400	mL/min	46.69	7.11	0.251	28.4	0.2	16.9	193	Clear	No Odor
09:52	70	400	mL/min	46.69	7.08	0.247	22.5	0.16	16.8	186	Clear	No Odor
09:57	75	400	mL/min	46.72	6.93	0.24	23.2	0.15	16.9	183	Clear	No Odor
10:02	80	400	mL/min	46.72	6.88	0.239	19	0.14	17	178	Clear	No Odor
10:07	85	400	mL/min	46.72	6.86	0.237	17.3	0.13	17	177	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
1,4-Dioxane (8270C)	Amber Glass	2	1 L	None
VOCs (SW8260)	Clear Glass	3	40 mL	HCl

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Comments: TV: 465-46.31=418.69*.01=4.18gal*3.785=15.85L

Well Information:

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

ARCADIS

Groundwater Sampling Log

Page 1 of 1

Project No. 30286060 | Well ID RW-21_MW-5-2 | Date 9/19/25

Project Name/Location RW-21 | Weather Sunny 85°

Measuring Pt. Description: Top of Casing | Screen Interval (ft-bmp): 560-570 | Casing Diameter (in.): 2" | Well Material: x PVC, ___ SS

Static Water Level (ft-bmp): 45.61 | Total Depth (ft-bmp): 575 | Water Column/Gallons in Well: 530' 81.8 gal

MP Elevation: N/A | Pump Intake (ft-bmp): Midscreen | Purge Method: Non-dedicated, Peristaltic, Submersible GeoSub, Other | Sample Method: LF MP TV

Pump On/Off: 0931 / 1035 | Volume Purged (gal): 12L

Sample Time: Label RW-21_MW-5-2 | Start 1030 | End 1035 | Replicate/Code No. N/A | Sampled by SV & SH

PID: 0.0

1030

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (L)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
0935	0	400	45.65	0	12.07	2.981	48.3	3.45	16.4	30.1	Clear	None
0940	5	400		2	12.06	2.888		0.86	17.9	10.7	"	"
0945	10	400	~~37.3~~	4	12.06	2.810	@ 32.3	0.82	20.3	40.2	"	"
0950	15	400	45.62	6	12.08	2.652		2.09	20.1	46.4	"	"
0955	20	400	45.61	8	12.16	2.063	15.7	0.65	16.8	52.1	"	"
1000	25	400		10	12.22	3.268		0.45	16.6	90.7	"	"
1005	30	400	45.60	12	12.14	2.590	10.7	0.50	17.2	95.3	"	"
1010	35	400		14	11.96	2.481		0.53	17.2	92.4	"	"
1015	40	400	45.61	16	11.94	2.454	8.61	0.49	17.3	92.5	"	"
1020	45	400	45.62	18	11.92	2.451	7.99	0.51	17.4	92.1	"	"
1025	50	400	45.63	20	11.93	2.448	6.44	0.50	17.3	93.0	"	"

TV

Constituents Sampled	Container	Number	Preservative
VOCs 8260	40 mL glass vial	3	HCl
1,4- Dioxane 8270 SIM	1 L amber bottle	2	None

Notes:

Tubing Volume Equation: Volume (gal)=(Midscreen depth - static water level depth) x tubing conversion factor (gal/ft)

575 - 45.61 = 530' · 0.006 = 3.2 gal = 12L

*Field Blank Required *Cone off early or day before

3 successive readings should be within +/- 0.1 for pH, +/- 3 percent for Sp. Con., +/- 10 percent for DO, +/- 10 mv for ORP, +/- 10 percent for turbidity, and +/- 10 percent for temperature.

Well Casing Volumes

Gallons/Foot: 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47 | 1/2" = 0.01 | 3/8" = 0.006

Well Information

Well Location: Central Blvd Romacho St. | Well Locked at Arrival: Yes / No

Condition of Well: | Well Locked at Departure: Yes / No

Well Completion: Flush Mount / Stick Up | Key Number To Well:

Appendix B

RW-21 System Capture Analysis of the OU3 Plume for 2024 - 2025

MEMO

To: Mike Wolfert – Arcadis Carlo San Giovanni – Arcadis	Copies: Mike Wolfert, Carlo San Giovanni, Dave Stern, Soma Das-Arcadis
From: Jennifer Wahlberg, Scott Potter - Arcadis	
Date: December 17, 2025	Arcadis Project No.: 30294343 MODB7
Subject: RW-21 System Capture Analysis of the OU3 Plume for 2024-2025	

Arcadis of New York, Inc.
290 Broadhollow Road
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Melville
New York 11747
Tel 631 249 7600

INTRODUCTION AND OBJECTIVES

Arcadis has prepared this technical memorandum on behalf of Northrop Grumman to summarize our analysis of the RW-21 System performance during 2024. The 2013 Record of Decision (ROD; NYSDEC 2013) required that *"one or more groundwater extraction well(s) along with the necessary treatment will be installed in the groundwater plume emanating from OU3 (the exact number to be determined during the design phase). The wells will be located downgradient of the area(s) of elevated contaminant levels identified upgradient of Bethpage Water District Plant 4. This system will be designed to capture and treat the "hot spot" area of the plume to the maximum extent practicable, at a minimum capturing and treating 90 percent of the total mass of volatile organic compounds in groundwater migrating from the elevated "hotspot area" (the recommendation by the Technical Team for Optimization of the Bethpage Plume Remedy in their June 15, 2011 report)."* The RW-21 system consists of three extraction wells (RW-20, RW-21, and RW-22) and the associated treatment, with the treated water recharged to the South Recharge Basins located on the Northrop Grumman site. The RW-21 system currently pumps at an average effective rate (i.e., the rate determined by dividing the total water pumped by the period over which the water was pumped) of 1,714 gallons per minute (gpm).

The analysis included a steady-state modeling to evaluate the hydraulic capture of the RW-21 System and the total volatile organic compounds (TVOCs) discharge through a cross-section located upgradient of BWD Plant 4 (i.e., Line of Section D-D') and a second cross-section located parallel to the first cross-section and that passes through the RW21 System Remedial Well 22 (i.e., Line of Section S-S') (see Figures 1 and 2 for section locations). The first cross-section location was established during the Pre-Design Report for the RW-21 Area (Arcadis, 2016). This evaluation was conducted using the calibrated groundwater flow and solute transport model (Arcadis, 2019). The pumping rates used in the analysis are tabulated in Table 1. These rates represent average pumping for September 2025, except for Bethpage Water District where pumping represents September 2024 rates as the 2025 rates were not available at the time of this analysis.

Table 1. Pumping Rate Summary

System	Well ID	Rate (gpm)
ONCT-OU2	Well 1	778
	Well 3R	781
	Well 17	898
	Well 18	892
	Well 19	437
West Recharge Basins		1,254
South Recharge Basins		4,426
ONCT-OU3	RW-1	0
	RW-2	79
	RW-3	80
	RW-4	15
	BCPMW-4-1	3
	BCPMW-4-2	5
OU3 Basin		182
Bethpage Water District	Well 4-1 (N-6915)	0
	Well 4-2 (N-6916)	0
	Well 5-1 (N-8004)	228
	Well 6-1 (N-3876)	347
	Well 6-2 (N-8941)	659
GM-38	GM38_RW-1	500
	GM38_RW-3	0
Arthur Ave. Basin		1,000
Arthur Ave. Dry Wells		115
Navy Phase 1	RW-4	365
	RE-137	250
Navy Phase 2	RW5B	215
	RW6B	0
	RW7B	270
	RW5 Basin	215
	RW7 Basin	270
Navy Phase 3	RW8	550
	RW9	0
	RW10A	0
	RW8 Basin	550
RW-21	RW-20	519
	RW-21	565
	RW-22	630

HYDRAULIC CAPTURE

The steady-state hydraulic capture was assessed using the MODular flow ALLocation (MODALL) program (Potter et al., 2008). This program uses the same MODFLOW-calculated cell-by-cell flow output as MODPATH (Pollock, 1989), but rather than tracking individual particle paths, it directly computes the zone-of-capture. MODALL can also calculate the capture along a cross-section. The TVOCs plume used in the capture analysis represents the most recently available data from each location sampled between 2016 and 2025 and is representative of OU3 only and does not include the OU2 plume, which is located west of the cross-sections, or the GM-38 plume, which is shallower than the "hot spot" area. Details regarding the distinctions between the plumes are described in the calibrated model report (Arcadis, 2019).

SIMULATION RESULTS

The simulated steady-state capture zones for the GM-38, BWD Plant 5-1, RW-21, ONCT-OU2, and ONCT-OU3 systems were superimposed on the OU3 plume to assess the degree of containment achieved. Figures 1 and 2 show that the capture zone of the RW-21 system encompasses all of the OU3 plume or the majority of the OU3 plume depending on the specific model layer. Table 2 presents the plume capture based on mass for each pumping center. The RW-21 system captures over 94% of the OU3 plume.

Table 2. OU3 Plume Capture Based on Mass

Pumping Wells	OU3 Plume Percent Capture
All Systems (ONCT-OU2, ONCT-OU3, RW-21, GM-38, BWD 5-1)	**99.92%**
RW-21	94.36%
GM-38	0.50%
BWD 5-1	0.94%
ONCT-OU2	3.84%
ONCT-OU3	0.28%

The capture of the OU3 plume along two cross-sections was also evaluated. One of the cross-sections (D-D') was established during the Pre-Design Report for the RW-21 Area (Arcadis, 2016) as a compliance point to evaluate whether the RW-21 system was capturing at a minimum 90 percent of the TVOC mass of groundwater migrating from the elevated "hotspot area." Since BWD Well Field 4 is no longer in operation and as Well RW-22 is the most downgradient remedial well of the RW-21 system, TVOC mass capture of the OU3 plume at cross-section S-S' (aligned parallel to cross-section D-D') was also evaluated to assess whether 90 percent of the OU3 plume was captured at this location. Table 3 presents the modeling results of the mass captured along each cross-section.

Table 3. OU3 Plume Capture Based on Mass along cross-sections

Pumping Wells	Cross-Section D-D'	Cross-Section S-S'
All Systems (ONCT-OU2, ONCT-OU3, RW-21, GM-38, BWD 5-1)	**99.93%**	**99.92%**
RW-21	99.57%	97.85%
GM-38	0.19%	1.75%
BWD 5-1	0.17%	0.32%
ONCT-OU2	0.00%	0.00%
ONCT-OU3	0.00%	0.00%

Based on modeling, approximately 100% of the OU3 plume TVOC mass discharge through cross-section D-D' is captured when the RW-21 Remedial System is pumping at 1,714 GPM along with other wells pumping (99.57% is captured by the RW-21 system by itself). TVOC mass capture of the OU3 plume at cross-section S-S'(aligned parallel to cross-section D-D') through well RW-22 is equally as effective as at D-D' with capture of 99.92% (97.85% is captured by the RW-21 system by itself).

CONCLUSIONS

The modeling assessment indicates that the RW-21 system is capturing greater than 97 % of the OU3 plume TVOC mass moving through the two cross-sections and therefore, is compliant with the OU3 ROD.

REFERENCES

Arcadis. 2016. Pre-Design Report for the RW-21 Area. Operable Unit 3 (Former Grumman Settling Ponds), Bethpage, New York. NYSDEC Site #1-30-003A

Arcadis, 2019. Attachment 1 of Northrop Grumman Comments on Proposed Amended Record of Decision and Feasibility Study: Groundwater Flow and Solute Transport Model Update (Model Report). July 2019.

Freeze, R. A. and J. A. Cherry. 1979. Groundwater, Prentice Hall, Inc.

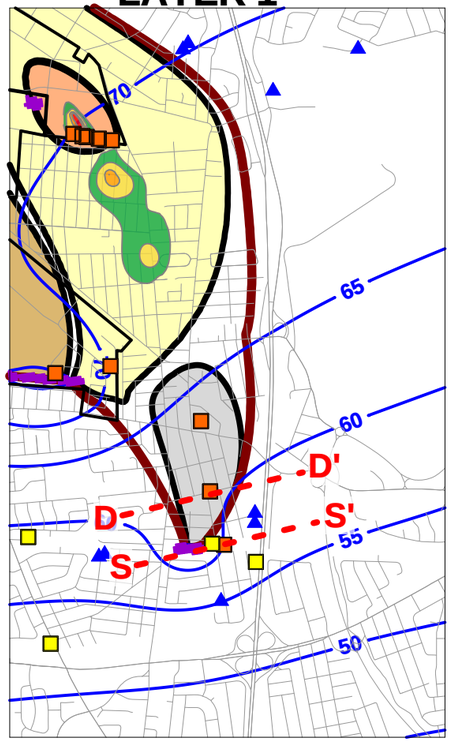
NYSDEC. 2013. Record of Decision. Operable Unite Number: 03. State Superfund Project Bethpage, Nassau County. Site No. 130003A.

Pollock, D. 1989. Documentation of Computer Programs to Compute and Display Pathlines Using Results for the U.S. Geological Survey Modular Three-Dimensional Finite-Difference Ground-Water Flow Model. U.S. Geological Survey Open File Report 89-381. Reston, Virginia.

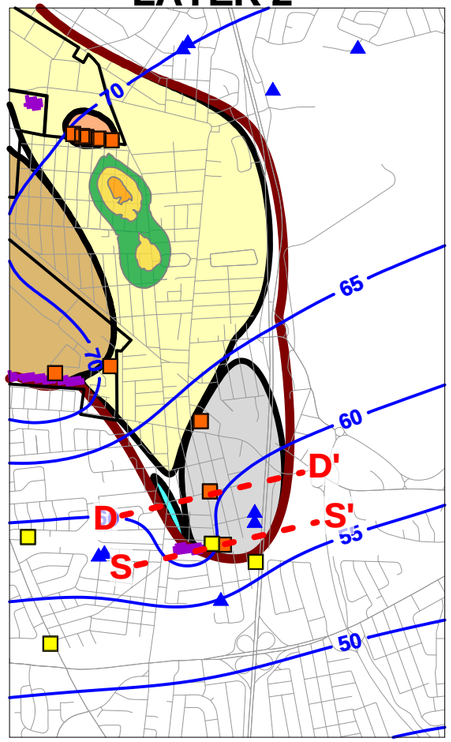
Potter, S.T., E. Moreno-Barbero, and C.E. Divine, 2008. MODALL: A Practical Tool for Designing and Optimizing Plume Capture Systems. Groundwater. 46(2): 335-340.

Figures

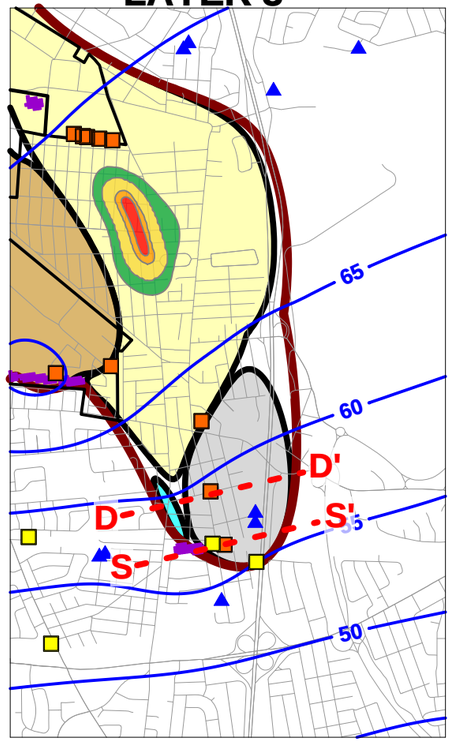
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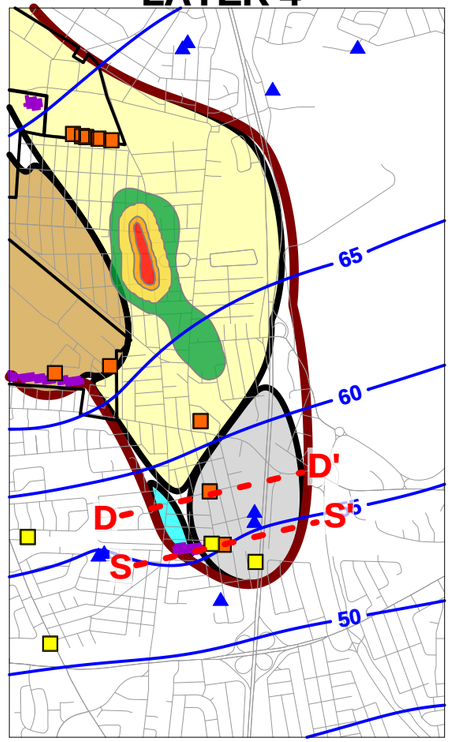
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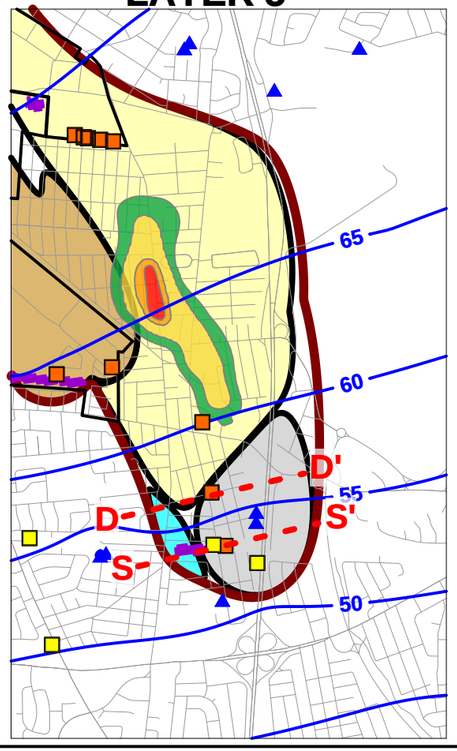
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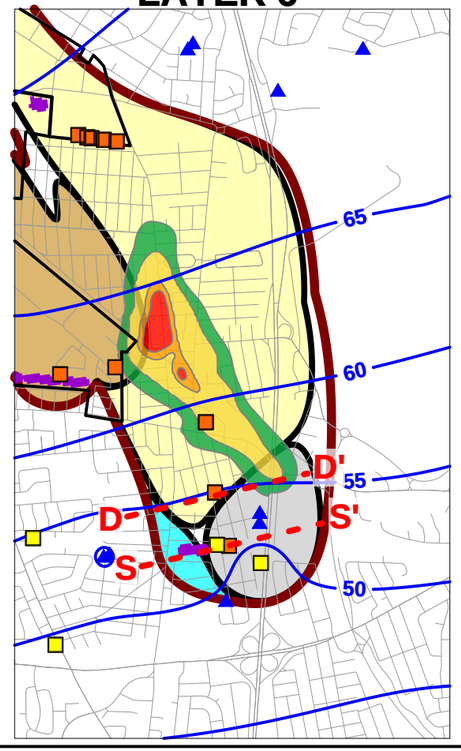
LAYER 4



LAYER 5



LAYER 6



LEGEND

- Site Outline of former Northrop Grumman Bethpage, NY Facility
- Recharge Basin
- Northrop Grumman Remediation Well
- Navy Remediation Well
- Water Supply Well
- 5 — Simulated Groundwater Elevation (ft NAVD88)
- Simulated Groundwater Capture Zone for the GM-38 System
- Simulated Groundwater Capture Zone for BWD Plant 5-1
- Simulated Groundwater Capture Zone for the RW-21 System
- Simulated Groundwater Capture Zone for the ONCT-OU2 System
- Simulated Groundwater Capture Zone for the OU3 System
- All Systems Simulated Groundwater Capture Zone
- TVOCs Mass Flux Cross-Section

TVOCs Concentration (µg/L)

5 — 50 — 500 — 1,000 — 5,000

Notes:

1. Recharge basins, water supply wells, and remediation wells are shown on each panel for reference regardless of layer designation.
2. Pumping wells are also shown regardless of pumping status (wells that are not pumping are shown).
3. OU3 Plume is based on the most recently available data from each sampling location collected between 2016 and 2025. Data were collected from monitoring wells, vertical profile borings, remedial wells, and public supply wells.
4. RW-21 System Wells Operating at 1,715 gpm total.

N

Scale in feet

0 — 3,000 — 6,000

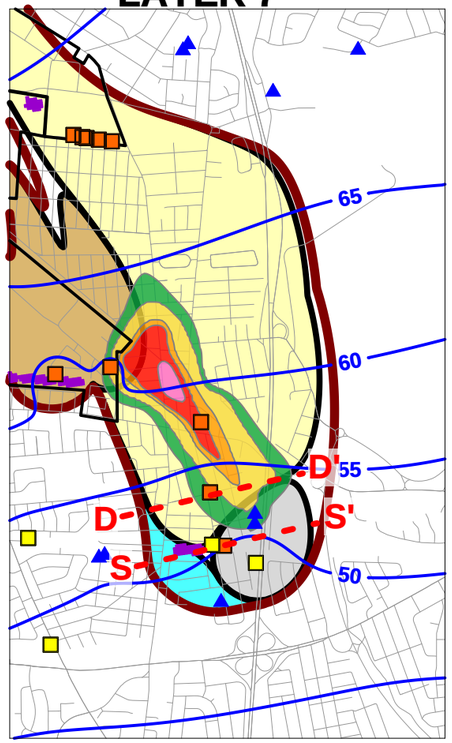
NORTHROP GRUMMAN
BETHPAGE, NEW YORK

MODEL SIMULATED GROUNDWATER ELEVATIONS AND GROUNDWATER CAPTURE ZONES: LAYERS 1 THROUGH 6

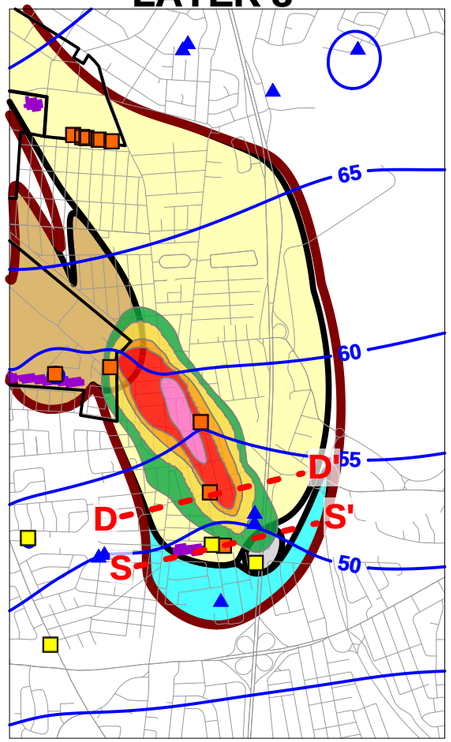
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FIGURE
1

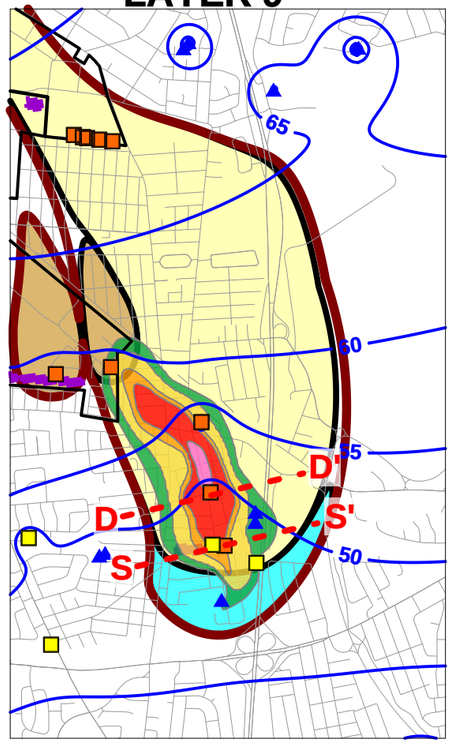
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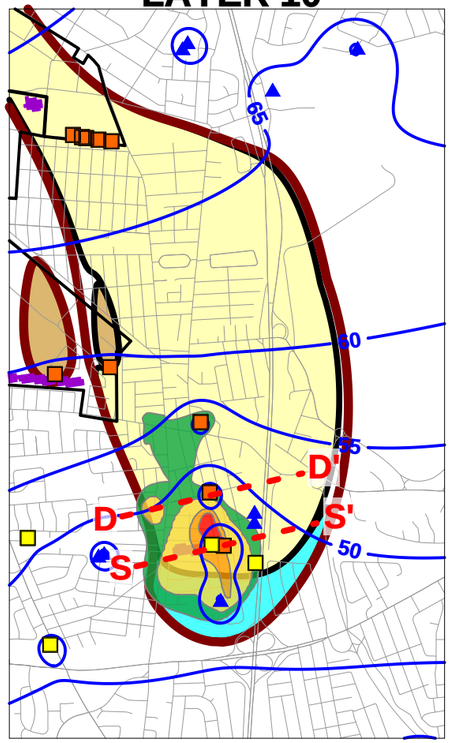
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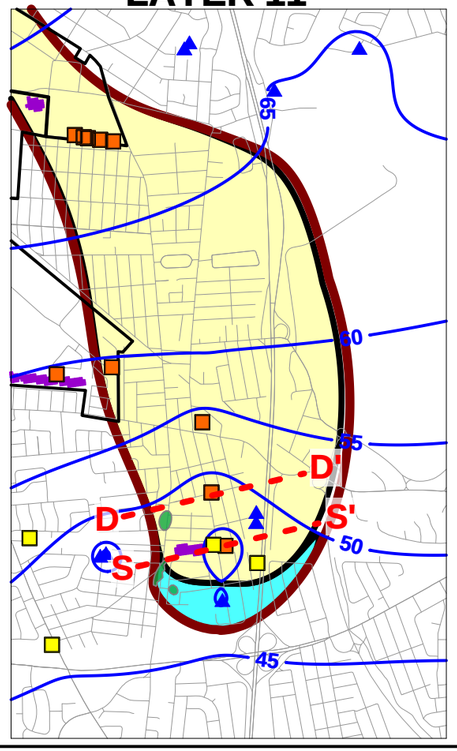
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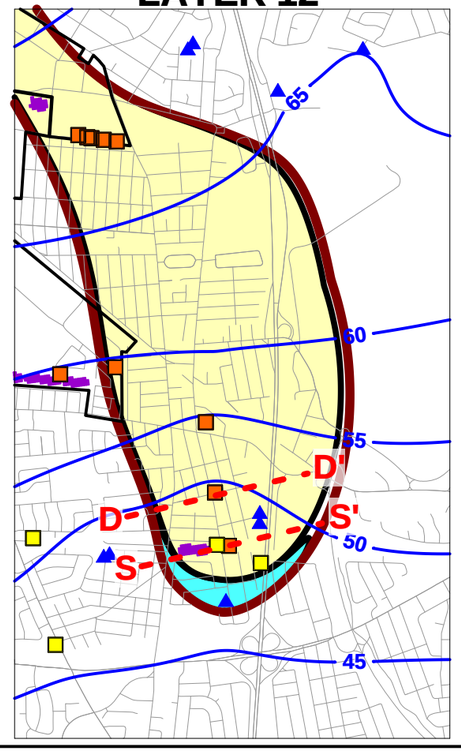
LAYER 10



LAYER 11



LAYER 12



LEGEND

- Site Outline of former Northrop Grumman Bethpage, NY Facility
- Recharge Basin
- Northrop Grumman Remediation Well
- Navy Remediation Well
- Water Supply Well
- 5 — Simulated Groundwater Elevation (ft NAVD88)
- Simulated Groundwater Capture Zone for the GM-38 System
- Simulated Groundwater Capture Zone for BWD Plant 5-1
- Simulated Groundwater Capture Zone for the RW-21 System
- Simulated Groundwater Capture Zone for the ONCT-OU2 System
- All Systems Simulated Groundwater Capture Zone
- TVOCs Mass Flux Cross-Section

TVOCs Concentration (µg/L)

5 | 50 | 500 | 1,000 | 5,000

Notes:

1. Recharge basins, water supply wells, and remediation wells are shown on each panel for reference regardless of layer designation.
2. Pumping wells are also shown regardless of pumping status (wells that are not pumping are shown).
3. OU3 Plume is based on the most recently available data from each sampling location collected between 2016 and 2025. Data were collected from monitoring wells, vertical profile borings, remedial wells, and public supply wells.
4. RW-21 System Wells Operating at 1,715 gpm total.

N

Scale in feet

0 | 3,000 | 6,000

NORTHROP GRUMMAN
BETHPAGE, NEW YORK

MODEL SIMULATED GROUNDWATER ELEVATIONS AND GROUNDWATER CAPTURE ZONES: LAYERS 7 THROUGH 12

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FIGURE 2

Appendix C

Operator Logs

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 2, 2024, Daily, Jimmy Leach

5/6/2024, 6:57:07 PM UTC

CREATED

5/2/2024, 6:48:41 PM UTC
by Larry Wright

UPDATED

5/6/2024, 6:57:07 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 2, 2024
Time	14:48
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	*System has been down due to various maintenance procedures and carbon replacement in the GAC vessels. Entire system running by 1425 (2:25 pm) after working around high PH issues caused by fresh carbon

Weather

Fetch Weather	
Weather	CLOUDS, T:68.47 °F, rH:73%, Clouds: 40%, Wind:6.91mph S-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	550
RW-20 Flow Totalizer (gal)	167650990
RW-21 Flow Rate (gpm)	550
RW-21 Flow Totalizer (gal)	170692402
RW-22 Flow Rate (gpm)	700
RW-22 Flow Totalizer (gal)	209859658
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	24
T-100 Sodium Hydroxide Tank Total Volume (gal)	6006.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	215
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4044
LOX-300 LOX Storage Tank Pressure (%)	80
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1709.22
AOP Recirc Into T-200 Flow Rate (gpm)	-0.3
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	18
P-400B PI-404 Discharge Pressure (psi)	1
P-400C PI-406 Discharge Pressure (psi)	1
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	20
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	789
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	886.5
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43107800
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	327500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.75
F-500B PIT-505 Vessel Differential Pressure (psi)	1.6
CF-700A Cartridge Filter Differential Pressure (psi)	3.63

CF-700B Cartridge Filter Differential Pressure (psi)	3.21
G-800A GAC Contractor Differential Pressure (psi)	6
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	6.2
G-800E GAC Contractor Differential Pressure (psi)	4.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	59.7
Discharge Pressure (psi)	0
Discharge pH (SU)	11.06
FIT-801 Discharge Flow Rate (gpm)	1672.75
Discharge Flow Totalizer (gal)	602323200
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	413588
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	411500
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 3, 2024, Daily, Weekly, Larry Wright

5/6/2024, 6:57:26 PM UTC

CREATED

5/3/2024, 6:05:46 PM UTC
by Larry Wright

UPDATED

5/6/2024, 6:57:26 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 3, 2024
Time	14:05
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Effluent PH escalation due to new carbon in GAC vessels.

Weather

Fetch Weather	
Weather	CLOUDS, T:58.62 °F, rH:69%, Clouds: 40%, Wind:10.36mph E-SE

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	168423980
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	171464312
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	210799178
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	32
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	8
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	8
T-100 Sodium Hydroxide Tank Total Volume (gal)	5775.1
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	224
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3990.3
LOX-300 LOX Storage Tank Pressure (%)	80
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1776
AOP Recirc Into T-200 Flow Rate (gpm)	2.7
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	1
P-200A Oxidation Feed Pump Effluent Pressure (psi)	15.5
P-200B Oxidation Feed Pump Influent Pressure (psi)	2.5
P-200B Oxidation Feed Pump Effluent Pressure (psi)	2
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	1
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	24
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.73
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	850
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	951
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43107800
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	327500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.231
F-500B PIT-505 Vessel Differential Pressure (psi)	1.919
CF-700A Cartridge Filter Differential Pressure (psi)	6.09
CF-700A Cartridge Filter Influent Pressure (psi)	16
CF-700A Cartridge Filter Effluent Pressure (psi)	13.5
CF-700B Cartridge Filter Differential Pressure (psi)	5.92
CF-700B Cartridge Filter Influent Pressure (psi)	18
CF-700B Cartridge Filter Effluent Pressure (psi)	13
G-800A GAC Contractor Differential Pressure (psi)	4
G-800A GAC Contractor Influent Pressure (psi)	6

G-800A GAC Contractor Effluent Pressure (psi)	1.5
G-800B GAC Contractor Differential Pressure (psi)	2
G-800B GAC Contractor Influent Pressure (psi)	11
G-800B GAC Contractor Effluent Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	5
G-800C GAC Contractor Influent Pressure (psi)	11
G-800C GAC Contractor Effluent Pressure (psi)	6
G-800D GAC Contractor Differential Pressure (psi)	2
G-800D GAC Contractor Influent Pressure (psi)	6
G-800D GAC Contractor Effluent Pressure (psi)	2
G-800E GAC Contractor Differential Pressure (psi)	2.5
G-800E GAC Contractor Influent Pressure (psi)	6.5
G-800E GAC Contractor Effluent Pressure (psi)	2
G-800F GAC Contractor Differential Pressure (psi)	1.5
G-800F GAC Contractor Influent Pressure (psi)	10.5
G-800F GAC Contractor Effluent Pressure (psi)	6.5
G-800G GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Influent Pressure (psi)	10.5
G-800G GAC Contractor Effluent Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	5
G-800H GAC Contractor Influent Pressure (psi)	6
G-800H GAC Contractor Effluent Pressure (psi)	1.5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	10.62
FIT-801 Discharge Flow Rate (gpm)	1727

Discharge Flow Totalizer (gal)	604752768
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	3.5
P-600 Backwash Pump Effluent Pressure (psi)	2
P-600 Backwash Pump Totalizer (gal)	413588
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.25
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.25
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1
P-1100 Decant Pump Effluent Pressure (psi)	6.6
P-1100 Decant Pump Totalizer (gal)	411500
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 6, 2024, Daily, Jimmy Leach

5/6/2024, 6:57:47 PM UTC

CREATED

5/6/2024, 5:29:44 PM UTC
by Larry Wright

UPDATED

5/6/2024, 6:57:47 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 6, 2024
Time	13:29
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	*Sodium Hydroxide pumps continue to run at 100% although the volume of caustic pumping into system is only 8 gallons per hour (AOP control panel screen indicates 32 gallons per hour).

Weather

Fetch Weather	
Weather	CLOUDS, T:64.51 °F, rH:83%, Clouds: 100%, Wind:5.75mph S-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	170866890
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	173903402
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	213816888
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	32
T-100 Sodium Hydroxide Tank Total Volume (gal)	5130.1
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	223
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3808.8
LOX-300 LOX Storage Tank Pressure (%)	75
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1778.96
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	27
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	27
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	834.2
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	932.3
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43107800
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	327500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.568
F-500B PIT-505 Vessel Differential Pressure (psi)	2.261
CF-700A Cartridge Filter Differential Pressure (psi)	6.63

CF-700B Cartridge Filter Differential Pressure (psi)	6.31
G-800A GAC Contractor Differential Pressure (psi)	6.2
G-800B GAC Contractor Differential Pressure (psi)	2.9
G-800C GAC Contractor Differential Pressure (psi)	4.8
G-800D GAC Contractor Differential Pressure (psi)	7
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.6
Discharge Pressure (psi)	0
Discharge pH (SU)	7.01
FIT-801 Discharge Flow Rate (gpm)	1784.77
Discharge Flow Totalizer (gal)	612331200
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	413588
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	411500
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 7, 2024, Daily, Jimmy Leach

5/8/2024, 6:27:24 PM UTC

CREATED

5/7/2024, 5:16:52 PM UTC
by Larry Wright

UPDATED

5/8/2024, 6:27:24 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 7, 2024
Time	13:16
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	*System went down at 0840 (due to P-400 A problem). System back up and running at 1036, P-400A taken out of rotation until diagnostic can be performed.

Weather

Fetch Weather	
Weather	CLEAR, T:75.2 °F, rH:38%, Clouds: 0%, Wind:5.99mph N-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	171614250
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	174655852
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	214748268
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	32.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	4960.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	224
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3750
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1756.58
AOP Recirc Into T-200 Flow Rate (gpm)	1.3
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	27
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	29
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	839.3
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	903.4
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43107800
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	327500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.261
F-500B PIT-505 Vessel Differential Pressure (psi)	2.163
CF-700A Cartridge Filter Differential Pressure (psi)	6.63

CF-700B Cartridge Filter Differential Pressure (psi)	6.47
G-800A GAC Contractor Differential Pressure (psi)	6.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	6
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	6.2
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.6
Discharge Pressure (psi)	0
Discharge pH (SU)	6.91
FIT-801 Discharge Flow Rate (gpm)	1763.44
Discharge Flow Totalizer (gal)	614674880
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	413588
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	411500
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 8, 2024, Daily, Jimmy Leach

5/8/2024, 6:30:20 PM UTC

CREATED

5/8/2024, 5:22:24 PM UTC
by Larry Wright

UPDATED

5/8/2024, 6:30:20 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 8, 2024
Time	13:22
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	*Flow rates of RW-20, RW-21, and RW-22 have been reduced from 1880 gpm down to 1500 gpm due to declining ph levels. PH levels may be declining as result of sodium hydroxide pumps inadequate pumping (possibly new synthetic rubber tubes in pumps are defective or have not met expectations).

Weather

Fetch Weather	
Weather	CLOUDS, T:67.17 °F, rH:81%, Clouds: 100%, Wind:10.36mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	500
RW-20 Flow Totalizer (gal)	172430390
RW-21 Flow Rate (gpm)	500
RW-21 Flow Totalizer (gal)	175470902
RW-22 Flow Rate (gpm)	500
RW-22 Flow Totalizer (gal)	215741728
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	32.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	4792.3
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	180
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3689.1
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1421.85
AOP Recirc Into T-200 Flow Rate (gpm)	-1.3
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	22
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	674.3
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	728.1
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43107800
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	327500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.94
F-500B PIT-505 Vessel Differential Pressure (psi)	1.719

CF-700A Cartridge Filter Differential Pressure (psi)	5.38
CF-700B Cartridge Filter Differential Pressure (psi)	5.27
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	3
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	6
G-800F GAC Contractor Differential Pressure (psi)	2
G-800G GAC Contractor Differential Pressure (psi)	5
G-800H GAC Contractor Differential Pressure (psi)	9
Discharge Temperature (F)	54.67
Discharge Pressure (psi)	0
Discharge pH (SU)	6.83
FIT-801 Discharge Flow Rate (gpm)	1432.24
Discharge Flow Totalizer (gal)	617213184
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	413588
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	411500
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 9, 2024, Daily, Larry Wright

5/10/2024, 7:38:57 PM UTC

CREATED

5/9/2024, 6:56:51 PM UTC
by Larry Wright

UPDATED

5/10/2024, 7:38:57 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 9, 2024
Time	14:56
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Received delivery Sodium Hydroxide 25% solution, 3000 gallons today. Sodium Hydroxide pump P-100A has been shut off after isolation draw down showed it not functioning properly and it had been preventing P-100B from pumping to capacity.

Weather

Fetch Weather	
Weather	CLEAR, T:66.25 °F, rH:56%, Clouds: 0%, Wind:3.44mph N-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	Yes
Describe maintenance items	P-100A caustic pump needs to be assessed for lack of performance.
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	500
RW-20 Flow Totalizer (gal)	173200500
RW-21 Flow Rate (gpm)	500
RW-21 Flow Totalizer (gal)	176239792
RW-22 Flow Rate (gpm)	700
RW-22 Flow Totalizer (gal)	216503438
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	11.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	7653.1
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	202
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3641.7
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1603
AOP Recirc Into T-200 Flow Rate (gpm)	1.9
P-200A/B/C Discharge Pressure (psi)	14
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	24
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.25
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	795
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	862
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43107800
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	327500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.513
F-500B PIT-505 Vessel Differential Pressure (psi)	2.231

CF-700A Cartridge Filter Differential Pressure (psi)	5.92
CF-700B Cartridge Filter Differential Pressure (psi)	5.75
G-800A GAC Contractor Differential Pressure (psi)	8
G-800B GAC Contractor Differential Pressure (psi)	1.5
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	7
G-800F GAC Contractor Differential Pressure (psi)	1.5
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	9
Discharge Temperature (F)	54.5
Discharge Pressure (psi)	0
Discharge pH (SU)	6.87
FIT-801 Discharge Flow Rate (gpm)	1648
Discharge Flow Totalizer (gal)	619439424
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	413588
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	411500
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 10, 2024, Daily, Weekly, Larry Wright

5/13/2024, 8:59:59 PM UTC

CREATED

5/10/2024, 3:11:52 PM UTC
by Larry Wright

UPDATED

5/13/2024, 8:59:59 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 10, 2024
Time	11:11
Technician	Larry Wright
Completed By	Larry Wright
General Comments	P-400A and P-100A pumps are in process of being diagnosed for operating problems.

Weather

Fetch Weather	
Weather	CLOUDS, T:50.36 °F, rH:81%, Clouds: 100%, Wind:12.66mph E-NE

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	Yes
Describe maintenance items	P-100A Sodium Hydroxide pump has been shut off until diagnosis can be performed.
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	500
RW-20 Flow Totalizer (gal)	173806860
RW-21 Flow Rate (gpm)	500
RW-21 Flow Totalizer (gal)	176845962
RW-22 Flow Rate (gpm)	700
RW-22 Flow Totalizer (gal)	217311898
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	11.2
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	8
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	8
T-100 Sodium Hydroxide Tank Total Volume (gal)	7465.4
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	201
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3601.2
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1595
AOP Recirc Into T-200 Flow Rate (gpm)	1.6
P-200A/B/C Discharge Pressure (psi)	14
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	14
P-200C Oxidation Feed Pump Influent Pressure (psi)	1
P-200C Oxidation Feed Pump Effluent Pressure (psi)	1

P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No
P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	14
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	27.5
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25.87
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	Yes
P-400A/B/C Filter Feed Pumps - Additional Comments	P-400A is taken out of rotation pending evaluation of rumbling sound and inconsistent operation.
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	766
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	839
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43107800
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	327500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.706
F-500B PIT-505 Vessel Differential Pressure (psi)	2.363
CF-700A Cartridge Filter Differential Pressure (psi)	6.55
CF-700A Cartridge Filter Influent Pressure (psi)	20
CF-700A Cartridge Filter Effluent Pressure (psi)	16
CF-700B Cartridge Filter Differential Pressure (psi)	6.35
CF-700B Cartridge Filter Influent Pressure (psi)	21
CF-700B Cartridge Filter Effluent Pressure (psi)	15
G-800A GAC Contractor Differential Pressure (psi)	6

G-800A GAC Contractor Influent Pressure (psi)	10
G-800A GAC Contractor Effluent Pressure (psi)	3
G-800B GAC Contractor Differential Pressure (psi)	1
G-800B GAC Contractor Influent Pressure (psi)	13.5
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Influent Pressure (psi)	13.5
G-800C GAC Contractor Effluent Pressure (psi)	9.5
G-800D GAC Contractor Differential Pressure (psi)	6.5
G-800D GAC Contractor Influent Pressure (psi)	9.5
G-800D GAC Contractor Effluent Pressure (psi)	3
G-800E GAC Contractor Differential Pressure (psi)	6.5
G-800E GAC Contractor Influent Pressure (psi)	9.5
G-800E GAC Contractor Effluent Pressure (psi)	2
G-800F GAC Contractor Differential Pressure (psi)	2
G-800F GAC Contractor Influent Pressure (psi)	13.5
G-800F GAC Contractor Effluent Pressure (psi)	9.5
G-800G GAC Contractor Differential Pressure (psi)	5.5
G-800G GAC Contractor Influent Pressure (psi)	13
G-800G GAC Contractor Effluent Pressure (psi)	10
G-800H GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Influent Pressure (psi)	10
G-800H GAC Contractor Effluent Pressure (psi)	1
Discharge Temperature (F)	54.5
Discharge Pressure (psi)	0

Discharge pH (SU)	7
FIT-801 Discharge Flow Rate (gpm)	1593
Discharge Flow Totalizer (gal)	621467776
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	3.5
P-600 Backwash Pump Effluent Pressure (psi)	2
P-600 Backwash Pump Totalizer (gal)	413588
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	411500
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 13, 2024, Daily, Larry Wright

5/14/2024, 7:21:18 PM UTC

CREATED

5/13/2024, 5:15:27 PM UTC
by Larry Wright

UPDATED

5/14/2024, 7:21:18 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 13, 2024
Time	13:15
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Increased well flow rates @ 1317. RW-20: up to 570 gpm (from 550 gpm) . RW-21: up to 570 gpm (from 550 gpm). RW-22: up to 740 gpm (from 700 gpm).

Weather

Fetch Weather	
Weather	CLOUDS, T:63.28 °F, rH:67%, Clouds: 20%, Wind:10.36mph W-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	176238180
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	179273322
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	220270678
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	6734
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	223
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3428.1
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1763
AOP Recirc Into T-200 Flow Rate (gpm)	0.8
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	30
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30.02
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	886
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	944
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43107800
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	327500
F-500A PIT-502 Vessel Differential Pressure (psi)	3.4
F-500B PIT-505 Vessel Differential Pressure (psi)	3.206
CF-700A Cartridge Filter Differential Pressure (psi)	7.45

CF-700B Cartridge Filter Differential Pressure (psi)	7.25
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	2.5
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	6
G-800F GAC Contractor Differential Pressure (psi)	2.5
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	6.5
Discharge Temperature (F)	54.5
Discharge Pressure (psi)	0
Discharge pH (SU)	7.05
FIT-801 Discharge Flow Rate (gpm)	1801
Discharge Flow Totalizer (gal)	628993024
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	413588
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	411500
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 14, 2024, Daily, Jimmy Leach

5/14/2024, 7:21:26 PM UTC

CREATED

5/14/2024, 5:17:24 PM UTC
by Larry Wright

UPDATED

5/14/2024, 7:21:26 PM UTC
by Patrick Dellecave

STATUS

QC Complete

POWERED BY Fulcrum WWW.FULCRUMAPP.COM

General

Date	May 14, 2024
Time	13:17
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:65.55 °F, rH:72%, Clouds: 0%, Wind:9.22mph S-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	177057720
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	180091642
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	221283348
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	28.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	6489
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	223
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3366
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	34
P-200A/B/C AOP Influent Flow Rate (gpm)	1767.77
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	18
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	20
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	821.3
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	880.3
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43177800
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	327500
F-500A PIT-502 Vessel Differential Pressure (psi)	3.236
F-500B PIT-505 Vessel Differential Pressure (psi)	3.025
CF-700A Cartridge Filter Differential Pressure (psi)	7.31
CF-700B Cartridge Filter Differential Pressure (psi)	7.25

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.2
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	6.2
Discharge Temperature (F)	54.6
Discharge Pressure (psi)	0
Discharge pH (SU)	7.04
FIT-801 Discharge Flow Rate (gpm)	1750.02
Discharge Flow Totalizer (gal)	631631680
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	413588
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	411500
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 15, 2024, Daily, Jimmy Leach

5/16/2024, 7:42:37 PM UTC

CREATED

5/15/2024, 5:11:51 PM UTC
by Larry Wright

UPDATED

5/16/2024, 7:42:37 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 15, 2024
Time	13:11
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	RAIN, T:60.76 °F, rH:90%, Clouds: 100%, Wind:6.91mph E-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	177875650
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	180908312
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	222293978
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	6230.1
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	223
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3307.2
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1770.9
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	18
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	31.5
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	33.5
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	917.2
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	963.9
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43107800
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	327500
F-500A PIT-502 Vessel Differential Pressure (psi)	3.575
F-500B PIT-505 Vessel Differential Pressure (psi)	3.481
CF-700A Cartridge Filter Differential Pressure (psi)	7.35
CF-700B Cartridge Filter Differential Pressure (psi)	7.4

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.6
Discharge Pressure (psi)	0
Discharge pH (SU)	7.04
FIT-801 Discharge Flow Rate (gpm)	1811.1
Discharge Flow Totalizer (gal)	634131968
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	413588
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	411500
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 16, 2024, Daily, Larry Wright

5/16/2024, 7:43:33 PM UTC

CREATED

5/16/2024, 10:43:16 AM UTC
by Larry Wright

UPDATED

5/16/2024, 7:43:33 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 16, 2024
Time	06:43
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	MIST, T:57.94 °F, rH:94%, Clouds: 100%, Wind:19.57mph N-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	178474670
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	181506202
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	223033848
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	6054.9
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	224
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3265.8
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1774
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	15
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	30
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	27.97
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	851
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	897
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43107800
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	327500
F-500A PIT-502 Vessel Differential Pressure (psi)	3.656
F-500B PIT-505 Vessel Differential Pressure (psi)	3.406
CF-700A Cartridge Filter Differential Pressure (psi)	6.67
CF-700B Cartridge Filter Differential Pressure (psi)	6.92

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	2.5
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.5
Discharge Pressure (psi)	0
Discharge pH (SU)	7.05
FIT-801 Discharge Flow Rate (gpm)	1762
Discharge Flow Totalizer (gal)	635965184
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	413588
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	411500
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 17, 2024, Daily, Weekly, Larry Wright

5/21/2024, 1:38:03 PM UTC

CREATED

5/17/2024, 3:20:07 PM UTC
by Larry Wright

UPDATED

5/21/2024, 1:38:03 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 17, 2024
Time	11:20
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Performed partial backwash yesterday afternoon (5-16-2024) on F-500A and F-500B followed by Cartridge Filter change out on CF-700B (Replaced D & D 5 micron cartridge filters after 4 weeks of use with Rosedale 5 micron cartridge filters).

Weather

Fetch Weather	
Weather	CLOUDS, T:67.14 °F, rH:64%, Clouds: 20%, Wind:9.22mph N-NE

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	179456200
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	182486072
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	224240968
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.2
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	7
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	9
T-100 Sodium Hydroxide Tank Total Volume (gal)	5753.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	224
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3192.9
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1760
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2.5
P-200B Oxidation Feed Pump Effluent Pressure (psi)	2
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	16

P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No
P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	21
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.31
P-400A Filter Feed Pump Influent Pressure (psi)	1.5
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	842
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	944
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43112700
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	335400
F-500A PIT-502 Vessel Differential Pressure (psi)	1.731
F-500B PIT-505 Vessel Differential Pressure (psi)	1.294
CF-700A Cartridge Filter Differential Pressure (psi)	3.67
CF-700A Cartridge Filter Influent Pressure (psi)	17
CF-700A Cartridge Filter Effluent Pressure (psi)	16.5
CF-700B Cartridge Filter Differential Pressure (psi)	1.8
CF-700B Cartridge Filter Influent Pressure (psi)	17
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	7

G-800A GAC Contractor Influent Pressure (psi)	10
G-800A GAC Contractor Effluent Pressure (psi)	1.5
G-800B GAC Contractor Differential Pressure (psi)	2
G-800B GAC Contractor Influent Pressure (psi)	14
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Influent Pressure (psi)	14
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	1
G-800E GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Influent Pressure (psi)	9.5
G-800E GAC Contractor Effluent Pressure (psi)	1
G-800F GAC Contractor Differential Pressure (psi)	2
G-800F GAC Contractor Influent Pressure (psi)	14
G-800F GAC Contractor Effluent Pressure (psi)	9.5
G-800G GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Influent Pressure (psi)	14
G-800G GAC Contractor Effluent Pressure (psi)	8.5
G-800H GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Influent Pressure (psi)	8.5
G-800H GAC Contractor Effluent Pressure (psi)	2
Discharge Temperature (F)	54.5
Discharge Pressure (psi)	0

Discharge pH (SU)	7.06
FIT-801 Discharge Flow Rate (gpm)	1781
Discharge Flow Totalizer (gal)	639046016
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0.5
P-600 Backwash Pump Totalizer (gal)	430742
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0.5
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	429084
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 20, 2024, Daily, Jimmy Leach

5/21/2024, 1:39:34 PM UTC

CREATED

5/20/2024, 6:00:51 PM UTC
by Larry Wright

UPDATED

5/21/2024, 1:39:34 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 20, 2024
Time	14:00
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	*RW-21 was turned off from 0818 until 1200 for work installing heat exchanger inside the vault.

Weather

Fetch Weather	
Weather	CLEAR, T:68.09 °F, rH:71%, Clouds: 0%, Wind:9.22mph S-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	182002010
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	184900972
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	227387578
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	4982.3
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	223
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3013.2
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1775.74
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	30
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	32
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	834.4
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	929.5
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43112700
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	335400
F-500A PIT-502 Vessel Differential Pressure (psi)	2.163
F-500B PIT-505 Vessel Differential Pressure (psi)	1.775
CF-700A Cartridge Filter Differential Pressure (psi)	10.46

CF-700B Cartridge Filter Differential Pressure (psi)	9.45
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.6
Discharge Pressure (psi)	0
Discharge pH (SU)	7.05
FIT-801 Discharge Flow Rate (gpm)	1782.81
Discharge Flow Totalizer (gal)	64701520
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	430742
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	429084
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 21, 2024, Daily, Jimmy Leach

5/29/2024, 8:28:05 PM UTC

CREATED

5/21/2024, 5:59:10 PM UTC
by Larry Wright

UPDATED

5/29/2024, 8:28:05 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 21, 2024
Time	13:59
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:72.28 °F, rH:72%, Clouds: 0%, Wind:8.05mph S-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	182822070
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	185719572
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	228399518
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	4729.7
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	224
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2952.9
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1757.19
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	34
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	36
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	852.6
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	951
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43112700
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	335400
F-500A PIT-502 Vessel Differential Pressure (psi)	2.238
F-500B PIT-505 Vessel Differential Pressure (psi)	1.969
CF-700A Cartridge Filter Differential Pressure (psi)	12.37
CF-700B Cartridge Filter Differential Pressure (psi)	11.66

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.6
Discharge Pressure (psi)	0
Discharge pH (SU)	7.05
FIT-801 Discharge Flow Rate (gpm)	1789.77
Discharge Flow Totalizer (gal)	649479424
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	430742
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	429084
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 22, 2024, Daily, Jimmy Leach

5/29/2024, 8:28:52 PM UTC

CREATED

5/22/2024, 5:13:21 PM UTC
by Larry Wright

UPDATED

5/29/2024, 8:28:52 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 22, 2024
Time	13:13
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:77.23 °F, rH:65%, Clouds: 0%, Wind:12.66mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	183617720
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	186514982
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	229382728
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	4490.8
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	223
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2898.9
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1774.97
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	36
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	38
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	816.6
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	916.9
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43112700
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	335400
F-500A PIT-502 Vessel Differential Pressure (psi)	2.319
F-500B PIT-505 Vessel Differential Pressure (psi)	2.181
CF-700A Cartridge Filter Differential Pressure (psi)	14.13
CF-700B Cartridge Filter Differential Pressure (psi)	13.74

G-800A GAC Contractor Differential Pressure (psi)	7.2
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	8.9
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.05
FIT-801 Discharge Flow Rate (gpm)	1769.99
Discharge Flow Totalizer (gal)	651981888
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	430742
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	429084
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 23, 2024, Daily, Jimmy Leach

5/31/2024, 12:37:04 PM UTC

CREATED

5/23/2024, 5:26:29 PM UTC
by Larry Wright

UPDATED

5/31/2024, 12:37:04 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 23, 2024
Time	13:26
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:72.72 °F, rH:85%, Clouds: 100%, Wind:1.01mph N-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	184444880
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	187341842
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	230404778
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	4240
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	224
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2838
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1788.97
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	38
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	40
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	815.8
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	932.8
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43112700
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	335400
F-500A PIT-502 Vessel Differential Pressure (psi)	2.563
F-500B PIT-505 Vessel Differential Pressure (psi)	2.225
CF-700A Cartridge Filter Differential Pressure (psi)	15.75
CF-700B Cartridge Filter Differential Pressure (psi)	15.38

G-800A GAC Contractor Differential Pressure (psi)	7.2
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4.4
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	8.5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.04
FIT-801 Discharge Flow Rate (gpm)	1776.49
Discharge Flow Totalizer (gal)	654590272
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	430742
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	429084
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 24, 2024, Daily, Weekly, Larry Wright

5/31/2024, 12:37:15 PM UTC

CREATED

5/24/2024, 11:22:31 AM UTC
by Larry Wright

UPDATED

5/31/2024, 12:37:15 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 24, 2024
Time	07:22
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:66.29 °F, rH:93%, Clouds: 77%, Wind:1.99mph N

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	185087950
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	187984372
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	231199088
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.2
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	9
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	9
T-100 Sodium Hydroxide Tank Total Volume (gal)	4064.9
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	223
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2796.9
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1760
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2.5
P-200B Oxidation Feed Pump Effluent Pressure (psi)	1.5
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	16
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	39
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	38.34
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	0.5
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	850
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	951
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43112700
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	335400
F-500A PIT-502 Vessel Differential Pressure (psi)	2.819
F-500B PIT-505 Vessel Differential Pressure (psi)	2.519
CF-700A Cartridge Filter Differential Pressure (psi)	17.67
CF-700A Cartridge Filter Influent Pressure (psi)	32
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	17.41
CF-700B Cartridge Filter Influent Pressure (psi)	33
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	7
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	2
G-800B GAC Contractor Differential Pressure (psi)	2
G-800B GAC Contractor Influent Pressure (psi)	14.5
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Influent Pressure (psi)	14.5
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	2
G-800E GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	1
G-800F GAC Contractor Differential Pressure (psi)	2
G-800F GAC Contractor Influent Pressure (psi)	14.5
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Influent Pressure (psi)	14.5
G-800G GAC Contractor Effluent Pressure (psi)	10
G-800H GAC Contractor Differential Pressure (psi)	8.5
G-800H GAC Contractor Influent Pressure (psi)	10
G-800H GAC Contractor Effluent Pressure (psi)	1
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.04
FIT-801 Discharge Flow Rate (gpm)	1802

Discharge Flow Totalizer (gal)	656527424
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	430742
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	429084
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 28, 2024, Daily, Larry Wright

5/31/2024, 12:39:35 PM UTC

CREATED

5/28/2024, 5:25:34 PM UTC
by Larry Wright

UPDATED

5/31/2024, 12:39:35 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 28, 2024
Time	13:25
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Received delivery of liquid oxygen today.

Weather

Fetch Weather	
Weather	CLEAR, T:78.57 °F, rH:51%, Clouds: 0%, Wind:14.97mph W-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	188541720
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	191436272
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	235462959
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.6
T-100 Sodium Hydroxide Tank Total Volume (gal)	3003
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	223
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2544.6
LOX-300 LOX Storage Tank Pressure (%)	85
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1770
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	25
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	26.39
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	832
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	911
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43112700
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	335400
F-500A PIT-502 Vessel Differential Pressure (psi)	3.113
F-500B PIT-505 Vessel Differential Pressure (psi)	2.844
CF-700A Cartridge Filter Differential Pressure (psi)	4.75
CF-700B Cartridge Filter Differential Pressure (psi)	5.96

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	2
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	9
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.06
FIT-801 Discharge Flow Rate (gpm)	1818
Discharge Flow Totalizer (gal)	667424768
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	430742
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	429084
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 29, 2024, Daily, Jimmy Leach

5/31/2024, 12:39:57 PM UTC

CREATED

5/29/2024, 6:40:23 PM UTC
by Larry Wright

UPDATED

5/31/2024, 12:39:57 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 29, 2024
Time	14:40
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	Delivered 3500 gallons Sodium Hydroxide 25% solution today.

Weather

Fetch Weather	
Weather	CLEAR, T:74.55 °F, rH:54%, Clouds: 0%, Wind:4.61mph N

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	189404460
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	192298422
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	236528818
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.6
T-100 Sodium Hydroxide Tank Total Volume (gal)	6257.4
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	224
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2478.3
LOX-300 LOX Storage Tank Pressure (%)	85
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1778.71
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	29
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	31
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	826.9
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	925.5
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43112700
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	335400
F-500A PIT-502 Vessel Differential Pressure (psi)	3.038
F-500B PIT-505 Vessel Differential Pressure (psi)	2.8
CF-700A Cartridge Filter Differential Pressure (psi)	6.65
CF-700B Cartridge Filter Differential Pressure (psi)	7.72

G-800A GAC Contractor Differential Pressure (psi)	7.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4.2
G-800D GAC Contractor Differential Pressure (psi)	8.1
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.2
G-800G GAC Contractor Differential Pressure (psi)	6.4
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.09
FIT-801 Discharge Flow Rate (gpm)	1775.77
Discharge Flow Totalizer (gal)	670169720
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	430742
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	429084
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 30, 2024, Daily, Jimmy Leach

5/31/2024, 12:41:49 PM UTC

CREATED

5/30/2024, 5:18:58 PM UTC
by Larry Wright

UPDATED

5/31/2024, 12:41:49 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 30, 2024
Time	13:18
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	Operated Volutes today.

Weather

Fetch Weather	
Weather	CLOUDS, T:66.72 °F, rH:57%, Clouds: 20%, Wind:13.8mph N-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	190178800
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	193072442
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	237485578
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	6012.8
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	223
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2430.3
LOX-300 LOX Storage Tank Pressure (%)	85
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1763.61
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	32
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	32
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	853.1
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	949.9
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43112700
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	335400
F-500A PIT-502 Vessel Differential Pressure (psi)	3.056
F-500B PIT-505 Vessel Differential Pressure (psi)	2.981
CF-700A Cartridge Filter Differential Pressure (psi)	8.13
CF-700B Cartridge Filter Differential Pressure (psi)	9.04

G-800A GAC Contractor Differential Pressure (psi)	7.2
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.2
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.06
FIT-801 Discharge Flow Rate (gpm)	1774.4
Discharge Flow Totalizer (gal)	672571392
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	430742
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	429084
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 31, 2024, Daily, Weekly, Monthly, Larry Wright

6/6/2024, 12:55:34 PM UTC

CREATED

5/31/2024, 10:32:26 AM UTC
by Larry Wright

UPDATED

6/6/2024, 12:55:34 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	May 31, 2024
Time	06:32
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:57.76 °F, rH:66%, Clouds: 0%, Wind:6.91mph N-NW

Inspection Type (check all that apply)	Daily, Weekly, Monthly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	190767620
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	193660912
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	238212988
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.8
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	7
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	8
T-100 Sodium Hydroxide Tank Total Volume (gal)	5837.7
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	225
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2389.2
LOX-300 LOX Storage Tank Pressure (%)	85
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1784
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	1
P-200A Oxidation Feed Pump Effluent Pressure (psi)	15.5
P-200B Oxidation Feed Pump Influent Pressure (psi)	2.5
P-200B Oxidation Feed Pump Effluent Pressure (psi)	2
P-200C Oxidation Feed Pump Influent Pressure (psi)	1
P-200C Oxidation Feed Pump Effluent Pressure (psi)	1
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	1.5
P-400C PI-406 Discharge Pressure (psi)	34
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	31.45
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	831
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	934
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43112700
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	335400
F-500A PIT-502 Vessel Differential Pressure (psi)	3.269
F-500B PIT-505 Vessel Differential Pressure (psi)	3.088
CF-700A Cartridge Filter Differential Pressure (psi)	9.78
CF-700A Cartridge Filter Influent Pressure (psi)	24
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	10.62
CF-700B Cartridge Filter Influent Pressure (psi)	26
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	7
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	2
G-800B GAC Contractor Differential Pressure (psi)	2
G-800B GAC Contractor Influent Pressure (psi)	14.75
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800C GAC Contractor Influent Pressure (psi)	14.5
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	1
G-800E GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	1
G-800F GAC Contractor Differential Pressure (psi)	2
G-800F GAC Contractor Influent Pressure (psi)	14.5
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800G GAC Contractor Influent Pressure (psi)	14.5
G-800G GAC Contractor Effluent Pressure (psi)	10
G-800H GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Influent Pressure (psi)	10
G-800H GAC Contractor Effluent Pressure (psi)	2
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.06
FIT-801 Discharge Flow Rate (gpm)	1776

Discharge Flow Totalizer (gal)	674377024
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	430742
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0.5
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	429084
Solids Handling Inspection Complete	Yes

Monthly Inspection Form

Remedial Well RW-20

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	Drip continues at check valve
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-20 Inspection Complete	Yes

Remedial Well RW-21

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	Drip continues at check valve
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-21 Inspection Complete	Yes

Remedial Well RW-22

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	Drip continues at check valve
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-22 Inspection Complete	Yes

Building 109 System

Checked process water piping, valves, joints and seals for leakage.	Yes
Action/comment piping	Drip at actuator flange V-503 manifold on F-500A Horizontal Filter.
Checked pneumatic lines for leaks or breaks	Yes
Action/comment for line leaks:	
Inspected valves for proper positioning/seating	Yes
Action/comment for valves	
Checked pumps and pump motors for excessive noise and vibration	Yes
Action/Comment for pumps and motors	
Checked mixers and mixer motors for excessive noise and vibration	Yes

Action/Comment for mixers and motors	
Checked tanks and tank connections/fittings for leaks	Yes
Action/Comment for tank leaks	
Checked solids processing equipment and connection points for leaks	Yes
Action/Comment for equipment leaks	
Checked motor bearing lubrication and lubricate as needed	Yes
Action/Comment for motor lubrication	
Checked control panel indicator lights for alarms	Yes
Action/Comment for alarm	
Monthly B109 Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 3, 2024, Daily, Jimmy Leach

6/6/2024, 12:56:40 PM UTC

CREATED

6/3/2024, 5:37:28 PM UTC
by Larry Wright

UPDATED

6/6/2024, 12:56:40 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 3, 2024
Time	13:37
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	Changed cartridge filters on CF-700A this morning replaced 5-micron Rosedale cartridge filters with 10-micron D & D cartridge filters. * RW-20 and RW-21 had shut off Sunday morning (6-2-2024) at 0605, most likely due to a power outage in the neighborhood, and no alarm had been dispatched. Returned system to full function by 0700 (approximate).

Weather

Fetch Weather	
Weather	CLEAR, T:82.69 °F, rH:48%, Clouds: 0%, Wind:1.99mph E-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	192641960
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	195534592
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	241504118
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	5226.9
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	225
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2216.4
LOX-300 LOX Storage Tank Pressure (%)	80
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1752.79
AOP Recirc Into T-200 Flow Rate (gpm)	2.7
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	22
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	862.7
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	950.4
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43112700
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	335400
F-500A PIT-502 Vessel Differential Pressure (psi)	3.2138
F-500B PIT-505 Vessel Differential Pressure (psi)	3.144

CF-700A Cartridge Filter Differential Pressure (psi)	2.04
CF-700B Cartridge Filter Differential Pressure (psi)	0.31
G-800A GAC Contractor Differential Pressure (psi)	7.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	8.5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	6.97
FIT-801 Discharge Flow Rate (gpm)	1780.13
Discharge Flow Totalizer (gal)	681262724
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	430742
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	429084
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 4, 2024, Daily, Larry Wright

6/6/2024, 1:06:01 PM UTC

CREATED

6/4/2024, 7:16:49 PM UTC
by Larry Wright

UPDATED

6/6/2024, 1:06:01 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 4, 2024
Time	15:16
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Ran Volutes today. Performed 4-minute Backwash on F-500A (3/4 cells) and F-500B (3/4 cells) until Westech system self-discontinued processes when reaching the fourth cell in each vessel.

Weather

Fetch Weather	
Weather	CLEAR, T:76.1 °F, rH:62%, Clouds: 0%, Wind:6.91mph S-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	193518490
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	196410762
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	242586898
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	4967.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	224
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2156.7
LOX-300 LOX Storage Tank Pressure (%)	75
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1791
AOP Recirc Into T-200 Flow Rate (gpm)	4.3
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	34
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	33.44
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	852
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	951
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.319
F-500B PIT-505 Vessel Differential Pressure (psi)	1.305
CF-700A Cartridge Filter Differential Pressure (psi)	14.7

CF-700B Cartridge Filter Differential Pressure (psi)	13.55
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.06
FIT-801 Discharge Flow Rate (gpm)	1785
Discharge Flow Totalizer (gal)	683893184
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447075
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 5, 2024, Daily, Larry Wright

6/6/2024, 1:06:46 PM UTC

CREATED

6/5/2024, 7:09:59 PM UTC
by Larry Wright

UPDATED

6/6/2024, 1:06:46 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 5, 2024
Time	15:09
Technician	Larry Wright
Completed By	Larry Wright
General Comments	System down most of day for repair and maintenance of AOP system being performed by APT WATER LLC (Nathan) and sub Eagle Control. Performed cartridge filter change on CF-700A (inserted last set of 10-micron cartridge filters from D & D). Examined caustic pump P-100A to assess problem.

Weather

Fetch Weather	
Weather	CLOUDS, T:76.03 °F, rH:75%, Clouds: 20%, Wind:11.5mph S-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	194193370
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	197087312
RW-22 Flow Rate (gpm)	570
RW-22 Flow Totalizer (gal)	243418768
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.7
T-100 Sodium Hydroxide Tank Total Volume (gal)	4757
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	225
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2108
LOX-300 LOX Storage Tank Pressure (%)	75
TI-201 Influent Temperature (F)	55
P-200A/B/C AOP Influent Flow Rate (gpm)	1773
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	23
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21.72
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	845
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	924
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.331
F-500B PIT-505 Vessel Differential Pressure (psi)	1.069

CF-700A Cartridge Filter Differential Pressure (psi)	0.32
CF-700B Cartridge Filter Differential Pressure (psi)	1.49
G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	9
G-800E GAC Contractor Differential Pressure (psi)	8.5
G-800F GAC Contractor Differential Pressure (psi)	2.5
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	9
Discharge Temperature (F)	55.4
Discharge Pressure (psi)	0
Discharge pH (SU)	7.06
FIT-801 Discharge Flow Rate (gpm)	1863
Discharge Flow Totalizer (gal)	686020992
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447075
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 6, 2024, Daily, Jimmy Leach

6/6/2024, 8:21:24 PM UTC

CREATED

6/6/2024, 6:36:06 PM UTC
by Larry Wright

UPDATED

6/6/2024, 8:21:24 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 6, 2024
Time	14:36
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:78.44 °F, rH:77%, Clouds: 40%, Wind:8.05mph W-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	194973520
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	197867162
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	244382440
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	10.5
T-100 Sodium Hydroxide Tank Total Volume (gal)	4567.1
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	223
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2053.8
LOX-300 LOX Storage Tank Pressure (%)	75
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1782.68
AOP Recirc Into T-200 Flow Rate (gpm)	0.3
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	23
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	838.9
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	908.4
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.413
F-500B PIT-505 Vessel Differential Pressure (psi)	1.05
CF-700A Cartridge Filter Differential Pressure (psi)	0.49
CF-700B Cartridge Filter Differential Pressure (psi)	1.64

G-800A GAC Contractor Differential Pressure (psi)	8
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4.6
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6.2
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	6.93
FIT-801 Discharge Flow Rate (gpm)	1763.2
Discharge Flow Totalizer (gal)	688564480
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447075
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 7, 2024, Daily, Weekly, Larry Wright

6/7/2024, 12:47:09 PM UTC

CREATED

6/7/2024, 11:28:45 AM UTC
by Larry Wright

UPDATED

6/7/2024, 12:47:09 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 7, 2024
Time	07:28
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:68.67 °F, rH:91%, Clouds: 75%, Wind:1.99mph W-SW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	195550770
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	198444152
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	245095778
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	10.7
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	0
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	6
T-100 Sodium Hydroxide Tank Total Volume (gal)	4435.1
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	224
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2013
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1780
AOP Recirc Into T-200 Flow Rate (gpm)	4.3
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	1
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	16
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	22
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21.25
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	862
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	928
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.469
F-500B PIT-505 Vessel Differential Pressure (psi)	1.181
CF-700A Cartridge Filter Differential Pressure (psi)	0.64
CF-700A Cartridge Filter Influent Pressure (psi)	15
CF-700A Cartridge Filter Effluent Pressure (psi)	17.5
CF-700B Cartridge Filter Differential Pressure (psi)	1.9
CF-700B Cartridge Filter Influent Pressure (psi)	17.5
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	8
G-800A GAC Contractor Influent Pressure (psi)	10.5

G-800A GAC Contractor Effluent Pressure (psi)	1
G-800B GAC Contractor Differential Pressure (psi)	2
G-800B GAC Contractor Influent Pressure (psi)	15
G-800B GAC Contractor Effluent Pressure (psi)	10.5
G-800C GAC Contractor Differential Pressure (psi)	5
G-800C GAC Contractor Influent Pressure (psi)	15
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	1.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	1
G-800F GAC Contractor Differential Pressure (psi)	2.5
G-800F GAC Contractor Influent Pressure (psi)	15
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Influent Pressure (psi)	14.5
G-800G GAC Contractor Effluent Pressure (psi)	10
G-800H GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Influent Pressure (psi)	10
G-800H GAC Contractor Effluent Pressure (psi)	2
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	6.9
FIT-801 Discharge Flow Rate (gpm)	1784

Discharge Flow Totalizer (gal)	690329024
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	6.25
P-1100 Decant Pump Totalizer (gal)	447075
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 10, 2024, Daily, Jimmy Leach

6/11/2024, 4:17:48 PM UTC

CREATED

6/10/2024, 5:29:26 PM UTC
by Larry Wright

UPDATED

6/11/2024, 4:17:48 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 10, 2024
Time	13:29
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	Replaced spent fuse on VFD for P-200B pump motor.

Weather

Fetch Weather	
Weather	CLOUDS, T:72.75 °F, rH:51%, Clouds: 40%, Wind:5.01mph W-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	198218220
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	201110432
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	248391298
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	11.9
T-100 Sodium Hydroxide Tank Total Volume (gal)	3771
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	225
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1821
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1775.56
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	21
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	860.4
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	919.9
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.719
F-500B PIT-505 Vessel Differential Pressure (psi)	1.488
CF-700A Cartridge Filter Differential Pressure (psi)	1.21
CF-700B Cartridge Filter Differential Pressure (psi)	2.07

G-800A GAC Contractor Differential Pressure (psi)	8
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4.4
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	6.4
G-800H GAC Contractor Differential Pressure (psi)	7.4
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	6.93
FIT-801 Discharge Flow Rate (gpm)	1774.43
Discharge Flow Totalizer (gal)	698688128
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447075
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 11, 2024, Daily, Larry Wright

6/12/2024, 10:21:53 AM UTC

CREATED

6/11/2024, 6:35:46 PM UTC
by Larry Wright

UPDATED

6/12/2024, 10:21:53 AM UTC
by Larry Wright

STATUS

QC Complete

General

Date	June 11, 2024
Time	14:35
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Reduced Ozone set point from 7 down to 6.7 per Doug G. From APT.

Weather

Fetch Weather	
Weather	CLOUDS, T:72.18 °F, rH:59%, Clouds: 100%, Wind:10.36mph S-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	199078190
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	201970092
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	249453998
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	3542.7
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	215
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1767
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1779
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	15
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	22.5
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21.5
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	856
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	921
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.6
F-500B PIT-505 Vessel Differential Pressure (psi)	1.45
CF-700A Cartridge Filter Differential Pressure (psi)	1.34
CF-700B Cartridge Filter Differential Pressure (psi)	2.24

G-800A GAC Contractor Differential Pressure (psi)	7.5
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	2
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	6.94
FIT-801 Discharge Flow Rate (gpm)	1772
Discharge Flow Totalizer (gal)	701345024
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447075
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 12, 2024, Daily, Jimmy Leach

6/13/2024, 5:48:48 PM UTC

CREATED

6/12/2024, 5:12:53 PM UTC
by Larry Wright

UPDATED

6/13/2024, 5:48:48 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 12, 2024
Time	13:12
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	Received delivery of caustic Sodium Hydroxide 25% solution 3500 gallons today.

Weather

Fetch Weather	
Weather	CLOUDS, T:73.83 °F, rH:57%, Clouds: 100%, Wind:4mph N-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	199851180
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	202742802
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	250409018
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	11.6
T-100 Sodium Hydroxide Tank Total Volume (gal)	6893.8
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	213
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1713
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1761.7
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	22
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	901.7
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	960.4
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.75
F-500B PIT-505 Vessel Differential Pressure (psi)	1.675
CF-700A Cartridge Filter Differential Pressure (psi)	1.479
CF-700B Cartridge Filter Differential Pressure (psi)	2.45

G-800A GAC Contractor Differential Pressure (psi)	7.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	6.95
FIT-801 Discharge Flow Rate (gpm)	1795.47
Discharge Flow Totalizer (gal)	703991614
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447075
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 13, 2024, Daily, Larry Wright

6/13/2024, 5:49:49 PM UTC

CREATED

6/13/2024, 3:29:30 PM UTC
by Larry Wright

UPDATED

6/13/2024, 5:49:49 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 13, 2024
Time	11:29
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:77.77 °F, rH:64%, Clouds: 0%, Wind:8.05mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	200619760
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	203510922
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	251358468
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	11.6
T-100 Sodium Hydroxide Tank Total Volume (gal)	6685.1
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	215
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1664.4
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1784
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	24
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.25
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	875
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	939
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.819
F-500B PIT-505 Vessel Differential Pressure (psi)	1.569
CF-700A Cartridge Filter Differential Pressure (psi)	1.51
CF-700B Cartridge Filter Differential Pressure (psi)	2.42

G-800A GAC Contractor Differential Pressure (psi)	7.5
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	2
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	6.96
FIT-801 Discharge Flow Rate (gpm)	1775
Discharge Flow Totalizer (gal)	706158976
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 14, 2024, Daily, Weekly, Larry Wright

6/14/2024, 1:46:38 PM UTC

CREATED

6/14/2024, 12:11:40 PM UTC
by Larry Wright

UPDATED

6/14/2024, 1:46:38 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 14, 2024
Time	08:11
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:72.18 °F, rH:77%, Clouds: 0%, Wind:12.66mph S-SW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	201323270
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	204214022
RW-22 Flow Rate (gpm)	570
RW-22 Flow Totalizer (gal)	252227368
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	11.5
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	0
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	6
T-100 Sodium Hydroxide Tank Total Volume (gal)	6489.4
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	216
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1616.4
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1771
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	1
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	16
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	20
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21.52
P-400A Filter Feed Pump Influent Pressure (psi)	1
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	862
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	931
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.75
F-500B PIT-505 Vessel Differential Pressure (psi)	1.538
CF-700A Cartridge Filter Differential Pressure (psi)	1.53
CF-700A Cartridge Filter Influent Pressure (psi)	15
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	2.36
CF-700B Cartridge Filter Influent Pressure (psi)	17.5
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	7.5
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	2
G-800B GAC Contractor Differential Pressure (psi)	2
G-800B GAC Contractor Influent Pressure (psi)	15
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800C GAC Contractor Influent Pressure (psi)	14.5
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	1.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	1
G-800F GAC Contractor Differential Pressure (psi)	2
G-800F GAC Contractor Influent Pressure (psi)	14.5
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800G GAC Contractor Influent Pressure (psi)	14.5
G-800G GAC Contractor Effluent Pressure (psi)	9.5
G-800H GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Influent Pressure (psi)	9.5
G-800H GAC Contractor Effluent Pressure (psi)	3
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	6.97
FIT-801 Discharge Flow Rate (gpm)	1772

Discharge Flow Totalizer (gal)	708357312
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 17, 2024, Daily, Larry Wright

6/17/2024, 7:29:38 PM UTC

CREATED

6/17/2024, 5:11:21 PM UTC
by Larry Wright

UPDATED

6/17/2024, 7:29:38 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 17, 2024
Time	13:11
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:78.8 °F, rH:65%, Clouds: 0%, Wind:16.11mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	203961020
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	206850502
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	255486168
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12
T-100 Sodium Hydroxide Tank Total Volume (gal)	6773.4
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	214
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1441.5
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1763
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	15
P-400A PI-402 Discharge Pressure (psi)	20
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.07
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	870
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	929
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.1
F-500B PIT-505 Vessel Differential Pressure (psi)	1.85
CF-700A Cartridge Filter Differential Pressure (psi)	1.47
CF-700B Cartridge Filter Differential Pressure (psi)	2.21

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	2
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	6.99
FIT-801 Discharge Flow Rate (gpm)	1783
Discharge Flow Totalizer (gal)	716592000
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 18, 2024, Daily, Larry Wright

6/18/2024, 6:44:15 PM UTC

CREATED

6/18/2024, 12:11:22 PM UTC
by Larry Wright

UPDATED

6/18/2024, 6:44:15 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 18, 2024
Time	08:11
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:73.6 °F, rH:79%, Clouds: 0%, Wind:10.36mph SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	204604100
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	207493342
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	256280678
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.1
T-100 Sodium Hydroxide Tank Total Volume (gal)	5590.8
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	215
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1406.1
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1798
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	15
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	23
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21.67
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	856
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	917
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.131
F-500B PIT-505 Vessel Differential Pressure (psi)	1.85
CF-700A Cartridge Filter Differential Pressure (psi)	1.36
CF-700B Cartridge Filter Differential Pressure (psi)	2.11

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	2
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	6.99
FIT-801 Discharge Flow Rate (gpm)	1769
Discharge Flow Totalizer (gal)	718606208
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 19, 2024, Daily, Jimmy Leach

6/21/2024, 11:56:48 AM UTC

CREATED

6/19/2024, 5:26:23 PM UTC
by Larry Wright

UPDATED

6/21/2024, 11:56:48 AM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 19, 2024
Time	13:26
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:82.94 °F, rH:69%, Clouds: 0%, Wind:10.36mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	205605540
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	208494302
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	257517948
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	5310.4
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	214
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1334.1
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1767.53
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	21
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	1
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	845.3
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	904.5
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.069
F-500B PIT-505 Vessel Differential Pressure (psi)	1.85
CF-700A Cartridge Filter Differential Pressure (psi)	1.07
CF-700B Cartridge Filter Differential Pressure (psi)	2.01

G-800A GAC Contractor Differential Pressure (psi)	7.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4.4
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.4
G-800G GAC Contractor Differential Pressure (psi)	6.8
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7
FIT-801 Discharge Flow Rate (gpm)	1704.34
Discharge Flow Totalizer (gal)	721759870
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 20, 2024, Daily, Jimmy Leach

6/21/2024, 11:58:22 AM UTC

CREATED

6/20/2024, 6:02:38 PM UTC
by Larry Wright

UPDATED

6/21/2024, 11:58:22 AM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 20, 2024
Time	14:02
Technician	Jimmy Leach
Completed By	Larry Wright
General Comments	Received delivery of 3473 gallons of Hydrogen Peroxide today.

Weather

Fetch Weather	
Weather	CLEAR, T:85.73 °F, rH:64%, Clouds: 0%, Wind:14.97mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	206447670
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	209335942
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	258558288
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.3
T-100 Sodium Hydroxide Tank Total Volume (gal)	5081.2
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	215
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4225.5
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1774.6
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	23
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	881.4
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	937.5
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.094
F-500B PIT-505 Vessel Differential Pressure (psi)	1.975
CF-700A Cartridge Filter Differential Pressure (psi)	0.83
CF-700B Cartridge Filter Differential Pressure (psi)	1.77

G-800A GAC Contractor Differential Pressure (psi)	7.2
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4.3
G-800D GAC Contractor Differential Pressure (psi)	8.4
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7
FIT-801 Discharge Flow Rate (gpm)	1705.44
Discharge Flow Totalizer (gal)	724398914
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	448671
P-600 Backwash Pump Totalizer (gal)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 21, 2024, Daily, Weekly, Larry Wright

6/21/2024, 2:43:30 PM UTC

CREATED

6/21/2024, 12:51:12 PM UTC
by Larry Wright

UPDATED

6/21/2024, 2:43:30 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 21, 2024
Time	08:51
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:80.73 °F, rH:70%, Clouds: 0%, Wind:6.91mph SW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	207089700
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	209977732
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	259351488
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.6
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	1
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	7
T-100 Sodium Hydroxide Tank Total Volume (gal)	4904.3
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	215
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4184.7
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1782
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	1
P-200A Oxidation Feed Pump Effluent Pressure (psi)	15
P-200B Oxidation Feed Pump Influent Pressure (psi)	2.5
P-200B Oxidation Feed Pump Effluent Pressure (psi)	1.5
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	1
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	23
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21.51
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	1.5
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	857
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	919
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.175
F-500B PIT-505 Vessel Differential Pressure (psi)	2.038
CF-700A Cartridge Filter Differential Pressure (psi)	0.68
CF-700A Cartridge Filter Influent Pressure (psi)	15
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	1.62
CF-700B Cartridge Filter Influent Pressure (psi)	17
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	7
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	2
G-800B GAC Contractor Differential Pressure (psi)	2
G-800B GAC Contractor Influent Pressure (psi)	14.5
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800C GAC Contractor Influent Pressure (psi)	14.25
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	1.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Influent Pressure (psi)	9.5
G-800E GAC Contractor Effluent Pressure (psi)	1
G-800F GAC Contractor Differential Pressure (psi)	2
G-800F GAC Contractor Influent Pressure (psi)	14
G-800F GAC Contractor Effluent Pressure (psi)	9.5
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800G GAC Contractor Influent Pressure (psi)	14
G-800G GAC Contractor Effluent Pressure (psi)	9.5
G-800H GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Influent Pressure (psi)	9.5
G-800H GAC Contractor Effluent Pressure (psi)	3
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.02
FIT-801 Discharge Flow Rate (gpm)	1781

Discharge Flow Totalizer (gal)	726371008
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0.5
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0.5
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 24, 2024, Daily, Larry Wright

6/26/2024, 5:49:45 PM UTC

CREATED

6/24/2024, 7:34:50 PM UTC
by Larry Wright

UPDATED

6/26/2024, 5:49:45 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 24, 2024
Time	15:34
Technician	Larry Wright
Completed By	Larry Wright
General Comments	RW-21 not operable due to CONTROL VALVE FAILURE and inability to clear alarm as of 6/23/2024. Kevin Erickson and LEB electrician scheduled for 6/25/2024 to troubleshoot and correct problem.

Weather

Fetch Weather	
Weather	CLOUDS, T:77.49 °F, rH:50%, Clouds: 75%, Wind:18.41mph W

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	No
RW-22	Yes (Fully Operational)

Downtime Details (1 Item)

Downtime Details - 1. 16:25, RW-21 CONTROL VALVE FAILURE

Asset Location	RW21
Asset Tag	RW21, EA-2001, V-2102 ELECTRIC ACTUATOR
Affected Assets	
Alarm-Maintenance Description	RW-21 CONTROL VALVE FAILURE
Action	Attempted to reset breaker and reset alarm without results
Off Hours	Yes
Planned Shutdown	No
Date Off	June 24, 2024

Time Off	16:25
Date On	
Time On	
New Parts	No

Maintenance Log

Monitoring

Were any maintenance items identified?	Yes
Describe maintenance items	RW-22 CONTROL VALVE FAILURE PREVENTED WELL FROM OPERATING SINCE 6/23/2024 until can be corrected.
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	209624530
RW-21 Flow Rate (gpm)	0
RW-21 Flow Totalizer (gal)	211716232
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	262412698
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	9.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	4254.3
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	149
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4029.6
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54

P-200A/B/C AOP Influent Flow Rate (gpm)	1242
AOP Recirc Into T-200 Flow Rate (gpm)	-2.4
P-200A/B/C Discharge Pressure (psi)	10
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	17
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	15.84
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	651
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	621
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.225
F-500B PIT-505 Vessel Differential Pressure (psi)	1.244
CF-700A Cartridge Filter Differential Pressure (psi)	0.33
CF-700B Cartridge Filter Differential Pressure (psi)	0.77
G-800A GAC Contractor Differential Pressure (psi)	6
G-800B GAC Contractor Differential Pressure (psi)	1
G-800C GAC Contractor Differential Pressure (psi)	2
G-800D GAC Contractor Differential Pressure (psi)	7
G-800E GAC Contractor Differential Pressure (psi)	6.5
G-800F GAC Contractor Differential Pressure (psi)	0
G-800G GAC Contractor Differential Pressure (psi)	4
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	55.1
Discharge Pressure (psi)	1
Discharge pH (SU)	7.05
FIT-801 Discharge Flow Rate (gpm)	1243
Discharge Flow Totalizer (gal)	733416128

B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 25, 2024, Daily, Larry Wright

6/26/2024, 5:50:43 PM UTC

CREATED

6/25/2024, 7:22:23 PM UTC
by Larry Wright

UPDATED

6/26/2024, 5:50:43 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 25, 2024
Time	15:22
Technician	Larry Wright
Completed By	Larry Wright
General Comments	RW-21 back in operation after Kevin Erickson worked on control valve manual/auto control interface.

Weather

Fetch Weather	
Weather	CLEAR, T:89.46 °F, rH:31%, Clouds: 0%, Wind:7mph W-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	210401970
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	211960372
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	263081538
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.5
T-100 Sodium Hydroxide Tank Total Volume (gal)	4092.7
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	214
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3992.1
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1776
AOP Recirc Into T-200 Flow Rate (gpm)	0.8
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	20
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21.23
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	887
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	865
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.888
F-500B PIT-505 Vessel Differential Pressure (psi)	1.819
CF-700A Cartridge Filter Differential Pressure (psi)	0.82

CF-700B Cartridge Filter Differential Pressure (psi)	1.6
G-800A GAC Contractor Differential Pressure (psi)	7.5
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	2
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.1
FIT-801 Discharge Flow Rate (gpm)	1882
Discharge Flow Totalizer (gal)	735060096
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 26, 2024, Daily, Larry Wright

6/26/2024, 5:52:26 PM UTC

CREATED

6/26/2024, 11:06:31 AM UTC
by Larry Wright

UPDATED

6/26/2024, 5:52:26 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 26, 2024
Time	07:06
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:70.66 °F, rH:78%, Clouds: 0%, Wind:5.01mph S-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	210940210
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	212498402
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	263746568
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.6
T-100 Sodium Hydroxide Tank Total Volume (gal)	3953.4
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	214
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3958.8
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1778
AOP Recirc Into T-200 Flow Rate (gpm)	4.3
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	20
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21.19
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	891
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	871
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.019
F-500B PIT-505 Vessel Differential Pressure (psi)	1.813
CF-700A Cartridge Filter Differential Pressure (psi)	0.75
CF-700B Cartridge Filter Differential Pressure (psi)	1.58

G-800A GAC Contractor Differential Pressure (psi)	7.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	2.5
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.07
FIT-801 Discharge Flow Rate (gpm)	1764
Discharge Flow Totalizer (gal)	736768704
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 27, 2024, Daily, Larry Wright

6/28/2024, 12:43:45 PM UTC

CREATED

6/27/2024, 11:45:03 AM UTC
by Larry Wright

UPDATED

6/28/2024, 12:43:45 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 27, 2024
Time	07:45
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:67.28 °F, rH:94%, Clouds: 0%, Wind:3mph S-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	211786650
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	213344552
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	264792418
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	3708.3
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	215
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3905.1
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1783
AOP Recirc Into T-200 Flow Rate (gpm)	4.3
P-200A/B/C Discharge Pressure (psi)	15
P-400A PI-402 Discharge Pressure (psi)	21
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.59
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	612
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	896
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.769
F-500B PIT-505 Vessel Differential Pressure (psi)	1.563
CF-700A Cartridge Filter Differential Pressure (psi)	1.69
CF-700B Cartridge Filter Differential Pressure (psi)	2.49

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	2
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.05
FIT-801 Discharge Flow Rate (gpm)	1780
Discharge Flow Totalizer (gal)	739440512
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 28, 2024, Daily, Weekly, Monthly, Larry Wright

7/2/2024, 3:21:01 PM UTC

CREATED

6/28/2024, 12:59:28 PM UTC
by Larry Wright

UPDATED

7/2/2024, 3:21:01 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	June 28, 2024
Time	08:59
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Received delivery of 3500 gallons Sodium Hydroxide 25% solution today. P-400 pumps and motors aligned and greases yesterday by A.C. Schultes (Brianna).

Weather

Fetch Weather	
Weather	CLEAR, T:67.3 °F, rH:44%, Clouds: 0%, Wind:10.36mph N

Inspection Type (check all that apply)	Daily, Weekly, Monthly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	212647420
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	214205142
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	265856178
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.2
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	1
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	8
T-100 Sodium Hydroxide Tank Total Volume (gal)	7013.3
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	214
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	38457
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1772
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	1
P-200A Oxidation Feed Pump Effluent Pressure (psi)	15.5
P-200B Oxidation Feed Pump Influent Pressure (psi)	2.5
P-200B Oxidation Feed Pump Effluent Pressure (psi)	2
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	1

P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No
P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	23
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.35
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	1
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	P-400 pumps aligned and greased 6/27/2024 by Breanna
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	893
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	874
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.781
F-500B PIT-505 Vessel Differential Pressure (psi)	1.556
CF-700A Cartridge Filter Differential Pressure (psi)	1.58
CF-700A Cartridge Filter Influent Pressure (psi)	16
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	2.37
CF-700B Cartridge Filter Influent Pressure (psi)	17
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	7.5

G-800A GAC Contractor Influent Pressure (psi)	10
G-800A GAC Contractor Effluent Pressure (psi)	2
G-800B GAC Contractor Differential Pressure (psi)	2
G-800B GAC Contractor Influent Pressure (psi)	14.5
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800C GAC Contractor Influent Pressure (psi)	14.5
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	1.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	1
G-800F GAC Contractor Differential Pressure (psi)	2.5
G-800F GAC Contractor Influent Pressure (psi)	14.5
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800G GAC Contractor Influent Pressure (psi)	14.5
G-800G GAC Contractor Effluent Pressure (psi)	10
G-800H GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Influent Pressure (psi)	10
G-800H GAC Contractor Effluent Pressure (psi)	2.5
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0

Discharge pH (SU)	7.06
FIT-801 Discharge Flow Rate (gpm)	1780
Discharge Flow Totalizer (gal)	742133504
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Monthly Inspection Form

Remedial Well RW-20

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	Check valve still dripping.
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	

Monthly RW-20 Inspection Complete	Yes

Remedial Well RW-21

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	Check valve still dripping
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-21 Inspection Complete	Yes

Remedial Well RW-22

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	Check valve still dripping.
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-22 Inspection Complete	Yes

Building 109 System

Checked process water piping, valves, joints and seals for leakage.	Yes
Action/comment piping	Drip at actuator V 503 flange on F-500A
Checked pneumatic lines for leaks or breaks	Yes
Action/comment for line leaks:	
Inspected valves for proper positioning/seating	Yes
Action/comment for valves	
Checked pumps and pump motors for excessive noise and vibration	Yes
Action/Comment for pumps and motors	

Checked mixers and mixer motors for excessive noise and vibration	Yes
Action/Comment for mixers and motors	
Checked tanks and tank connections/fittings for leaks	Yes
Action/Comment for tank leaks	
Checked solids processing equipment and connection points for leaks	Yes
Action/Comment for equipment leaks	
Checked motor bearing lubrication and lubricate as needed	Yes
Action/Comment for motor lubrication	
Checked control panel indicator lights for alarms	Yes
Action/Comment for alarm	
Monthly B109 Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 1, 2024, Daily, Larry Wright

7/2/2024, 3:22:07 PM UTC

CREATED

7/1/2024, 11:59:44 AM UTC
by Larry Wright

UPDATED

7/2/2024, 3:22:07 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 1, 2024
Time	07:59
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:66.43 °F, rH:76%, Clouds: 13%, Wind:8.99mph NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	215075040
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	216631922
RW-22 Flow Rate (gpm)	570
RW-22 Flow Totalizer (gal)	268855598
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	6292.7
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	215
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3689.4
LOX-300 LOX Storage Tank Pressure (%)	30
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1787
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	15
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	24
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.67
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	914
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	890
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.275
F-500B PIT-505 Vessel Differential Pressure (psi)	1.994
CF-700A Cartridge Filter Differential Pressure (psi)	1.51
CF-700B Cartridge Filter Differential Pressure (psi)	2.3

G-800A GAC Contractor Differential Pressure (psi)	7.5
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	2.5
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.08
FIT-801 Discharge Flow Rate (gpm)	1777
Discharge Flow Totalizer (gal)	749712384
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 2, 2024, Daily, Larry Wright

7/2/2024, 3:22:34 PM UTC

CREATED

7/2/2024, 11:27:17 AM UTC
by Larry Wright

UPDATED

7/2/2024, 3:22:34 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 2, 2024
Time	07:27
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:66.79 °F, rH:67%, Clouds: 0%, Wind:4.61mph N-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	215876760
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	217433462
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	269846268
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.9
T-100 Sodium Hydroxide Tank Total Volume (gal)	6054.3
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	215
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3635.7
LOX-300 LOX Storage Tank Pressure (%)	30
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1770
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	21
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.81
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	929
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	895
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.413
F-500B PIT-505 Vessel Differential Pressure (psi)	2.156
CF-700A Cartridge Filter Differential Pressure (psi)	1.55
CF-700B Cartridge Filter Differential Pressure (psi)	2.35

G-800A GAC Contractor Differential Pressure (psi)	7.5
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	2.5
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.1
FIT-801 Discharge Flow Rate (gpm)	1791
Discharge Flow Totalizer (gal)	752239616
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 3, 2024, Daily, Larry Wright

7/8/2024, 1:30:11 PM UTC

CREATED

7/2/2024, 6:33:39 PM UTC
by Larry Wright

UPDATED

7/8/2024, 1:30:11 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 3, 2024
Time	07:49
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Received delivery of Liquid Oxygen late yesterday (7/2/2024) afternoon.

Weather

Fetch Weather	
Weather	CLEAR, T:67.51 °F, rH:87%, Clouds: 0%, Wind:0mph N

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	216710240
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	218266582
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	270876018
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	5809.2
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	214
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3582
LOX-300 LOX Storage Tank Pressure (%)	80
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1786
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	15
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	23
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.27
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	890
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	862
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.381
F-500B PIT-505 Vessel Differential Pressure (psi)	2.106
CF-700A Cartridge Filter Differential Pressure (psi)	1.54
CF-700B Cartridge Filter Differential Pressure (psi)	2.25

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	2
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.09
FIT-801 Discharge Flow Rate (gpm)	1770
Discharge Flow Totalizer (gal)	754818496
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 5, 2024, Daily, Weekly, Hosam Badawi

7/8/2024, 7:58:34 PM UTC

CREATED

7/5/2024, 12:54:54 PM UTC
by Larry Wright

UPDATED

7/8/2024, 7:58:34 PM UTC
by Larry Wright

STATUS

QC Complete

General

Date	July 5, 2024
Time	08:54
Technician	Hosam Badawi
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:75.69 °F, rH:87%, Clouds: 100%, Wind:1.99mph S

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	218390300
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	219946120
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	272952120
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.4
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	9
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	9
T-100 Sodium Hydroxide Tank Total Volume (gal)	5303.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	214
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	20
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	0
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3473.4
LOX-300 LOX Storage Tank Pressure (%)	75
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1758
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	15
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	1
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	16
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	21
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	0
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	920
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	867
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.45
F-500B PIT-505 Vessel Differential Pressure (psi)	2.19
CF-700A Cartridge Filter Differential Pressure (psi)	1.72
CF-700A Cartridge Filter Influent Pressure (psi)	15
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	2.43
CF-700B Cartridge Filter Influent Pressure (psi)	17
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	7
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	2
G-800B GAC Contractor Differential Pressure (psi)	2
G-800B GAC Contractor Influent Pressure (psi)	15
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Influent Pressure (psi)	15
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	1
G-800E GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Influent Pressure (psi)	14
G-800E GAC Contractor Effluent Pressure (psi)	1
G-800F GAC Contractor Differential Pressure (psi)	2
G-800F GAC Contractor Influent Pressure (psi)	14
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Influent Pressure (psi)	14
G-800G GAC Contractor Effluent Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Influent Pressure (psi)	9
G-800H GAC Contractor Effluent Pressure (psi)	3
Discharge Temperature (F)	54
Discharge Pressure (psi)	0
Discharge pH (SU)	7.11
FIT-801 Discharge Flow Rate (gpm)	1772

Discharge Flow Totalizer (gal)	760137472
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	2
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6
P-1000B Dewatering Volute Feed Pump Pressure (psi)	7
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	7
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 8, 2024, Daily, Larry Wright

7/10/2024, 7:22:36 PM UTC

CREATED

7/8/2024, 4:02:37 PM UTC
by Larry Wright

UPDATED

7/10/2024, 7:22:36 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 8, 2024
Time	12:02
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:87.06 °F, rH:65%, Clouds: 0%, Wind:5.75mph N-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	220959190
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	222513882
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	276125958
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	4517.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	215
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3303.9
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1751
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	15
P-400A PI-402 Discharge Pressure (psi)	21
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.5
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	915
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	890
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.638
F-500B PIT-505 Vessel Differential Pressure (psi)	2.406
CF-700A Cartridge Filter Differential Pressure (psi)	2.33
CF-700B Cartridge Filter Differential Pressure (psi)	3.01

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	2
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.14
FIT-801 Discharge Flow Rate (gpm)	1776
Discharge Flow Totalizer (gal)	768090304
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	448671
P-600 Backwash Pump Totalizer (gal)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 9, 2024, Daily, Larry Wright

7/10/2024, 7:32:56 PM UTC

CREATED

7/9/2024, 4:01:05 PM UTC
by Larry Wright

UPDATED

7/10/2024, 7:32:56 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 9, 2024
Time	12:01
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Changed lag sodium hydroxide pump P-100A To lead pump @ 1205.

Weather

Fetch Weather	
Weather	CLOUDS, T:83.84 °F, rH:76%, Clouds: 88%, Wind:3mph S-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	221786580
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	223340922
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	277148338
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	18.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	4267.9
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	215
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3255.9
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1770
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	15
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	24
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.43
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	903
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	874
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.681
F-500B PIT-505 Vessel Differential Pressure (psi)	2.369
CF-700A Cartridge Filter Differential Pressure (psi)	2.53
CF-700B Cartridge Filter Differential Pressure (psi)	3.14

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	2.5
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.17
FIT-801 Discharge Flow Rate (gpm)	1767
Discharge Flow Totalizer (gal)	770722496
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 10, 2024, Daily, Larry Wright

7/10/2024, 7:33:03 PM UTC

CREATED

7/10/2024, 11:46:44 AM UTC
by Larry Wright

UPDATED

7/10/2024, 7:33:03 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 10, 2024
Time	07:46
Technician	Larry Wright
Completed By	Larry Wright
General Comments	*Switched P-100A off and returned P-100B back to lead sodium hydroxide pump due to performance issues and pending replacement of pvc pipes and fittings at P-100A (cracked flange at P-100A replacement will occur upon receipt of proper chemical resistant cpvc glue expected 7/11/2024 from GRAINGER).

Weather

Fetch Weather	
Weather	MIST, T:75.25 °F, rH:91%, Clouds: 100%, Wind:9.22mph S-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	222459980
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	224014062
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	277980348
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	4078.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	214
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3215.1
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1774
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	24
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.64
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	896
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	874
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.663
F-500B PIT-505 Vessel Differential Pressure (psi)	2.344

CF-700A Cartridge Filter Differential Pressure (psi)	2.79
CF-700B Cartridge Filter Differential Pressure (psi)	3.38
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	2.5
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.14
FIT-801 Discharge Flow Rate (gpm)	1771
Discharge Flow Totalizer (gal)	772790592
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 11, 2024, Daily, Larry Wright

7/12/2024, 1:15:02 PM UTC

CREATED

7/11/2024, 5:30:13 PM UTC
by Larry Wright

UPDATED

7/12/2024, 1:15:02 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 11, 2024
Time	13:30
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Sodium Hydroxide pump P-100B has been assigned as lead pump again while P-100A is shut off to allow installation of new pvc flanges and pipe to replace cracked flanges.

Weather

Fetch Weather	
Weather	CLEAR, T:85.55 °F, rH:58%, Clouds: 0%, Wind:14.97mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	223511970
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	225066412
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	279281128
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	3749.8
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	215
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3142.8
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1783
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	15
P-400A PI-402 Discharge Pressure (psi)	22.5
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.14
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	901
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	884
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.719
F-500B PIT-505 Vessel Differential Pressure (psi)	2.381
CF-700A Cartridge Filter Differential Pressure (psi)	3.25

CF-700B Cartridge Filter Differential Pressure (psi)	3.78
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.17
FIT-801 Discharge Flow Rate (gpm)	1762
Discharge Flow Totalizer (gal)	776074880
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 12, 2024, Daily, Weekly, Larry Wright

7/15/2024, 8:17:59 PM UTC

CREATED

7/12/2024, 12:39:32 PM UTC
by Larry Wright

UPDATED

7/15/2024, 8:17:59 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 12, 2024
Time	08:39
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:73.45 °F, rH:92%, Clouds: 100%, Wind:5.75mph S

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	224133780
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	225687052
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	280048238
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.3
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	0
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	8
T-100 Sodium Hydroxide Tank Total Volume (gal)	3563.8
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	215
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3107.4
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1775
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	1
P-200A Oxidation Feed Pump Effluent Pressure (psi)	16
P-200B Oxidation Feed Pump Influent Pressure (psi)	2.5
P-200B Oxidation Feed Pump Effluent Pressure (psi)	2
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	1
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	25
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.6
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	907
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	887
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.631
F-500B PIT-505 Vessel Differential Pressure (psi)	2.425
CF-700A Cartridge Filter Differential Pressure (psi)	3.75
CF-700A Cartridge Filter Influent Pressure (psi)	18
CF-700A Cartridge Filter Effluent Pressure (psi)	17.5
CF-700B Cartridge Filter Differential Pressure (psi)	4.29
CF-700B Cartridge Filter Influent Pressure (psi)	20
CF-700B Cartridge Filter Effluent Pressure (psi)	16.5
G-800A GAC Contractor Differential Pressure (psi)	7
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	2
G-800B GAC Contractor Differential Pressure (psi)	2
G-800B GAC Contractor Influent Pressure (psi)	15
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800C GAC Contractor Influent Pressure (psi)	15
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	1.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	1
G-800F GAC Contractor Differential Pressure (psi)	2
G-800F GAC Contractor Influent Pressure (psi)	14.5
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800G GAC Contractor Influent Pressure (psi)	14
G-800G GAC Contractor Effluent Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Influent Pressure (psi)	9
G-800H GAC Contractor Effluent Pressure (psi)	2.5
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.18
FIT-801 Discharge Flow Rate (gpm)	1785

Discharge Flow Totalizer (gal)	778014272
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 15, 2024, Daily, Larry Wright

7/15/2024, 8:18:57 PM UTC

CREATED

7/15/2024, 5:57:11 PM UTC
by Larry Wright

UPDATED

7/15/2024, 8:18:57 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 15, 2024
Time	13:57
Technician	Larry Wright
Completed By	Larry Wright
General Comments	System shut down Sunday (7/14/2024) @ 2:10 pm HYDROGEN PEROXIDE TANK LOW LEVEL SHUTDOWN ALARM followed by @ 2:12 pm ADVANCED OXIDATION SYSTEM SHUTDOWN ALARMS and system went down. Jimmy and Sam came in Sunday and restarted system after clearing alarms and system ran until 6:58 pm. The system repeated shut down Sunday (7/14/2024) @ 6:58 pm HYDROGEN PEROXIDE TANK LOW LEVEL SHUTDOWN ALARM followed by @ 7:00 pm ADVANCED OXIDATION SYSTEM SHUTDOWN ALARMS and system went down. I came in Monday morning and reset the HYDROGEN PEROXIDE LEVEL LOW SP FROM 1.0 Ft. to 0.0 Ft and had system up and running three wells at 7:37 am (7/15/2024) and continued to run throughout the rest of the afternoon.

Weather

Fetch Weather	
Weather	CLEAR, T:86.32 °F, rH:75%, Clouds: 0%, Wind:5.75mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	226300140
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	227859982
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	282736048
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	30.5
T-100 Sodium Hydroxide Tank Total Volume (gal)	2891.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	214
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2962.2
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1764
AOP Recirc Into T-200 Flow Rate (gpm)	2.4
P-200A/B/C Discharge Pressure (psi)	15
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	29
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	20.37
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	847
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	946
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.438

F-500B PIT-505 Vessel Differential Pressure (psi)	1.844
CF-700A Cartridge Filter Differential Pressure (psi)	7.64
CF-700B Cartridge Filter Differential Pressure (psi)	8.11
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	9
G-800E GAC Contractor Differential Pressure (psi)	8.5
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.16
FIT-801 Discharge Flow Rate (gpm)	1852
Discharge Flow Totalizer (gal)	784810496
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 16, 2024, Daily, Larry Wright

7/18/2024, 6:10:46 PM UTC

CREATED

7/16/2024, 5:07:58 PM UTC
by Larry Wright

UPDATED

7/18/2024, 6:10:46 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 16, 2024
Time	13:07
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Received delivery today of 3500 gallons SODIUM HYDROXIDE 25% solution. Conducted system performance sampling for BUILDING 109 today.

Weather

Fetch Weather	
Weather	CLEAR, T:91.29 °F, rH:56%, Clouds: 0%, Wind:13.8mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	227094790
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	228654222
RW-22 Flow Rate (gpm)	570
RW-22 Flow Totalizer (gal)	283717898
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.3
T-100 Sodium Hydroxide Tank Total Volume (gal)	6207.3
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	213
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2908.5
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1772
AOP Recirc Into T-200 Flow Rate (gpm)	2.1
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	1
P-400C PI-406 Discharge Pressure (psi)	32
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30.22
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	860
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	947
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43121600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.531
F-500B PIT-505 Vessel Differential Pressure (psi)	2.038
CF-700A Cartridge Filter Differential Pressure (psi)	9.44

CF-700B Cartridge Filter Differential Pressure (psi)	9.88
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8.5
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	55.1
Discharge Pressure (psi)	0
Discharge pH (SU)	7.17
FIT-801 Discharge Flow Rate (gpm)	1809
Discharge Flow Totalizer (gal)	787329408
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	448671
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	447080
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 17, 2024, Daily, Larry Wright

7/18/2024, 6:18:35 PM UTC

CREATED

7/17/2024, 6:59:42 PM UTC
by Larry Wright

UPDATED

7/18/2024, 6:18:35 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 17, 2024
Time	14:59
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Performed partial backwash (cells C and D in F-500A) and changed cartridge filters on F-700B (changed out D & D 10-micron with Rosedale 5-micron due to fitting issues)

Weather

Fetch Weather	
Weather	CLOUDS, T:85.57 °F, rH:72%, Clouds: 46%, Wind:5.01mph SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	227970380
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	229529522
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	284790458
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.7
T-100 Sodium Hydroxide Tank Total Volume (gal)	5927.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	212
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2855.4
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1756
AOP Recirc Into T-200 Flow Rate (gpm)	1.3
P-200A/B/C Discharge Pressure (psi)	15
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	22
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21.6
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1030
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	852
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.363
F-500B PIT-505 Vessel Differential Pressure (psi)	2.013
CF-700A Cartridge Filter Differential Pressure (psi)	2.02

CF-700B Cartridge Filter Differential Pressure (psi)	0.17
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	55.1
Discharge Pressure (psi)	0
Discharge pH (SU)	7.19
FIT-801 Discharge Flow Rate (gpm)	1888
Discharge Flow Totalizer (gal)	790094208
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454577
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 18, 2024, Daily, Larry Wright

7/18/2024, 6:40:48 PM UTC

CREATED

7/18/2024, 12:41:45 PM UTC
by Larry Wright

UPDATED

7/18/2024, 6:40:48 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 18, 2024
Time	08:41
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:75 °F, rH:84%, Clouds: 75%, Wind:5.99mph N-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	228565970
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	230124822
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	285526388
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.9
T-100 Sodium Hydroxide Tank Total Volume (gal)	5745.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	213
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2819.4
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1761
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	15
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	24
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.04
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1024
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	855
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.144
F-500B PIT-505 Vessel Differential Pressure (psi)	1.944
CF-700A Cartridge Filter Differential Pressure (psi)	3.21
CF-700B Cartridge Filter Differential Pressure (psi)	1.44

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.19
FIT-801 Discharge Flow Rate (gpm)	1788
Discharge Flow Totalizer (gal)	791986688
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	454577
P-600 Backwash Pump Totalizer (gal)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 19, 2024, Daily, Weekly, Larry Wright

7/25/2024, 5:55:40 PM UTC

CREATED

7/19/2024, 11:20:40 AM UTC
by Larry Wright

UPDATED

7/25/2024, 5:55:40 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 19, 2024
Time	07:20
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:67.64 °F, rH:76%, Clouds: 0%, Wind:8.05mph N-NW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	229340790
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	230899352
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	286483828
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.1
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	10
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	7
T-100 Sodium Hydroxide Tank Total Volume (gal)	5493.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	213
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	17
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2772.3
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1750
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	16
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	1
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25.74
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	952
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	866
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.494
F-500B PIT-505 Vessel Differential Pressure (psi)	1.994
CF-700A Cartridge Filter Differential Pressure (psi)	5.89
CF-700A Cartridge Filter Influent Pressure (psi)	20
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	4.4
CF-700B Cartridge Filter Influent Pressure (psi)	20
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	7
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	2
G-800B GAC Contractor Differential Pressure (psi)	3
G-800B GAC Contractor Influent Pressure (psi)	14.5
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800C GAC Contractor Influent Pressure (psi)	14.5
G-800C GAC Contractor Effluent Pressure (psi)	9.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	9.5
G-800D GAC Contractor Effluent Pressure (psi)	1.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Influent Pressure (psi)	9.5
G-800E GAC Contractor Effluent Pressure (psi)	1
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800F GAC Contractor Influent Pressure (psi)	14
G-800F GAC Contractor Effluent Pressure (psi)	9.5
G-800G GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Influent Pressure (psi)	14
G-800G GAC Contractor Effluent Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Influent Pressure (psi)	9
G-800H GAC Contractor Effluent Pressure (psi)	3
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.2
FIT-801 Discharge Flow Rate (gpm)	1776

Discharge Flow Totalizer (gal)	794398976
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 22, 2024, Daily, Larry Wright

7/25/2024, 5:58:46 PM UTC

CREATED

7/22/2024, 5:10:18 PM UTC
by Larry Wright

UPDATED

7/25/2024, 5:58:46 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 22, 2024
Time	13:10
Technician	Larry Wright
Completed By	Larry Wright
General Comments	P-400A has been taken out of rotation due to possible malfunction on Friday 7-19-2024 which resulted in alarm “OXIDIZED WATER TANK HIGH-HIGH LEVEL” and system shutdown. Megger testing scheduled for pump motors with LEB for Tuesday 7-23-2024.

Weather

Fetch Weather	
Weather	CLEAR, T:81.39 °F, rH:74%, Clouds: 0%, Wind:13.8mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	231987430
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	233546492
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	289754458
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	4650.7
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	215
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2602.2
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1773
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	32
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30.01
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	921
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	801
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.475
F-500B PIT-505 Vessel Differential Pressure (psi)	1.769
CF-700A Cartridge Filter Differential Pressure (psi)	9.99

CF-700B Cartridge Filter Differential Pressure (psi)	10.87
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	55.1
Discharge Pressure (psi)	0
Discharge pH (SU)	7.21
FIT-801 Discharge Flow Rate (gpm)	1777
Discharge Flow Totalizer (gal)	802687424
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 23, 2024, Daily, Larry Wright

7/25/2024, 6:03:11 PM UTC

CREATED

7/23/2024, 4:26:00 PM UTC
by Larry Wright

UPDATED

7/25/2024, 6:03:11 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 23, 2024
Time	12:26
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Changed cartridge filters on CF-700B today.

Weather

Fetch Weather	
Weather	CLOUDS, T:79.11 °F, rH:83%, Clouds: 100%, Wind:5.01mph SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	232751620
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	234310482
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	290697028
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.7
T-100 Sodium Hydroxide Tank Total Volume (gal)	4393
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	214
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2555.4
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1760
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	20
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21.8
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	947
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	849
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.406
F-500B PIT-505 Vessel Differential Pressure (psi)	1.625
CF-700A Cartridge Filter Differential Pressure (psi)	2.19
CF-700B Cartridge Filter Differential Pressure (psi)	0.37

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.23
FIT-801 Discharge Flow Rate (gpm)	1784
Discharge Flow Totalizer (gal)	805087680
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	454824
P-600 Backwash Pump Totalizer (gal)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 24, 2024, Daily, Larry Wright

7/25/2024, 6:05:06 PM UTC

CREATED

7/24/2024, 5:04:26 PM UTC
by Larry Wright

UPDATED

7/25/2024, 6:05:06 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 24, 2024
Time	13:04
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:74.86 °F, rH:92%, Clouds: 100%, Wind:1.01mph N

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	233591820
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	235150402
RW-22 Flow Rate (gpm)	74
RW-22 Flow Totalizer (gal)	291735108
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	4118.9
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	223
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2501.1
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1833
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	25
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.03
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	954
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	862
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.469
F-500B PIT-505 Vessel Differential Pressure (psi)	1.513
CF-700A Cartridge Filter Differential Pressure (psi)	3.45
CF-700B Cartridge Filter Differential Pressure (psi)	1.72

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.22
FIT-801 Discharge Flow Rate (gpm)	1833
Discharge Flow Totalizer (gal)	807718784
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	454823
P-600 Backwash Pump Totalizer (gal)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 25, 2024, Daily, Larry Wright

7/25/2024, 6:05:55 PM UTC

CREATED

7/25/2024, 2:31:59 PM UTC
by Larry Wright

UPDATED

7/25/2024, 6:05:55 PM UTC
by Patrick Dellecave

STATUS

QC Complete

POWERED BY Fulcrum WWW.FULCRUMAPP.COM

General

Date	July 25, 2024
Time	10:31
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:78.49 °F, rH:80%, Clouds: 40%, Wind:4.61mph W

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	234326440
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	235884862
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	292642808
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.5
T-100 Sodium Hydroxide Tank Total Volume (gal)	3875.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2447.1
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1845
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16.5
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	29
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	27.11
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1071
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	927
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.706
F-500B PIT-505 Vessel Differential Pressure (psi)	1.869
CF-700A Cartridge Filter Differential Pressure (psi)	6.13
CF-700B Cartridge Filter Differential Pressure (psi)	4.26

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.23
FIT-801 Discharge Flow Rate (gpm)	1902
Discharge Flow Totalizer (gal)	810105024
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	454823
P-600 Backwash Pump Totalizer (gal)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 26, 2024, Daily, Weekly, Larry Wright

7/29/2024, 5:28:39 PM UTC

CREATED

7/26/2024, 8:21:02 PM UTC
by Larry Wright

UPDATED

7/29/2024, 5:28:39 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 26, 2024
Time	16:21
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Installed new P-100A sodium hydroxide pump today but encountered several glitches leading to temporary system shutdowns until problem resolved via various calls to Verder and APT.

Weather

Fetch Weather	
Weather	CLEAR, T:82.31 °F, rH:46%, Clouds: 0%, Wind:5.75mph N-NW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	235292770
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	236871062
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	293861738
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	11
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	6
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	8
T-100 Sodium Hydroxide Tank Total Volume (gal)	3528
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	17
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2381.2
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1831
AOP Recirc Into T-200 Flow Rate (gpm)	3.5
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	1
P-200A Oxidation Feed Pump Effluent Pressure (psi)	16
P-200B Oxidation Feed Pump Influent Pressure (psi)	2.5
P-200B Oxidation Feed Pump Effluent Pressure (psi)	1
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	1

P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No
P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	34
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	35.75
P-400A Filter Feed Pump Influent Pressure (psi)	1
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	996
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	925
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.794
F-500B PIT-505 Vessel Differential Pressure (psi)	1.525
CF-700A Cartridge Filter Differential Pressure (psi)	13.71
CF-700A Cartridge Filter Influent Pressure (psi)	29
CF-700A Cartridge Filter Effluent Pressure (psi)	18
CF-700B Cartridge Filter Differential Pressure (psi)	12.96
CF-700B Cartridge Filter Influent Pressure (psi)	30
CF-700B Cartridge Filter Effluent Pressure (psi)	17.5
G-800A GAC Contractor Differential Pressure (psi)	7

G-800A GAC Contractor Influent Pressure (psi)	10.5
G-800A GAC Contractor Effluent Pressure (psi)	2.5
G-800B GAC Contractor Differential Pressure (psi)	3.5
G-800B GAC Contractor Influent Pressure (psi)	15.5
G-800B GAC Contractor Effluent Pressure (psi)	10.5
G-800C GAC Contractor Differential Pressure (psi)	5
G-800C GAC Contractor Influent Pressure (psi)	15.5
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	9
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	1.5
G-800E GAC Contractor Differential Pressure (psi)	9
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	1.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Influent Pressure (psi)	16
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Influent Pressure (psi)	16
G-800G GAC Contractor Effluent Pressure (psi)	10
G-800H GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Influent Pressure (psi)	10
G-800H GAC Contractor Effluent Pressure (psi)	3.5
Discharge Temperature (F)	55.4
Discharge Pressure (psi)	0

Discharge pH (SU)	7.22
FIT-801 Discharge Flow Rate (gpm)	1867
Discharge Flow Totalizer (gal)	813290304
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0.5
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1
P-1100 Decant Pump Effluent Pressure (psi)	6.25
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 29, 2024, Daily, Larry Wright

7/29/2024, 5:30:45 PM UTC

CREATED

7/29/2024, 4:34:23 PM UTC
by Larry Wright

UPDATED

7/29/2024, 5:30:45 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 29, 2024
Time	12:34
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Received delivery Sodium Hydroxide 25% solution this morning 3732 gallons.

Weather

Fetch Weather	
Weather	CLOUDS, T:80.17 °F, rH:72%, Clouds: 81%, Wind:4mph W

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	237624340
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	239201972
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	296742528
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	11.9
T-100 Sodium Hydroxide Tank Total Volume (gal)	6537.8
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2227.5
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1820
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16.5
P-400A PI-402 Discharge Pressure (psi)	21
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.77
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	961
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	865
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.294
F-500B PIT-505 Vessel Differential Pressure (psi)	1.488
CF-700A Cartridge Filter Differential Pressure (psi)	1.65
CF-700B Cartridge Filter Differential Pressure (psi)	2.97

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3.5
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.24
FIT-801 Discharge Flow Rate (gpm)	1834
Discharge Flow Totalizer (gal)	820865024
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 30, 2024, Daily, Larry Wright

7/31/2024, 11:33:52 AM UTC

CREATED

7/30/2024, 6:37:43 PM UTC
by Larry Wright

UPDATED

7/31/2024, 11:33:52 AM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 30, 2024
Time	14:37
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Replaced tube in sodium hydroxide pump P-100B (replaced with natural rubber tube). Both sodium hydroxide pumps (P-100A and P-100B) are operational with natural rubber tubes.

Weather

Fetch Weather	
Weather	CLOUDS, T:82.6 °F, rH:73%, Clouds: 100%, Wind:7mph SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	238516730
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	240095842
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	297847288
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	11.5
T-100 Sodium Hydroxide Tank Total Volume (gal)	7499
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2168.4
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1832
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16.5
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	24
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.45
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	964
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	869
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.294
F-500B PIT-505 Vessel Differential Pressure (psi)	1.494
CF-700A Cartridge Filter Differential Pressure (psi)	1.92

CF-700B Cartridge Filter Differential Pressure (psi)	3.11
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.24
FIT-801 Discharge Flow Rate (gpm)	1837
Discharge Flow Totalizer (gal)	823766592
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 31, 2024, Daily, Monthly, Larry Wright

8/6/2024, 11:45:53 AM UTC

CREATED

7/31/2024, 4:13:42 PM UTC
by Larry Wright

UPDATED

8/6/2024, 11:45:53 AM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	July 31, 2024
Time	12:13
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:80.69 °F, rH:79%, Clouds: 72%, Wind:5.01mph W

Inspection Type (check all that apply)	Daily, Monthly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	239249870
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	240830402
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	298755188
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12
T-100 Sodium Hydroxide Tank Total Volume (gal)	5969.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2114.4
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1840
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16.5
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	24
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.91
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	963
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	861
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.225
F-500B PIT-505 Vessel Differential Pressure (psi)	1.494
CF-700A Cartridge Filter Differential Pressure (psi)	2.23
CF-700B Cartridge Filter Differential Pressure (psi)	3.33

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.25
FIT-801 Discharge Flow Rate (gpm)	1825
Discharge Flow Totalizer (gal)	826153984
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Monthly Inspection Form

Remedial Well RW-20

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	

Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-20 Inspection Complete	Yes

Remedial Well RW-21

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-21 Inspection Complete	Yes

Remedial Well RW-22

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-22 Inspection Complete	Yes

Building 109 System

Checked process water piping, valves, joints and seals for leakage.	Yes
Action/comment piping	Water continues to drip at flange of actuator V-503 on F-500A Horizontal Filter after Bensen pluming had torqued bolts this month.
Checked pneumatic lines for leaks or breaks	Yes
Action/comment for line leaks:	

Inspected valves for proper positioning/seating	Yes
Action/comment for valves	
Checked pumps and pump motors for excessive noise and vibration	Yes
Action/Comment for pumps and motors	
Checked mixers and mixer motors for excessive noise and vibration	Yes
Action/Comment for mixers and motors	
Checked tanks and tank connections/fittings for leaks	Yes
Action/Comment for tank leaks	
Checked solids processing equipment and connection points for leaks	Yes
Action/Comment for equipment leaks	
Checked motor bearing lubrication and lubricate as needed	Yes
Action/Comment for motor lubrication	
Checked control panel indicator lights for alarms	Yes
Action/Comment for alarm	
Monthly B109 Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 1, 2024, Daily, Larry Wright

8/6/2024, 11:52:44 AM UTC

CREATED

8/1/2024, 4:12:19 PM UTC
by Larry Wright

UPDATED

8/6/2024, 11:52:44 AM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 1, 2024
Time	12:12
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:89.26 °F, rH:55%, Clouds: 0%, Wind:5.75mph N-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	240070870
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	241652912
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	299771898
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	5689.2
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	222
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2059.8
LOX-300 LOX Storage Tank Pressure (%)	30
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1822
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16.5
P-400A PI-402 Discharge Pressure (psi)	24
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25.42
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1010
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	912
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.438
F-500B PIT-505 Vessel Differential Pressure (psi)	1.675
CF-700A Cartridge Filter Differential Pressure (psi)	2.85
CF-700B Cartridge Filter Differential Pressure (psi)	4.03

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3.5
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.25
FIT-801 Discharge Flow Rate (gpm)	1870
Discharge Flow Totalizer (gal)	828825984
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454824
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 2, 2024, Daily, Weekly, Larry Wright

8/6/2024, 11:55:14 AM UTC

CREATED

8/2/2024, 11:08:53 AM UTC
by Larry Wright

UPDATED

8/6/2024, 11:55:14 AM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 2, 2024
Time	07:08
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	MIST, T:76.1 °F, rH:90%, Clouds: 0%, Wind:3.44mph S-SW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	240714480
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	242297782
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	300568738
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.4
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	5
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	7
T-100 Sodium Hydroxide Tank Total Volume (gal)	5457.2
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	17
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2012.7
LOX-300 LOX Storage Tank Pressure (%)	30
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1820
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	1
P-200A Oxidation Feed Pump Effluent Pressure (psi)	16
P-200B Oxidation Feed Pump Influent Pressure (psi)	2.5
P-200B Oxidation Feed Pump Effluent Pressure (psi)	1
P-200C Oxidation Feed Pump Influent Pressure (psi)	0.5
P-200C Oxidation Feed Pump Effluent Pressure (psi)	1
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	23
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.91
P-400A Filter Feed Pump Influent Pressure (psi)	1
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	Yes
P-400A/B/C Filter Feed Pumps - Additional Comments	P-400A seems to have greater than normal vibration while operating.
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	988
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	879
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.475
F-500B PIT-505 Vessel Differential Pressure (psi)	1.725
CF-700A Cartridge Filter Differential Pressure (psi)	3.2
CF-700A Cartridge Filter Influent Pressure (psi)	18
CF-700A Cartridge Filter Effluent Pressure (psi)	18
CF-700B Cartridge Filter Differential Pressure (psi)	4.35
CF-700B Cartridge Filter Influent Pressure (psi)	20
CF-700B Cartridge Filter Effluent Pressure (psi)	17
G-800A GAC Contractor Differential Pressure (psi)	7
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	2.5
G-800B GAC Contractor Differential Pressure (psi)	3.5
G-800B GAC Contractor Influent Pressure (psi)	15
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	5
G-800C GAC Contractor Influent Pressure (psi)	14.5
G-800C GAC Contractor Effluent Pressure (psi)	9.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	9.5
G-800D GAC Contractor Effluent Pressure (psi)	2
G-800E GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Influent Pressure (psi)	9.5
G-800E GAC Contractor Effluent Pressure (psi)	1
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800F GAC Contractor Influent Pressure (psi)	14.5
G-800F GAC Contractor Effluent Pressure (psi)	9.5
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800G GAC Contractor Influent Pressure (psi)	14
G-800G GAC Contractor Effluent Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Influent Pressure (psi)	8
G-800H GAC Contractor Effluent Pressure (psi)	2.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.26
FIT-801 Discharge Flow Rate (gpm)	1869

Discharge Flow Totalizer (gal)	830928720
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1
P-1100 Decant Pump Effluent Pressure (psi)	6.25
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 5, 2024, Daily, Larry Wright

8/6/2024, 11:56:12 AM UTC

CREATED

8/5/2024, 3:41:16 PM UTC
by Larry Wright

UPDATED

8/6/2024, 11:56:12 AM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 5, 2024
Time	11:41
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:86.13 °F, rH:56%, Clouds: 0%, Wind:4.61mph E

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	243329330
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	244917092
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	303781598
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.6
T-100 Sodium Hydroxide Tank Total Volume (gal)	4546
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1838.1
LOX-300 LOX Storage Tank Pressure (%)	25
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1818
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	28
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	27.34
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	993
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	898
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.575
F-500B PIT-505 Vessel Differential Pressure (psi)	1.75
CF-700A Cartridge Filter Differential Pressure (psi)	5.01
CF-700B Cartridge Filter Differential Pressure (psi)	6

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3.5
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.27
FIT-801 Discharge Flow Rate (gpm)	1865
Discharge Flow Totalizer (gal)	839411712
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 6, 2024, Daily, Larry Wright

8/9/2024, 12:58:27 PM UTC

CREATED

8/6/2024, 6:31:47 PM UTC
by Larry Wright

UPDATED

8/9/2024, 12:58:27 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 6, 2024
Time	14:31
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Planned system shutdown for three hours to replace faulty air relief valve above horizontal filter F-500A from 1028 to 1328. Another planned system shutdown will occur later this week to replace faulty air relief valve above horizontal filter F-500B.

Weather

Fetch Weather	
Weather	RAIN, T:83.75 °F, rH:78%, Clouds: 75%, Wind:4.61mph N-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	Yes
Describe maintenance items	Air relief valve above horizontal filter F-500B needs replacing
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	244139230
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	245731022
RW-22 Flow Rate (gpm)	570
RW-22 Flow Totalizer (gal)	304779318
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.6
T-100 Sodium Hydroxide Tank Total Volume (gal)	4253.7
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1784.4
LOX-300 LOX Storage Tank Pressure (%)	25
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1837
AOP Recirc Into T-200 Flow Rate (gpm)	1.6
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	1
P-400C PI-406 Discharge Pressure (psi)	32
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30.07
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1032
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	917
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.419
F-500B PIT-505 Vessel Differential Pressure (psi)	1.769

CF-700A Cartridge Filter Differential Pressure (psi)	7.64
CF-700B Cartridge Filter Differential Pressure (psi)	8.46
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	9
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	56.3
Discharge Pressure (psi)	0
Discharge pH (SU)	7.26
FIT-801 Discharge Flow Rate (gpm)	1870
Discharge Flow Totalizer (gal)	842025408
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 7, 2024, Daily, Larry Wright

8/9/2024, 12:59:40 PM UTC

CREATED

8/7/2024, 4:46:33 PM UTC
by Larry Wright

UPDATED

8/9/2024, 12:59:40 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 7, 2024
Time	12:46
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:65.07 °F, rH:93%, Clouds: 100%, Wind:9.22mph NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	244888850
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	246482102
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	305698578
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.7
T-100 Sodium Hydroxide Tank Total Volume (gal)	4008.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1743.9
LOX-300 LOX Storage Tank Pressure (%)	75
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1815
AOP Recirc Into T-200 Flow Rate (gpm)	1.9
P-200A/B/C Discharge Pressure (psi)	16.5
P-400A PI-402 Discharge Pressure (psi)	29
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30.21
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	971
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	876
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.369
F-500B PIT-505 Vessel Differential Pressure (psi)	1.588
CF-700A Cartridge Filter Differential Pressure (psi)	9.41
CF-700B Cartridge Filter Differential Pressure (psi)	10.13

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3.5
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.28
FIT-801 Discharge Flow Rate (gpm)	1841
Discharge Flow Totalizer (gal)	844446400
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 8, 2024, Daily, Larry Wright

8/9/2024, 1:00:53 PM UTC

CREATED

8/8/2024, 4:51:18 PM UTC
by Larry Wright

UPDATED

8/9/2024, 1:00:53 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 8, 2024
Time	12:51
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Replaced air relief valve on horizontal filter F500-B today and water seepage has subsided.

Weather

Fetch Weather	
Weather	CLOUDS, T:68.11 °F, rH:92%, Clouds: 100%, Wind:13.8mph E-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	245710250
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	247305022
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	306705488
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	3729.3
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1688.7
LOX-300 LOX Storage Tank Pressure (%)	75
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1815
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	33
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	32.14
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	986
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	864
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.506
F-500B PIT-505 Vessel Differential Pressure (psi)	1.738
CF-700A Cartridge Filter Differential Pressure (psi)	11.66
CF-700B Cartridge Filter Differential Pressure (psi)	12.31

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.29
FIT-801 Discharge Flow Rate (gpm)	1855
Discharge Flow Totalizer (gal)	847106816
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 9, 2024, Daily, Weekly, Larry Wright

8/13/2024, 5:44:26 PM UTC

CREATED

8/9/2024, 4:51:41 PM UTC
by Larry Wright

UPDATED

8/13/2024, 5:44:26 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 9, 2024
Time	12:51
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Received delivery of Sodium Hydroxide today (3496.72591 gallons). Changed cartridge filters on CF-700B today, replacing ROSEDALE 5-micron with D & D 5-micron.

Weather

Fetch Weather	
Weather	CLOUDS, T:82.58 °F, rH:83%, Clouds: 100%, Wind:25.32mph S-SE

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570
RW-20 Flow Totalizer (gal)	246471600
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	248072212
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	307643598
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.5
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	5
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	7
T-100 Sodium Hydroxide Tank Total Volume (gal)	6991.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	18
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1627.5
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1821
AOP Recirc Into T-200 Flow Rate (gpm)	5.6
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	16
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	1

P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No
P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	1
P-400C PI-406 Discharge Pressure (psi)	25
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.15
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	980
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	876
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.25
F-500B PIT-505 Vessel Differential Pressure (psi)	1.619
CF-700A Cartridge Filter Differential Pressure (psi)	2.04
CF-700A Cartridge Filter Influent Pressure (psi)	16
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	0.49
CF-700B Cartridge Filter Influent Pressure (psi)	16
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	7

G-800A GAC Contractor Influent Pressure (psi)	10
G-800A GAC Contractor Effluent Pressure (psi)	2
G-800B GAC Contractor Differential Pressure (psi)	3.5
G-800B GAC Contractor Influent Pressure (psi)	15
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	5
G-800C GAC Contractor Influent Pressure (psi)	15
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	1.5
G-800E GAC Contractor Differential Pressure (psi)	7
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	2
G-800F GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Influent Pressure (psi)	15
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800G GAC Contractor Influent Pressure (psi)	15.5
G-800G GAC Contractor Effluent Pressure (psi)	9.5
G-800H GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Influent Pressure (psi)	9.5
G-800H GAC Contractor Effluent Pressure (psi)	2.5
Discharge Temperature (F)	55
Discharge Pressure (psi)	0

Discharge pH (SU)	7.29
FIT-801 Discharge Flow Rate (gpm)	1817
Discharge Flow Totalizer (gal)	849579520
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1
P-1100 Decant Pump Effluent Pressure (psi)	6.25
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 12, 2024, Daily, Larry Wright

8/13/2024, 5:45:18 PM UTC

CREATED

8/12/2024, 3:41:38 PM UTC
by Larry Wright

UPDATED

8/13/2024, 5:45:18 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 12, 2024
Time	11:41
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:78.8 °F, rH:52%, Clouds: 20%, Wind:8.05mph W-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	248890470
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	250495672
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	310607598
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.7
T-100 Sodium Hydroxide Tank Total Volume (gal)	8802.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	217
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1465.5
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1808
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	24
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.23
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	970
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	884
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.081
F-500B PIT-505 Vessel Differential Pressure (psi)	1.688
CF-700A Cartridge Filter Differential Pressure (psi)	2.77
CF-700B Cartridge Filter Differential Pressure (psi)	1.42

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	6.5
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.3
FIT-801 Discharge Flow Rate (gpm)	1842
Discharge Flow Totalizer (gal)	857401920
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454824
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 13, 2024, Daily, Larry Wright

8/13/2024, 5:46:56 PM UTC

CREATED

8/13/2024, 5:05:34 PM UTC
by Larry Wright

UPDATED

8/13/2024, 5:46:56 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 13, 2024
Time	13:05
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Received delivery of 3500 gallons Hydrogen Peroxide this morning.

Weather

Fetch Weather	
Weather	CLOUDS, T:77.85 °F, rH:54%, Clouds: 20%, Wind:5.99mph W-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	249762200
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	251369012
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	311675148
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.7
T-100 Sodium Hydroxide Tank Total Volume (gal)	5837.7
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4322.4
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1831
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	20
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.17
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	944
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	842
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.156
F-500B PIT-505 Vessel Differential Pressure (psi)	1.469
CF-700A Cartridge Filter Differential Pressure (psi)	2.61
CF-700B Cartridge Filter Differential Pressure (psi)	1.49

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3.5
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	6.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.3
FIT-801 Discharge Flow Rate (gpm)	1818
Discharge Flow Totalizer (gal)	860223808
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 14, 2024, Daily, Larry Wright

8/16/2024, 5:05:44 PM UTC

CREATED

8/14/2024, 5:42:08 PM UTC
by Larry Wright

UPDATED

8/16/2024, 5:05:44 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 14, 2024
Time	13:42
Technician	Larry Wright
Completed By	Larry Wright
General Comments	FIT-801 Effluent flow meter not functioning

Weather

Fetch Weather	
Weather	CLOUDS, T:83.82 °F, rH:50%, Clouds: 20%, Wind:9.22mph NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	FIT-801 Effluent flow meter not functioning

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	250668380
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	252275932
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	312785158
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.7
T-100 Sodium Hydroxide Tank Total Volume (gal)	5486.2
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4250.1
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1812
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	24
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.55
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	947
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	804
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.044
F-500B PIT-505 Vessel Differential Pressure (psi)	1.494
CF-700A Cartridge Filter Differential Pressure (psi)	2.56
CF-700B Cartridge Filter Differential Pressure (psi)	1.62

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.3
FIT-801 Discharge Flow Rate (gpm)	
Discharge Flow Totalizer (gal)	860817984
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 15, 2024, Daily, Larry Wright

8/16/2024, 5:06:03 PM UTC

CREATED

8/15/2024, 4:18:11 PM UTC
by Larry Wright

UPDATED

8/16/2024, 5:06:03 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 15, 2024
Time	12:18
Technician	Larry Wright
Completed By	Larry Wright
General Comments	*FIT-801 flow meter is back in operation.

Weather

Fetch Weather	
Weather	CLEAR, T:82.15 °F, rH:59%, Clouds: 0%, Wind:4.61mph N

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	251367570
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	252976492
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	313641828
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	5254.7
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4208.4
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1808
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	25
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.15
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	962
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	879
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.206
F-500B PIT-505 Vessel Differential Pressure (psi)	1.713
CF-700A Cartridge Filter Differential Pressure (psi)	2.77
CF-700B Cartridge Filter Differential Pressure (psi)	1.87

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.3
FIT-801 Discharge Flow Rate (gpm)	1824
Discharge Flow Totalizer (gal)	861032896
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 16, 2024, Daily, Weekly, Larry Wright

8/16/2024, 5:16:46 PM UTC

CREATED

8/16/2024, 3:46:31 PM UTC
by Larry Wright

UPDATED

8/16/2024, 5:16:46 PM UTC
by Larry Wright

STATUS

QC Complete

General

Date	August 16, 2024
Time	11:46
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:82.42 °F, rH:67%, Clouds: 0%, Wind:4.61mph NE

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	590.5

RW-20 Flow Totalizer (gal)	252167320
RW-21 Flow Rate (gpm)	566.4
RW-21 Flow Totalizer (gal)	253777542
RW-22 Flow Rate (gpm)	726.5
RW-22 Flow Totalizer (gal)	314621518
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.9
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	8
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	6
T-100 Sodium Hydroxide Tank Total Volume (gal)	4974.3
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	18
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4154.1
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1813
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	1
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	16
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	23
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.43
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	965
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	850
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.325
F-500B PIT-505 Vessel Differential Pressure (psi)	1.781
CF-700A Cartridge Filter Differential Pressure (psi)	3.79
CF-700A Cartridge Filter Influent Pressure (psi)	17
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	3.05
CF-700B Cartridge Filter Influent Pressure (psi)	18
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	7
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	2
G-800B GAC Contractor Differential Pressure (psi)	3.5
G-800B GAC Contractor Influent Pressure (psi)	15
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	5
G-800C GAC Contractor Influent Pressure (psi)	15.5
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	2
G-800E GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	2
G-800F GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Influent Pressure (psi)	15
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	8
G-800G GAC Contractor Influent Pressure (psi)	15
G-800G GAC Contractor Effluent Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Influent Pressure (psi)	9
G-800H GAC Contractor Effluent Pressure (psi)	3
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.3
FIT-801 Discharge Flow Rate (gpm)	1915

Discharge Flow Totalizer (gal)	863670976
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0.5
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1
P-1100 Decant Pump Effluent Pressure (psi)	6.25
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 19, 2024, Daily, Larry Wright

8/26/2024, 2:58:05 PM UTC

CREATED

8/19/2024, 5:00:12 PM UTC
by Larry Wright

UPDATED

8/26/2024, 2:58:05 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 19, 2024
Time	13:00
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Ran frack tank with water from drilling through system this morning which spiked cartridge filter pressures. Changed cartridge filters on CF-700A after collection of data in today's report.

Weather

Fetch Weather	
Weather	CLOUDS, T:81.5 °F, rH:75%, Clouds: 85%, Wind:1.99mph SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	584.7
RW-20 Flow Totalizer (gal)	254667690
RW-21 Flow Rate (gpm)	562.3
RW-21 Flow Totalizer (gal)	256282232
RW-22 Flow Rate (gpm)	718.2
RW-22 Flow Totalizer (gal)	317684288
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.1
T-100 Sodium Hydroxide Tank Total Volume (gal)	4099
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3986.4
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1815
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	33
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	34.54
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	960
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	865
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.838
F-500B PIT-505 Vessel Differential Pressure (psi)	2.15
CF-700A Cartridge Filter Differential Pressure (psi)	14.78

CF-700B Cartridge Filter Differential Pressure (psi)	14.45
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	6.5
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.31
FIT-801 Discharge Flow Rate (gpm)	1830
Discharge Flow Totalizer (gal)	872390592
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 20, 2024, Daily, Larry Wright

8/26/2024, 3:06:20 PM UTC

CREATED

8/20/2024, 2:50:46 PM UTC
by Larry Wright

UPDATED

8/26/2024, 3:06:20 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 20, 2024
Time	10:50
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:66.79 °F, rH:68%, Clouds: 100%, Wind:13.8mph N

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	556.5

RW-20 Flow Totalizer (gal)	255413110
RW-21 Flow Rate (gpm)	545.9
RW-21 Flow Totalizer (gal)	257028572
RW-22 Flow Rate (gpm)	757.3
RW-22 Flow Totalizer (gal)	318597708
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.1
T-100 Sodium Hydroxide Tank Total Volume (gal)	3840.2
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3940.8
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1816
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	25.5
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.52
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1010
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	920
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.544
F-500B PIT-505 Vessel Differential Pressure (psi)	2.113
CF-700A Cartridge Filter Differential Pressure (psi)	1.24
CF-700B Cartridge Filter Differential Pressure (psi)	2.95

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.31
FIT-801 Discharge Flow Rate (gpm)	1887
Discharge Flow Totalizer (gal)	8748119776
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 21, 2024, Daily, Larry Wright

8/26/2024, 3:08:02 PM UTC

CREATED

8/21/2024, 4:24:04 PM UTC
by Larry Wright

UPDATED

8/26/2024, 3:08:02 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 21, 2024
Time	12:24
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:69.89 °F, rH:57%, Clouds: 20%, Wind:4mph W-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	588.4

RW-20 Flow Totalizer (gal)	256286740
RW-21 Flow Rate (gpm)	548.1
RW-21 Flow Totalizer (gal)	257902172
RW-22 Flow Rate (gpm)	731.6
RW-22 Flow Totalizer (gal)	319664688
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	3535.3
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3881.4
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1814
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	27
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	999
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	888
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.525
F-500B PIT-505 Vessel Differential Pressure (psi)	1.988
CF-700A Cartridge Filter Differential Pressure (psi)	1.81
CF-700B Cartridge Filter Differential Pressure (psi)	3.41

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	6.5
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.31
FIT-801 Discharge Flow Rate (gpm)	1869
Discharge Flow Totalizer (gal)	877618304
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	454823
P-600 Backwash Pump Totalizer (gal)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 22, 2024, Daily, Larry Wright

8/26/2024, 3:11:12 PM UTC

CREATED

8/22/2024, 4:48:17 PM UTC
by Larry Wright

UPDATED

8/26/2024, 3:11:12 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 22, 2024
Time	12:48
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:74.61 °F, rH:53%, Clouds: 0%, Wind:11.5mph W-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	555.4

RW-20 Flow Totalizer (gal)	257129940
RW-21 Flow Rate (gpm)	563.6
RW-21 Flow Totalizer (gal)	258745202
RW-22 Flow Rate (gpm)	748.8
RW-22 Flow Totalizer (gal)	320695168
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	3241.9
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3829.2
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1807
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	23
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.35
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	968
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	872
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.538
F-500B PIT-505 Vessel Differential Pressure (psi)	1.919
CF-700A Cartridge Filter Differential Pressure (psi)	2.5
CF-700B Cartridge Filter Differential Pressure (psi)	3.79

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3.5
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	6.5
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.32
FIT-801 Discharge Flow Rate (gpm)	1830
Discharge Flow Totalizer (gal)	880339776
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	454823
P-600 Backwash Pump Totalizer (gal)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 23, 2024, Daily, Weekly, Jimmy Leach

8/26/2024, 3:14:57 PM UTC

CREATED

8/23/2024, 5:02:55 PM UTC
by Jimmy Leach

UPDATED

8/26/2024, 3:14:57 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 23, 2024
Time	13:02
Technician	Jimmy Leach
Completed By	Jimmy Leach
General Comments	Received delivery SODIUM HYDROXIDE 3500 gallons today.

Weather

Fetch Weather	
Weather	CLEAR, T:78.22 °F, rH:49%, Clouds: 0%, Wind:9.22mph W-NW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	581.9

RW-20 Flow Totalizer (gal)	257950890
RW-21 Flow Rate (gpm)	566.4
RW-21 Flow Totalizer (gal)	259566362
RW-22 Flow Rate (gpm)	730.3
RW-22 Flow Totalizer (gal)	321699388
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	6
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	8
T-100 Sodium Hydroxide Tank Total Volume (gal)	6517.7
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	16.7
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	0
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3766.8
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1843.87
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-200A Oxidation Feed Pump Influent Pressure (psi)	16
P-200A Oxidation Feed Pump Effluent Pressure (psi)	1
P-200B Oxidation Feed Pump Influent Pressure (psi)	1
P-200B Oxidation Feed Pump Effluent Pressure (psi)	2.5
P-200C Oxidation Feed Pump Influent Pressure (psi)	1
P-200C Oxidation Feed Pump Effluent Pressure (psi)	0
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	26
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25.04
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	997.3
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	894.4
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.606
F-500B PIT-505 Vessel Differential Pressure (psi)	2
CF-700A Cartridge Filter Differential Pressure (psi)	3.42
CF-700A Cartridge Filter Influent Pressure (psi)	18.5
CF-700A Cartridge Filter Effluent Pressure (psi)	17.5
CF-700B Cartridge Filter Differential Pressure (psi)	4.67
CF-700B Cartridge Filter Influent Pressure (psi)	20
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	7
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	2
G-800B GAC Contractor Differential Pressure (psi)	3
G-800B GAC Contractor Influent Pressure (psi)	14
G-800B GAC Contractor Effluent Pressure (psi)	9
G-800C GAC Contractor Differential Pressure (psi)	5
G-800C GAC Contractor Influent Pressure (psi)	15.5
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	2
G-800E GAC Contractor Differential Pressure (psi)	7.4
G-800E GAC Contractor Influent Pressure (psi)	9
G-800E GAC Contractor Effluent Pressure (psi)	1
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800F GAC Contractor Influent Pressure (psi)	14
G-800F GAC Contractor Effluent Pressure (psi)	9
G-800G GAC Contractor Differential Pressure (psi)	8
G-800G GAC Contractor Influent Pressure (psi)	15
G-800G GAC Contractor Effluent Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Influent Pressure (psi)	8
G-800H GAC Contractor Effluent Pressure (psi)	2
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.32
FIT-801 Discharge Flow Rate (gpm)	1831.36

Discharge Flow Totalizer (gal)	883076920
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 26, 2024, Daily, Larry Wright

8/26/2024, 6:35:33 PM UTC

CREATED

8/26/2024, 5:40:29 PM UTC
by Larry Wright

UPDATED

8/26/2024, 6:35:33 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 26, 2024
Time	13:40
Technician	Larry Wright
Completed By	Larry Wright
General Comments	*system had gone down Sunday (8/25/2024) morning due to electrical problems with chillers for AOP. System back up and running with temporary fix until technician can come out to correctly repair chiller.

Weather

Fetch Weather	
Weather	CLOUDS, T:82.67 °F, rH:63%, Clouds: 75%, Wind:4mph S-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	Yes
Describe maintenance items	AOP chillers electrical problems have temporary fix but will require attention through APT.
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	555.1
RW-20 Flow Totalizer (gal)	260233010
RW-21 Flow Rate (gpm)	578.7
RW-21 Flow Totalizer (gal)	261847142
RW-22 Flow Rate (gpm)	740.2
RW-22 Flow Totalizer (gal)	324488778
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	5689.8
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	218
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3603.9
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1826
AOP Recirc Into T-200 Flow Rate (gpm)	5.9
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	31
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	29.89
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	983
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	888
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.94
F-500B PIT-505 Vessel Differential Pressure (psi)	1.975

CF-700A Cartridge Filter Differential Pressure (psi)	8.11
CF-700B Cartridge Filter Differential Pressure (psi)	8.94
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3.5
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.31
FIT-801 Discharge Flow Rate (gpm)	1866
Discharge Flow Totalizer (gal)	890365568
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 27, 2024, Daily, Larry Wright

8/28/2024, 5:15:25 PM UTC

CREATED

8/27/2024, 6:28:20 PM UTC
by Larry Wright

UPDATED

8/28/2024, 5:15:25 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 27, 2024
Time	14:28
Technician	Larry Wright
Completed By	Larry Wright
General Comments	System was shut down from 0923 to 1120 for partial repairs to chiller for AOP. received delivery of liquid oxygen today and driver changed readout on display from percentages to gallons...therefore today's percentage for LOX is a calculated estimate.

Weather

Fetch Weather	
Weather	CLOUDS, T:82.36 °F, rH:64%, Clouds: 20%, Wind:9.22mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	Yes
Describe maintenance items	Technicians working on chiller for AOP...will continue when replacement parts are obtained.
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	569.1
RW-20 Flow Totalizer (gal)	261004950
RW-21 Flow Rate (gpm)	569.7
RW-21 Flow Totalizer (gal)	262595872
RW-22 Flow Rate (gpm)	754.1
RW-22 Flow Totalizer (gal)	325429638
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.9
T-100 Sodium Hydroxide Tank Total Volume (gal)	5414.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3556.5
LOX-300 LOX Storage Tank Pressure (%)	67
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1839
AOP Recirc Into T-200 Flow Rate (gpm)	2.1
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	1
P-400C PI-406 Discharge Pressure (psi)	35
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	33.27
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1003
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	901
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.919
F-500B PIT-505 Vessel Differential Pressure (psi)	2.036

CF-700A Cartridge Filter Differential Pressure (psi)	10.75
CF-700B Cartridge Filter Differential Pressure (psi)	11.41
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	9
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.31
FIT-801 Discharge Flow Rate (gpm)	1856
Discharge Flow Totalizer (gal)	892832384
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 28, 2024, Daily, Larry Wright

8/29/2024, 1:07:23 PM UTC

CREATED

8/28/2024, 5:30:05 PM UTC
by Larry Wright

UPDATED

8/29/2024, 1:07:23 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 28, 2024
Time	13:30
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Cartridge Filter change out today on CF-700B

Weather

Fetch Weather	
Weather	CLEAR, T:87.89 °F, rH:62%, Clouds: 0%, Wind:8.05mph W

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	567.1

RW-20 Flow Totalizer (gal)	261792660
RW-21 Flow Rate (gpm)	581.6
RW-21 Flow Totalizer (gal)	263383592
RW-22 Flow Rate (gpm)	745.8
RW-22 Flow Totalizer (gal)	326392628
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.9
T-100 Sodium Hydroxide Tank Total Volume (gal)	5142.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3496.8
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1812
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	23
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.22
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	953
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	862
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.719
F-500B PIT-505 Vessel Differential Pressure (psi)	2.038
CF-700A Cartridge Filter Differential Pressure (psi)	2.21
CF-700B Cartridge Filter Differential Pressure (psi)	0.58

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3.5
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.31
FIT-801 Discharge Flow Rate (gpm)	1822
Discharge Flow Totalizer (gal)	895378304
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	454823
P-600 Backwash Pump Totalizer (gal)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 29, 2024, Daily, Larry Wright

9/6/2024, 6:50:00 PM UTC

CREATED

8/29/2024, 4:02:38 PM UTC
by Larry Wright

UPDATED

9/6/2024, 6:50:00 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 29, 2024
Time	12:02
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:75.34 °F, rH:70%, Clouds: 100%, Wind:6.91mph E-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	573.2

RW-20 Flow Totalizer (gal)	262561090
RW-21 Flow Rate (gpm)	567.4
RW-21 Flow Totalizer (gal)	264152032
RW-22 Flow Rate (gpm)	746.3
RW-22 Flow Totalizer (gal)	327332038
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13
T-100 Sodium Hydroxide Tank Total Volume (gal)	4869.1
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3443.7
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1822
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	1
P-400C PI-406 Discharge Pressure (psi)	26
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.72
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1010
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	917
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.625
F-500B PIT-505 Vessel Differential Pressure (psi)	2.013
CF-700A Cartridge Filter Differential Pressure (psi)	2.71
CF-700B Cartridge Filter Differential Pressure (psi)	1.11

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3.5
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.32
FIT-801 Discharge Flow Rate (gpm)	1833
Discharge Flow Totalizer (gal)	897861696
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 30, 2024, Daily, Weekly, Monthly, Larry Wright

9/6/2024, 6:50:25 PM UTC

CREATED

8/30/2024, 3:24:39 PM UTC
by Larry Wright

UPDATED

9/6/2024, 6:50:25 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	August 30, 2024
Time	11:24
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:70.86 °F, rH:68%, Clouds: 40%, Wind:10.36mph E-NE

Inspection Type (check all that apply)	Daily, Weekly, Monthly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	573.2

RW-20 Flow Totalizer (gal)	262561090
RW-21 Flow Rate (gpm)	567.4
RW-21 Flow Totalizer (gal)	264152032
RW-22 Flow Rate (gpm)	746.3
RW-22 Flow Totalizer (gal)	327332038
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.1
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	6.5
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	8.5
T-100 Sodium Hydroxide Tank Total Volume (gal)	4603.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	17
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3396.3
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1816
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	16
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	1
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	26
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.71
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	1
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1007
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	909
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.725
F-500B PIT-505 Vessel Differential Pressure (psi)	2.025
CF-700A Cartridge Filter Differential Pressure (psi)	3.24
CF-700A Cartridge Filter Influent Pressure (psi)	19
CF-700A Cartridge Filter Effluent Pressure (psi)	18
CF-700B Cartridge Filter Differential Pressure (psi)	1.72
CF-700B Cartridge Filter Influent Pressure (psi)	19
CF-700B Cartridge Filter Effluent Pressure (psi)	18
G-800A GAC Contractor Differential Pressure (psi)	7
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	2.5
G-800B GAC Contractor Differential Pressure (psi)	3.5
G-800B GAC Contractor Influent Pressure (psi)	15
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	5
G-800C GAC Contractor Influent Pressure (psi)	15
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	2
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	2
G-800F GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Influent Pressure (psi)	15
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	8
G-800G GAC Contractor Influent Pressure (psi)	14.5
G-800G GAC Contractor Effluent Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Influent Pressure (psi)	9
G-800H GAC Contractor Effluent Pressure (psi)	2
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.32
FIT-801 Discharge Flow Rate (gpm)	1809

Discharge Flow Totalizer (gal)	897861696
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Monthly Inspection Form

Remedial Well RW-20

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-20 Inspection Complete	Yes

Remedial Well RW-21

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-21 Inspection Complete	Yes

Remedial Well RW-22

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-22 Inspection Complete	Yes

Building 109 System

Checked process water piping, valves, joints and seals for leakage.	Yes
Action/comment piping	Actuator flange at Horizontal Filter F-500A (V-503) dripping as previously stated.
Checked pneumatic lines for leaks or breaks	Yes
Action/comment for line leaks:	
Inspected valves for proper positioning/seating	Yes
Action/comment for valves	
Checked pumps and pump motors for excessive noise and vibration	Yes
Action/Comment for pumps and motors	
Checked mixers and mixer motors for excessive noise and vibration	Yes

Action/Comment for mixers and motors	
Checked tanks and tank connections/fittings for leaks	Yes
Action/Comment for tank leaks	
Checked solids processing equipment and connection points for leaks	Yes
Action/Comment for equipment leaks	
Checked motor bearing lubrication and lubricate as needed	Yes
Action/Comment for motor lubrication	
Checked control panel indicator lights for alarms	Yes
Action/Comment for alarm	
Monthly B109 Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 3, 2024, Daily, Larry Wright

9/6/2024, 6:50:33 PM UTC

CREATED

9/3/2024, 6:29:35 PM UTC
by Larry Wright

UPDATED

9/6/2024, 6:50:33 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 3, 2024
Time	14:29
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Replaced tube (natural rubber) in Sodium Hydroxide pump P-100A with EPDM synthetic rubber.

Weather

Fetch Weather	
Weather	CLEAR, T:72.27 °F, rH:35%, Clouds: 0%, Wind:5.75mph N-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	585
RW-20 Flow Totalizer (gal)	266749130
RW-21 Flow Rate (gpm)	570.2
RW-21 Flow Totalizer (gal)	268340072
RW-22 Flow Rate (gpm)	732.6
RW-22 Flow Totalizer (gal)	332450288
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.6
T-100 Sodium Hydroxide Tank Total Volume (gal)	3417.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3162.6
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1827
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	29
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	18.1
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	955
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	849
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.888
F-500B PIT-505 Vessel Differential Pressure (psi)	2.056
CF-700A Cartridge Filter Differential Pressure (psi)	7.76

CF-700B Cartridge Filter Differential Pressure (psi)	7.23
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3.5
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	1817
Discharge Flow Totalizer (gal)	91396928
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 4, 2024, Daily, Larry Wright

9/6/2024, 6:50:40 PM UTC

CREATED

9/4/2024, 3:05:40 PM UTC
by Larry Wright

UPDATED

9/6/2024, 6:50:40 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 4, 2024
Time	11:05
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Switched P-100B Sodium Hydroxide pump to lead pump yesterday afternoon after replacing tube in P-100A.

Weather

Fetch Weather	
Weather	CLEAR, T:73.33 °F, rH:51%, Clouds: 0%, Wind:8.05mph NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	585
RW-20 Flow Totalizer (gal)	266749130
RW-21 Flow Rate (gpm)	570.2
RW-21 Flow Totalizer (gal)	268340072
RW-22 Flow Rate (gpm)	732.6
RW-22 Flow Totalizer (gal)	332450288
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	3417.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3162.6
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1818
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	32
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30.72
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	979
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	878
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.019
F-500B PIT-505 Vessel Differential Pressure (psi)	2.175
CF-700A Cartridge Filter Differential Pressure (psi)	9.69

CF-700B Cartridge Filter Differential Pressure (psi)	9.4
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	1842
Discharge Flow Totalizer (gal)	911396928
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 5, 2024, Daily, Larry Wright

9/6/2024, 6:50:55 PM UTC

CREATED

9/5/2024, 5:03:09 PM UTC
by Larry Wright

UPDATED

9/6/2024, 6:50:55 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 5, 2024
Time	13:03
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:74.8 °F, rH:59%, Clouds: 0%, Wind:11.5mph E-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	558.6

RW-20 Flow Totalizer (gal)	268339310
RW-21 Flow Rate (gpm)	559.9
RW-21 Flow Totalizer (gal)	269930372
RW-22 Flow Rate (gpm)	744.5
RW-22 Flow Totalizer (gal)	334393258
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	2871.1
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3060.6
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1812
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	36
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	34
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	989
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	888
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.25
F-500B PIT-505 Vessel Differential Pressure (psi)	2.288
CF-700A Cartridge Filter Differential Pressure (psi)	12.18
CF-700B Cartridge Filter Differential Pressure (psi)	12.04

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	1819
Discharge Flow Totalizer (gal)	916535872
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 6, 2024, Daily, Weekly, Larry Wright

9/6/2024, 6:51:22 PM UTC

CREATED

9/6/2024, 4:57:32 PM UTC
by Larry Wright

UPDATED

9/6/2024, 6:51:22 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 6, 2024
Time	12:57
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Received delivery Sodium Hydroxide 3730 gallons. Changed cartridge filters on CF-700A.

Weather

Fetch Weather	
Weather	CLOUDS, T:74.5 °F, rH:75%, Clouds: 100%, Wind:9.22mph N-NE

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	534.9

RW-20 Flow Totalizer (gal)	269174830
RW-21 Flow Rate (gpm)	574.9
RW-21 Flow Totalizer (gal)	270765862
RW-22 Flow Rate (gpm)	726.7
RW-22 Flow Totalizer (gal)	335413948
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.6
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	6
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	8
T-100 Sodium Hydroxide Tank Total Volume (gal)	6376.8
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	218
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2993.7
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1823
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	2
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	16
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	1
P-400C PI-406 Discharge Pressure (psi)	24
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.27
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	955
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	861
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.144
F-500B PIT-505 Vessel Differential Pressure (psi)	2.238
CF-700A Cartridge Filter Differential Pressure (psi)	0.52
CF-700A Cartridge Filter Influent Pressure (psi)	15
CF-700A Cartridge Filter Effluent Pressure (psi)	17.5
CF-700B Cartridge Filter Differential Pressure (psi)	2.31
CF-700B Cartridge Filter Influent Pressure (psi)	18
CF-700B Cartridge Filter Effluent Pressure (psi)	17
G-800A GAC Contractor Differential Pressure (psi)	7
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	2.5
G-800B GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Influent Pressure (psi)	15.5
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	5
G-800C GAC Contractor Influent Pressure (psi)	15.5
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	2
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	2
G-800F GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Influent Pressure (psi)	15.5
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	8
G-800G GAC Contractor Influent Pressure (psi)	15.5
G-800G GAC Contractor Effluent Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Influent Pressure (psi)	9
G-800H GAC Contractor Effluent Pressure (psi)	2
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	1872

Discharge Flow Totalizer (gal)	919236096
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1.25
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 9, 2024, Daily, Larry Wright

9/10/2024, 9:01:56 PM UTC

CREATED

9/9/2024, 2:32:39 PM UTC
by Larry Wright

UPDATED

9/10/2024, 9:01:56 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 9, 2024
Time	10:32
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:68.76 °F, rH:51%, Clouds: 0%, Wind:8.05mph SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	559.5

RW-20 Flow Totalizer (gal)	271535600
RW-21 Flow Rate (gpm)	573.6
RW-21 Flow Totalizer (gal)	273126712
RW-22 Flow Rate (gpm)	728.6
RW-22 Flow Totalizer (gal)	338297768
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.7
T-100 Sodium Hydroxide Tank Total Volume (gal)	5528.3
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2838.9
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1831
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16.5
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	24
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.47
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	980
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	891
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.075
F-500B PIT-505 Vessel Differential Pressure (psi)	2.15
CF-700A Cartridge Filter Differential Pressure (psi)	1.86
CF-700B Cartridge Filter Differential Pressure (psi)	3.07

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	1847
Discharge Flow Totalizer (gal)	926863104
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 10, 2024, Daily, Larry Wright

9/10/2024, 9:02:22 PM UTC

CREATED

9/10/2024, 4:14:39 PM UTC
by Larry Wright

UPDATED

9/10/2024, 9:02:22 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 10, 2024
Time	12:14
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:72.91 °F, rH:61%, Clouds: 0%, Wind:8.05mph N-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	578.8

RW-20 Flow Totalizer (gal)	272420730
RW-21 Flow Rate (gpm)	555.7
RW-21 Flow Totalizer (gal)	274011852
RW-22 Flow Rate (gpm)	729.5
RW-22 Flow Totalizer (gal)	339379338
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	5205.2
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2772
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1814
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	24
P-400B PI-404 Discharge Pressure (psi)	1
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.95
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	975
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	877
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.975
F-500B PIT-505 Vessel Differential Pressure (psi)	2.144
CF-700A Cartridge Filter Differential Pressure (psi)	2.17
CF-700B Cartridge Filter Differential Pressure (psi)	3.19

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	1824
Discharge Flow Totalizer (gal)	929723584
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	542688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 11, 2024, Daily, Larry Wright

9/12/2024, 7:02:10 PM UTC

CREATED

9/11/2024, 4:20:35 PM UTC
by Larry Wright

UPDATED

9/12/2024, 7:02:10 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 11, 2024
Time	12:20
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:74.68 °F, rH:49%, Clouds: 0%, Wind:3mph NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	561.5

RW-20 Flow Totalizer (gal)	273238800
RW-21 Flow Rate (gpm)	562.7
RW-21 Flow Totalizer (gal)	274829882
RW-22 Flow Rate (gpm)	725.3
RW-22 Flow Totalizer (gal)	340378868
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	4924.2
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2718
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1813
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	26
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25.24
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	995
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	880
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.025
F-500B PIT-505 Vessel Differential Pressure (psi)	2.156
CF-700A Cartridge Filter Differential Pressure (psi)	2.37
CF-700B Cartridge Filter Differential Pressure (psi)	3.33

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3.5
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1861
Discharge Flow Totalizer (gal)	932366976
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 12, 2024, Daily, Larry Wright

9/17/2024, 8:40:55 PM UTC

CREATED

9/12/2024, 6:58:42 PM UTC
by Larry Wright

UPDATED

9/17/2024, 8:40:55 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 12, 2024
Time	14:58
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Hydrogen Peroxide pump P-3600 failed at 0019 (19 minutes past midnight). Switched over to P-3000 pump and system up and running by 0630. Also changed tubing and roller in P-3600 for future changeover.

Weather

Fetch Weather	
Weather	CLEAR, T:76.82 °F, rH:60%, Clouds: 0%, Wind:5.99mph S-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	Yes
Describe maintenance items	Hydrogen Peroxide pump P-3600 needed replacement of failed tube and roller.
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	569.7
RW-20 Flow Totalizer (gal)	273948880
RW-21 Flow Rate (gpm)	565.3
RW-21 Flow Totalizer (gal)	275544913
RW-22 Flow Rate (gpm)	749.5
RW-22 Flow Totalizer (gal)	341252488
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	4666.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	26694
LOX-300 LOX Storage Tank Pressure (%)	75
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1813
AOP Recirc Into T-200 Flow Rate (gpm)	0.5
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	24
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25.04
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	983
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	898
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.794
F-500B PIT-505 Vessel Differential Pressure (psi)	1.925

CF-700A Cartridge Filter Differential Pressure (psi)	3.37
CF-700B Cartridge Filter Differential Pressure (psi)	4.2
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1841
Discharge Flow Totalizer (gal)	934674112
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 13, 2024, Daily, Weekly, Larry Wright

9/17/2024, 8:41:13 PM UTC

CREATED

9/13/2024, 3:59:13 PM UTC
by Larry Wright

UPDATED

9/17/2024, 8:41:13 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 13, 2024
Time	11:59
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:76.42 °F, rH:61%, Clouds: 0%, Wind:3mph W

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	583.2

RW-20 Flow Totalizer (gal)	274672160
RW-21 Flow Rate (gpm)	576.2
RW-21 Flow Totalizer (gal)	276268282
RW-22 Flow Rate (gpm)	744.4
RW-22 Flow Totalizer (gal)	342136118
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.8
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	7
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	9
T-100 Sodium Hydroxide Tank Total Volume (gal)	414.1
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	222
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	18
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	18
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2616
LOX-300 LOX Storage Tank Pressure (%)	75
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1850
AOP Recirc Into T-200 Flow Rate (gpm)	1.4
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	1
P-200A Oxidation Feed Pump Effluent Pressure (psi)	16
P-200B Oxidation Feed Pump Influent Pressure (psi)	2.5
P-200B Oxidation Feed Pump Effluent Pressure (psi)	2
P-200C Oxidation Feed Pump Influent Pressure (psi)	0.5
P-200C Oxidation Feed Pump Effluent Pressure (psi)	1
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	25
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	26.05
P-400A Filter Feed Pump Influent Pressure (psi)	1
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	997
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	887
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.688
F-500B PIT-505 Vessel Differential Pressure (psi)	1.919
CF-700A Cartridge Filter Differential Pressure (psi)	3.51
CF-700A Cartridge Filter Influent Pressure (psi)	18
CF-700A Cartridge Filter Effluent Pressure (psi)	18
CF-700B Cartridge Filter Differential Pressure (psi)	4.39
CF-700B Cartridge Filter Influent Pressure (psi)	21
CF-700B Cartridge Filter Effluent Pressure (psi)	17
G-800A GAC Contractor Differential Pressure (psi)	7
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	2.5
G-800B GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Influent Pressure (psi)	15
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	5
G-800C GAC Contractor Influent Pressure (psi)	15
G-800C GAC Contractor Effluent Pressure (psi)	9.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	9.5
G-800D GAC Contractor Effluent Pressure (psi)	2
G-800E GAC Contractor Differential Pressure (psi)	7
G-800E GAC Contractor Influent Pressure (psi)	9.5
G-800E GAC Contractor Effluent Pressure (psi)	2
G-800F GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Influent Pressure (psi)	15
G-800F GAC Contractor Effluent Pressure (psi)	9.5
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800G GAC Contractor Influent Pressure (psi)	15
G-800G GAC Contractor Effluent Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Influent Pressure (psi)	9
G-800H GAC Contractor Effluent Pressure (psi)	2
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	1869

Discharge Flow Totalizer (gal)	937011776
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 16, 2024, Daily, Larry Wright

9/17/2024, 9:03:56 PM UTC

CREATED

9/16/2024, 3:20:03 PM UTC
by Larry Wright

UPDATED

9/17/2024, 9:03:56 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 16, 2024
Time	11:20
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:71.4 °F, rH:67%, Clouds: 0%, Wind:8.05mph NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	605.3

RW-20 Flow Totalizer (gal)	277109250
RW-21 Flow Rate (gpm)	577.9
RW-21 Flow Totalizer (gal)	278705502
RW-22 Flow Rate (gpm)	753.9
RW-22 Flow Totalizer (gal)	345113848
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13
T-100 Sodium Hydroxide Tank Total Volume (gal)	3570.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2448
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1830
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	26
P-400B PI-404 Discharge Pressure (psi)	1
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	26.94
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	979
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	925
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.019
F-500B PIT-505 Vessel Differential Pressure (psi)	2.125
CF-700A Cartridge Filter Differential Pressure (psi)	4.77
CF-700B Cartridge Filter Differential Pressure (psi)	5.55

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1861
Discharge Flow Totalizer (gal)	944887296
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 17, 2024, Daily, Larry Wright

9/17/2024, 10:25:00 PM UTC

CREATED

9/17/2024, 5:34:25 PM UTC
by Larry Wright

UPDATED

9/17/2024, 10:25:00 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 17, 2024
Time	13:34
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Performed Building 109 Performance Sampling today including RW-20, RW-21, and RW-22 Well House vaults.

Weather

Fetch Weather	
Weather	CLOUDS, T:76.62 °F, rH:70%, Clouds: 40%, Wind:4mph NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	583.4
RW-20 Flow Totalizer (gal)	277997890
RW-21 Flow Rate (gpm)	570.1
RW-21 Flow Totalizer (gal)	279594222
RW-22 Flow Rate (gpm)	741.8
RW-22 Flow Totalizer (gal)	346199228
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13
T-100 Sodium Hydroxide Tank Total Volume (gal)	3256.7
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2381.7
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1812
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	27
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25.79
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	914
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	863
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.919
F-500B PIT-505 Vessel Differential Pressure (psi)	2.056
CF-700A Cartridge Filter Differential Pressure (psi)	5.41

CF-700B Cartridge Filter Differential Pressure (psi)	6.05
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1816
Discharge Flow Totalizer (gal)	947757504
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 18, 2024, Daily, Larry Wright

9/20/2024, 6:32:58 PM UTC

CREATED

9/18/2024, 4:48:27 PM UTC
by Larry Wright

UPDATED

9/20/2024, 6:32:58 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 18, 2024
Time	12:48
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:71.62 °F, rH:78%, Clouds: 0%, Wind:8.05mph NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	573.1

RW-20 Flow Totalizer (gal)	278792010
RW-21 Flow Rate (gpm)	570.9
RW-21 Flow Totalizer (gal)	280388402
RW-22 Flow Rate (gpm)	736.8
RW-22 Flow Totalizer (gal)	347169208
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	
T-100 Sodium Hydroxide Tank Total Volume (gal)	2981.4
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2328.6
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1814
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	30
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	20.67
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	966
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	892
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.125
F-500B PIT-505 Vessel Differential Pressure (psi)	2.231
CF-700A Cartridge Filter Differential Pressure (psi)	6.79
CF-700B Cartridge Filter Differential Pressure (psi)	7.42

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1862
Discharge Flow Totalizer (gal)	950319296
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 19, 2024, Daily, Larry Wright

9/20/2024, 6:35:48 PM UTC

CREATED

9/19/2024, 9:58:33 AM UTC
by Larry Wright

UPDATED

9/20/2024, 6:35:48 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 19, 2024
Time	05:58
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Replaced Carbon in Lead GAC vessels today shutting down facility during duration. System planned shutdown at 0850 and resumed full operation at 1630 after carbon replacement and adjustments.

Weather

Fetch Weather	
Weather	CLOUDS, T:66.7 °F, rH:85%, Clouds: 100%, Wind:5.75mph N

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	552
RW-20 Flow Totalizer (gal)	279378890
RW-21 Flow Rate (gpm)	556.4
RW-21 Flow Totalizer (gal)	280975302
RW-22 Flow Rate (gpm)	732.8
RW-22 Flow Totalizer (gal)	347886028
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.1
T-100 Sodium Hydroxide Tank Total Volume (gal)	2778.9
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2287.8
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1817
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	29
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	29.52
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	964
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	899
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.15
F-500B PIT-505 Vessel Differential Pressure (psi)	2.3
CF-700A Cartridge Filter Differential Pressure (psi)	7.34

CF-700B Cartridge Filter Differential Pressure (psi)	7.9
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.36
FIT-801 Discharge Flow Rate (gpm)	1842
Discharge Flow Totalizer (gal)	952215872
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 20, 2024, Daily, Weekly, Larry Wright

9/25/2024, 12:22:55 PM UTC

CREATED

9/20/2024, 5:05:19 PM UTC
by Larry Wright

UPDATED

9/25/2024, 12:22:55 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 20, 2024
Time	13:05
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Changed cartridge filters on CF-700B. Received delivery sodium hydroxide, around 3738 gallons.

Weather

Fetch Weather	
Weather	CLOUDS, T:77.04 °F, rH:64%, Clouds: 20%, Wind:16.11mph N

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	567.5
RW-20 Flow Totalizer (gal)	280199090
RW-21 Flow Rate (gpm)	577.2
RW-21 Flow Totalizer (gal)	281775152
RW-22 Flow Rate (gpm)	741.6
RW-22 Flow Totalizer (gal)	348888168
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.7
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	5
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	7
T-100 Sodium Hydroxide Tank Total Volume (gal)	6299.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	16
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	18
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2228.4
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1812
AOP Recirc Into T-200 Flow Rate (gpm)	1.3
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	16
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	1

P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No
P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	26
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25.12
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	1
P-400C Filter Feed Pump Influent Pressure (psi)	1
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	951
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	947
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.619
F-500B PIT-505 Vessel Differential Pressure (psi)	1.869
CF-700A Cartridge Filter Differential Pressure (psi)	4.11
CF-700A Cartridge Filter Influent Pressure (psi)	20
CF-700A Cartridge Filter Effluent Pressure (psi)	18
CF-700B Cartridge Filter Differential Pressure (psi)	2.61
CF-700B Cartridge Filter Influent Pressure (psi)	20
CF-700B Cartridge Filter Effluent Pressure (psi)	18
G-800A GAC Contractor Differential Pressure (psi)	6

G-800A GAC Contractor Influent Pressure (psi)	16
G-800A GAC Contractor Effluent Pressure (psi)	9
G-800B GAC Contractor Differential Pressure (psi)	6
G-800B GAC Contractor Influent Pressure (psi)	9
G-800B GAC Contractor Effluent Pressure (psi)	1
G-800C GAC Contractor Differential Pressure (psi)	8
G-800C GAC Contractor Influent Pressure (psi)	10
G-800C GAC Contractor Effluent Pressure (psi)	1
G-800D GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Influent Pressure (psi)	15.5
G-800D GAC Contractor Effluent Pressure (psi)	10
G-800E GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Influent Pressure (psi)	15.5
G-800E GAC Contractor Effluent Pressure (psi)	10
G-800F GAC Contractor Differential Pressure (psi)	6
G-800F GAC Contractor Influent Pressure (psi)	10
G-800F GAC Contractor Effluent Pressure (psi)	2
G-800G GAC Contractor Differential Pressure (psi)	8
G-800G GAC Contractor Influent Pressure (psi)	9
G-800G GAC Contractor Effluent Pressure (psi)	2.5
G-800H GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Influent Pressure (psi)	15.5
G-800H GAC Contractor Effluent Pressure (psi)	9
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0

Discharge pH (SU)	9.45
FIT-801 Discharge Flow Rate (gpm)	1864
Discharge Flow Totalizer (gal)	954837376
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.25
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1
P-1100 Decant Pump Effluent Pressure (psi)	6.25
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 23, 2024, Daily, Larry Wright

9/25/2024, 12:23:04 PM UTC

CREATED

9/23/2024, 4:20:31 PM UTC
by Larry Wright

UPDATED

9/25/2024, 12:23:04 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 23, 2024
Time	12:20
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:66.78 °F, rH:64%, Clouds: 20%, Wind:10.36mph NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	573.3

RW-20 Flow Totalizer (gal)	282635870
RW-21 Flow Rate (gpm)	577.7
RW-21 Flow Totalizer (gal)	284212072
RW-22 Flow Rate (gpm)	747.3
RW-22 Flow Totalizer (gal)	351865588
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	5450.3
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2055
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1815
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	28
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	26.75
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	946
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	898
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.525
F-500B PIT-505 Vessel Differential Pressure (psi)	1.638
CF-700A Cartridge Filter Differential Pressure (psi)	5.89
CF-700B Cartridge Filter Differential Pressure (psi)	4.89

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	7
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	6.5
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.39
FIT-801 Discharge Flow Rate (gpm)	1781
Discharge Flow Totalizer (gal)	962723392
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 24, 2024, Daily, Larry Wright

9/25/2024, 12:33:48 PM UTC

CREATED

9/24/2024, 4:55:56 PM UTC
by Larry Wright

UPDATED

9/25/2024, 12:33:48 PM UTC
by Larry Wright

STATUS

QC Complete

General

Date	September 24, 2024
Time	12:55
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Pump/motor alignment taking place today as well as tomorrow for #400 pumps and #200 pumps. *System went down yesterday afternoon (9/23/2024) @ 1534 due to obstruction in glycol reservoir tank for cooling ozone generators. Removed obstruction and resumed operation @ 1605 with no further complications.

Weather

Fetch Weather	
Weather	CLOUDS, T:65.8 °F, rH:67%, Clouds: 75%, Wind:9.22mph E-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	563.2
RW-20 Flow Totalizer (gal)	283440530
RW-21 Flow Rate (gpm)	563.5
RW-21 Flow Totalizer (gal)	285009612
RW-22 Flow Rate (gpm)	744.3
RW-22 Flow Totalizer (gal)	352848368
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	5171.1
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2001
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1810
AOP Recirc Into T-200 Flow Rate (gpm)	5.3
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	30
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	28.67
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	942
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	874
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.494
F-500B PIT-505 Vessel Differential Pressure (psi)	1.75

CF-700A Cartridge Filter Differential Pressure (psi)	7.34
CF-700B Cartridge Filter Differential Pressure (psi)	6.48
G-800A GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	7
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	6.5
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.38
FIT-801 Discharge Flow Rate (gpm)	1821
Discharge Flow Totalizer (gal)	965324584
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 25, 2024, Daily, Larry Wright

9/27/2024, 11:43:48 AM UTC

CREATED

9/25/2024, 8:43:46 PM UTC
by Larry Wright

UPDATED

9/27/2024, 11:43:48 AM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 25, 2024
Time	16:43
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Continued working on pump/motor alignment through today 9/25/2024. System experienced temporary shutdown while manipulating P-400 pump motors for alignment/testing (approximately 10 minutes).

Weather

Fetch Weather	
Weather	CLOUDS, T:65.12 °F, rH:77%, Clouds: 100%, Wind:13.8mph E

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	565.9
RW-20 Flow Totalizer (gal)	284387560
RW-21 Flow Rate (gpm)	574.5
RW-21 Flow Totalizer (gal)	285961502
RW-22 Flow Rate (gpm)	731.7
RW-22 Flow Totalizer (gal)	354011668
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.9
T-100 Sodium Hydroxide Tank Total Volume (gal)	4834.4
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1935
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1810
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	30
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	28.57
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	913
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	874
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.075
F-500B PIT-505 Vessel Differential Pressure (psi)	1.731
CF-700A Cartridge Filter Differential Pressure (psi)	9.39

CF-700B Cartridge Filter Differential Pressure (psi)	8.87
G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	5.5
G-800C GAC Contractor Differential Pressure (psi)	7
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.38
FIT-801 Discharge Flow Rate (gpm)	1819
Discharge Flow Totalizer (gal)	968399616
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 26, 2024, Daily, Larry Wright

9/27/2024, 11:46:51 AM UTC

CREATED

9/26/2024, 10:31:54 AM UTC
by Larry Wright

UPDATED

9/27/2024, 11:46:51 AM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 26, 2024
Time	06:31
Technician	Larry Wright
Completed By	Larry Wright
General Comments	System planned shutdown occurred today (9/26/2024) for maintenance performed on compressors.System shut down at 0806 while work on pvc T at glycol supply line from/at chiller replaced for leakage and system remained down while D&D ELECTRIC performed maintenance on compressors until finished (1330). System restarted at 1350.

Weather

Fetch Weather	
Weather	CLOUDS, T:65.16 °F, rH:92%, Clouds: 100%, Wind:6.91mph E

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	572.8
RW-20 Flow Totalizer (gal)	284860070
RW-21 Flow Rate (gpm)	559.8
RW-21 Flow Totalizer (gal)	286434112
RW-22 Flow Rate (gpm)	752.2
RW-22 Flow Totalizer (gal)	354588828
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.9
T-100 Sodium Hydroxide Tank Total Volume (gal)	4680.2
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1899.3
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1808
AOP Recirc Into T-200 Flow Rate (gpm)	1.6
P-200A/B/C Discharge Pressure (psi)	16.5
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	34
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	32.87
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	952
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	910
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.294
F-500B PIT-505 Vessel Differential Pressure (psi)	1.988

CF-700A Cartridge Filter Differential Pressure (psi)	11.18
CF-700B Cartridge Filter Differential Pressure (psi)	10.77
G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	7
G-800C GAC Contractor Differential Pressure (psi)	7
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	8.5
G-800H GAC Contractor Differential Pressure (psi)	6.5
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.38
FIT-801 Discharge Flow Rate (gpm)	1870
Discharge Flow Totalizer (gal)	969923520
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 27, 2024, Daily, Weekly, Larry Wright

9/30/2024, 4:39:43 PM UTC

CREATED

9/27/2024, 2:28:27 PM UTC
by Larry Wright

UPDATED

9/30/2024, 4:39:43 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 27, 2024
Time	10:28
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:67.8 °F, rH:84%, Clouds: 100%, Wind:5.75mph NE

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	587.7

RW-20 Flow Totalizer (gal)	285613250
RW-21 Flow Rate (gpm)	579.4
RW-21 Flow Totalizer (gal)	287186242
RW-22 Flow Rate (gpm)	735.2
RW-22 Flow Totalizer (gal)	355509408
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.9
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	6
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	9
T-100 Sodium Hydroxide Tank Total Volume (gal)	4407.2
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	17
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	18
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1845
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1812
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16.5
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	1
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	16.5
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16.5
P-400A PI-402 Discharge Pressure (psi)	31
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	32.05
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	959
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	913
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.075
F-500B PIT-505 Vessel Differential Pressure (psi)	2.044
CF-700A Cartridge Filter Differential Pressure (psi)	12.35
CF-700A Cartridge Filter Influent Pressure (psi)	27
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	12.32
CF-700B Cartridge Filter Influent Pressure (psi)	28
CF-700B Cartridge Filter Effluent Pressure (psi)	17
G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800A GAC Contractor Influent Pressure (psi)	15

G-800A GAC Contractor Effluent Pressure (psi)	11
G-800B GAC Contractor Differential Pressure (psi)	6
G-800B GAC Contractor Influent Pressure (psi)	11
G-800B GAC Contractor Effluent Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	7
G-800C GAC Contractor Influent Pressure (psi)	10
G-800C GAC Contractor Effluent Pressure (psi)	2.5
G-800D GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Influent Pressure (psi)	15
G-800D GAC Contractor Effluent Pressure (psi)	10
G-800E GAC Contractor Differential Pressure (psi)	4
G-800E GAC Contractor Influent Pressure (psi)	14.5
G-800E GAC Contractor Effluent Pressure (psi)	10
G-800F GAC Contractor Differential Pressure (psi)	6
G-800F GAC Contractor Influent Pressure (psi)	10
G-800F GAC Contractor Effluent Pressure (psi)	2
G-800G GAC Contractor Differential Pressure (psi)	8.5
G-800G GAC Contractor Influent Pressure (psi)	8.5
G-800G GAC Contractor Effluent Pressure (psi)	1.5
G-800H GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Influent Pressure (psi)	14
G-800H GAC Contractor Effluent Pressure (psi)	8.5
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.38
FIT-801 Discharge Flow Rate (gpm)	1861

Discharge Flow Totalizer (gal)	972369168
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1
P-1100 Decant Pump Effluent Pressure (psi)	6.25
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 30, 2024, Daily, Monthly, Larry Wright

9/30/2024, 6:15:10 PM UTC

CREATED

9/30/2024, 4:04:45 PM UTC
by Larry Wright

UPDATED

9/30/2024, 6:15:10 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	September 30, 2024
Time	12:04
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Received delivery of 2980.34 gallons hydrogen peroxide this morning (9/30/2024). Switched caustic pump P-100B from lead and put P-100A into lead position due to indicators of tube wear on P-100B which will necessitate tube replacement.

Weather

Fetch Weather	
Weather	CLOUDS, T:67.55 °F, rH:78%, Clouds: 100%, Wind:8.05mph N-NE

Inspection Type (check all that apply)	Daily, Monthly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	574.9
RW-20 Flow Totalizer (gal)	288131910
RW-21 Flow Rate (gpm)	581.7
RW-21 Flow Totalizer (gal)	289705422
RW-22 Flow Rate (gpm)	719.1
RW-22 Flow Totalizer (gal)	358586818
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	3549.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4185.9
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1822
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	22
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.32
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	974
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	923
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.031
F-500B PIT-505 Vessel Differential Pressure (psi)	2.075
CF-700A Cartridge Filter Differential Pressure (psi)	1.11

CF-700B Cartridge Filter Differential Pressure (psi)	2.47
G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	5.5
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	4.5
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.38
FIT-801 Discharge Flow Rate (gpm)	1860
Discharge Flow Totalizer (gal)	980502080
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Monthly Inspection Form

Remedial Well RW-20

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes

Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-20 Inspection Complete	Yes

Remedial Well RW-21

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-21 Inspection Complete	Yes

Remedial Well RW-22

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-22 Inspection Complete	Yes

Building 109 System

Checked process water piping, valves, joints and seals for leakage.	Yes
Action/comment piping	Drip continues at actuator flange of Horizontal Filter F-500A.
Checked pneumatic lines for leaks or breaks	Yes

Action/comment for line leaks:	
Inspected valves for proper positioning/seating	Yes
Action/comment for valves	
Checked pumps and pump motors for excessive noise and vibration	Yes
Action/Comment for pumps and motors	
Checked mixers and mixer motors for excessive noise and vibration	Yes
Action/Comment for mixers and motors	
Checked tanks and tank connections/fittings for leaks	Yes
Action/Comment for tank leaks	
Checked solids processing equipment and connection points for leaks	Yes
Action/Comment for equipment leaks	
Checked motor bearing lubrication and lubricate as needed	Yes
Action/Comment for motor lubrication	
Checked control panel indicator lights for alarms	Yes
Action/Comment for alarm	
Monthly B109 Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 1, 2024, Daily, Larry Wright

10/3/2024, 5:22:27 PM UTC

CREATED

10/1/2024, 4:43:37 PM UTC
by Larry Wright

UPDATED

10/3/2024, 5:22:27 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 1, 2024
Time	12:43
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Changed peristaltic tube in Sodium Hydroxide pump P-100B due to accumulation of corrupted lubricant (lubricant had turned black and overflowed from pump lubricant fill tube).

Weather

Fetch Weather	
Weather	CLOUDS, T:66.7 °F, rH:76%, Clouds: 100%, Wind:8.05mph E-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	568.6
RW-20 Flow Totalizer (gal)	288963990
RW-21 Flow Rate (gpm)	578.9
RW-21 Flow Totalizer (gal)	290537642
RW-22 Flow Rate (gpm)	749.2
RW-22 Flow Totalizer (gal)	359603358
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.9
T-100 Sodium Hydroxide Tank Total Volume (gal)	3363.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4120.2
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1823
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	24
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.65
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	932
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	845
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.9
F-500B PIT-505 Vessel Differential Pressure (psi)	1.925
CF-700A Cartridge Filter Differential Pressure (psi)	1.14

CF-700B Cartridge Filter Differential Pressure (psi)	2.23
G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	5.5
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.38
FIT-801 Discharge Flow Rate (gpm)	1825
Discharge Flow Totalizer (gal)	983195200
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 2, 2024, Daily, Larry Wright

10/3/2024, 5:25:46 PM UTC

CREATED

10/2/2024, 4:18:05 PM UTC
by Larry Wright

UPDATED

10/3/2024, 5:25:46 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 2, 2024
Time	12:18
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:65.8 °F, rH:69%, Clouds: 75%, Wind:4.61mph N

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	562.7

RW-20 Flow Totalizer (gal)	389779430
RW-21 Flow Rate (gpm)	569
RW-21 Flow Totalizer (gal)	291353212
RW-22 Flow Rate (gpm)	750.3
RW-22 Flow Totalizer (gal)	360599418
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	2980.8
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4060.2
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1836
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	24
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.25
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	917
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	843
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.894
F-500B PIT-505 Vessel Differential Pressure (psi)	1.938
CF-700A Cartridge Filter Differential Pressure (psi)	1.34
CF-700B Cartridge Filter Differential Pressure (psi)	2.44

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	5.5
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	10
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.37
FIT-801 Discharge Flow Rate (gpm)	1799
Discharge Flow Totalizer (gal)	985834368
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 3, 2024, Daily, Larry Wright

10/3/2024, 5:31:53 PM UTC

CREATED

10/3/2024, 4:07:21 PM UTC
by Larry Wright

UPDATED

10/3/2024, 5:31:53 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 3, 2024
Time	12:07
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Received 3738 gallon delivery of Sodium Hydroxide today (10-3-2024}

Weather

Fetch Weather	
Weather	CLOUDS, T:69.51 °F, rH:63%, Clouds: 100%, Wind:6.91mph SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570.3

RW-20 Flow Totalizer (gal)	290596180
RW-21 Flow Rate (gpm)	592.6
RW-21 Flow Totalizer (gal)	292170092
RW-22 Flow Rate (gpm)	736.1
RW-22 Flow Totalizer (gal)	361597038
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13
T-100 Sodium Hydroxide Tank Total Volume (gal)	6531.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	22
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4000.2
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1817
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	22
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.57
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	965
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	892
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.069
F-500B PIT-505 Vessel Differential Pressure (psi)	2.15
CF-700A Cartridge Filter Differential Pressure (psi)	1.61
CF-700B Cartridge Filter Differential Pressure (psi)	2.67

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	10
G-800H GAC Contractor Differential Pressure (psi)	5.5
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.37
FIT-801 Discharge Flow Rate (gpm)	1823
Discharge Flow Totalizer (gal)	988476096
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 4, 2024, Daily, Weekly, Larry Wright

10/16/2024, 6:29:19 PM UTC

CREATED

10/4/2024, 6:18:24 PM UTC
by Larry Wright

UPDATED

10/16/2024, 6:29:19 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 4, 2024
Time	14:18
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:72.25 °F, rH:71%, Clouds: 40%, Wind:5.99mph S-SE

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	558.4

RW-20 Flow Totalizer (gal)	291488060
RW-21 Flow Rate (gpm)	565.9
RW-21 Flow Totalizer (gal)	293062092
RW-22 Flow Rate (gpm)	731
RW-22 Flow Totalizer (gal)	362686278
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	13.5
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	6
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	3
T-100 Sodium Hydroxide Tank Total Volume (gal)	6208.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	218
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	17
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	18
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3934.2
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1832
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	16
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	1
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	25
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.91
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	1
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	948
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	849
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.994
F-500B PIT-505 Vessel Differential Pressure (psi)	2.025
CF-700A Cartridge Filter Differential Pressure (psi)	1.77
CF-700A Cartridge Filter Influent Pressure (psi)	17
CF-700A Cartridge Filter Effluent Pressure (psi)	18
CF-700B Cartridge Filter Differential Pressure (psi)	2.92
CF-700B Cartridge Filter Influent Pressure (psi)	19
CF-700B Cartridge Filter Effluent Pressure (psi)	17
G-800A GAC Contractor Differential Pressure (psi)	5
G-800A GAC Contractor Influent Pressure (psi)	16

G-800A GAC Contractor Effluent Pressure (psi)	10
G-800B GAC Contractor Differential Pressure (psi)	6
G-800B GAC Contractor Influent Pressure (psi)	10
G-800B GAC Contractor Effluent Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	8
G-800C GAC Contractor Influent Pressure (psi)	10.5
G-800C GAC Contractor Effluent Pressure (psi)	2
G-800D GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Influent Pressure (psi)	16
G-800D GAC Contractor Effluent Pressure (psi)	10.5
G-800E GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Influent Pressure (psi)	15.5
G-800E GAC Contractor Effluent Pressure (psi)	11
G-800F GAC Contractor Differential Pressure (psi)	6
G-800F GAC Contractor Influent Pressure (psi)	10.5
G-800F GAC Contractor Effluent Pressure (psi)	11
G-800G GAC Contractor Differential Pressure (psi)	9.5
G-800G GAC Contractor Influent Pressure (psi)	10
G-800G GAC Contractor Effluent Pressure (psi)	2
G-800H GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Influent Pressure (psi)	15
G-800H GAC Contractor Effluent Pressure (psi)	10
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.37
FIT-801 Discharge Flow Rate (gpm)	1834

Discharge Flow Totalizer (gal)	991360576
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1
P-1100 Decant Pump Effluent Pressure (psi)	5.5
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 7, 2024, Daily, Larry Wright

10/16/2024, 6:28:39 PM UTC

CREATED

10/7/2024, 3:31:34 PM UTC
by Larry Wright

UPDATED

10/16/2024, 6:28:39 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 7, 2024
Time	11:31
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:65.37 °F, rH:90%, Clouds: 100%, Wind:10.36mph SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	571.7

RW-20 Flow Totalizer (gal)	293855730
RW-21 Flow Rate (gpm)	573.4
RW-21 Flow Totalizer (gal)	295429662
RW-22 Flow Rate (gpm)	744.2
RW-22 Flow Totalizer (gal)	365577968
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.3
T-100 Sodium Hydroxide Tank Total Volume (gal)	5401.4
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	217
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3761.4
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1834
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	26
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.15
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	944
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	864
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.169
F-500B PIT-505 Vessel Differential Pressure (psi)	2.175
CF-700A Cartridge Filter Differential Pressure (psi)	2.67
CF-700B Cartridge Filter Differential Pressure (psi)	3.49

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	10
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.37
FIT-801 Discharge Flow Rate (gpm)	1822
Discharge Flow Totalizer (gal)	999019584
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 8, 2024, Daily, Larry Wright

10/16/2024, 6:33:58 PM UTC

CREATED

10/8/2024, 3:16:28 PM UTC
by Larry Wright

UPDATED

10/16/2024, 6:33:58 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 8, 2024
Time	11:16
Technician	Larry Wright
Completed By	Larry Wright
General Comments	*Totalizer FIT-801 has surpassed one billion and the display cannot translate numbers above that range, therefore the total FIT-801 in this report is an estimate based on the sum of the three well totals at this time with the addition of 44156224 gallons (based upon the previous day's three well totals subtracted from the FIT-801 reading).

Weather

Fetch Weather	
Weather	CLEAR, T:63.27 °F, rH:51%, Clouds: 0%, Wind:8.05mph NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	560.2
RW-20 Flow Totalizer (gal)	294670010
RW-21 Flow Rate (gpm)	563.8
RW-21 Flow Totalizer (gal)	296243901
RW-22 Flow Rate (gpm)	749.9
RW-22 Flow Totalizer (gal)	366572148
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	5129
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3702
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1823
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	1
P-400C PI-406 Discharge Pressure (psi)	27
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25.87
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	990
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	918
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.338
F-500B PIT-505 Vessel Differential Pressure (psi)	2.419

CF-700A Cartridge Filter Differential Pressure (psi)	3.18
CF-700B Cartridge Filter Differential Pressure (psi)	3.89
G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.37
FIT-801 Discharge Flow Rate (gpm)	1875
Discharge Flow Totalizer (gal)	1001642283
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 9, 2024, Daily, Larry Wright

10/16/2024, 6:38:11 PM UTC

CREATED

10/9/2024, 5:07:38 PM UTC
by Larry Wright

UPDATED

10/16/2024, 6:38:11 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 9, 2024
Time	13:07
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Switched hydrogen peroxide pump from P-3600 ((making squeaking noise) over to P-3610.

Weather

Fetch Weather	
Weather	CLEAR, T:66.56 °F, rH:47%, Clouds: 0%, Wind:5.99mph SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	599.1

RW-20 Flow Totalizer (gal)	295553470
RW-21 Flow Rate (gpm)	586.6
RW-21 Flow Totalizer (gal)	297127362
RW-22 Flow Rate (gpm)	737.5
RW-22 Flow Totalizer (gal)	367650908
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.3
T-100 Sodium Hydroxide Tank Total Volume (gal)	4820.3
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3636.3
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1819
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	26
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	27.16
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1011
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	902
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	3.438
F-500B PIT-505 Vessel Differential Pressure (psi)	2.375
CF-700A Cartridge Filter Differential Pressure (psi)	3.85
CF-700B Cartridge Filter Differential Pressure (psi)	4.49

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.36
FIT-801 Discharge Flow Rate (gpm)	1845
Discharge Flow Totalizer (gal)	1004502208
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 10, 2024, Daily, Larry Wright

10/16/2024, 6:39:59 PM UTC

CREATED

10/10/2024, 5:09:48 PM UTC
by Larry Wright

UPDATED

10/16/2024, 6:39:59 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 10, 2024
Time	13:09
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:59 °F, rH:50%, Clouds: 20%, Wind:6.91mph N

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570.6

RW-20 Flow Totalizer (gal)	296374240
RW-21 Flow Rate (gpm)	579.7
RW-21 Flow Totalizer (gal)	297948122
RW-22 Flow Rate (gpm)	739
RW-22 Flow Totalizer (gal)	368653068
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	4545.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3577.2
LOX-300 LOX Storage Tank Pressure (%)	30
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1819
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	28
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	26.92
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1000
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	903
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.369
F-500B PIT-505 Vessel Differential Pressure (psi)	2.444
CF-700A Cartridge Filter Differential Pressure (psi)	4.6
CF-700B Cartridge Filter Differential Pressure (psi)	5.22

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.36
FIT-801 Discharge Flow Rate (gpm)	1874
Discharge Flow Totalizer (gal)	1007148032
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 11, 2024, Daily, Weekly, Larry Wright

10/16/2024, 6:43:33 PM UTC

CREATED

10/11/2024, 3:17:37 PM UTC
by Larry Wright

UPDATED

10/16/2024, 6:43:33 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 11, 2024
Time	11:17
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:59.4 °F, rH:57%, Clouds: 0%, Wind:5.75mph N

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	577.5

RW-20 Flow Totalizer (gal)	820520
RW-21 Flow Rate (gpm)	568.3
RW-21 Flow Totalizer (gal)	820540
RW-22 Flow Rate (gpm)	733
RW-22 Flow Totalizer (gal)	1001710
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.6
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	7
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	10
T-100 Sodium Hydroxide Tank Total Volume (gal)	4302
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	17
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3517.8
LOX-300 LOX Storage Tank Pressure (%)	30
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1826
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	16
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	1
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	27
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25.37
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	934
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	840
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.281
F-500B PIT-505 Vessel Differential Pressure (psi)	2.288
CF-700A Cartridge Filter Differential Pressure (psi)	4.9
CF-700A Cartridge Filter Influent Pressure (psi)	18.5
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	5.37
CF-700B Cartridge Filter Influent Pressure (psi)	20
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800A GAC Contractor Influent Pressure (psi)	15

G-800A GAC Contractor Effluent Pressure (psi)	9.5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800B GAC Contractor Influent Pressure (psi)	9.5
G-800B GAC Contractor Effluent Pressure (psi)	2.5
G-800C GAC Contractor Differential Pressure (psi)	8
G-800C GAC Contractor Influent Pressure (psi)	10
G-800C GAC Contractor Effluent Pressure (psi)	1.5
G-800D GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Influent Pressure (psi)	15
G-800D GAC Contractor Effluent Pressure (psi)	10
G-800E GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Influent Pressure (psi)	15
G-800E GAC Contractor Effluent Pressure (psi)	10
G-800F GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Influent Pressure (psi)	10
G-800F GAC Contractor Effluent Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	9
G-800G GAC Contractor Influent Pressure (psi)	10
G-800G GAC Contractor Effluent Pressure (psi)	2
G-800H GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Influent Pressure (psi)	11
G-800H GAC Contractor Effluent Pressure (psi)	10
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.36
FIT-801 Discharge Flow Rate (gpm)	1787

Discharge Flow Totalizer (gal)	1009580928
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 14, 2024, Daily, Larry Wright

10/16/2024, 6:44:14 PM UTC

CREATED

10/14/2024, 1:08:28 PM UTC
by Larry Wright

UPDATED

10/16/2024, 6:44:14 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 14, 2024
Time	09:08
Technician	Larry Wright
Completed By	Larry Wright
General Comments	System shut down for HVAC work on chiller unit. System shut down @ 1100 for HVAC work and remained down overnight due to glycol leak detected after HVAC work (system restarted @ 1950 (7:50 pm) and shutdown @ 2048 (8:48 pm) until following day when glycol leak at chiller unit can be remedied.

Weather

Fetch Weather	
Weather	CLOUDS, T:53.8 °F, rH:93%, Clouds: 100%, Wind:3.44mph E

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	577.5
RW-20 Flow Totalizer (gal)	297129990
RW-21 Flow Rate (gpm)	568.3
RW-21 Flow Totalizer (gal)	298703872
RW-22 Flow Rate (gpm)	733
RW-22 Flow Totalizer (gal)	369575818
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.9
T-100 Sodium Hydroxide Tank Total Volume (gal)	3485.9
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3342.9
LOX-300 LOX Storage Tank Pressure (%)	25
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1825
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	30
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	28.22
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	954
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	855
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.563
F-500B PIT-505 Vessel Differential Pressure (psi)	2.519

CF-700A Cartridge Filter Differential Pressure (psi)	7.49
CF-700B Cartridge Filter Differential Pressure (psi)	7.81
G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.36
FIT-801 Discharge Flow Rate (gpm)	1813
Discharge Flow Totalizer (gal)	1009580928
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 15, 2024, Daily, Larry Wright

11/22/2024, 6:54:47 PM UTC

CREATED

10/15/2024, 9:17:13 PM UTC
by Larry Wright

UPDATED

11/22/2024, 6:54:47 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 15, 2024
Time	17:17
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Drip at chiller after servicing with new pump/ motor compressor. Will be addressed with replacement parts as made available. * System had been down from 1100 on 10/14 until 1535 on 10/15 due to work on chiller unit.

Weather

Fetch Weather	
Weather	CLOUDS, T:56.32 °F, rH:44%, Clouds: 20%, Wind:9.22mph NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	Yes
Describe maintenance items	Drip at chiller after servicing with new pump/ motor compressor. Will be addressed with replacement parts as made available.
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	572.7
RW-20 Flow Totalizer (gal)	299647250
RW-21 Flow Rate (gpm)	560.6
RW-21 Flow Totalizer (gal)	301201762
RW-22 Flow Rate (gpm)	728
RW-22 Flow Totalizer (gal)	372623718
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	16.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	3444.4
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3331.5
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1820
AOP Recirc Into T-200 Flow Rate (gpm)	2.4
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	31
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30.51
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	939
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	931
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.119
F-500B PIT-505 Vessel Differential Pressure (psi)	1.963

CF-700A Cartridge Filter Differential Pressure (psi)	10.07
CF-700B Cartridge Filter Differential Pressure (psi)	10.37
G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	59
Discharge Pressure (psi)	0
Discharge pH (SU)	7.21
FIT-801 Discharge Flow Rate (gpm)	1842
Discharge Flow Totalizer (gal)	1017641984
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 16, 2024, Daily, Larry Wright

11/22/2024, 6:54:26 PM UTC

CREATED

10/16/2024, 3:48:13 PM UTC
by Larry Wright

UPDATED

11/22/2024, 6:54:26 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 16, 2024
Time	11:48
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:53.51 °F, rH:56%, Clouds: 0%, Wind:11.5mph NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	569.4

RW-20 Flow Totalizer (gal)	300275730
RW-21 Flow Rate (gpm)	570.2
RW-21 Flow Totalizer (gal)	301830282
RW-22 Flow Rate (gpm)	748.6
RW-22 Flow Totalizer (gal)	373391398
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.1
T-100 Sodium Hydroxide Tank Total Volume (gal)	3234.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3277.2
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1806
AOP Recirc Into T-200 Flow Rate (gpm)	2.1
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	32
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	31.35
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	921
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	883
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.956
F-500B PIT-505 Vessel Differential Pressure (psi)	1.731
CF-700A Cartridge Filter Differential Pressure (psi)	12.2
CF-700B Cartridge Filter Differential Pressure (psi)	12.48

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5.5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1804
Discharge Flow Totalizer (gal)	1019667904
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 17, 2024, Daily, Larry Wright

11/22/2024, 6:55:28 PM UTC

CREATED

10/17/2024, 4:07:59 PM UTC
by Larry Wright

UPDATED

11/22/2024, 6:55:28 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 17, 2024
Time	12:07
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:53.74 °F, rH:56%, Clouds: 0%, Wind:11.5mph N-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	590.6

RW-20 Flow Totalizer (gal)	301108240
RW-21 Flow Rate (gpm)	566.2
RW-21 Flow Totalizer (gal)	302662842
RW-22 Flow Rate (gpm)	763.5
RW-22 Flow Totalizer (gal)	374407878
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.1
T-100 Sodium Hydroxide Tank Total Volume (gal)	2953
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3217.5
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1815
AOP Recirc Into T-200 Flow Rate (gpm)	-1.3
P-200A/B/C Discharge Pressure (psi)	16.5
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	36
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	34.61
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	957
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	906
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.181
F-500B PIT-505 Vessel Differential Pressure (psi)	2.044
CF-700A Cartridge Filter Differential Pressure (psi)	13.34
CF-700B Cartridge Filter Differential Pressure (psi)	13.57

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	1846
Discharge Flow Totalizer (gal)	1022350976
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 18, 2024, Daily, Weekly, Larry Wright

11/22/2024, 6:56:13 PM UTC

CREATED

10/18/2024, 4:20:26 PM UTC
by Larry Wright

UPDATED

11/22/2024, 6:56:13 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 18, 2024
Time	12:20
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Changed cartridge filters on CF-700B today (10-18-2024).

Weather

Fetch Weather	
Weather	CLEAR, T:61.07 °F, rH:42%, Clouds: 0%, Wind:13.8mph N

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	552

RW-20 Flow Totalizer (gal)	301939250
RW-21 Flow Rate (gpm)	573.2
RW-21 Flow Totalizer (gal)	303493962
RW-22 Flow Rate (gpm)	743.1
RW-22 Flow Totalizer (gal)	375422548
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.4
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	9
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	11
T-100 Sodium Hydroxide Tank Total Volume (gal)	2680
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	218
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	17
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3163.5
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1804
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	1
P-200A Oxidation Feed Pump Effluent Pressure (psi)	16
P-200B Oxidation Feed Pump Influent Pressure (psi)	1.5
P-200B Oxidation Feed Pump Effluent Pressure (psi)	2.5
P-200C Oxidation Feed Pump Influent Pressure (psi)	0.5
P-200C Oxidation Feed Pump Effluent Pressure (psi)	1
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	21
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.32
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	944
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	902
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.25
F-500B PIT-505 Vessel Differential Pressure (psi)	2.275
CF-700A Cartridge Filter Differential Pressure (psi)	2.05
CF-700A Cartridge Filter Influent Pressure (psi)	17
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	0.41
CF-700B Cartridge Filter Influent Pressure (psi)	17
CF-700B Cartridge Filter Effluent Pressure (psi)	17
G-800A GAC Contractor Differential Pressure (psi)	5
G-800A GAC Contractor Influent Pressure (psi)	15

G-800A GAC Contractor Effluent Pressure (psi)	10
G-800B GAC Contractor Differential Pressure (psi)	6
G-800B GAC Contractor Influent Pressure (psi)	10
G-800B GAC Contractor Effluent Pressure (psi)	2.5
G-800C GAC Contractor Differential Pressure (psi)	8
G-800C GAC Contractor Influent Pressure (psi)	10
G-800C GAC Contractor Effluent Pressure (psi)	2
G-800D GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Influent Pressure (psi)	15
G-800D GAC Contractor Effluent Pressure (psi)	10
G-800E GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Influent Pressure (psi)	14.5
G-800E GAC Contractor Effluent Pressure (psi)	9.5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Influent Pressure (psi)	9.5
G-800F GAC Contractor Effluent Pressure (psi)	2.5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800G GAC Contractor Influent Pressure (psi)	9.5
G-800G GAC Contractor Effluent Pressure (psi)	2
G-800H GAC Contractor Differential Pressure (psi)	5
G-800H GAC Contractor Influent Pressure (psi)	14.5
G-800H GAC Contractor Effluent Pressure (psi)	9.5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	1850

Discharge Flow Totalizer (gal)	1025030080
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1.25
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 21, 2024, Daily, Larry Wright

11/22/2024, 6:56:27 PM UTC

CREATED

10/21/2024, 4:28:11 PM UTC
by Larry Wright

UPDATED

11/22/2024, 6:56:27 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 21, 2024
Time	12:28
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Received delivery of Sodium Hydroxide today 3749.29 gallons.

Weather

Fetch Weather	
Weather	CLEAR, T:73.11 °F, rH:40%, Clouds: 0%, Wind:3mph NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	594.6

RW-20 Flow Totalizer (gal)	304400850
RW-21 Flow Rate (gpm)	576.3
RW-21 Flow Totalizer (gal)	305955642
RW-22 Flow Rate (gpm)	729.7
RW-22 Flow Totalizer (gal)	378428948
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	5724.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2976.9
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1831
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	22
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.32
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	968
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	904
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.075
F-500B PIT-505 Vessel Differential Pressure (psi)	1.894
CF-700A Cartridge Filter Differential Pressure (psi)	2.31
CF-700B Cartridge Filter Differential Pressure (psi)	0.75

G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1847
Discharge Flow Totalizer (gal)	1032963968
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 22, 2024, Daily, Larry Wright

11/22/2024, 7:00:54 PM UTC

CREATED

10/22/2024, 4:45:37 PM UTC
by Larry Wright

UPDATED

11/22/2024, 7:00:54 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 22, 2024
Time	12:45
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Raised flow rates on wells: RW-20 and RW-21 raised from 570 to 575 gpm each and RW-22 raised from 740 to 745 gpm this morning (10/22/2024) @0607

Weather

Fetch Weather	
Weather	CLEAR, T:77.07 °F, rH:50%, Clouds: 0%, Wind:3mph E-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	573.4
RW-20 Flow Totalizer (gal)	305242720
RW-21 Flow Rate (gpm)	569
RW-21 Flow Totalizer (gal)	306797432
RW-22 Flow Rate (gpm)	737.5
RW-22 Flow Totalizer (gal)	379456288
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	5400.9
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	224
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2915.7
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1849
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	25
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.86
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	977
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	908
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.169
F-500B PIT-505 Vessel Differential Pressure (psi)	2.025
CF-700A Cartridge Filter Differential Pressure (psi)	2.43

CF-700B Cartridge Filter Differential Pressure (psi)	0.87
G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	1863
Discharge Flow Totalizer (gal)	1035676672
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 23, 2024, Daily, Larry Wright

11/22/2024, 7:01:06 PM UTC

CREATED

10/23/2024, 5:32:31 PM UTC
by Larry Wright

UPDATED

11/22/2024, 7:01:06 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 23, 2024
Time	13:32
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:71.22 °F, rH:77%, Clouds: 20%, Wind:16.11mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	583.4

RW-20 Flow Totalizer (gal)	306097680
RW-21 Flow Rate (gpm)	581
RW-21 Flow Totalizer (gal)	307652252
RW-22 Flow Rate (gpm)	747.1
RW-22 Flow Totalizer (gal)	380498438
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.5
T-100 Sodium Hydroxide Tank Total Volume (gal)	5122.2
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2856.9
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1822
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16.5
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	25
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.8
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1001
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	929
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.275
F-500B PIT-505 Vessel Differential Pressure (psi)	2.119
CF-700A Cartridge Filter Differential Pressure (psi)	2.57
CF-700B Cartridge Filter Differential Pressure (psi)	1.01

G-800A GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	4
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	1882
Discharge Flow Totalizer (gal)	1038430016
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 24, 2024, Daily, Larry Wright

11/22/2024, 7:01:18 PM UTC

CREATED

10/24/2024, 6:30:40 PM UTC
by Larry Wright

UPDATED

11/22/2024, 7:01:18 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 24, 2024
Time	14:30
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:67.73 °F, rH:49%, Clouds: 0%, Wind:13.8mph N-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	577.9

RW-20 Flow Totalizer (gal)	306951480
RW-21 Flow Rate (gpm)	570.3
RW-21 Flow Totalizer (gal)	308505882
RW-22 Flow Rate (gpm)	755.4
RW-22 Flow Totalizer (gal)	381539338
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.6
T-100 Sodium Hydroxide Tank Total Volume (gal)	4827.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2790.6
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1815
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	22
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.64
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	969
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	900
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.231
F-500B PIT-505 Vessel Differential Pressure (psi)	2.088
CF-700A Cartridge Filter Differential Pressure (psi)	2.62
CF-700B Cartridge Filter Differential Pressure (psi)	1.12

G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	1827
Discharge Flow Totalizer (gal)	1041180608
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 25, 2024, Daily, Weekly, Larry Wright

11/22/2024, 7:01:31 PM UTC

CREATED

10/25/2024, 3:25:52 PM UTC
by Larry Wright

UPDATED

11/22/2024, 7:01:31 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 25, 2024
Time	11:25
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:55.92 °F, rH:58%, Clouds: 0%, Wind:1.99mph SW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	567

RW-20 Flow Totalizer (gal)	307671970
RW-21 Flow Rate (gpm)	576.4
RW-21 Flow Totalizer (gal)	309225672
RW-22 Flow Rate (gpm)	729.5
RW-22 Flow Totalizer (gal)	382417538
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.7
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	7
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	9
T-100 Sodium Hydroxide Tank Total Volume (gal)	4595.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	17
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	18
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2737.5
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1840
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	0
P-200B Oxidation Feed Pump Effluent Pressure (psi)	16
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	1.5
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	24
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.64
P-400A Filter Feed Pump Influent Pressure (psi)	1.5
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	P-400C inspecting for drip at effluent pressure gauge.
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	940
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	845
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.044
F-500B PIT-505 Vessel Differential Pressure (psi)	1.856
CF-700A Cartridge Filter Differential Pressure (psi)	2.89
CF-700A Cartridge Filter Influent Pressure (psi)	17.5
CF-700A Cartridge Filter Effluent Pressure (psi)	18
CF-700B Cartridge Filter Differential Pressure (psi)	1.36
CF-700B Cartridge Filter Influent Pressure (psi)	18.5
CF-700B Cartridge Filter Effluent Pressure (psi)	18
G-800A GAC Contractor Differential Pressure (psi)	5
G-800A GAC Contractor Influent Pressure (psi)	16

G-800A GAC Contractor Effluent Pressure (psi)	10
G-800B GAC Contractor Differential Pressure (psi)	6
G-800B GAC Contractor Influent Pressure (psi)	10
G-800B GAC Contractor Effluent Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	8
G-800C GAC Contractor Influent Pressure (psi)	10
G-800C GAC Contractor Effluent Pressure (psi)	1.5
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Influent Pressure (psi)	14.5
G-800D GAC Contractor Effluent Pressure (psi)	10
G-800E GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Influent Pressure (psi)	14.5
G-800E GAC Contractor Effluent Pressure (psi)	9
G-800F GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Influent Pressure (psi)	9
G-800F GAC Contractor Effluent Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	9
G-800G GAC Contractor Influent Pressure (psi)	9.5
G-800G GAC Contractor Effluent Pressure (psi)	2
G-800H GAC Contractor Differential Pressure (psi)	5
G-800H GAC Contractor Influent Pressure (psi)	14.5
G-800H GAC Contractor Effluent Pressure (psi)	9.5
Discharge Temperature (F)	54.6
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1900

Discharge Flow Totalizer (gal)	1043500480
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1.25
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 28, 2024, Daily, Larry Wright

11/22/2024, 7:01:43 PM UTC

CREATED

10/28/2024, 4:35:27 PM UTC
by Larry Wright

UPDATED

11/22/2024, 7:01:43 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 28, 2024
Time	12:35
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:58.96 °F, rH:42%, Clouds: 0%, Wind:5.75mph N

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	560.4

RW-20 Flow Totalizer (gal)	310189830
RW-21 Flow Rate (gpm)	578.1
RW-21 Flow Totalizer (gal)	311740292
RW-22 Flow Rate (gpm)	736.9
RW-22 Flow Totalizer (gal)	385486808
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15
T-100 Sodium Hydroxide Tank Total Volume (gal)	3749.8
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2545.8
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1833
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16.5
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	27
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.92
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	947
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	867
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.313
F-500B PIT-505 Vessel Differential Pressure (psi)	2.15
CF-700A Cartridge Filter Differential Pressure (psi)	2.01
CF-700B Cartridge Filter Differential Pressure (psi)	3.25

G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1827
Discharge Flow Totalizer (gal)	1051606912
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 29, 2024, Daily, Larry Wright

11/22/2024, 7:01:56 PM UTC

CREATED

10/29/2024, 5:37:27 PM UTC
by Larry Wright

UPDATED

11/22/2024, 7:01:56 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 29, 2024
Time	13:37
Technician	Larry Wright
Completed By	Larry Wright
General Comments	System was shut down from 1030 and restarted at 1214. There was a CONTROL VALVE FAILURE at RW-22 after system put in “shutdown “ mode followed by a CONTROL VALVE FAILURE at RW-21 when system had been restarted. Reset appropriate breakers in each respective vault and system successfully rebooted. David (HVAC) was unable to install replacement chiller pump/motor due to incompatibility and correct replacement pump/motor was ordered to be installed at a future date. Clarence, from APT conducted adjustments via remote computer to the AOP SYSTEM during down time...will resume further adjustments when possible.

Weather

Fetch Weather	
Weather	CLOUDS, T:59.41 °F, rH:76%, Clouds: 100%, Wind:9.22mph E-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	584.2
RW-20 Flow Totalizer (gal)	311005520
RW-21 Flow Rate (gpm)	555.9
RW-21 Flow Totalizer (gal)	312545942
RW-22 Flow Rate (gpm)	746.1
RW-22 Flow Totalizer (gal)	386478768
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	16
T-100 Sodium Hydroxide Tank Total Volume (gal)	3464.8
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	222
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2490.9
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1854
AOP Recirc Into T-200 Flow Rate (gpm)	1.3
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	26
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	26.71
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1006
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	941
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.5

F-500B PIT-505 Vessel Differential Pressure (psi)	2.15
CF-700A Cartridge Filter Differential Pressure (psi)	4
CF-700B Cartridge Filter Differential Pressure (psi)	2.72
G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5.5
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1838
Discharge Flow Totalizer (gal)	1054221504
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 30, 2024, Daily, Jimmy Leach

11/22/2024, 7:02:07 PM UTC

CREATED

10/30/2024, 5:36:22 PM UTC
by Jimmy Leach

UPDATED

11/22/2024, 7:02:07 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 30, 2024
Time	13:36
Technician	Jimmy Leach
Completed By	Jimmy Leach
General Comments	Na

Weather

Fetch Weather	
Weather	CLEAR, T:70.81 °F, rH:64%, Clouds: 0%, Wind:9.22mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	584

RW-20 Flow Totalizer (gal)	311829500
RW-21 Flow Rate (gpm)	578
RW-21 Flow Totalizer (gal)	313368922
RW-22 Flow Rate (gpm)	729
RW-22 Flow Totalizer (gal)	387483608
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.1
T-100 Sodium Hydroxide Tank Total Volume (gal)	3200
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	222
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2800
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1831
AOP Recirc Into T-200 Flow Rate (gpm)	3.1
P-200A/B/C Discharge Pressure (psi)	18
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	27
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	27
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	973
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	900
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.1
F-500B PIT-505 Vessel Differential Pressure (psi)	2.2
CF-700A Cartridge Filter Differential Pressure (psi)	4
CF-700B Cartridge Filter Differential Pressure (psi)	2.95

G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5.5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	1824
Discharge Flow Totalizer (gal)	1056976192
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

October 31, 2024, Daily, Monthly, Larry Wright

11/22/2024, 7:02:20 PM UTC

CREATED

10/31/2024, 6:45:15 PM UTC
by Larry Wright

UPDATED

11/22/2024, 7:02:20 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	October 31, 2024
Time	14:45
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Ran frack tank through system today (1800 gallons water from well redevelopment).

Weather

Fetch Weather	
Weather	CLEAR, T:77.45 °F, rH:58%, Clouds: 0%, Wind:10.36mph S

Inspection Type (check all that apply)	Daily, Monthly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	579.5

RW-20 Flow Totalizer (gal)	312694770
RW-21 Flow Rate (gpm)	572.4
RW-21 Flow Totalizer (gal)	314233042
RW-22 Flow Rate (gpm)	751.1
RW-22 Flow Totalizer (gal)	388539418
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.1
T-100 Sodium Hydroxide Tank Total Volume (gal)	2898.4
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	222
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2364
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1822
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	30
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	28.99
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	961
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	888
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.519
F-500B PIT-505 Vessel Differential Pressure (psi)	2.519
CF-700A Cartridge Filter Differential Pressure (psi)	7.47
CF-700B Cartridge Filter Differential Pressure (psi)	6.8

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1855
Discharge Flow Totalizer (gal)	1059664192
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Monthly Inspection Form

Remedial Well RW-20

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	

Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-20 Inspection Complete	Yes

Remedial Well RW-21

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-21 Inspection Complete	Yes

Remedial Well RW-22

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-22 Inspection Complete	Yes

Building 109 System

Checked process water piping, valves, joints and seals for leakage.	Yes
Action/comment piping	Drip continues at actuator flange of Horizontal Filter F-500A.
Checked pneumatic lines for leaks or breaks	Yes
Action/comment for line leaks:	

Inspected valves for proper positioning/seating	Yes
Action/comment for valves	
Checked pumps and pump motors for excessive noise and vibration	Yes
Action/Comment for pumps and motors	
Checked mixers and mixer motors for excessive noise and vibration	Yes
Action/Comment for mixers and motors	
Checked tanks and tank connections/fittings for leaks	Yes
Action/Comment for tank leaks	
Checked solids processing equipment and connection points for leaks	Yes
Action/Comment for equipment leaks	
Checked motor bearing lubrication and lubricate as needed	Yes
Action/Comment for motor lubrication	
Checked control panel indicator lights for alarms	Yes
Action/Comment for alarm	
Monthly B109 Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 1, 2024, Daily, Weekly, Austin Shelley

11/22/2024, 7:02:33 PM UTC

CREATED

11/1/2024, 5:01:59 PM UTC
by Austin Shelley

UPDATED

11/22/2024, 7:02:33 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 1, 2024
Time	13:01
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	Delivered Sodium Hydroxide 25% solution today 4000 gallons (actual 3745.56 gallons received).

Weather

Fetch Weather	
Weather	CLEAR, T:73.27 °F, rH:66%, Clouds: 0%, Wind:14.97mph SW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	588
RW-20 Flow Totalizer (gal)	313461770
RW-21 Flow Rate (gpm)	573
RW-21 Flow Totalizer (gal)	314999062
RW-22 Flow Rate (gpm)	743
RW-22 Flow Totalizer (gal)	389475888
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.1
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	5.5
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	7
T-100 Sodium Hydroxide Tank Total Volume (gal)	6375
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	223
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	16.5
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	18.5
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2750
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1827
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17.7
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	2
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	16.5

P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No
P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16.5
P-400A PI-402 Discharge Pressure (psi)	32
P-400B PI-404 Discharge Pressure (psi)	1
P-400C PI-406 Discharge Pressure (psi)	1
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	32
P-400A Filter Feed Pump Influent Pressure (psi)	1
P-400B Filter Feed Pump Influent Pressure (psi)	1
P-400C Filter Feed Pump Influent Pressure (psi)	1
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	709
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	862
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.6
F-500B PIT-505 Vessel Differential Pressure (psi)	2.6
CF-700A Cartridge Filter Differential Pressure (psi)	10.54
CF-700A Cartridge Filter Influent Pressure (psi)	24.5
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	10
CF-700B Cartridge Filter Influent Pressure (psi)	25.5
CF-700B Cartridge Filter Effluent Pressure (psi)	16.5
G-800A GAC Contractor Differential Pressure (psi)	5

G-800A GAC Contractor Influent Pressure (psi)	15
G-800A GAC Contractor Effluent Pressure (psi)	9.5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800B GAC Contractor Influent Pressure (psi)	9.5
G-800B GAC Contractor Effluent Pressure (psi)	3.5
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800C GAC Contractor Influent Pressure (psi)	9.5
G-800C GAC Contractor Effluent Pressure (psi)	2
G-800D GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Influent Pressure (psi)	15
G-800D GAC Contractor Effluent Pressure (psi)	9.5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Influent Pressure (psi)	14.5
G-800E GAC Contractor Effluent Pressure (psi)	9.5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Influent Pressure (psi)	9.5
G-800F GAC Contractor Effluent Pressure (psi)	2.5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800G GAC Contractor Influent Pressure (psi)	9
G-800G GAC Contractor Effluent Pressure (psi)	2
G-800H GAC Contractor Differential Pressure (psi)	5.5
G-800H GAC Contractor Influent Pressure (psi)	15
G-800H GAC Contractor Effluent Pressure (psi)	9
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0

Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1853
Discharge Flow Totalizer (gal)	1062172096
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	0
P-600 Backwash Pump Effluent Pressure (psi)	1.2
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1.5
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 4, 2024, Daily, Larry Wright

11/22/2024, 7:02:44 PM UTC

CREATED

11/4/2024, 5:30:13 PM UTC
by Larry Wright

UPDATED

11/22/2024, 7:02:44 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 4, 2024
Time	12:30
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Changed cartridge filters Friday 11/1/2024 on CF-700A due to rising pressures attributed to frack tank going through system on 10/31/2024

Weather

Fetch Weather	
Weather	CLOUDS, T:55.71 °F, rH:62%, Clouds: 75%, Wind:10.36mph E-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	576.5
RW-20 Flow Totalizer (gal)	315961740
RW-21 Flow Rate (gpm)	582.9
RW-21 Flow Totalizer (gal)	317495562
RW-22 Flow Rate (gpm)	744.1
RW-22 Flow Totalizer (gal)	392524838
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.7
T-100 Sodium Hydroxide Tank Total Volume (gal)	5618.7
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2122.5
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1849
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	23
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.19
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	964
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	879
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.575
F-500B PIT-505 Vessel Differential Pressure (psi)	2.525
CF-700A Cartridge Filter Differential Pressure (psi)	1.43

CF-700B Cartridge Filter Differential Pressure (psi)	2.73
G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	54.6
Discharge Pressure (psi)	0
Discharge pH (SU)	7.36
FIT-801 Discharge Flow Rate (gpm)	1844
Discharge Flow Totalizer (gal)	1070184704
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 5, 2024, Daily, Austin Shelley

11/22/2024, 7:02:55 PM UTC

CREATED

11/5/2024, 6:08:52 PM UTC
by Austin Shelley

UPDATED

11/22/2024, 7:02:55 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 5, 2024
Time	13:08
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:68.61 °F, rH:70%, Clouds: 0%, Wind:14.97mph S-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	580

RW-20 Flow Totalizer (gal)	316810440
RW-21 Flow Rate (gpm)	571
RW-21 Flow Totalizer (gal)	318343182
RW-22 Flow Rate (gpm)	747
RW-22 Flow Totalizer (gal)	393560118
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.6
T-100 Sodium Hydroxide Tank Total Volume (gal)	5300
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2400
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1842
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17.8
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	27
P-400C PI-406 Discharge Pressure (psi)	1
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	26
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	991
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	907
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.6
F-500B PIT-505 Vessel Differential Pressure (psi)	2.6
CF-700A Cartridge Filter Differential Pressure (psi)	1.6
CF-700B Cartridge Filter Differential Pressure (psi)	3

G-800A GAC Contractor Differential Pressure (psi)	4.8
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	7.8
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5.5
Discharge Temperature (F)	54.6
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1918
Discharge Flow Totalizer (gal)	1072914432
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 6, 2024, Daily, Larry Wright

11/22/2024, 7:03:07 PM UTC

CREATED

11/6/2024, 7:38:40 PM UTC
by Larry Wright

UPDATED

11/22/2024, 7:03:07 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 6, 2024
Time	14:38
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Leak detection at several wells and RW-22 went down at 0741 due to what appeared to be electrical issues in vicinity. Leak detection cleared itself in a couple minutes and RW-22 back up and running at 0920 after resetting breakers in vault.

Weather

Fetch Weather	
Weather	CLEAR, T:73.2 °F, rH:70%, Clouds: 0%, Wind:12.66mph S-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	567.8
RW-20 Flow Totalizer (gal)	317666010
RW-21 Flow Rate (gpm)	577.9
RW-21 Flow Totalizer (gal)	319221762
RW-22 Flow Rate (gpm)	731.5
RW-22 Flow Totalizer (gal)	394568338
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.5
T-100 Sodium Hydroxide Tank Total Volume (gal)	5038
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	222
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1995
LOX-300 LOX Storage Tank Pressure (%)	80
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1832
AOP Recirc Into T-200 Flow Rate (gpm)	3.7
P-200A/B/C Discharge Pressure (psi)	16.5
P-400A PI-402 Discharge Pressure (psi)	24
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25.1
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	970
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	894
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.994
F-500B PIT-505 Vessel Differential Pressure (psi)	2.681
CF-700A Cartridge Filter Differential Pressure (psi)	2.47

CF-700B Cartridge Filter Differential Pressure (psi)	3.65
G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1961
Discharge Flow Totalizer (gal)	1075709824
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 7, 2024, Daily, Austin Shelley

11/22/2024, 7:03:20 PM UTC

CREATED

11/7/2024, 6:11:56 PM UTC
by Austin Shelley

UPDATED

11/22/2024, 7:03:20 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 7, 2024
Time	13:11
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:72.36 °F, rH:48%, Clouds: 0%, Wind:11.5mph NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	580

RW-20 Flow Totalizer (gal)	318443280
RW-21 Flow Rate (gpm)	575
RW-21 Flow Totalizer (gal)	319997972
RW-22 Flow Rate (gpm)	750
RW-22 Flow Totalizer (gal)	395516588
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.7
T-100 Sodium Hydroxide Tank Total Volume (gal)	4800
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	222
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2300
LOX-300 LOX Storage Tank Pressure (%)	80
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1815
AOP Recirc Into T-200 Flow Rate (gpm)	4
P-200A/B/C Discharge Pressure (psi)	17.6
P-400A PI-402 Discharge Pressure (psi)	25
P-400B PI-404 Discharge Pressure (psi)	1
P-400C PI-406 Discharge Pressure (psi)	1
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	26.4
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	984
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	906
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	3.05
F-500B PIT-505 Vessel Differential Pressure (psi)	2.76
CF-700A Cartridge Filter Differential Pressure (psi)	2.72
CF-700B Cartridge Filter Differential Pressure (psi)	3.86

G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5.5
Discharge Temperature (F)	54.6
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1856
Discharge Flow Totalizer (gal)	1078319872
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 8, 2024, Daily, Weekly, Austin Shelley

11/22/2024, 7:03:33 PM UTC

CREATED

11/8/2024, 8:37:05 PM UTC
by Austin Shelley

UPDATED

11/22/2024, 7:03:33 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 8, 2024
Time	15:37
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	System shut down FRIDAY 11/8/2024 until SATURDAY 11/9/2024 with all three wells up and running @ 1545 (3:45 pm) for carbon change out on GAC 4 lead vessels including purging air and saturating carbon for 1 day with system off.

Weather

Fetch Weather	
Weather	CLEAR, T:68.16 °F, rH:32%, Clouds: 0%, Wind:14.97mph W

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	System disabled for carbon exchange on GAC's. 0800

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	0
RW-20 Flow Totalizer (gal)	319089180
RW-21 Flow Rate (gpm)	0
RW-21 Flow Totalizer (gal)	320642812
RW-22 Flow Rate (gpm)	0
RW-22 Flow Totalizer (gal)	396303948
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	0
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	0
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	0
T-100 Sodium Hydroxide Tank Total Volume (gal)	4550
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	0
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	5
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	6
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2200
LOX-300 LOX Storage Tank Pressure (%)	80
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	0
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	7
P-200A Oxidation Feed Pump Influent Pressure (psi)	3
P-200A Oxidation Feed Pump Effluent Pressure (psi)	3
P-200B Oxidation Feed Pump Influent Pressure (psi)	3
P-200B Oxidation Feed Pump Effluent Pressure (psi)	3
P-200C Oxidation Feed Pump Influent Pressure (psi)	3

P-200C Oxidation Feed Pump Effluent Pressure (psi)	3
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No
P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	3
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	0
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	0
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	0
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	1.1
F-500B PIT-505 Vessel Differential Pressure (psi)	0.6
CF-700A Cartridge Filter Differential Pressure (psi)	0
CF-700A Cartridge Filter Influent Pressure (psi)	0
CF-700A Cartridge Filter Effluent Pressure (psi)	2
CF-700B Cartridge Filter Differential Pressure (psi)	0
CF-700B Cartridge Filter Influent Pressure (psi)	0
CF-700B Cartridge Filter Effluent Pressure (psi)	2

G-800A GAC Contractor Differential Pressure (psi)	0
G-800A GAC Contractor Influent Pressure (psi)	1.5
G-800A GAC Contractor Effluent Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	2
G-800B GAC Contractor Influent Pressure (psi)	5
G-800B GAC Contractor Effluent Pressure (psi)	0
G-800C GAC Contractor Differential Pressure (psi)	3.5
G-800C GAC Contractor Influent Pressure (psi)	5
G-800C GAC Contractor Effluent Pressure (psi)	0
G-800D GAC Contractor Differential Pressure (psi)	0
G-800D GAC Contractor Influent Pressure (psi)	1.5
G-800D GAC Contractor Effluent Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	0
G-800E GAC Contractor Influent Pressure (psi)	2
G-800E GAC Contractor Effluent Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	0
G-800F GAC Contractor Influent Pressure (psi)	4
G-800F GAC Contractor Effluent Pressure (psi)	0
G-800G GAC Contractor Differential Pressure (psi)	5.5
G-800G GAC Contractor Influent Pressure (psi)	4.5
G-800G GAC Contractor Effluent Pressure (psi)	0
G-800H GAC Contractor Differential Pressure (psi)	0
G-800H GAC Contractor Influent Pressure (psi)	1.5
G-800H GAC Contractor Effluent Pressure (psi)	4.5

Discharge Temperature (F)	56
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	0
Discharge Flow Totalizer (gal)	1080413696
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1
P-600 Backwash Pump Effluent Pressure (psi)	1
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	0
P-1000B Dewatering Volute Feed Pump Pressure (psi)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 11, 2024, Daily, Larry Wright

11/22/2024, 7:03:45 PM UTC

CREATED

11/11/2024, 5:39:44 PM UTC
by Larry Wright

UPDATED

11/22/2024, 7:03:45 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 11, 2024
Time	12:39
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Completed carbon change with saturation period from Friday afternoon (11/8) until Saturday afternoon (11/9). System resumed full 3 well operation Saturday (11/9) at 1545 (3:45 pm). High ph readings 10.8 on 11/9 and gradually lowering to 7.57 on 11/11 resulting from new carbon.

Weather

Fetch Weather	
Weather	CLOUDS, T:67.06 °F, rH:63%, Clouds: 20%, Wind:19.57mph W

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570.2
RW-20 Flow Totalizer (gal)	320688320
RW-21 Flow Rate (gpm)	589.1
RW-21 Flow Totalizer (gal)	322211092
RW-22 Flow Rate (gpm)	748.1
RW-22 Flow Totalizer (gal)	398208778
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	4064.3
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	222
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1778.7
LOX-300 LOX Storage Tank Pressure (%)	75
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1836
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	1
P-400C PI-406 Discharge Pressure (psi)	29
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	28.02
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	978
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	897
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.763
F-500B PIT-505 Vessel Differential Pressure (psi)	2.888

CF-700A Cartridge Filter Differential Pressure (psi)	5.98
CF-700B Cartridge Filter Differential Pressure (psi)	6.57
G-800A GAC Contractor Differential Pressure (psi)	6
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	7
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.6
Discharge Pressure (psi)	0
Discharge pH (SU)	7.56
FIT-801 Discharge Flow Rate (gpm)	1863
Discharge Flow Totalizer (gal)	1085484160
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 12, 2024, Daily, Austin Shelley

11/22/2024, 7:03:57 PM UTC

CREATED

11/12/2024, 7:03:03 PM UTC
by Austin Shelley

UPDATED

11/22/2024, 7:03:57 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 12, 2024
Time	14:03
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:53.15 °F, rH:43%, Clouds: 0%, Wind:19.57mph N-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	555

RW-20 Flow Totalizer (gal)	321564080
RW-21 Flow Rate (gpm)	568
RW-21 Flow Totalizer (gal)	323085932
RW-22 Flow Rate (gpm)	716
RW-22 Flow Totalizer (gal)	399276578
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.3
T-100 Sodium Hydroxide Tank Total Volume (gal)	3750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	225
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1950
LOX-300 LOX Storage Tank Pressure (%)	75
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1815
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17.5
P-400A PI-402 Discharge Pressure (psi)	28
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	28
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	955
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	875
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.9
F-500B PIT-505 Vessel Differential Pressure (psi)	2.9
CF-700A Cartridge Filter Differential Pressure (psi)	6.7
CF-700B Cartridge Filter Differential Pressure (psi)	7.6

G-800A GAC Contractor Differential Pressure (psi)	6.5
G-800B GAC Contractor Differential Pressure (psi)	2.8
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	7
G-800E GAC Contractor Differential Pressure (psi)	6
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	6.8
G-800H GAC Contractor Differential Pressure (psi)	7.2
Discharge Temperature (F)	54.6
Discharge Pressure (psi)	0
Discharge pH (SU)	7.43
FIT-801 Discharge Flow Rate (gpm)	1808
Discharge Flow Totalizer (gal)	1088307523
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 13, 2024, Daily, Larry Wright

11/22/2024, 7:04:14 PM UTC

CREATED

11/13/2024, 6:19:57 PM UTC
by Larry Wright

UPDATED

11/22/2024, 7:04:14 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 13, 2024
Time	13:19
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:47.17 °F, rH:37%, Clouds: 0%, Wind:10.36mph N

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	580

RW-20 Flow Totalizer (gal)	322366970
RW-21 Flow Rate (gpm)	579.4
RW-21 Flow Totalizer (gal)	323887812
RW-22 Flow Rate (gpm)	757.2
RW-22 Flow Totalizer (gal)	400255258
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.7
T-100 Sodium Hydroxide Tank Total Volume (gal)	3520.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1635.9
LOX-300 LOX Storage Tank Pressure (%)	75
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1853
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16.5
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	29
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	20.23
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	940
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	883
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	3.131
F-500B PIT-505 Vessel Differential Pressure (psi)	3.094
CF-700A Cartridge Filter Differential Pressure (psi)	7.58
CF-700B Cartridge Filter Differential Pressure (psi)	8.09

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	6
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.6
Discharge Pressure (psi)	0
Discharge pH (SU)	7.39
FIT-801 Discharge Flow Rate (gpm)	1795
Discharge Flow Totalizer (gal)	1090886656
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 14, 2024, Daily, Larry Wright

11/22/2024, 7:04:24 PM UTC

CREATED

11/14/2024, 7:36:58 PM UTC
by Larry Wright

UPDATED

11/22/2024, 7:04:24 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 14, 2024
Time	14:36
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Conducted Building 109 Performance Sampling today 11/14/2024.

Weather

Fetch Weather	
Weather	CLEAR, T:45.61 °F, rH:59%, Clouds: 0%, Wind:5.75mph SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	559.7

RW-20 Flow Totalizer (gal)	323239300
RW-21 Flow Rate (gpm)	602.3
RW-21 Flow Totalizer (gal)	324759142
RW-22 Flow Rate (gpm)	745.9
RW-22 Flow Totalizer (gal)	401318908
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.9
T-100 Sodium Hydroxide Tank Total Volume (gal)	3227.7
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1575
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1850
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	30
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30.84
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1002
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	922
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127600
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	3.313
F-500B PIT-505 Vessel Differential Pressure (psi)	3.331
CF-700A Cartridge Filter Differential Pressure (psi)	8.26
CF-700B Cartridge Filter Differential Pressure (psi)	8.7

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	6
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	54.6
Discharge Pressure (psi)	0
Discharge pH (SU)	7.38
FIT-801 Discharge Flow Rate (gpm)	1871
Discharge Flow Totalizer (gal)	1093694848
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	452688
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 15, 2024, Daily, Weekly, Larry Wright

11/22/2024, 7:04:38 PM UTC

CREATED

11/15/2024, 7:26:12 PM UTC
by Larry Wright

UPDATED

11/22/2024, 7:04:38 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 15, 2024
Time	14:26
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Performed partial backwash on F-500A but had to reduce flow and abort when attempting to do so on F-500B due to rapidly rising differential pressures on cartridge filter vessels. After partial backwash changed cartridge filters on CF-700B. Received SODIUM HYDROXIDE delivery today 3738 gallons.

Weather

Fetch Weather	
Weather	CLEAR, T:55.2 °F, rH:39%, Clouds: 0%, Wind:12.66mph NW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	575.5
RW-20 Flow Totalizer (gal)	324058360
RW-21 Flow Rate (gpm)	567.1
RW-21 Flow Totalizer (gal)	325577352
RW-22 Flow Rate (gpm)	763
RW-22 Flow Totalizer (gal)	402320468
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.1
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	7
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	9
T-100 Sodium Hydroxide Tank Total Volume (gal)	6746.5
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	17
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	18
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1508.7
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1840
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	16
P-200C Oxidation Feed Pump Influent Pressure (psi)	0

P-200C Oxidation Feed Pump Effluent Pressure (psi)	1
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No
P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	25
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.02
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	1
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	983
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	822
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127900
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.35
F-500B PIT-505 Vessel Differential Pressure (psi)	3.375
CF-700A Cartridge Filter Differential Pressure (psi)	2.42
CF-700A Cartridge Filter Influent Pressure (psi)	17
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	0.41
CF-700B Cartridge Filter Influent Pressure (psi)	17
CF-700B Cartridge Filter Effluent Pressure (psi)	17

G-800A GAC Contractor Differential Pressure (psi)	7
G-800A GAC Contractor Influent Pressure (psi)	10
G-800A GAC Contractor Effluent Pressure (psi)	2
G-800B GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Influent Pressure (psi)	15
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	5
G-800C GAC Contractor Influent Pressure (psi)	14.5
G-800C GAC Contractor Effluent Pressure (psi)	9.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	9.5
G-800D GAC Contractor Effluent Pressure (psi)	1.5
G-800E GAC Contractor Differential Pressure (psi)	6.5
G-800E GAC Contractor Influent Pressure (psi)	9
G-800E GAC Contractor Effluent Pressure (psi)	2
G-800F GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Influent Pressure (psi)	14.5
G-800F GAC Contractor Effluent Pressure (psi)	9
G-800G GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Influent Pressure (psi)	15
G-800G GAC Contractor Effluent Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Influent Pressure (psi)	9
G-800H GAC Contractor Effluent Pressure (psi)	2

Discharge Temperature (F)	54.5
Discharge Pressure (psi)	0
Discharge pH (SU)	7.38
FIT-801 Discharge Flow Rate (gpm)	1869
Discharge Flow Totalizer (gal)	1096334848
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1.5
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	6.25
P-1100 Decant Pump Totalizer (gal)	453236
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 18, 2024, Daily, Austin Shelley

11/22/2024, 7:05:14 PM UTC

CREATED

11/18/2024, 7:30:16 PM UTC
by Austin Shelley

UPDATED

11/22/2024, 7:05:14 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 18, 2024
Time	14:30
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:64.56 °F, rH:44%, Clouds: 0%, Wind:17.27mph NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	612

RW-20 Flow Totalizer (gal)	326551920
RW-21 Flow Rate (gpm)	582
RW-21 Flow Totalizer (gal)	328068452
RW-22 Flow Rate (gpm)	758
RW-22 Flow Totalizer (gal)	405362418
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.6
T-100 Sodium Hydroxide Tank Total Volume (gal)	5850
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	224
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1550
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1856
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17.6
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	26
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25.5
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	988
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	896
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43127900
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	344500
F-500A PIT-502 Vessel Differential Pressure (psi)	2.4
F-500B PIT-505 Vessel Differential Pressure (psi)	2.9
CF-700A Cartridge Filter Differential Pressure (psi)	3.13
CF-700B Cartridge Filter Differential Pressure (psi)	1.31

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3.8
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	7.8
Discharge Temperature (F)	54.5
Discharge Pressure (psi)	0
Discharge pH (SU)	7.37
FIT-801 Discharge Flow Rate (gpm)	1808
Discharge Flow Totalizer (gal)	1104375040
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	454823
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	453236
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 19, 2024, Daily, Larry Wright

11/22/2024, 7:05:45 PM UTC

CREATED

11/19/2024, 6:56:44 PM UTC
by Larry Wright

UPDATED

11/22/2024, 7:05:45 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 19, 2024
Time	13:56
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Ran partial backwash F-500A, Cell A then F-500B, Cell D. Needed to change cartridge filters on CF-700A following backwash due to extreme differential pressures.

Weather

Fetch Weather	
Weather	CLEAR, T:57.67 °F, rH:46%, Clouds: 10%, Wind:5.01mph W-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	564
RW-20 Flow Totalizer (gal)	327346000
RW-21 Flow Rate (gpm)	576.2
RW-21 Flow Totalizer (gal)	328861682
RW-22 Flow Rate (gpm)	743.3
RW-22 Flow Totalizer (gal)	406329388
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.5
T-100 Sodium Hydroxide Tank Total Volume (gal)	5661.3
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4629.3
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1841
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16.5
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	26
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.26
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	910
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	903
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43131100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	1.375
F-500B PIT-505 Vessel Differential Pressure (psi)	1.663
CF-700A Cartridge Filter Differential Pressure (psi)	0.61

CF-700B Cartridge Filter Differential Pressure (psi)	2.24
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	6
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54
Discharge Pressure (psi)	0
Discharge pH (SU)	7.36
FIT-801 Discharge Flow Rate (gpm)	1865
Discharge Flow Totalizer (gal)	1106926464
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	458166
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	453557
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 20, 2024, Daily, Larry Wright

11/22/2024, 7:06:31 PM UTC

CREATED

11/20/2024, 8:09:02 PM UTC
by Larry Wright

UPDATED

11/22/2024, 7:06:31 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 20, 2024
Time	15:09
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:56.71 °F, rH:64%, Clouds: 75%, Wind:5.75mph SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	583.6

RW-20 Flow Totalizer (gal)	328209420
RW-21 Flow Rate (gpm)	587.3
RW-21 Flow Totalizer (gal)	329724172
RW-22 Flow Rate (gpm)	738.6
RW-22 Flow Totalizer (gal)	407381988
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	14.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	5373.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	223
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4563.3
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1845
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	23
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.45
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	999
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	880
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43131100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	1.025
F-500B PIT-505 Vessel Differential Pressure (psi)	1.369
CF-700A Cartridge Filter Differential Pressure (psi)	1.56
CF-700B Cartridge Filter Differential Pressure (psi)	3.02

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	7.5
G-800E GAC Contractor Differential Pressure (psi)	6.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.5
Discharge Pressure (psi)	0
Discharge pH (SU)	7.36
FIT-801 Discharge Flow Rate (gpm)	1861
Discharge Flow Totalizer (gal)	1109712384
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	458574
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	454268
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 21, 2024, Daily, Larry Wright

11/22/2024, 7:06:56 PM UTC

CREATED

11/21/2024, 7:27:19 PM UTC
by Larry Wright

UPDATED

11/22/2024, 7:06:56 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 21, 2024
Time	14:27
Technician	Larry Wright
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	RAIN, T:47.95 °F, rH:90%, Clouds: 100%, Wind:10.36mph N-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	582.3

RW-20 Flow Totalizer (gal)	329015570
RW-21 Flow Rate (gpm)	579.3
RW-21 Flow Totalizer (gal)	330529392
RW-22 Flow Rate (gpm)	735
RW-22 Flow Totalizer (gal)	408364938
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15
T-100 Sodium Hydroxide Tank Total Volume (gal)	5121.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	222
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4498.8
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1828
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	24
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.29
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	992
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	871
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43131100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	1.131
F-500B PIT-505 Vessel Differential Pressure (psi)	1.569
CF-700A Cartridge Filter Differential Pressure (psi)	1.92
CF-700B Cartridge Filter Differential Pressure (psi)	3.41

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7
G-800F GAC Contractor Differential Pressure (psi)	4.5
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.5
Discharge Pressure (psi)	0
Discharge pH (SU)	7.37
FIT-801 Discharge Flow Rate (gpm)	1841
Discharge Flow Totalizer (gal)	1112312192
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	458574
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	454268
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 22, 2024, Daily, Weekly, Austin Shelley

11/26/2024, 1:28:55 PM UTC

CREATED

11/22/2024, 6:39:34 PM UTC
by Austin Shelley

UPDATED

11/26/2024, 1:28:55 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 22, 2024
Time	13:39
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:41.47 °F, rH:76%, Clouds: 100%, Wind:13.8mph SW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	561

RW-20 Flow Totalizer (gal)	329814730
RW-21 Flow Rate (gpm)	556
RW-21 Flow Totalizer (gal)	331327802
RW-22 Flow Rate (gpm)	739
RW-22 Flow Totalizer (gal)	409340278
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.2
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	7
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	9
T-100 Sodium Hydroxide Tank Total Volume (gal)	4825
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	13.5
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	5200
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1840
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17.5
P-200A Oxidation Feed Pump Influent Pressure (psi)	0
P-200A Oxidation Feed Pump Effluent Pressure (psi)	0
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	0
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	16.5
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16.5
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	24
P-400C PI-406 Discharge Pressure (psi)	1
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.25
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	0
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	939
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	837
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43131100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	1.08
F-500B PIT-505 Vessel Differential Pressure (psi)	1.3
CF-700A Cartridge Filter Differential Pressure (psi)	2.4
CF-700A Cartridge Filter Influent Pressure (psi)	20
CF-700A Cartridge Filter Effluent Pressure (psi)	19.5
CF-700B Cartridge Filter Differential Pressure (psi)	3.7
CF-700B Cartridge Filter Influent Pressure (psi)	19.5
CF-700B Cartridge Filter Effluent Pressure (psi)	12.5
G-800A GAC Contractor Differential Pressure (psi)	7
G-800A GAC Contractor Influent Pressure (psi)	11

G-800A GAC Contractor Effluent Pressure (psi)	3
G-800B GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Influent Pressure (psi)	17
G-800B GAC Contractor Effluent Pressure (psi)	11
G-800C GAC Contractor Differential Pressure (psi)	5.5
G-800C GAC Contractor Influent Pressure (psi)	15.5
G-800C GAC Contractor Effluent Pressure (psi)	9.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	9.5
G-800D GAC Contractor Effluent Pressure (psi)	3
G-800E GAC Contractor Differential Pressure (psi)	7
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	3.5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Influent Pressure (psi)	16
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Influent Pressure (psi)	15
G-800G GAC Contractor Effluent Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Influent Pressure (psi)	9
G-800H GAC Contractor Effluent Pressure (psi)	2
Discharge Temperature (F)	54.4
Discharge Pressure (psi)	0
Discharge pH (SU)	7.37
FIT-801 Discharge Flow Rate (gpm)	1865

Discharge Flow Totalizer (gal)	1114894336
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	2.5
P-600 Backwash Pump Effluent Pressure (psi)	1
P-600 Backwash Pump Totalizer (gal)	458574
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.5
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1.5
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	454268
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 25, 2024, Daily, Austin Shelley

11/26/2024, 8:47:20 PM UTC

CREATED

11/25/2024, 7:27:14 PM UTC
by Austin Shelley

UPDATED

11/26/2024, 8:47:20 PM UTC
by Larry Wright

STATUS

QC Complete

General

Date	November 25, 2024
Time	14:27
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	*

Weather

Fetch Weather	
Weather	CLEAR, T:52.81 °F, rH:43%, Clouds: 0%, Wind:10.36mph W

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	587

RW-20 Flow Totalizer (gal)	332332250
RW-21 Flow Rate (gpm)	576
RW-21 Flow Totalizer (gal)	333842602
RW-22 Flow Rate (gpm)	740
RW-22 Flow Totalizer (gal)	412411388
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.5
T-100 Sodium Hydroxide Tank Total Volume (gal)	4000
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	5000
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1835
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17.6
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	27.5
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25.77
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	966
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	867
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43131100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	1.2
F-500B PIT-505 Vessel Differential Pressure (psi)	1.6
CF-700A Cartridge Filter Differential Pressure (psi)	3.5
CF-700B Cartridge Filter Differential Pressure (psi)	4.9

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.4
Discharge Pressure (psi)	0
Discharge pH (SU)	7.37
FIT-801 Discharge Flow Rate (gpm)	1842
Discharge Flow Totalizer (gal)	1122988288
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	458574
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	454268
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 26, 2024, Daily, Austin Shelley

12/3/2024, 6:37:56 PM UTC

CREATED

11/26/2024, 7:56:22 PM UTC
by Austin Shelley

UPDATED

12/3/2024, 6:37:56 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 26, 2024
Time	14:56
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	Began running pre-treated water from OU3, transferred via CLEAN HARBORS, into frack tank in Building 109 - then through water treatment system of Building 109. Scheduled for 20,000 gallons total, which will be completed tomorrow (11/27/2024). Water will most likely result in need for Cartridge Filter change when finished treatment through Building 109 system.

Weather

Fetch Weather	
Weather	CLOUDS, T:57.29 °F, rH:73%, Clouds: 40%, Wind:11.5mph W-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	566
RW-20 Flow Totalizer (gal)	333169360
RW-21 Flow Rate (gpm)	559
RW-21 Flow Totalizer (gal)	334678832
RW-22 Flow Rate (gpm)	713
RW-22 Flow Totalizer (gal)	413431918
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	3750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	229
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4900
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1912
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	18
P-400A PI-402 Discharge Pressure (psi)	30
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30.42
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1060
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	939
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43131100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	1.6
F-500B PIT-505 Vessel Differential Pressure (psi)	2.1

CF-700A Cartridge Filter Differential Pressure (psi)	7.39
CF-700B Cartridge Filter Differential Pressure (psi)	8.46
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	3.2
G-800C GAC Contractor Differential Pressure (psi)	5.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.2
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.5
Discharge Pressure (psi)	0
Discharge pH (SU)	7.37
FIT-801 Discharge Flow Rate (gpm)	1932
Discharge Flow Totalizer (gal)	1125723648
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	458574
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	454268
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 27, 2024, Daily, Larry Wright

12/3/2024, 6:46:34 PM UTC

CREATED

11/27/2024, 5:18:33 PM UTC
by Larry Wright

UPDATED

12/3/2024, 6:46:34 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 27, 2024
Time	12:18
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Finished running frack tank water from OU3 through Building 109 treatment.

Weather

Fetch Weather	
Weather	CLEAR, T:49.66 °F, rH:53%, Clouds: 0%, Wind:6.91mph W

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	588.3

RW-20 Flow Totalizer (gal)	333919270
RW-21 Flow Rate (gpm)	591.6
RW-21 Flow Totalizer (gal)	335427712
RW-22 Flow Rate (gpm)	749.8
RW-22 Flow Totalizer (gal)	414345838
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	16
T-100 Sodium Hydroxide Tank Total Volume (gal)	3548.4
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4134
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1832
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	29
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	29.43
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	989
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	864
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43131100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	1.619
F-500B PIT-505 Vessel Differential Pressure (psi)	1.906
CF-700A Cartridge Filter Differential Pressure (psi)	7.58
CF-700B Cartridge Filter Differential Pressure (psi)	8.45

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.4
Discharge Pressure (psi)	0
Discharge pH (SU)	7.36
FIT-801 Discharge Flow Rate (gpm)	1846
Discharge Flow Totalizer (gal)	1128146304
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	458574
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	454268
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

November 29, 2024, Daily, Weekly, Monthly, Austin Shelley

12/3/2024, 6:52:27 PM UTC

CREATED

11/29/2024, 6:04:33 PM UTC
by Austin Shelley

UPDATED

12/3/2024, 6:52:27 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	November 29, 2024
Time	13:04
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	Changed cartridge filters on CF-700B. P-400B was shut off at 2:30 pm due to loud noises and odor of burnt wire insulation coming from the pump/motor. Pump is locked out until further investigation and resolution.

Weather

Fetch Weather	
Weather	CLOUDS, T:46.15 °F, rH:57%, Clouds: 75%, Wind:13.8mph W

Inspection Type (check all that apply)	Daily, Weekly, Monthly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	569
RW-20 Flow Totalizer (gal)	335588100
RW-21 Flow Rate (gpm)	576
RW-21 Flow Totalizer (gal)	337094822
RW-22 Flow Rate (gpm)	742
RW-22 Flow Totalizer (gal)	416379638
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	16
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	9
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	11
T-100 Sodium Hydroxide Tank Total Volume (gal)	3100
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	222
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	12
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4700
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1830
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	18
P-200A Oxidation Feed Pump Influent Pressure (psi)	0
P-200A Oxidation Feed Pump Effluent Pressure (psi)	16
P-200B Oxidation Feed Pump Influent Pressure (psi)	2.5
P-200B Oxidation Feed Pump Effluent Pressure (psi)	0
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	0

P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No
P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	30
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	31.2
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	0
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	973
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	882
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43131100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	1.8
F-500B PIT-505 Vessel Differential Pressure (psi)	1.9
CF-700A Cartridge Filter Differential Pressure (psi)	9.5
CF-700A Cartridge Filter Influent Pressure (psi)	25
CF-700A Cartridge Filter Effluent Pressure (psi)	17.5
CF-700B Cartridge Filter Differential Pressure (psi)	10.2
CF-700B Cartridge Filter Influent Pressure (psi)	26
CF-700B Cartridge Filter Effluent Pressure (psi)	17
G-800A GAC Contractor Differential Pressure (psi)	7

G-800A GAC Contractor Influent Pressure (psi)	10
G-800A GAC Contractor Effluent Pressure (psi)	2.5
G-800B GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Influent Pressure (psi)	15
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	5
G-800C GAC Contractor Influent Pressure (psi)	15
G-800C GAC Contractor Effluent Pressure (psi)	9
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	9
G-800D GAC Contractor Effluent Pressure (psi)	2
G-800E GAC Contractor Differential Pressure (psi)	7
G-800E GAC Contractor Influent Pressure (psi)	9
G-800E GAC Contractor Effluent Pressure (psi)	2.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Influent Pressure (psi)	14
G-800F GAC Contractor Effluent Pressure (psi)	9
G-800G GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Influent Pressure (psi)	15
G-800G GAC Contractor Effluent Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Influent Pressure (psi)	9
G-800H GAC Contractor Effluent Pressure (psi)	3
Discharge Temperature (F)	54.4
Discharge Pressure (psi)	0

Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	1828
Discharge Flow Totalizer (gal)	1133570560
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	2.7
P-600 Backwash Pump Effluent Pressure (psi)	1
P-600 Backwash Pump Totalizer (gal)	458574
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.2
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.2
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	1.6
P-1100 Decant Pump Effluent Pressure (psi)	6.5
P-1100 Decant Pump Totalizer (gal)	454268
Solids Handling Inspection Complete	Yes

Monthly Inspection Form

Remedial Well RW-20

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	

Monthly RW-20 Inspection Complete	Yes

Remedial Well RW-21

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-21 Inspection Complete	Yes

Remedial Well RW-22

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-22 Inspection Complete	Yes

Building 109 System

Checked process water piping, valves, joints and seals for leakage.	Yes
Action/comment piping	
Checked pneumatic lines for leaks or breaks	Yes
Action/comment for line leaks:	
Inspected valves for proper positioning/seating	Yes
Action/comment for valves	
Checked pumps and pump motors for excessive noise and vibration	Yes
Action/Comment for pumps and motors	

Checked mixers and mixer motors for excessive noise and vibration	Yes
Action/Comment for mixers and motors	
Checked tanks and tank connections/fittings for leaks	Yes
Action/Comment for tank leaks	
Checked solids processing equipment and connection points for leaks	Yes
Action/Comment for equipment leaks	
Checked motor bearing lubrication and lubricate as needed	Yes
Action/Comment for motor lubrication	
Checked control panel indicator lights for alarms	Yes
Action/Comment for alarm	
Monthly B109 Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

December 2, 2024, Daily, Austin Shelley

12/3/2024, 6:52:57 PM UTC

CREATED

12/2/2024, 7:36:13 PM UTC
by Austin Shelley

UPDATED

12/3/2024, 6:52:57 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	December 2, 2024
Time	14:36
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	Ozone leak at AOP discovered. Nathan of ATP notified, sending someone Wednesday Dec 4th 2024. P-400B pump motor failure. LOTO 11/29/2024 @ 2:20 P.M. System down from 0952 and back up running at 1139 due to Ozone detector alarm. Received delivery of sodium hydroxide today (3758.65 gallons).

Weather

Fetch Weather	
Weather	CLEAR, T:38.32 °F, rH:50%, Clouds: 0%, Wind:12.66mph W-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	563
RW-20 Flow Totalizer (gal)	338110660
RW-21 Flow Rate (gpm)	554
RW-21 Flow Totalizer (gal)	339595532
RW-22 Flow Rate (gpm)	758
RW-22 Flow Totalizer (gal)	419415878
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	6100
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	229
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4500
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1839
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17.5
P-400A PI-402 Discharge Pressure (psi)	22
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	1
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.8
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	992
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	899
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43131100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	1.6
F-500B PIT-505 Vessel Differential Pressure (psi)	1.8

CF-700A Cartridge Filter Differential Pressure (psi)	2.06
CF-700B Cartridge Filter Differential Pressure (psi)	0.55
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.3
Discharge Pressure (psi)	0
Discharge pH (SU)	7.36
FIT-801 Discharge Flow Rate (gpm)	1850
Discharge Flow Totalizer (gal)	1141605376
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	458574
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	454268
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

December 3, 2024, Daily, Austin Shelley

12/6/2024, 6:52:50 PM UTC

CREATED

12/3/2024, 7:08:56 PM UTC
by Austin Shelley

UPDATED

12/6/2024, 6:52:50 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	December 3, 2024
Time	14:08
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	Continue to run exhaust fan to reduce Ozone concentration near AOP to enable system to operate until problem has been remedied.

Weather

Fetch Weather	
Weather	CLOUDS, T:40.73 °F, rH:55%, Clouds: 100%, Wind:8.05mph W-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	591
RW-20 Flow Totalizer (gal)	338923700
RW-21 Flow Rate (gpm)	598
RW-21 Flow Totalizer (gal)	340407942
RW-22 Flow Rate (gpm)	768
RW-22 Flow Totalizer (gal)	420407528
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	5750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	223
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4300
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1833
AOP Recirc Into T-200 Flow Rate (gpm)	4
P-200A/B/C Discharge Pressure (psi)	18
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	25.5
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.32
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1028
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	924
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	4313100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	1.7
F-500B PIT-505 Vessel Differential Pressure (psi)	2.08
CF-700A Cartridge Filter Differential Pressure (psi)	2.18

CF-700B Cartridge Filter Differential Pressure (psi)	0.68
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	6
G-800D GAC Contractor Differential Pressure (psi)	7.5
G-800E GAC Contractor Differential Pressure (psi)	6
G-800F GAC Contractor Differential Pressure (psi)	4.5
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.3
Discharge Pressure (psi)	0
Discharge pH (SU)	7.36
FIT-801 Discharge Flow Rate (gpm)	1906
Discharge Flow Totalizer (gal)	1144226688
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	458574
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	454268
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

December 4, 2024, Daily, Larry Wright

12/6/2024, 6:56:06 PM UTC

CREATED

12/4/2024, 6:14:48 PM UTC
by Larry Wright

UPDATED

12/6/2024, 6:56:06 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	December 4, 2024
Time	13:14
Technician	Larry Wright
Completed By	Larry Wright
General Comments	James from APT at Building 109 to assess ozone leak near AOP and will have new actuator ordered to replace leaky actuator valve. P400-B pump/motor is still removed from rotation pending technician assessment and repair.

Weather

Fetch Weather	
Weather	CLEAR, T:38.84 °F, rH:58%, Clouds: 0%, Wind:13.8mph S-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	592.1
RW-20 Flow Totalizer (gal)	339701840
RW-21 Flow Rate (gpm)	575.5
RW-21 Flow Totalizer (gal)	341185332
RW-22 Flow Rate (gpm)	763.8
RW-22 Flow Totalizer (gal)	421356328
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.3
T-100 Sodium Hydroxide Tank Total Volume (gal)	5574.9
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3709.2
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1847
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	24
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21.45
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	997
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	851
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43131100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	1.631
F-500B PIT-505 Vessel Differential Pressure (psi)	1.875
CF-700A Cartridge Filter Differential Pressure (psi)	1.95

CF-700B Cartridge Filter Differential Pressure (psi)	0.64
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.3
Discharge Pressure (psi)	0
Discharge pH (SU)	7.37
FIT-801 Discharge Flow Rate (gpm)	1838
Discharge Flow Totalizer (gal)	1146733184
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	458574
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	454268
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	Why can't I email or print the reports generated by Fulcrum as of 12-4-2024?

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

December 5, 2024, Daily, Larry Wright

12/6/2024, 6:59:30 PM UTC

CREATED

12/5/2024, 7:03:08 PM UTC
by Larry Wright

UPDATED

12/6/2024, 6:59:30 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	December 5, 2024
Time	14:03
Technician	Larry Wright
Completed By	Larry Wright
General Comments	System went down this morning due to power outage in well vault area just after 0400. Full operation resumed after resetting alarms then resetting breakers in RW-22 vault for CONTROL VALVE FAILURE. Leaky actuator valve at AOP is currently awaiting availability of replacement from APT.

Weather

Fetch Weather	
Weather	CLOUDS, T:38.25 °F, rH:50%, Clouds: 75%, Wind:19.57mph W

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	583
RW-20 Flow Totalizer (gal)	340493950
RW-21 Flow Rate (gpm)	609.1
RW-21 Flow Totalizer (gal)	341976722
RW-22 Flow Rate (gpm)	733.3
RW-22 Flow Totalizer (gal)	422271528
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15
T-100 Sodium Hydroxide Tank Total Volume (gal)	5322.9
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3643.8
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1832
AOP Recirc Into T-200 Flow Rate (gpm)	3.2
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	23
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.34
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1036
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	934
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43131100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	1.788
F-500B PIT-505 Vessel Differential Pressure (psi)	2.119

CF-700A Cartridge Filter Differential Pressure (psi)	1.98
CF-700B Cartridge Filter Differential Pressure (psi)	0.82
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.3
Discharge Pressure (psi)	0
Discharge pH (SU)	7.36
FIT-801 Discharge Flow Rate (gpm)	1910
Discharge Flow Totalizer (gal)	1149239680
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	458574
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	454268
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

December 6, 2024, Daily, Weekly, Larry Wright

12/6/2024, 7:36:57 PM UTC

CREATED

12/6/2024, 6:55:57 PM UTC
by Larry Wright

UPDATED

12/6/2024, 7:36:57 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	December 6, 2024
Time	13:55
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Discharged frack tank into system (3 vac truck loads).

Weather

Fetch Weather	
Weather	CLEAR, T:33.84 °F, rH:43%, Clouds: 0%, Wind:12.66mph NW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	556.7

RW-20 Flow Totalizer (gal)	341334980
RW-21 Flow Rate (gpm)	573.2
RW-21 Flow Totalizer (gal)	342817122
RW-22 Flow Rate (gpm)	761.7
RW-22 Flow Totalizer (gal)	423297568
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.4
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	8
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	10
T-100 Sodium Hydroxide Tank Total Volume (gal)	5049.4
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	228
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	20
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3584.4
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1889
AOP Recirc Into T-200 Flow Rate (gpm)	7.3
P-200A/B/C Discharge Pressure (psi)	17.5
P-200A Oxidation Feed Pump Influent Pressure (psi)	2
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	17.5
P-200C Oxidation Feed Pump Influent Pressure (psi)	1
P-200C Oxidation Feed Pump Effluent Pressure (psi)	2
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	18
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	27
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.81
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	2
P-400C Filter Feed Pump Influent Pressure (psi)	2
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	P-400B is out of rotation pending servicing.
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1016
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	921
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43131100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	1.931
F-500B PIT-505 Vessel Differential Pressure (psi)	2.125
CF-700A Cartridge Filter Differential Pressure (psi)	2.26
CF-700A Cartridge Filter Influent Pressure (psi)	18
CF-700A Cartridge Filter Effluent Pressure (psi)	18
CF-700B Cartridge Filter Differential Pressure (psi)	1.01
CF-700B Cartridge Filter Influent Pressure (psi)	18
CF-700B Cartridge Filter Effluent Pressure (psi)	18
G-800A GAC Contractor Differential Pressure (psi)	7
G-800A GAC Contractor Influent Pressure (psi)	10.5

G-800A GAC Contractor Effluent Pressure (psi)	2.5
G-800B GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Influent Pressure (psi)	15.5
G-800B GAC Contractor Effluent Pressure (psi)	10.5
G-800C GAC Contractor Differential Pressure (psi)	5
G-800C GAC Contractor Influent Pressure (psi)	15.5
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	2.5
G-800E GAC Contractor Differential Pressure (psi)	7
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	2
G-800F GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Influent Pressure (psi)	10
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Influent Pressure (psi)	14.5
G-800G GAC Contractor Effluent Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Influent Pressure (psi)	9
G-800H GAC Contractor Effluent Pressure (psi)	2.5
Discharge Temperature (F)	53.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.39
FIT-801 Discharge Flow Rate (gpm)	1887

Discharge Flow Totalizer (gal)	1151958912
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	3
P-600 Backwash Pump Effluent Pressure (psi)	1.5
P-600 Backwash Pump Totalizer (gal)	458574
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6.25
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6.25
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	2
P-1100 Decant Pump Effluent Pressure (psi)	7
P-1100 Decant Pump Totalizer (gal)	454268
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

December 9, 2024, Daily, Larry Wright

1/2/2025, 7:15:51 PM UTC

CREATED

12/9/2024, 6:16:30 PM UTC
by Larry Wright

UPDATED

1/2/2025, 7:15:51 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	December 9, 2024
Time	13:16
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Resumed discharging frack tank into system as Clean Harbors continued transporting water from OU3 to Building 109.

Weather

Fetch Weather	
Weather	RAIN, T:50.74 °F, rH:84%, Clouds: 100%, Wind:12.66mph E-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	594.8
RW-20 Flow Totalizer (gal)	343778320
RW-21 Flow Rate (gpm)	575.3
RW-21 Flow Totalizer (gal)	345258072
RW-22 Flow Rate (gpm)	756.9
RW-22 Flow Totalizer (gal)	426277538
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	4259.4
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	230
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3385.8
LOX-300 LOX Storage Tank Pressure (%)	30
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1904
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	24.5
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25.78
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1042
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	939
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43131100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	2.225
F-500B PIT-505 Vessel Differential Pressure (psi)	2.213
CF-700A Cartridge Filter Differential Pressure (psi)	2.47

CF-700B Cartridge Filter Differential Pressure (psi)	1.45
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7
G-800F GAC Contractor Differential Pressure (psi)	4.5
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.1
Discharge Pressure (psi)	0
Discharge pH (SU)	7.42
FIT-801 Discharge Flow Rate (gpm)	1956
Discharge Flow Totalizer (gal)	1159856640
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	458574
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	45426
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

December 10, 2024, Daily, Larry Wright

1/2/2025, 7:16:09 PM UTC

CREATED

12/10/2024, 6:23:52 PM UTC
by Larry Wright

UPDATED

1/2/2025, 7:16:09 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	December 10, 2024
Time	13:23
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Continue to run frack tank content from OU3 through Building109 treatment facility.

Weather

Fetch Weather	
Weather	MIST, T:46.47 °F, rH:95%, Clouds: 100%, Wind:9.22mph E

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	564.9

RW-20 Flow Totalizer (gal)	344609820
RW-21 Flow Rate (gpm)	577.1
RW-21 Flow Totalizer (gal)	346088582
RW-22 Flow Rate (gpm)	744.4
RW-22 Flow Totalizer (gal)	427290768
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	15.7
T-100 Sodium Hydroxide Tank Total Volume (gal)	3986.4
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	228
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3319.8
LOX-300 LOX Storage Tank Pressure (%)	30
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1887
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	27
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.45
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	966
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	857
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43131100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	2.094
F-500B PIT-505 Vessel Differential Pressure (psi)	2.4
CF-700A Cartridge Filter Differential Pressure (psi)	3.76
CF-700B Cartridge Filter Differential Pressure (psi)	3.09

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7
G-800F GAC Contractor Differential Pressure (psi)	4.5
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54
Discharge Pressure (psi)	0
Discharge pH (SU)	7.44
FIT-801 Discharge Flow Rate (gpm)	1850
Discharge Flow Totalizer (gal)	1162550912
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	458574
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	454268
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

December 11, 2024, Daily, Larry Wright

1/2/2025, 7:16:28 PM UTC

CREATED

12/11/2024, 6:15:03 PM UTC
by Larry Wright

UPDATED

1/2/2025, 7:16:28 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	December 11, 2024
Time	13:15
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Continue running frack tank water from OU3 through Building 109 treatment facility.

Weather

Fetch Weather	
Weather	MIST, T:58.96 °F, rH:97%, Clouds: 100%, Wind:23.02mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570.7

RW-20 Flow Totalizer (gal)	345432000
RW-21 Flow Rate (gpm)	594.3
RW-21 Flow Totalizer (gal)	346909872
RW-22 Flow Rate (gpm)	733
RW-22 Flow Totalizer (gal)	428293148
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	16
T-100 Sodium Hydroxide Tank Total Volume (gal)	3728.7
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3264.9
LOX-300 LOX Storage Tank Pressure (%)	25
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1853
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	29
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30.32
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1029
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	902
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43131100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	2.269
F-500B PIT-505 Vessel Differential Pressure (psi)	2.763
CF-700A Cartridge Filter Differential Pressure (psi)	7.71
CF-700B Cartridge Filter Differential Pressure (psi)	7.21

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.3
Discharge Pressure (psi)	0
Discharge pH (SU)	7.39
FIT-801 Discharge Flow Rate (gpm)	1868
Discharge Flow Totalizer (gal)	1165223936
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	458574
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	454268
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

December 12, 2024, Daily, Larry Wright

1/2/2025, 7:16:43 PM UTC

CREATED

12/12/2024, 4:24:40 PM UTC
by Larry Wright

UPDATED

1/2/2025, 7:16:43 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	December 12, 2024
Time	11:24
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Continued running frack tank through system until end of Wednesday late afternoon without any additions today (12/12/2024). Clean Harbors is scheduled to resume water transfer tomorrow, Friday 12/13 with additional 20000 gallons of water from OU3 to Building 109 frack tank to run through system. Conducted Building 109 Performance Sampling (including well houses RW-20, RW-21, RW-22) today 12/12/2024.

Weather

Fetch Weather	
Weather	CLEAR, T:40.12 °F, rH:44%, Clouds: 0%, Wind:28.77mph W-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570.7
RW-20 Flow Totalizer (gal)	346223950
RW-21 Flow Rate (gpm)	566.1
RW-21 Flow Totalizer (gal)	347700982
RW-22 Flow Rate (gpm)	766.4
RW-22 Flow Totalizer (gal)	429258658
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	16
T-100 Sodium Hydroxide Tank Total Volume (gal)	3505.8
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	223
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3206.4
LOX-300 LOX Storage Tank Pressure (%)	25
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1853
AOP Recirc Into T-200 Flow Rate (gpm)	-2.9
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	31.5
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	29.82
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	956
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	834
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43131100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	2.444
F-500B PIT-505 Vessel Differential Pressure (psi)	2.569

CF-700A Cartridge Filter Differential Pressure (psi)	8.37
CF-700B Cartridge Filter Differential Pressure (psi)	7.91
G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	4
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.3
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1837
Discharge Flow Totalizer (gal)	1167781888
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	458574
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	454268
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

December 13, 2024, Daily, Weekly, Larry Wright

1/2/2025, 7:17:05 PM UTC

CREATED

12/13/2024, 5:24:21 PM UTC
by Larry Wright

UPDATED

1/2/2025, 7:17:05 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	December 13, 2024
Time	12:24
Technician	Larry Wright
Completed By	Larry Wright
General Comments	Clean Harbors did not discharge any water into the Building 109 frack tank to run through system today, contrary to what had been scheduled.

Weather

Fetch Weather	
Weather	CLEAR, T:31.86 °F, rH:41%, Clouds: 0%, Wind:10.36mph W-NW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	564.8
RW-20 Flow Totalizer (gal)	347071180
RW-21 Flow Rate (gpm)	566.9
RW-21 Flow Totalizer (gal)	348547422
RW-22 Flow Rate (gpm)	745.7
RW-22 Flow Totalizer (gal)	430292068
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	16.1
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	10
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	12
T-100 Sodium Hydroxide Tank Total Volume (gal)	3260.6
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	224
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	21
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3153
LOX-300 LOX Storage Tank Pressure (%)	20
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1828
AOP Recirc Into T-200 Flow Rate (gpm)	-2.1
P-200A/B/C Discharge Pressure (psi)	17
P-200A Oxidation Feed Pump Influent Pressure (psi)	2.5
P-200A Oxidation Feed Pump Effluent Pressure (psi)	2.5
P-200B Oxidation Feed Pump Influent Pressure (psi)	3
P-200B Oxidation Feed Pump Effluent Pressure (psi)	2
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	17

P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No
P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	30
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	3
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30.23
P-400A Filter Feed Pump Influent Pressure (psi)	2
P-400B Filter Feed Pump Influent Pressure (psi)	2.5
P-400C Filter Feed Pump Influent Pressure (psi)	3
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	968
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	875
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43131100
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	347400
F-500A PIT-502 Vessel Differential Pressure (psi)	2.413
F-500B PIT-505 Vessel Differential Pressure (psi)	2.906
CF-700A Cartridge Filter Differential Pressure (psi)	8.73
CF-700A Cartridge Filter Influent Pressure (psi)	24
CF-700A Cartridge Filter Effluent Pressure (psi)	18
CF-700B Cartridge Filter Differential Pressure (psi)	8.28
CF-700B Cartridge Filter Influent Pressure (psi)	26
CF-700B Cartridge Filter Effluent Pressure (psi)	18
G-800A GAC Contractor Differential Pressure (psi)	7

G-800A GAC Contractor Influent Pressure (psi)	10
G-800A GAC Contractor Effluent Pressure (psi)	2.5
G-800B GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Influent Pressure (psi)	10.5
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	5
G-800C GAC Contractor Influent Pressure (psi)	10.5
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	2
G-800E GAC Contractor Differential Pressure (psi)	7
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	2
G-800F GAC Contractor Differential Pressure (psi)	4.5
G-800F GAC Contractor Influent Pressure (psi)	15
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Influent Pressure (psi)	15
G-800G GAC Contractor Effluent Pressure (psi)	9.5
G-800H GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Influent Pressure (psi)	9.5
G-800H GAC Contractor Effluent Pressure (psi)	2
Discharge Temperature (F)	54.2
Discharge Pressure (psi)	0

Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1844
Discharge Flow Totalizer (gal)	1170508416
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	3
P-600 Backwash Pump Effluent Pressure (psi)	1.5
P-600 Backwash Pump Totalizer (gal)	458574
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	2.25
P-1100 Decant Pump Effluent Pressure (psi)	7
P-1100 Decant Pump Totalizer (gal)	454268
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

January 27, 2025, Daily, Larry Wright

3/6/2025, 2:11:14 PM UTC

CREATED

1/27/2025, 6:06:42 PM UTC
by Larry Wright

UPDATED

3/6/2025, 2:11:14 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	January 27, 2025
Time	13:06
Technician	Larry Wright
Completed By	Larry Wright
General Comments	System is operating on 12 hours per day schedule.

Weather

Fetch Weather	
Weather	CLEAR, T:37.87 °F, rH:42%, Clouds: 0%, Wind:13.8mph S-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	574.7

RW-20 Flow Totalizer (gal)	360551530
RW-21 Flow Rate (gpm)	587.5
RW-21 Flow Totalizer (gal)	362875292
RW-22 Flow Rate (gpm)	690
RW-22 Flow Totalizer (gal)	447061338
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.5
T-100 Sodium Hydroxide Tank Total Volume (gal)	5739.3
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2052.3
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1823
AOP Recirc Into T-200 Flow Rate (gpm)	2.4
P-200A/B/C Discharge Pressure (psi)	15
P-400A PI-402 Discharge Pressure (psi)	24
P-400B PI-404 Discharge Pressure (psi)	2
P-400C PI-406 Discharge Pressure (psi)	2
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24.03
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	952
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	863
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	431375000
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350700
F-500A PIT-502 Vessel Differential Pressure (psi)	1.7
F-500B PIT-505 Vessel Differential Pressure (psi)	1.406
CF-700A Cartridge Filter Differential Pressure (psi)	3.79
CF-700B Cartridge Filter Differential Pressure (psi)	4.76

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	5.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	6.5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	8.5
Discharge Temperature (F)	54.2
Discharge Pressure (psi)	0
Discharge pH (SU)	7.36
FIT-801 Discharge Flow Rate (gpm)	
Discharge Flow Totalizer (gal)	1173241344
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

February 6, 2025, Daily, Austin Shelley

3/6/2025, 2:11:52 PM UTC

CREATED

2/6/2025, 7:21:19 PM UTC
by Austin Shelley

UPDATED

3/6/2025, 2:11:52 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	February 6, 2025
Time	14:21
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	System operating 12hrs

Weather

Fetch Weather	
Weather	MIST, T:37.58 °F, rH:96%, Clouds: 100%, Wind:1.99mph NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	567

RW-20 Flow Totalizer (gal)	364608820
RW-21 Flow Rate (gpm)	566
RW-21 Flow Totalizer (gal)	366933722
RW-22 Flow Rate (gpm)	702
RW-22 Flow Totalizer (gal)	451802658
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.6
T-100 Sodium Hydroxide Tank Total Volume (gal)	2625
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	218
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2100
LOX-300 LOX Storage Tank Pressure (%)	30
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1880
AOP Recirc Into T-200 Flow Rate (gpm)	4
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	38
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	38.4
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	985
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	886
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350700
F-500A PIT-502 Vessel Differential Pressure (psi)	1.965
F-500B PIT-505 Vessel Differential Pressure (psi)	1.85
CF-700A Cartridge Filter Differential Pressure (psi)	17.78
CF-700B Cartridge Filter Differential Pressure (psi)	17.43

G-800A GAC Contractor Differential Pressure (psi)	7.2
G-800B GAC Contractor Differential Pressure (psi)	4.5
G-800C GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Differential Pressure (psi)	7
G-800E GAC Contractor Differential Pressure (psi)	8.2
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	54.1
Discharge Pressure (psi)	0
Discharge pH (SU)	7.4
FIT-801 Discharge Flow Rate (gpm)	1840
Discharge Flow Totalizer (gal)	1183345200
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

February 27, 2025, Daily, Austin Shelley

3/6/2025, 2:12:08 PM UTC

CREATED

2/27/2025, 8:01:43 PM UTC
by Austin Shelley

UPDATED

3/6/2025, 2:12:08 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	February 27, 2025
Time	15:01
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	

Weather

Fetch Weather	
Weather	MIST, T:46.11 °F, rH:90%, Clouds: 100%, Wind:12.66mph S-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570

RW-20 Flow Totalizer (gal)	373430550
RW-21 Flow Rate (gpm)	585
RW-21 Flow Totalizer (gal)	375688602
RW-22 Flow Rate (gpm)	701
RW-22 Flow Totalizer (gal)	462222198
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	5250
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	223
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4200
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1825
AOP Recirc Into T-200 Flow Rate (gpm)	5.1
P-200A/B/C Discharge Pressure (psi)	17.5
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	30
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	29.12
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1004
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	901
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350700
F-500A PIT-502 Vessel Differential Pressure (psi)	1.481
F-500B PIT-505 Vessel Differential Pressure (psi)	1.625
CF-700A Cartridge Filter Differential Pressure (psi)	8.05
CF-700B Cartridge Filter Differential Pressure (psi)	7.4

G-800A GAC Contractor Differential Pressure (psi)	7.5
G-800B GAC Contractor Differential Pressure (psi)	4.5
G-800C GAC Contractor Differential Pressure (psi)	5.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	5.2
G-800F GAC Contractor Differential Pressure (psi)	5.5
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	8.5
Discharge Temperature (F)	54.3
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	0
Discharge Flow Totalizer (gal)	0
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

February 28, 2025, Daily, Weekly, Monthly, Kyle Zafarana

3/6/2025, 2:12:21 PM UTC

CREATED

2/28/2025, 7:22:39 PM UTC
by Austin Shelley

UPDATED

3/6/2025, 2:12:21 PM UTC
by Patrick Dellecave

STATUS

QC Complete

General

Date	February 28, 2025
Time	14:22
Technician	Kyle Zafarana
Completed By	Austin Shelley
General Comments	P-400B pump motor awaiting replacement.

Weather

Fetch Weather	
Weather	CLEAR, T:49.95 °F, rH:28%, Clouds: 0%, Wind:14.97mph NW

Inspection Type (check all that apply)	Daily, Weekly, Monthly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	573.2

RW-20 Flow Totalizer (gal)	373836820
RW-21 Flow Rate (gpm)	561.6
RW-21 Flow Totalizer (gal)	376094552
RW-22 Flow Rate (gpm)	701.7
RW-22 Flow Totalizer (gal)	462704168
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.1
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	8
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	10
T-100 Sodium Hydroxide Tank Total Volume (gal)	5125
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4200
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1840.59
AOP Recirc Into T-200 Flow Rate (gpm)	3.2
P-200A/B/C Discharge Pressure (psi)	17
P-200A Oxidation Feed Pump Influent Pressure (psi)	1
P-200A Oxidation Feed Pump Effluent Pressure (psi)	0
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	0
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	16
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	28
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	29.41
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	1
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	954.6
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	857.8
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350700
F-500A PIT-502 Vessel Differential Pressure (psi)	1.238
F-500B PIT-505 Vessel Differential Pressure (psi)	1.475
CF-700A Cartridge Filter Differential Pressure (psi)	7.69
CF-700A Cartridge Filter Influent Pressure (psi)	24
CF-700A Cartridge Filter Effluent Pressure (psi)	16
CF-700B Cartridge Filter Differential Pressure (psi)	8.24
CF-700B Cartridge Filter Influent Pressure (psi)	23
CF-700B Cartridge Filter Effluent Pressure (psi)	17
G-800A GAC Contractor Differential Pressure (psi)	7.5
G-800A GAC Contractor Influent Pressure (psi)	1.5

G-800A GAC Contractor Effluent Pressure (psi)	9.5
G-800B GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Influent Pressure (psi)	15.5
G-800B GAC Contractor Effluent Pressure (psi)	9.5
G-800C GAC Contractor Differential Pressure (psi)	5
G-800C GAC Contractor Influent Pressure (psi)	15.5
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	7
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	3
G-800E GAC Contractor Differential Pressure (psi)	5.5
G-800E GAC Contractor Influent Pressure (psi)	9
G-800E GAC Contractor Effluent Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Influent Pressure (psi)	15
G-800F GAC Contractor Effluent Pressure (psi)	9
G-800G GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Influent Pressure (psi)	15
G-800G GAC Contractor Effluent Pressure (psi)	9.5
G-800H GAC Contractor Differential Pressure (psi)	8.5
G-800H GAC Contractor Influent Pressure (psi)	9.5
G-800H GAC Contractor Effluent Pressure (psi)	1.5
Discharge Temperature (F)	54.3
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	0

Discharge Flow Totalizer (gal)	0
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	1
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	6
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Monthly Inspection Form

Remedial Well RW-20

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-20 Inspection Complete	Yes

Remedial Well RW-21

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-21 Inspection Complete	Yes

Remedial Well RW-22

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-22 Inspection Complete	Yes

Building 109 System

Checked process water piping, valves, joints and seals for leakage.	Yes
Action/comment piping	
Checked pneumatic lines for leaks or breaks	Yes
Action/comment for line leaks:	
Inspected valves for proper positioning/seating	Yes
Action/comment for valves	
Checked pumps and pump motors for excessive noise and vibration	Yes
Action/Comment for pumps and motors	
Checked mixers and mixer motors for excessive noise and vibration	Yes

Action/Comment for mixers and motors	
Checked tanks and tank connections/fittings for leaks	Yes
Action/Comment for tank leaks	
Checked solids processing equipment and connection points for leaks	Yes
Action/Comment for equipment leaks	
Checked motor bearing lubrication and lubricate as needed	Yes
Action/Comment for motor lubrication	
Checked control panel indicator lights for alarms	Yes
Action/Comment for alarm	
Monthly B109 Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

March 5, 2025, Daily, Kyle Zafarana

9/5/2025, 6:21:57 PM UTC

CREATED

3/5/2025, 7:43:45 PM UTC
by Kyle Zafarana

UPDATED

9/5/2025, 6:21:57 PM UTC
by Austin Shelley

STATUS

Ready for QC

General

Date	March 5, 2025
Time	14:43
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:52.16 °F, rH:79%, Clouds: 75%, Wind:21.85mph S-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	560

RW-20 Flow Totalizer (gal)	375921360
RW-21 Flow Rate (gpm)	592.2
RW-21 Flow Totalizer (gal)	378177272
RW-22 Flow Rate (gpm)	700
RW-22 Flow Totalizer (gal)	465165828
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	12.1
T-100 Sodium Hydroxide Tank Total Volume (gal)	4500
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4000
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1824.3
AOP Recirc Into T-200 Flow Rate (gpm)	0.8
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	28
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	28
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	995.3
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	894.2
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350700
F-500A PIT-502 Vessel Differential Pressure (psi)	1.431
F-500B PIT-505 Vessel Differential Pressure (psi)	1.588
CF-700A Cartridge Filter Differential Pressure (psi)	6.36
CF-700B Cartridge Filter Differential Pressure (psi)	7.06

G-800A GAC Contractor Differential Pressure (psi)	7.5
G-800B GAC Contractor Differential Pressure (psi)	4.5
G-800C GAC Contractor Differential Pressure (psi)	5.5
G-800D GAC Contractor Differential Pressure (psi)	7
G-800E GAC Contractor Differential Pressure (psi)	6
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	8.5
Discharge Temperature (F)	54.4
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	0
Discharge Flow Totalizer (gal)	0
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

April 9, 2025, Daily, Kyle Zafarana

9/5/2025, 6:22:09 PM UTC

CREATED

4/9/2025, 6:59:56 PM UTC
by Kyle Zafarana

UPDATED

9/5/2025, 6:22:09 PM UTC
by Austin Shelley

STATUS

Ready for QC

General

Date	April 9, 2025
Time	14:59
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	Discharge flow rate, and totalizer are 0 due to awaiting replacement of flow meter.

Weather

Fetch Weather	
Weather	CLEAR, T:45.84 °F, rH:33%, Clouds: 0%, Wind:7mph S-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	580

RW-20 Flow Totalizer (gal)	389654590
RW-21 Flow Rate (gpm)	551.7
RW-21 Flow Totalizer (gal)	391896002
RW-22 Flow Rate (gpm)	708.3
RW-22 Flow Totalizer (gal)	481409348
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	11.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	4000
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2800
LOX-300 LOX Storage Tank Pressure (%)	80
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1832
AOP Recirc Into T-200 Flow Rate (gpm)	2.1
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	18
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	18
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	928.5
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	900.9
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350700
F-500A PIT-502 Vessel Differential Pressure (psi)	1.331
F-500B PIT-505 Vessel Differential Pressure (psi)	1.006
CF-700A Cartridge Filter Differential Pressure (psi)	1.57
CF-700B Cartridge Filter Differential Pressure (psi)	1.52

G-800A GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Differential Pressure (psi)	7
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	7.5
G-800G GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Differential Pressure (psi)	5.5
Discharge Temperature (F)	54
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	0
Discharge Flow Totalizer (gal)	0
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

April 21, 2025, Daily, Austin Shelley

4/21/2025, 7:16:01 PM UTC

CREATED

4/21/2025, 7:02:04 PM UTC
by Austin Shelley

UPDATED

4/21/2025, 7:16:01 PM UTC
by Austin Shelley

STATUS

Ready for QC

General

Date	April 21, 2025
Time	15:02
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	Effluent flow meter inoperable

Weather

Fetch Weather	
Weather	CLOUDS, T:54.12 °F, rH:54%, Clouds: 100%, Wind:16.11mph E-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	566

RW-20 Flow Totalizer (gal)	394672190
RW-21 Flow Rate (gpm)	570
RW-21 Flow Totalizer (gal)	396907042
RW-22 Flow Rate (gpm)	678
RW-22 Flow Totalizer (gal)	487344998
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	10.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	5750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2350
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1820
AOP Recirc Into T-200 Flow Rate (gpm)	2.9
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	22
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21.2
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	974
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	966
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350700
F-500A PIT-502 Vessel Differential Pressure (psi)	1.45
F-500B PIT-505 Vessel Differential Pressure (psi)	1.23
CF-700A Cartridge Filter Differential Pressure (psi)	0.39
CF-700B Cartridge Filter Differential Pressure (psi)	0.32

G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	8
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Differential Pressure (psi)	10
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.5
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	0
Discharge Flow Totalizer (gal)	0
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

April 22, 2025, Daily, Kyle Zafarana

4/22/2025, 6:15:31 PM UTC

CREATED

4/22/2025, 6:04:25 PM UTC
by Kyle Zafarana

UPDATED

4/22/2025, 6:15:31 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	April 22, 2025
Time	14:04
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	Discharge pressure, flow rate, and totalizer are 0 awaiting installation of new totalizer

Weather

Fetch Weather	
Weather	CLEAR, T:75.7 °F, rH:55%, Clouds: 0%, Wind:11.5mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	573.9

RW-20 Flow Totalizer (gal)	395080410
RW-21 Flow Rate (gpm)	575.1
RW-21 Flow Totalizer (gal)	397314822
RW-22 Flow Rate (gpm)	683
RW-22 Flow Totalizer (gal)	487828098
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	10.7
T-100 Sodium Hydroxide Tank Total Volume (gal)	5750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2300
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1829
AOP Recirc Into T-200 Flow Rate (gpm)	1.6
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	22
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	941.3
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	921.6
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350700
F-500A PIT-502 Vessel Differential Pressure (psi)	1.525
F-500B PIT-505 Vessel Differential Pressure (psi)	0.969
CF-700A Cartridge Filter Differential Pressure (psi)	0.61
CF-700B Cartridge Filter Differential Pressure (psi)	0.63

G-800A GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Differential Pressure (psi)	7.5
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	4
G-800E GAC Contractor Differential Pressure (psi)	3.5
G-800F GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5.5
Discharge Temperature (F)	54
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	0
Discharge Flow Totalizer (gal)	0
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 16, 2025, Daily, Weekly, Austin Shelley

5/16/2025, 5:50:45 PM UTC

CREATED

5/16/2025, 5:29:28 PM UTC
by Austin Shelley

UPDATED

5/16/2025, 5:50:45 PM UTC
by Austin Shelley

STATUS

Ready for QC

General

Date	May 16, 2025
Time	13:29
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	12 hour operation, effluent flow meter inoperative

Weather

Fetch Weather	
Weather	CLOUDS, T:68.36 °F, rH:86%, Clouds: 83%, Wind:7mph SW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	583

RW-20 Flow Totalizer (gal)	404697770
RW-21 Flow Rate (gpm)	564
RW-21 Flow Totalizer (gal)	407022942
RW-22 Flow Rate (gpm)	684
RW-22 Flow Totalizer (gal)	499322668
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	10
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	5
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	6
T-100 Sodium Hydroxide Tank Total Volume (gal)	6850
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4350
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1830
AOP Recirc Into T-200 Flow Rate (gpm)	1.9
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	0
P-200A Oxidation Feed Pump Effluent Pressure (psi)	16
P-200B Oxidation Feed Pump Influent Pressure (psi)	0
P-200B Oxidation Feed Pump Effluent Pressure (psi)	0
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	0
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	33
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	33
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	0
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	942
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	934
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350700
F-500A PIT-502 Vessel Differential Pressure (psi)	1.9
F-500B PIT-505 Vessel Differential Pressure (psi)	1.8
CF-700A Cartridge Filter Differential Pressure (psi)	10
CF-700A Cartridge Filter Influent Pressure (psi)	25
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	11
CF-700B Cartridge Filter Influent Pressure (psi)	26
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800A GAC Contractor Influent Pressure (psi)	14.5

G-800A GAC Contractor Effluent Pressure (psi)	9
G-800B GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Influent Pressure (psi)	9
G-800B GAC Contractor Effluent Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800C GAC Contractor Influent Pressure (psi)	9
G-800C GAC Contractor Effluent Pressure (psi)	2
G-800D GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Influent Pressure (psi)	14
G-800D GAC Contractor Effluent Pressure (psi)	9
G-800E GAC Contractor Differential Pressure (psi)	4
G-800E GAC Contractor Influent Pressure (psi)	14
G-800E GAC Contractor Effluent Pressure (psi)	10
G-800F GAC Contractor Differential Pressure (psi)	7
G-800F GAC Contractor Influent Pressure (psi)	10
G-800F GAC Contractor Effluent Pressure (psi)	2
G-800G GAC Contractor Differential Pressure (psi)	9
G-800G GAC Contractor Influent Pressure (psi)	9
G-800G GAC Contractor Effluent Pressure (psi)	2
G-800H GAC Contractor Differential Pressure (psi)	5
G-800H GAC Contractor Influent Pressure (psi)	14
G-800H GAC Contractor Effluent Pressure (psi)	9
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	0

Discharge Flow Totalizer (gal)	0
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	0
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	6
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 17, 2025, Daily, Kyle Zafarana

5/17/2025, 9:35:14 PM UTC

CREATED

5/17/2025, 9:21:40 PM UTC
by Kyle Zafarana

UPDATED

5/17/2025, 9:35:14 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	May 17, 2025
Time	17:21
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:75.9 °F, rH:69%, Clouds: 21%, Wind:4mph SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	605

RW-20 Flow Totalizer (gal)	405242590
RW-21 Flow Rate (gpm)	559.8
RW-21 Flow Totalizer (gal)	407569302
RW-22 Flow Rate (gpm)	710
RW-22 Flow Totalizer (gal)	499720438
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	10
T-100 Sodium Hydroxide Tank Total Volume (gal)	6750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4400
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1828
AOP Recirc Into T-200 Flow Rate (gpm)	2.7
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	30
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	900.8
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	888.9
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350700
F-500A PIT-502 Vessel Differential Pressure (psi)	1.781
F-500B PIT-505 Vessel Differential Pressure (psi)	1.65
CF-700A Cartridge Filter Differential Pressure (psi)	11.1
CF-700B Cartridge Filter Differential Pressure (psi)	11.2

G-800A GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Differential Pressure (psi)	8
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	4
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	10
G-800H GAC Contractor Differential Pressure (psi)	5.5
Discharge Temperature (F)	54
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	0
Discharge Flow Totalizer (gal)	0
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 18, 2025, Daily, Kyle Zafarana

5/18/2025, 9:41:02 PM UTC

CREATED

5/18/2025, 9:29:53 PM UTC
by Kyle Zafarana

UPDATED

5/18/2025, 9:41:02 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	May 18, 2025
Time	17:29
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	Discharge pressure, flow rate, and totalizer are 0 due to flow meter being broken. Awaiting new flow meter.

Weather

Fetch Weather	
Weather	CLOUDS, T:72.09 °F, rH:54%, Clouds: 89%, Wind:10mph W-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	586.7
RW-20 Flow Totalizer (gal)	405657150
RW-21 Flow Rate (gpm)	575
RW-21 Flow Totalizer (gal)	407981442
RW-22 Flow Rate (gpm)	692.9
RW-22 Flow Totalizer (gal)	500215598
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	10
T-100 Sodium Hydroxide Tank Total Volume (gal)	6750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4400
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1827.86
AOP Recirc Into T-200 Flow Rate (gpm)	4.8
P-200A/B/C Discharge Pressure (psi)	18
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	32
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	32
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	908.8
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	907.7
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350700
F-500A PIT-502 Vessel Differential Pressure (psi)	1.869
F-500B PIT-505 Vessel Differential Pressure (psi)	1.763
CF-700A Cartridge Filter Differential Pressure (psi)	12.08

CF-700B Cartridge Filter Differential Pressure (psi)	12.23
G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	7.5
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	4
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Differential Pressure (psi)	9.5
G-800H GAC Contractor Differential Pressure (psi)	5.5
Discharge Temperature (F)	54
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	0
Discharge Flow Totalizer (gal)	0
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 22, 2025, Daily, Hosam Badawi

5/23/2025, 2:21:58 AM UTC

CREATED

5/23/2025, 2:02:46 AM UTC
by Larry Wright

UPDATED

5/23/2025, 2:21:58 AM UTC
by Larry Wright

STATUS

Ready for QC

General

Date	May 22, 2025
Time	22:02
Technician	Hosam Badawi
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:46.58 °F, rH:93%, Clouds: 100%, Wind:9.22mph N-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	
Any system parameters out of range?	
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	577

RW-20 Flow Totalizer (gal)	407518040
RW-21 Flow Rate (gpm)	577
RW-21 Flow Totalizer (gal)	409818242
RW-22 Flow Rate (gpm)	682
RW-22 Flow Totalizer (gal)	502439338
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	10.1
T-100 Sodium Hydroxide Tank Total Volume (gal)	6242
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3536
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1818
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	23
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21.36
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	898
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	945
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	
F-500A PIT-502 Vessel Differential Pressure (psi)	1.95
F-500B PIT-505 Vessel Differential Pressure (psi)	1.52
CF-700A Cartridge Filter Differential Pressure (psi)	0.6
CF-700B Cartridge Filter Differential Pressure (psi)	0.6

G-800A GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Differential Pressure (psi)	6
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	7.5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54
Discharge Pressure (psi)	
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	
Discharge Flow Totalizer (gal)	
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 23, 2025, Daily, Weekly, Hosam Badawi

5/23/2025, 7:19:18 AM UTC

CREATED

5/23/2025, 6:57:33 AM UTC
by Larry Wright

UPDATED

5/23/2025, 7:19:18 AM UTC
by Larry Wright

STATUS

Ready for QC

General

Date	May 23, 2025
Time	02:57
Technician	Hosam Badawi
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:46.6 °F, rH:92%, Clouds: 100%, Wind:5.75mph NW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	589

RW-20 Flow Totalizer (gal)	407686450
RW-21 Flow Rate (gpm)	562
RW-21 Flow Totalizer (gal)	409986422
RW-22 Flow Rate (gpm)	695
RW-22 Flow Totalizer (gal)	502639218
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	10
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	5
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	8
T-100 Sodium Hydroxide Tank Total Volume (gal)	6208
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	19
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3525
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1819
AOP Recirc Into T-200 Flow Rate (gpm)	2.1
P-200A/B/C Discharge Pressure (psi)	17
P-200A Oxidation Feed Pump Influent Pressure (psi)	1
P-200A Oxidation Feed Pump Effluent Pressure (psi)	16
P-200B Oxidation Feed Pump Influent Pressure (psi)	2
P-200B Oxidation Feed Pump Effluent Pressure (psi)	0
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	0
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	200A Running
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	22
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	20.87
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	0
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	400C Running
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	900
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	940
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	
F-500A PIT-502 Vessel Differential Pressure (psi)	1.918
F-500B PIT-505 Vessel Differential Pressure (psi)	1.544
CF-700A Cartridge Filter Differential Pressure (psi)	0.62
CF-700A Cartridge Filter Influent Pressure (psi)	15
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	0.64
CF-700B Cartridge Filter Influent Pressure (psi)	16
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	4
G-800A GAC Contractor Influent Pressure (psi)	4

G-800A GAC Contractor Effluent Pressure (psi)	10
G-800B GAC Contractor Differential Pressure (psi)	6
G-800B GAC Contractor Influent Pressure (psi)	10
G-800B GAC Contractor Effluent Pressure (psi)	0
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800C GAC Contractor Influent Pressure (psi)	10
G-800C GAC Contractor Effluent Pressure (psi)	0
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Influent Pressure (psi)	3
G-800D GAC Contractor Effluent Pressure (psi)	10
G-800E GAC Contractor Differential Pressure (psi)	4
G-800E GAC Contractor Influent Pressure (psi)	3
G-800E GAC Contractor Effluent Pressure (psi)	10
G-800F GAC Contractor Differential Pressure (psi)	6
G-800F GAC Contractor Influent Pressure (psi)	10
G-800F GAC Contractor Effluent Pressure (psi)	0
G-800G GAC Contractor Differential Pressure (psi)	9
G-800G GAC Contractor Influent Pressure (psi)	9
G-800G GAC Contractor Effluent Pressure (psi)	0
G-800H GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Influent Pressure (psi)	2
G-800H GAC Contractor Effluent Pressure (psi)	9
Discharge Temperature (F)	54
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	

Discharge Flow Totalizer (gal)	
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	0
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A Dewatering Volute Feed Pump Pressure (psi)	0
P-1000B Dewatering Volute Feed Pump Pressure (psi)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 24, 2025, Daily, Hosam Badawi

5/24/2025, 5:11:19 AM UTC

CREATED

5/24/2025, 5:00:06 AM UTC
by Larry Wright

UPDATED

5/24/2025, 5:11:19 AM UTC
by Larry Wright

STATUS

Ready for QC

General

Date	May 24, 2025
Time	01:00
Technician	Hosam Badawi
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:51.03 °F, rH:92%, Clouds: 75%, Wind:5.75mph W

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	584

RW-20 Flow Totalizer (gal)	408447470
RW-21 Flow Rate (gpm)	579
RW-21 Flow Totalizer (gal)	410746462
RW-22 Flow Rate (gpm)	713
RW-22 Flow Totalizer (gal)	503542158
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	9.9
T-100 Sodium Hydroxide Tank Total Volume (gal)	6032
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3470
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1819
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	20
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21.47
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	904
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	963
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	
F-500A PIT-502 Vessel Differential Pressure (psi)	2.056
F-500B PIT-505 Vessel Differential Pressure (psi)	1.644
CF-700A Cartridge Filter Differential Pressure (psi)	0.78
CF-700B Cartridge Filter Differential Pressure (psi)	0.77

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	6.5
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	10
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	
Discharge Flow Totalizer (gal)	
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 25, 2025, Daily, Hosam Badawi

5/25/2025, 5:07:29 AM UTC

CREATED

5/25/2025, 4:57:14 AM UTC
by Larry Wright

UPDATED

5/25/2025, 5:07:29 AM UTC
by Larry Wright

STATUS

Ready for QC

General

Date	May 25, 2025
Time	00:57
Technician	Hosam Badawi
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:55.31 °F, rH:72%, Clouds: 100%, Wind:10.36mph W-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	575

RW-20 Flow Totalizer (gal)	409273650
RW-21 Flow Rate (gpm)	558
RW-21 Flow Totalizer (gal)	411571572
RW-22 Flow Rate (gpm)	682
RW-22 Flow Totalizer (gal)	504522488
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	10
T-100 Sodium Hydroxide Tank Total Volume (gal)	5845
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3410
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1826
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	22
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21.34
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	897
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	943
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	
F-500A PIT-502 Vessel Differential Pressure (psi)	1.975
F-500B PIT-505 Vessel Differential Pressure (psi)	1.531
CF-700A Cartridge Filter Differential Pressure (psi)	0.87
CF-700B Cartridge Filter Differential Pressure (psi)	0.83

G-800A GAC Contractor Differential Pressure (psi)	3
G-800B GAC Contractor Differential Pressure (psi)	7
G-800C GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Differential Pressure (psi)	3
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	
Discharge Flow Totalizer (gal)	
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 26, 2025, Daily, Hosam Badawi

5/26/2025, 5:10:27 AM UTC

CREATED

5/26/2025, 5:01:31 AM UTC
by Larry Wright

UPDATED

5/26/2025, 5:10:27 AM UTC
by Larry Wright

STATUS

Ready for QC

General

Date	May 26, 2025
Time	01:01
Technician	Hosam Badawi
Completed By	Larry Wright
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:55.36 °F, rH:77%, Clouds: 75%, Wind:4.61mph N-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	582

RW-20 Flow Totalizer (gal)	410104360
RW-21 Flow Rate (gpm)	556
RW-21 Flow Totalizer (gal)	412401132
RW-22 Flow Rate (gpm)	701
RW-22 Flow Totalizer (gal)	505508898
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	10
T-100 Sodium Hydroxide Tank Total Volume (gal)	5653
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	222
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3349
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1832
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	23
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21.47
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	897
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	943
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	
F-500A PIT-502 Vessel Differential Pressure (psi)	1.931
F-500B PIT-505 Vessel Differential Pressure (psi)	1.583
CF-700A Cartridge Filter Differential Pressure (psi)	0.96
CF-700B Cartridge Filter Differential Pressure (psi)	0.92

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	7
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Differential Pressure (psi)	10
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	54
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	
Discharge Flow Totalizer (gal)	
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

May 30, 2025, Daily, Patrick Dellecave

5/30/2025, 6:20:50 AM UTC

CREATED

5/30/2025, 6:08:10 AM UTC
by Patrick Dellecave

UPDATED

5/30/2025, 6:20:50 AM UTC
by Patrick Dellecave

STATUS

Ready for QC

General

Date	May 30, 2025
Time	02:08
Technician	Patrick Dellecave
Completed By	Patrick Dellecave
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:58.69 °F, rH:95%, Clouds: 100%, Wind:5.75mph SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	575

RW-20 Flow Totalizer (gal)	410664830
RW-21 Flow Rate (gpm)	557
RW-21 Flow Totalizer (gal)	412956532
RW-22 Flow Rate (gpm)	700
RW-22 Flow Totalizer (gal)	506175948
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	10.9
T-100 Sodium Hydroxide Tank Total Volume (gal)	5514
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3307.2
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1832
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	27
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	28.3
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	928
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	970
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	699942
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350
F-500A PIT-502 Vessel Differential Pressure (psi)	1.875
F-500B PIT-505 Vessel Differential Pressure (psi)	1.55
CF-700A Cartridge Filter Differential Pressure (psi)	7.95
CF-700B Cartridge Filter Differential Pressure (psi)	7.98

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	5
G-800C GAC Contractor Differential Pressure (psi)	7
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54
Discharge Pressure (psi)	
Discharge pH (SU)	7.37
FIT-801 Discharge Flow Rate (gpm)	
Discharge Flow Totalizer (gal)	
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 2, 2025, Daily, Kyle Zafarana

6/2/2025, 7:23:26 PM UTC

CREATED

6/2/2025, 7:14:21 PM UTC
by Kyle Zafarana

UPDATED

6/2/2025, 7:23:26 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	June 2, 2025
Time	15:14
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	Discharge flow rate and totalizer are marked as 0 awaiting install of new totalizer.

Weather

Fetch Weather	
Weather	CLOUDS, T:70.79 °F, rH:45%, Clouds: 40%, Wind:12.66mph S-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	571.6

RW-20 Flow Totalizer (gal)	413603780
RW-21 Flow Rate (gpm)	577.3
RW-21 Flow Totalizer (gal)	415891132
RW-22 Flow Rate (gpm)	720
RW-22 Flow Totalizer (gal)	509665088
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	10.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	4750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3600
LOX-300 LOX Storage Tank Pressure (%)	30
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1830
AOP Recirc Into T-200 Flow Rate (gpm)	2.6
P-200A/B/C Discharge Pressure (psi)	18
P-400A PI-402 Discharge Pressure (psi)	26
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	26
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	906
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	960.9
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350800
F-500A PIT-502 Vessel Differential Pressure (psi)	1.875
F-500B PIT-505 Vessel Differential Pressure (psi)	1.688
CF-700A Cartridge Filter Differential Pressure (psi)	8.58
CF-700B Cartridge Filter Differential Pressure (psi)	8.6

G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	7.5
G-800C GAC Contractor Differential Pressure (psi)	7
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6.5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.36
FIT-801 Discharge Flow Rate (gpm)	0
Discharge Flow Totalizer (gal)	0
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 4, 2025, Daily, Weekly, Kyle Zafarana

6/4/2025, 6:25:38 PM UTC

CREATED

6/4/2025, 6:04:15 PM UTC
by Kyle Zafarana

UPDATED

6/4/2025, 6:25:38 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	June 4, 2025
Time	14:04
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:76.15 °F, rH:61%, Clouds: 0%, Wind:11.5mph SE

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	Yes
Describe out of range system parameters.	Effluent pressure is 0 due to not being able to pressure in the pipe not being high enough to read.
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	567.6
RW-20 Flow Totalizer (gal)	415215040
RW-21 Flow Rate (gpm)	586.7
RW-21 Flow Totalizer (gal)	417499862
RW-22 Flow Rate (gpm)	691.5
RW-22 Flow Totalizer (gal)	511578948
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	10.4
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	0
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	9
T-100 Sodium Hydroxide Tank Total Volume (gal)	4500
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	0
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3400
LOX-300 LOX Storage Tank Pressure (%)	25
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1831
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	18
P-200A Oxidation Feed Pump Influent Pressure (psi)	0
P-200A Oxidation Feed Pump Effluent Pressure (psi)	18
P-200B Oxidation Feed Pump Influent Pressure (psi)	0
P-200B Oxidation Feed Pump Effluent Pressure (psi)	0
P-200C Oxidation Feed Pump Influent Pressure (psi)	0

P-200C Oxidation Feed Pump Effluent Pressure (psi)	0
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No
P-200A/B/C Oxidation Feed Pumps - Additional Comments	N/A
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	18
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	30
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	1
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	N/A
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	911.8
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	970.7
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350800
F-500A PIT-502 Vessel Differential Pressure (psi)	2.056
F-500B PIT-505 Vessel Differential Pressure (psi)	1.85
CF-700A Cartridge Filter Differential Pressure (psi)	8.97
CF-700A Cartridge Filter Influent Pressure (psi)	24
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	9
CF-700B Cartridge Filter Influent Pressure (psi)	24
CF-700B Cartridge Filter Effluent Pressure (psi)	15

G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800A GAC Contractor Influent Pressure (psi)	15.5
G-800A GAC Contractor Effluent Pressure (psi)	11
G-800B GAC Contractor Differential Pressure (psi)	7.5
G-800B GAC Contractor Influent Pressure (psi)	2
G-800B GAC Contractor Effluent Pressure (psi)	11
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800C GAC Contractor Influent Pressure (psi)	3
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Influent Pressure (psi)	15
G-800D GAC Contractor Effluent Pressure (psi)	10
G-800E GAC Contractor Differential Pressure (psi)	4
G-800E GAC Contractor Influent Pressure (psi)	14.5
G-800E GAC Contractor Effluent Pressure (psi)	10.5
G-800F GAC Contractor Differential Pressure (psi)	6.5
G-800F GAC Contractor Influent Pressure (psi)	10
G-800F GAC Contractor Effluent Pressure (psi)	2.5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800G GAC Contractor Influent Pressure (psi)	2
G-800G GAC Contractor Effluent Pressure (psi)	10
G-800H GAC Contractor Differential Pressure (psi)	5.5
G-800H GAC Contractor Influent Pressure (psi)	14.5
G-800H GAC Contractor Effluent Pressure (psi)	10

Discharge Temperature (F)	54
Discharge Pressure (psi)	0
Discharge pH (SU)	7.35
FIT-801 Discharge Flow Rate (gpm)	1863
Discharge Flow Totalizer (gal)	5987360
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	0
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A Dewatering Volute Feed Pump Pressure (psi)	0
P-1000B Dewatering Volute Feed Pump Pressure (psi)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 9, 2025, Daily, Kyle Zafarana

6/9/2025, 7:29:47 PM UTC

CREATED

6/9/2025, 7:21:25 PM UTC
by Kyle Zafarana

UPDATED

6/9/2025, 7:29:47 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	June 9, 2025
Time	15:21
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	MIST, T:62.83 °F, rH:93%, Clouds: 100%, Wind:5.75mph E-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	592

RW-20 Flow Totalizer (gal)	419401440
RW-21 Flow Rate (gpm)	585.7
RW-21 Flow Totalizer (gal)	421679182
RW-22 Flow Rate (gpm)	686.2
RW-22 Flow Totalizer (gal)	516554048
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	10.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	3625
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3100
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1833.39
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	18
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	33
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	33
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	919.7
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	982.5
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350800
F-500A PIT-502 Vessel Differential Pressure (psi)	2.2
F-500B PIT-505 Vessel Differential Pressure (psi)	1.969
CF-700A Cartridge Filter Differential Pressure (psi)	9.72
CF-700B Cartridge Filter Differential Pressure (psi)	9.69

G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	7.5
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6.5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	1872.53
Discharge Flow Totalizer (gal)	9391906
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 10, 2025, Daily, Austin Shelley

6/10/2025, 6:06:39 PM UTC

CREATED

6/10/2025, 5:48:57 PM UTC
by Austin Shelley

UPDATED

6/10/2025, 6:06:39 PM UTC
by Austin Shelley

STATUS

Ready for QC

General

Date	June 10, 2025
Time	13:48
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	

Weather

Fetch Weather	
Weather	RAIN, T:66 °F, rH:93%, Clouds: 100%, Wind:1.01mph E-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	577

RW-20 Flow Totalizer (gal)	420173270
RW-21 Flow Rate (gpm)	586
RW-21 Flow Totalizer (gal)	422450292
RW-22 Flow Rate (gpm)	702
RW-22 Flow Totalizer (gal)	517472998
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	9.3
T-100 Sodium Hydroxide Tank Total Volume (gal)	6850
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3100
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1828
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	30
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	29
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	858
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	919
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350900
F-500A PIT-502 Vessel Differential Pressure (psi)	1.95
F-500B PIT-505 Vessel Differential Pressure (psi)	1.86
CF-700A Cartridge Filter Differential Pressure (psi)	9.13
CF-700B Cartridge Filter Differential Pressure (psi)	9.12

G-800A GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Differential Pressure (psi)	7.5
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5.5
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	1820
Discharge Flow Totalizer (gal)	1192430976
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 11, 2025, Daily, Kyle Zafarana

6/11/2025, 7:23:51 PM UTC

CREATED

6/11/2025, 7:14:50 PM UTC
by Kyle Zafarana

UPDATED

6/11/2025, 7:23:51 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	June 11, 2025
Time	15:14
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:81.59 °F, rH:46%, Clouds: 0%, Wind:13.8mph S-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	588

RW-20 Flow Totalizer (gal)	421053540
RW-21 Flow Rate (gpm)	559.4
RW-21 Flow Totalizer (gal)	423328452
RW-22 Flow Rate (gpm)	705.7
RW-22 Flow Totalizer (gal)	518518108
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	9.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	6750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3000
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1821.07
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	16
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	29
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	911.6
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	966.8
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350800
F-500A PIT-502 Vessel Differential Pressure (psi)	2.219
F-500B PIT-505 Vessel Differential Pressure (psi)	1.994
CF-700A Cartridge Filter Differential Pressure (psi)	10.04
CF-700B Cartridge Filter Differential Pressure (psi)	9.99

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	7.5
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6.5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54
Discharge Pressure (psi)	0
Discharge pH (SU)	7.34
FIT-801 Discharge Flow Rate (gpm)	1855.62
Discharge Flow Totalizer (gal)	1195255040
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 12, 2025, Daily, Austin Shelley

6/12/2025, 7:20:13 PM UTC

CREATED

6/12/2025, 6:32:58 PM UTC
by Austin Shelley

UPDATED

6/12/2025, 7:20:13 PM UTC
by Austin Shelley

STATUS

Ready for QC

General

Date	June 12, 2025
Time	14:32
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:87.87 °F, rH:48%, Clouds: 0%, Wind:10.36mph SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	595

RW-20 Flow Totalizer (gal)	421854850
RW-21 Flow Rate (gpm)	569
RW-21 Flow Totalizer (gal)	424128292
RW-22 Flow Rate (gpm)	706
RW-22 Flow Totalizer (gal)	519470908
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	9.5
T-100 Sodium Hydroxide Tank Total Volume (gal)	6500
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2900
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1816
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	33
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	32
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	937
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	996
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350900
F-500A PIT-502 Vessel Differential Pressure (psi)	2.25
F-500B PIT-505 Vessel Differential Pressure (psi)	2.07
CF-700A Cartridge Filter Differential Pressure (psi)	10.25
CF-700B Cartridge Filter Differential Pressure (psi)	10.23

G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	7.5
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	1816
Discharge Flow Totalizer (gal)	1197835648
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 17, 2025, Daily, Kyle Zafarana

6/17/2025, 7:12:19 PM UTC

CREATED

6/17/2025, 7:04:32 PM UTC
by Kyle Zafarana

UPDATED

6/17/2025, 7:12:19 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	June 17, 2025
Time	15:04
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	MIST, T:66.36 °F, rH:93%, Clouds: 100%, Wind:4.61mph E-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	581.6

RW-20 Flow Totalizer (gal)	426010110
RW-21 Flow Rate (gpm)	575.5
RW-21 Flow Totalizer (gal)	428276412
RW-22 Flow Rate (gpm)	707.1
RW-22 Flow Totalizer (gal)	524412368
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	9.6
T-100 Sodium Hydroxide Tank Total Volume (gal)	5750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2600
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1823.43
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	18
P-400A PI-402 Discharge Pressure (psi)	23
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	923.4
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	974.4
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350800
F-500A PIT-502 Vessel Differential Pressure (psi)	2.006
F-500B PIT-505 Vessel Differential Pressure (psi)	1.838
CF-700A Cartridge Filter Differential Pressure (psi)	3.71
CF-700B Cartridge Filter Differential Pressure (psi)	2.23

G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	8
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6.5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.7
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	1856.83
Discharge Flow Totalizer (gal)	1211195008
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 18, 2025, Daily, Kyle Zafarana

6/18/2025, 6:43:10 PM UTC

CREATED

6/18/2025, 6:33:36 PM UTC
by Kyle Zafarana

UPDATED

6/18/2025, 6:43:10 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	June 18, 2025
Time	14:33
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:78.46 °F, rH:80%, Clouds: 0%, Wind:3mph SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	577.4

RW-20 Flow Totalizer (gal)	426824100
RW-21 Flow Rate (gpm)	603.5
RW-21 Flow Totalizer (gal)	429089102
RW-22 Flow Rate (gpm)	700.9
RW-22 Flow Totalizer (gal)	525380258
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	9.5
T-100 Sodium Hydroxide Tank Total Volume (gal)	5500
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2500
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1833.74
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	25
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	880.1
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	927
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350800
F-500A PIT-502 Vessel Differential Pressure (psi)	1.875
F-500B PIT-505 Vessel Differential Pressure (psi)	1.725
CF-700A Cartridge Filter Differential Pressure (psi)	3.83
CF-700B Cartridge Filter Differential Pressure (psi)	2.5

G-800A GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Differential Pressure (psi)	8
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	1862.75
Discharge Flow Totalizer (gal)	1213809152
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 19, 2025, Daily, Austin Shelley

6/19/2025, 7:19:33 PM UTC

CREATED

6/19/2025, 7:07:02 PM UTC
by Austin Shelley

UPDATED

6/19/2025, 7:19:33 PM UTC
by Austin Shelley

STATUS

Ready for QC

General

Date	June 19, 2025
Time	15:07
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:85.48 °F, rH:67%, Clouds: 0%, Wind:16.11mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	610

RW-20 Flow Totalizer (gal)	427667000
RW-21 Flow Rate (gpm)	564
RW-21 Flow Totalizer (gal)	429906902
RW-22 Flow Rate (gpm)	710
RW-22 Flow Totalizer (gal)	526353998
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	9.6
T-100 Sodium Hydroxide Tank Total Volume (gal)	5375
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2450
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1827
AOP Recirc Into T-200 Flow Rate (gpm)	2.1
P-200A/B/C Discharge Pressure (psi)	16.4
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	26
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25.15
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	918
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	989
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350900
F-500A PIT-502 Vessel Differential Pressure (psi)	2.1
F-500B PIT-505 Vessel Differential Pressure (psi)	1.8
CF-700A Cartridge Filter Differential Pressure (psi)	4.52
CF-700B Cartridge Filter Differential Pressure (psi)	3.22

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	7
G-800C GAC Contractor Differential Pressure (psi)	7
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	1871
Discharge Flow Totalizer (gal)	1216467980
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 20, 2025, Daily, Weekly, Kyle Zafarana

6/20/2025, 7:11:57 PM UTC

CREATED

6/20/2025, 6:52:31 PM UTC
by Kyle Zafarana

UPDATED

6/20/2025, 7:11:57 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	June 20, 2025
Time	14:52
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:82.56 °F, rH:46%, Clouds: 40%, Wind:16.11mph W

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	578.1

RW-20 Flow Totalizer (gal)	428486550
RW-21 Flow Rate (gpm)	571.9
RW-21 Flow Totalizer (gal)	430725052
RW-22 Flow Rate (gpm)	701.9
RW-22 Flow Totalizer (gal)	527328998
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	9.5
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	0
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	7
T-100 Sodium Hydroxide Tank Total Volume (gal)	5250
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	0
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2400
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1827.09
AOP Recirc Into T-200 Flow Rate (gpm)	5.6
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	0
P-200A Oxidation Feed Pump Effluent Pressure (psi)	0
P-200B Oxidation Feed Pump Influent Pressure (psi)	1
P-200B Oxidation Feed Pump Effluent Pressure (psi)	16
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	0
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	23
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23
P-400A Filter Feed Pump Influent Pressure (psi)	1
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	0
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	881.1
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	949.1
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350800
F-500A PIT-502 Vessel Differential Pressure (psi)	2.1
F-500B PIT-505 Vessel Differential Pressure (psi)	1.825
CF-700A Cartridge Filter Differential Pressure (psi)	4.82
CF-700A Cartridge Filter Influent Pressure (psi)	16
CF-700A Cartridge Filter Effluent Pressure (psi)	20
CF-700B Cartridge Filter Differential Pressure (psi)	3.64
CF-700B Cartridge Filter Influent Pressure (psi)	16
CF-700B Cartridge Filter Effluent Pressure (psi)	19.5
G-800A GAC Contractor Differential Pressure (psi)	5
G-800A GAC Contractor Influent Pressure (psi)	15

G-800A GAC Contractor Effluent Pressure (psi)	10
G-800B GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Influent Pressure (psi)	10
G-800B GAC Contractor Effluent Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800C GAC Contractor Influent Pressure (psi)	10
G-800C GAC Contractor Effluent Pressure (psi)	2.5
G-800D GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Influent Pressure (psi)	15
G-800D GAC Contractor Effluent Pressure (psi)	10
G-800E GAC Contractor Differential Pressure (psi)	4
G-800E GAC Contractor Influent Pressure (psi)	15
G-800E GAC Contractor Effluent Pressure (psi)	11
G-800F GAC Contractor Differential Pressure (psi)	6
G-800F GAC Contractor Influent Pressure (psi)	11
G-800F GAC Contractor Effluent Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	9
G-800G GAC Contractor Influent Pressure (psi)	10
G-800G GAC Contractor Effluent Pressure (psi)	2
G-800H GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Influent Pressure (psi)	15
G-800H GAC Contractor Effluent Pressure (psi)	10
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	1847.9

Discharge Flow Totalizer (gal)	1219105536
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	0
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A Dewatering Volute Feed Pump Pressure (psi)	0
P-1000B Dewatering Volute Feed Pump Pressure (psi)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 23, 2025, Daily, Kyle Zafarana

6/23/2025, 6:33:30 PM UTC

CREATED

6/23/2025, 6:23:09 PM UTC
by Kyle Zafarana

UPDATED

6/23/2025, 6:33:30 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	June 23, 2025
Time	14:23
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:90.21 °F, rH:69%, Clouds: 0%, Wind:11.5mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	577.2

RW-20 Flow Totalizer (gal)	430764380
RW-21 Flow Rate (gpm)	577.6
RW-21 Flow Totalizer (gal)	432998462
RW-22 Flow Rate (gpm)	720.8
RW-22 Flow Totalizer (gal)	530041638
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	9.6
T-100 Sodium Hydroxide Tank Total Volume (gal)	4750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2200
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1820.22
AOP Recirc Into T-200 Flow Rate (gpm)	2.1
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	24
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	884.1
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	906.6
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	350800
F-500A PIT-502 Vessel Differential Pressure (psi)	2.031
F-500B PIT-505 Vessel Differential Pressure (psi)	1.913
CF-700A Cartridge Filter Differential Pressure (psi)	5.62
CF-700B Cartridge Filter Differential Pressure (psi)	4.81

G-800A GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Differential Pressure (psi)	7
G-800C GAC Contractor Differential Pressure (psi)	7
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6.5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	5.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	1834.84
Discharge Flow Totalizer (gal)	1226450944
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 24, 2025, Daily, Kyle Zafarana

6/24/2025, 12:15:17 PM UTC

CREATED

6/24/2025, 12:02:25 PM UTC
by Kyle Zafarana

UPDATED

6/24/2025, 12:15:17 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	June 24, 2025
Time	08:02
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:85.17 °F, rH:73%, Clouds: 0%, Wind:5.75mph NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	560.2

RW-20 Flow Totalizer (gal)	431375160
RW-21 Flow Rate (gpm)	571.7
RW-21 Flow Totalizer (gal)	433608942
RW-22 Flow Rate (gpm)	705
RW-22 Flow Totalizer (gal)	530768078
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	9.5
T-100 Sodium Hydroxide Tank Total Volume (gal)	4625
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2200
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1819.3
AOP Recirc Into T-200 Flow Rate (gpm)	4.5
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	27
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	27
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	942.8
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	967.1
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351000
F-500A PIT-502 Vessel Differential Pressure (psi)	2.206
F-500B PIT-505 Vessel Differential Pressure (psi)	2.113
CF-700A Cartridge Filter Differential Pressure (psi)	6.41
CF-700B Cartridge Filter Differential Pressure (psi)	5.67

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	7
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	10
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	1860.4
Discharge Flow Totalizer (gal)	1228416256
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 25, 2025, Daily, Kyle Zafarana

6/25/2025, 7:09:09 PM UTC

CREATED

6/25/2025, 6:52:34 PM UTC
by Kyle Zafarana

UPDATED

6/25/2025, 7:09:09 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	June 25, 2025
Time	14:52
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:95.76 °F, rH:48%, Clouds: 0%, Wind:9.22mph W

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	607.5

RW-20 Flow Totalizer (gal)	432433040
RW-21 Flow Rate (gpm)	565.5
RW-21 Flow Totalizer (gal)	434665922
RW-22 Flow Rate (gpm)	704.1
RW-22 Flow Totalizer (gal)	532026068
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	9.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	4375
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	222
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2100
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1826
AOP Recirc Into T-200 Flow Rate (gpm)	3.5
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	27
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	27
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	879
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	907.9
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	35100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.169
F-500B PIT-505 Vessel Differential Pressure (psi)	2.038
CF-700A Cartridge Filter Differential Pressure (psi)	6.62
CF-700B Cartridge Filter Differential Pressure (psi)	6.04

G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	7.5
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.32
FIT-801 Discharge Flow Rate (gpm)	1824.53
Discharge Flow Totalizer (gal)	1231825280
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

June 27, 2025, Daily, Weekly, Monthly, Kyle Zafarana

6/27/2025, 6:32:34 PM UTC

CREATED

6/27/2025, 6:16:00 PM UTC
by Kyle Zafarana

UPDATED

6/27/2025, 6:32:34 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	June 27, 2025
Time	14:16
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:70.09 °F, rH:50%, Clouds: 100%, Wind:14.97mph E-SE

Inspection Type (check all that apply)	Daily, Weekly, Monthly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	576.9

RW-20 Flow Totalizer (gal)	434068700
RW-21 Flow Rate (gpm)	594.2
RW-21 Flow Totalizer (gal)	436300532
RW-22 Flow Rate (gpm)	700.1
RW-22 Flow Totalizer (gal)	533971388
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	9.5
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	0
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	7
T-100 Sodium Hydroxide Tank Total Volume (gal)	4000
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	223
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	20
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	0
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1900
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1830.92
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-200A Oxidation Feed Pump Influent Pressure (psi)	0
P-200A Oxidation Feed Pump Effluent Pressure (psi)	0
P-200B Oxidation Feed Pump Influent Pressure (psi)	0
P-200B Oxidation Feed Pump Effluent Pressure (psi)	0
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	17
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	29
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	29
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	0
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	914.3
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	945.6
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	35100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.519
F-500B PIT-505 Vessel Differential Pressure (psi)	2.2
CF-700A Cartridge Filter Differential Pressure (psi)	7.94
CF-700A Cartridge Filter Influent Pressure (psi)	24
CF-700A Cartridge Filter Effluent Pressure (psi)	16
CF-700B Cartridge Filter Differential Pressure (psi)	7.35
CF-700B Cartridge Filter Influent Pressure (psi)	24
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	5
G-800A GAC Contractor Influent Pressure (psi)	15

G-800A GAC Contractor Effluent Pressure (psi)	10
G-800B GAC Contractor Differential Pressure (psi)	8
G-800B GAC Contractor Influent Pressure (psi)	10
G-800B GAC Contractor Effluent Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800C GAC Contractor Influent Pressure (psi)	10
G-800C GAC Contractor Effluent Pressure (psi)	2
G-800D GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Influent Pressure (psi)	15
G-800D GAC Contractor Effluent Pressure (psi)	10
G-800E GAC Contractor Differential Pressure (psi)	4
G-800E GAC Contractor Influent Pressure (psi)	15
G-800E GAC Contractor Effluent Pressure (psi)	11
G-800F GAC Contractor Differential Pressure (psi)	7
G-800F GAC Contractor Influent Pressure (psi)	11
G-800F GAC Contractor Effluent Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Influent Pressure (psi)	9
G-800G GAC Contractor Effluent Pressure (psi)	3
G-800H GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Influent Pressure (psi)	15
G-800H GAC Contractor Effluent Pressure (psi)	9
Discharge Temperature (F)	54.8
Discharge Pressure (psi)	0
Discharge pH (SU)	7.32
FIT-801 Discharge Flow Rate (gpm)	1857.05

Discharge Flow Totalizer (gal)	1237078144
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	0
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A Dewatering Volute Feed Pump Pressure (psi)	0
P-1000B Dewatering Volute Feed Pump Pressure (psi)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Monthly Inspection Form

Remedial Well RW-20

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-20 Inspection Complete	Yes

Remedial Well RW-21

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-21 Inspection Complete	Yes

Remedial Well RW-22

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-22 Inspection Complete	Yes

Building 109 System

Checked process water piping, valves, joints and seals for leakage.	Yes
Action/comment piping	
Checked pneumatic lines for leaks or breaks	Yes
Action/comment for line leaks:	
Inspected valves for proper positioning/seating	Yes
Action/comment for valves	
Checked pumps and pump motors for excessive noise and vibration	Yes
Action/Comment for pumps and motors	
Checked mixers and mixer motors for excessive noise and vibration	Yes

Action/Comment for mixers and motors	
Checked tanks and tank connections/fittings for leaks	Yes
Action/Comment for tank leaks	
Checked solids processing equipment and connection points for leaks	Yes
Action/Comment for equipment leaks	
Checked motor bearing lubrication and lubricate as needed	Yes
Action/Comment for motor lubrication	
Checked control panel indicator lights for alarms	Yes
Action/Comment for alarm	
Monthly B109 Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 1, 2025, Daily, Kyle Zafarana

7/1/2025, 7:07:33 PM UTC

CREATED

7/1/2025, 6:55:01 PM UTC
by Kyle Zafarana

UPDATED

7/1/2025, 7:07:33 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	July 1, 2025
Time	14:55
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:88.09 °F, rH:71%, Clouds: 0%, Wind:14.97mph SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	579

RW-20 Flow Totalizer (gal)	437329100
RW-21 Flow Rate (gpm)	575.3
RW-21 Flow Totalizer (gal)	4395600112
RW-22 Flow Rate (gpm)	698.6
RW-22 Flow Totalizer (gal)	537849768
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	8.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	7000
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	5000
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1829.11
AOP Recirc Into T-200 Flow Rate (gpm)	2.4
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	31
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	31
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	887.8
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	919.7
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351000
F-500A PIT-502 Vessel Differential Pressure (psi)	2.381
F-500B PIT-505 Vessel Differential Pressure (psi)	2.269
CF-700A Cartridge Filter Differential Pressure (psi)	9.92
CF-700B Cartridge Filter Differential Pressure (psi)	9.68

G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	7
G-800C GAC Contractor Differential Pressure (psi)	7
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	55.1
Discharge Pressure (psi)	0
Discharge pH (SU)	7.32
FIT-801 Discharge Flow Rate (gpm)	1842.48
Discharge Flow Totalizer (gal)	1247606912
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 2, 2025, Daily, Kyle Zafarana

7/2/2025, 7:10:13 PM UTC

CREATED

7/2/2025, 6:59:03 PM UTC
by Kyle Zafarana

UPDATED

7/2/2025, 7:10:13 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	July 2, 2025
Time	14:59
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:78.48 °F, rH:78%, Clouds: 100%, Wind:7mph S-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	567.4

RW-20 Flow Totalizer (gal)	438164770
RW-21 Flow Rate (gpm)	570.9
RW-21 Flow Totalizer (gal)	440394852
RW-22 Flow Rate (gpm)	734.3
RW-22 Flow Totalizer (gal)	538842498
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	8.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	6750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	5000
LOX-300 LOX Storage Tank Pressure (%)	30
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1824.11
AOP Recirc Into T-200 Flow Rate (gpm)	2.7
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	30
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	883.7
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	915.9
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.356
F-500B PIT-505 Vessel Differential Pressure (psi)	2.319
CF-700A Cartridge Filter Differential Pressure (psi)	10.88
CF-700B Cartridge Filter Differential Pressure (psi)	10.67

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	7
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6.5
G-800G GAC Contractor Differential Pressure (psi)	10
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.31
FIT-801 Discharge Flow Rate (gpm)	1844.99
Discharge Flow Totalizer (gal)	1250272384
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 3, 2025, Daily, Kyle Zafarana

7/3/2025, 7:16:42 PM UTC

CREATED

7/3/2025, 7:09:16 PM UTC
by Kyle Zafarana

UPDATED

7/3/2025, 7:16:42 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	July 3, 2025
Time	15:09
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:88.3 °F, rH:47%, Clouds: 0%, Wind:14.97mph S-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	576.3

RW-20 Flow Totalizer (gal)	435993680
RW-21 Flow Rate (gpm)	585
RW-21 Flow Totalizer (gal)	441223092
RW-22 Flow Rate (gpm)	702.9
RW-22 Flow Totalizer (gal)	539827778
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	8.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	6750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	5000
LOX-300 LOX Storage Tank Pressure (%)	30
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1822.91
AOP Recirc Into T-200 Flow Rate (gpm)	1.9
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	24
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	872.8
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	901.3
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.431
F-500B PIT-505 Vessel Differential Pressure (psi)	2.225
CF-700A Cartridge Filter Differential Pressure (psi)	0.47
CF-700B Cartridge Filter Differential Pressure (psi)	2.14

G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	7
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.31
FIT-801 Discharge Flow Rate (gpm)	1820.54
Discharge Flow Totalizer (gal)	1252940416
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 4, 2025, Daily, Weekly, Kyle Zafarana

7/4/2025, 3:48:32 PM UTC

CREATED

7/4/2025, 3:33:41 PM UTC
by Kyle Zafarana

UPDATED

7/4/2025, 3:48:32 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	July 4, 2025
Time	11:33
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:78.75 °F, rH:51%, Clouds: 0%, Wind:8.01mph W-NW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	563.6

RW-20 Flow Totalizer (gal)	439697120
RW-21 Flow Rate (gpm)	586.8
RW-21 Flow Totalizer (gal)	441926492
RW-22 Flow Rate (gpm)	706.7
RW-22 Flow Totalizer (gal)	540664898
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	8.8
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	0
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	6
T-100 Sodium Hydroxide Tank Total Volume (gal)	6500
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	20
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	0
T-300 Hydrogen Peroxide Tank Total Volume (gal)	5000
LOX-300 LOX Storage Tank Pressure (%)	30
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1824.24
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-200A Oxidation Feed Pump Influent Pressure (psi)	0
P-200A Oxidation Feed Pump Effluent Pressure (psi)	17
P-200B Oxidation Feed Pump Influent Pressure (psi)	0
P-200B Oxidation Feed Pump Effluent Pressure (psi)	0
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	0
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	25
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	0
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	911.3
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	940.3
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.544
F-500B PIT-505 Vessel Differential Pressure (psi)	2.344
CF-700A Cartridge Filter Differential Pressure (psi)	0.85
CF-700A Cartridge Filter Influent Pressure (psi)	15
CF-700A Cartridge Filter Effluent Pressure (psi)	16
CF-700B Cartridge Filter Differential Pressure (psi)	2.57
CF-700B Cartridge Filter Influent Pressure (psi)	18
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800A GAC Contractor Influent Pressure (psi)	15

G-800A GAC Contractor Effluent Pressure (psi)	10
G-800B GAC Contractor Differential Pressure (psi)	8
G-800B GAC Contractor Influent Pressure (psi)	10
G-800B GAC Contractor Effluent Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800C GAC Contractor Influent Pressure (psi)	10
G-800C GAC Contractor Effluent Pressure (psi)	2.5
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Influent Pressure (psi)	14.5
G-800D GAC Contractor Effluent Pressure (psi)	10
G-800E GAC Contractor Differential Pressure (psi)	4
G-800E GAC Contractor Influent Pressure (psi)	14
G-800E GAC Contractor Effluent Pressure (psi)	10
G-800F GAC Contractor Differential Pressure (psi)	6
G-800F GAC Contractor Influent Pressure (psi)	10
G-800F GAC Contractor Effluent Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	8
G-800G GAC Contractor Influent Pressure (psi)	9
G-800G GAC Contractor Effluent Pressure (psi)	2
G-800H GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Influent Pressure (psi)	15
G-800H GAC Contractor Effluent Pressure (psi)	9
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.31
FIT-801 Discharge Flow Rate (gpm)	1839

Discharge Flow Totalizer (gal)	1255202560
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	0
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A Dewatering Volute Feed Pump Pressure (psi)	0
P-1000B Dewatering Volute Feed Pump Pressure (psi)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 7, 2025, Daily, Kyle Zafarana

7/7/2025, 7:16:29 PM UTC

CREATED

7/7/2025, 7:08:44 PM UTC
by Kyle Zafarana

UPDATED

7/7/2025, 7:16:29 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	July 7, 2025
Time	15:08
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:82.72 °F, rH:82%, Clouds: 75%, Wind:16.11mph S-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	582.7

RW-20 Flow Totalizer (gal)	442278850
RW-21 Flow Rate (gpm)	575.9
RW-21 Flow Totalizer (gal)	444510022
RW-22 Flow Rate (gpm)	705.6
RW-22 Flow Totalizer (gal)	543742918
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	8.9
T-100 Sodium Hydroxide Tank Total Volume (gal)	6000
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4700
LOX-300 LOX Storage Tank Pressure (%)	20
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1818.23
AOP Recirc Into T-200 Flow Rate (gpm)	2.1
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	25
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	937.3
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	933.9
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.394
F-500B PIT-505 Vessel Differential Pressure (psi)	2.331
CF-700A Cartridge Filter Differential Pressure (psi)	1.67
CF-700B Cartridge Filter Differential Pressure (psi)	3.27

G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	7.5
G-800C GAC Contractor Differential Pressure (psi)	7
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	6.5
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.31
FIT-801 Discharge Flow Rate (gpm)	1869.31
Discharge Flow Totalizer (gal)	1263541504
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 8, 2025, Daily, Austin Shelley

7/8/2025, 7:22:03 PM UTC

CREATED

7/8/2025, 7:08:13 PM UTC
by Austin Shelley

UPDATED

7/8/2025, 7:22:03 PM UTC
by Austin Shelley

STATUS

Ready for QC

General

Date	July 8, 2025
Time	15:08
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:90.88 °F, rH:64%, Clouds: 0%, Wind:12.66mph S-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	601

RW-20 Flow Totalizer (gal)	443105900
RW-21 Flow Rate (gpm)	584
RW-21 Flow Totalizer (gal)	445337162
RW-22 Flow Rate (gpm)	694
RW-22 Flow Totalizer (gal)	544726798
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	8.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	5825
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4700
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1824
AOP Recirc Into T-200 Flow Rate (gpm)	0.3
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	22
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.27
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	903
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	898
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.5
F-500B PIT-505 Vessel Differential Pressure (psi)	2.51
CF-700A Cartridge Filter Differential Pressure (psi)	2.01
CF-700B Cartridge Filter Differential Pressure (psi)	3.59

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	7
G-800C GAC Contractor Differential Pressure (psi)	7
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.31
FIT-801 Discharge Flow Rate (gpm)	1841
Discharge Flow Totalizer (gal)	1266201472
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 9, 2025, Daily, Kyle Zafarana

7/9/2025, 7:08:20 PM UTC

CREATED

7/9/2025, 6:54:53 PM UTC
by Kyle Zafarana

UPDATED

7/9/2025, 7:08:20 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	July 9, 2025
Time	14:54
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:86.58 °F, rH:68%, Clouds: 40%, Wind:13mph W-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	579

RW-20 Flow Totalizer (gal)	443925790
RW-21 Flow Rate (gpm)	591
RW-21 Flow Totalizer (gal)	446157282
RW-22 Flow Rate (gpm)	709.5
RW-22 Flow Totalizer (gal)	545703158
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	8.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	5750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4600
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1813.65
AOP Recirc Into T-200 Flow Rate (gpm)	1.3
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	24
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	871.1
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	892.9
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.425
F-500B PIT-505 Vessel Differential Pressure (psi)	2.35
CF-700A Cartridge Filter Differential Pressure (psi)	2.04
CF-700B Cartridge Filter Differential Pressure (psi)	3.45

G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	7.5
G-800C GAC Contractor Differential Pressure (psi)	9.5
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	8.5
G-800G GAC Contractor Differential Pressure (psi)	11.5
G-800H GAC Contractor Differential Pressure (psi)	5
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.3
FIT-801 Discharge Flow Rate (gpm)	1822.86
Discharge Flow Totalizer (gal)	1268909440
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 10, 2025, Daily, Kyle Zafarana

7/10/2025, 7:12:47 PM UTC

CREATED

7/10/2025, 7:05:41 PM UTC
by Kyle Zafarana

UPDATED

7/10/2025, 7:12:47 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	July 10, 2025
Time	15:05
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:80.06 °F, rH:77%, Clouds: 75%, Wind:4mph E-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	583.8

RW-20 Flow Totalizer (gal)	444758690
RW-21 Flow Rate (gpm)	560.8
RW-21 Flow Totalizer (gal)	446990562
RW-22 Flow Rate (gpm)	706.9
RW-22 Flow Totalizer (gal)	546665178
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	8.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	5500
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4500
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1821.42
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	25
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	903
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	921
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.625
F-500B PIT-505 Vessel Differential Pressure (psi)	2.394
CF-700A Cartridge Filter Differential Pressure (psi)	2.26
CF-700B Cartridge Filter Differential Pressure (psi)	3.7

G-800A GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Differential Pressure (psi)	8
G-800C GAC Contractor Differential Pressure (psi)	9.5
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Differential Pressure (psi)	8.5
G-800G GAC Contractor Differential Pressure (psi)	11
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.3
FIT-801 Discharge Flow Rate (gpm)	1873.67
Discharge Flow Totalizer (gal)	1271661440
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 11, 2025, Daily, Weekly, Kyle Zafarana

7/11/2025, 6:51:42 PM UTC

CREATED

7/11/2025, 6:37:51 PM UTC
by Kyle Zafarana

UPDATED

7/11/2025, 6:51:42 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	July 11, 2025
Time	14:37
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:79.65 °F, rH:76%, Clouds: 20%, Wind:11.5mph E-SE

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	578.4

RW-20 Flow Totalizer (gal)	445570690
RW-21 Flow Rate (gpm)	567.3
RW-21 Flow Totalizer (gal)	447802222
RW-22 Flow Rate (gpm)	704.7
RW-22 Flow Totalizer (gal)	547660998
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	8.9
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	0
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	6
T-100 Sodium Hydroxide Tank Total Volume (gal)	5500
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	0
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4400
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1822.48
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-200A Oxidation Feed Pump Influent Pressure (psi)	0
P-200A Oxidation Feed Pump Effluent Pressure (psi)	0
P-200B Oxidation Feed Pump Influent Pressure (psi)	0
P-200B Oxidation Feed Pump Effluent Pressure (psi)	17
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	0
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	23
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	0
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	929.4
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	948.9
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.619
F-500B PIT-505 Vessel Differential Pressure (psi)	2.475
CF-700A Cartridge Filter Differential Pressure (psi)	2.64
CF-700A Cartridge Filter Influent Pressure (psi)	17
CF-700A Cartridge Filter Effluent Pressure (psi)	18
CF-700B Cartridge Filter Differential Pressure (psi)	4.05
CF-700B Cartridge Filter Influent Pressure (psi)	20
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	4
G-800A GAC Contractor Influent Pressure (psi)	15

G-800A GAC Contractor Effluent Pressure (psi)	10
G-800B GAC Contractor Differential Pressure (psi)	8
G-800B GAC Contractor Influent Pressure (psi)	10
G-800B GAC Contractor Effluent Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	9
G-800C GAC Contractor Influent Pressure (psi)	10
G-800C GAC Contractor Effluent Pressure (psi)	1
G-800D GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Influent Pressure (psi)	15
G-800D GAC Contractor Effluent Pressure (psi)	10
G-800E GAC Contractor Differential Pressure (psi)	4
G-800E GAC Contractor Influent Pressure (psi)	15
G-800E GAC Contractor Effluent Pressure (psi)	10
G-800F GAC Contractor Differential Pressure (psi)	9
G-800F GAC Contractor Influent Pressure (psi)	10
G-800F GAC Contractor Effluent Pressure (psi)	1
G-800G GAC Contractor Differential Pressure (psi)	10
G-800G GAC Contractor Influent Pressure (psi)	9
G-800G GAC Contractor Effluent Pressure (psi)	1
G-800H GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Influent Pressure (psi)	14
G-800H GAC Contractor Effluent Pressure (psi)	9
Discharge Temperature (F)	55.3
Discharge Pressure (psi)	0
Discharge pH (SU)	7.3
FIT-801 Discharge Flow Rate (gpm)	1707.46

Discharge Flow Totalizer (gal)	1274352256
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	0
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A Dewatering Volute Feed Pump Pressure (psi)	0
P-1000B Dewatering Volute Feed Pump Pressure (psi)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 17, 2025, Daily, Kyle Zafarana

7/17/2025, 8:51:24 PM UTC

CREATED

7/17/2025, 8:39:26 PM UTC
by Kyle Zafarana

UPDATED

7/17/2025, 8:51:24 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	July 17, 2025
Time	16:39
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:90.79 °F, rH:61%, Clouds: 75%, Wind:14.97mph SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	572.8

RW-20 Flow Totalizer (gal)	448211500
RW-21 Flow Rate (gpm)	576.5
RW-21 Flow Totalizer (gal)	450436482
RW-22 Flow Rate (gpm)	709.3
RW-22 Flow Totalizer (gal)	550801478
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	7.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	5000
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	227
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4200
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1874.41
AOP Recirc Into T-200 Flow Rate (gpm)	9.9
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	28
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	28
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	941.4
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	1003.3
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.869
F-500B PIT-505 Vessel Differential Pressure (psi)	2.588
CF-700A Cartridge Filter Differential Pressure (psi)	9.48
CF-700B Cartridge Filter Differential Pressure (psi)	10.27

G-800A GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	8.5
Discharge Temperature (F)	56.1
Discharge Pressure (psi)	0
Discharge pH (SU)	7.52
FIT-801 Discharge Flow Rate (gpm)	1922.56
Discharge Flow Totalizer (gal)	1282944128
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 18, 2025, Daily, Weekly, Kyle Zafarana

7/18/2025, 7:26:06 PM UTC

CREATED

7/18/2025, 7:10:04 PM UTC
by Kyle Zafarana

UPDATED

7/18/2025, 7:26:06 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	July 18, 2025
Time	15:10
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:81.48 °F, rH:52%, Clouds: 0%, Wind:8.05mph NW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	595.4

RW-20 Flow Totalizer (gal)	448990500
RW-21 Flow Rate (gpm)	581.8
RW-21 Flow Totalizer (gal)	451214852
RW-22 Flow Rate (gpm)	713.4
RW-22 Flow Totalizer (gal)	551728090
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	8.4
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	0
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	6
T-100 Sodium Hydroxide Tank Total Volume (gal)	4750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	0
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4200
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1816.38
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-200A Oxidation Feed Pump Influent Pressure (psi)	0
P-200A Oxidation Feed Pump Effluent Pressure (psi)	0
P-200B Oxidation Feed Pump Influent Pressure (psi)	0
P-200B Oxidation Feed Pump Effluent Pressure (psi)	0
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	17
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	32
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	32
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	0
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	912
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	979.5
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.675
F-500B PIT-505 Vessel Differential Pressure (psi)	2.556
CF-700A Cartridge Filter Differential Pressure (psi)	10.01
CF-700A Cartridge Filter Influent Pressure (psi)	24
CF-700A Cartridge Filter Effluent Pressure (psi)	15
CF-700B Cartridge Filter Differential Pressure (psi)	10.25
CF-700B Cartridge Filter Influent Pressure (psi)	25
CF-700B Cartridge Filter Effluent Pressure (psi)	15
G-800A GAC Contractor Differential Pressure (psi)	8
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	2
G-800B GAC Contractor Differential Pressure (psi)	4
G-800B GAC Contractor Influent Pressure (psi)	14
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Influent Pressure (psi)	14
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	1.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	2
G-800F GAC Contractor Differential Pressure (psi)	4
G-800F GAC Contractor Influent Pressure (psi)	14
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Influent Pressure (psi)	15
G-800G GAC Contractor Effluent Pressure (psi)	10
G-800H GAC Contractor Differential Pressure (psi)	9
G-800H GAC Contractor Influent Pressure (psi)	10
G-800H GAC Contractor Effluent Pressure (psi)	1
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.4
FIT-801 Discharge Flow Rate (gpm)	1817.12

Discharge Flow Totalizer (gal)	1285436928
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	0
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A Dewatering Volute Feed Pump Pressure (psi)	0
P-1000B Dewatering Volute Feed Pump Pressure (psi)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 21, 2025, Daily, Austin Shelley

7/21/2025, 7:10:22 PM UTC

CREATED

7/21/2025, 6:57:18 PM UTC
by Austin Shelley

UPDATED

7/21/2025, 7:10:22 PM UTC
by Austin Shelley

STATUS

Ready for QC

General

Date	July 21, 2025
Time	14:57
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:84.2 °F, rH:50%, Clouds: 0%, Wind:6.91mph N

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	568

RW-20 Flow Totalizer (gal)	451459180
RW-21 Flow Rate (gpm)	559
RW-21 Flow Totalizer (gal)	453681842
RW-22 Flow Rate (gpm)	687
RW-22 Flow Totalizer (gal)	554665998
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	8.5
T-100 Sodium Hydroxide Tank Total Volume (gal)	4330
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3400
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1815
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	22
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	900
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	960
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.7
F-500B PIT-505 Vessel Differential Pressure (psi)	2.6
CF-700A Cartridge Filter Differential Pressure (psi)	1.94
CF-700B Cartridge Filter Differential Pressure (psi)	0.62

G-800A GAC Contractor Differential Pressure (psi)	8
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	9
G-800E GAC Contractor Differential Pressure (psi)	6
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	9
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.31
FIT-801 Discharge Flow Rate (gpm)	1840
Discharge Flow Totalizer (gal)	1293543552
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 22, 2025, Daily, Kyle Zafarana

7/23/2025, 11:38:55 AM UTC

CREATED

7/22/2025, 8:14:35 PM UTC
by Kyle Zafarana

UPDATED

7/23/2025, 11:38:55 AM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	July 22, 2025
Time	16:14
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	AOP recirculating into T-200 flowmeter is giving a “check sensor” alarm, will conduct further investigation into resolution.

Weather

Fetch Weather	
Weather	CLOUDS, T:76.64 °F, rH:54%, Clouds: 20%, Wind:9.22mph S-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	556
RW-20 Flow Totalizer (gal)	452331700
RW-21 Flow Rate (gpm)	587.7
RW-21 Flow Totalizer (gal)	454554042
RW-22 Flow Rate (gpm)	706.7
RW-22 Flow Totalizer (gal)	555704318
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	8.1
T-100 Sodium Hydroxide Tank Total Volume (gal)	3900
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	227
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4250
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1883.5
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	25
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	941.1
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	1008
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.819
F-500B PIT-505 Vessel Differential Pressure (psi)	2.75
CF-700A Cartridge Filter Differential Pressure (psi)	2.14

CF-700B Cartridge Filter Differential Pressure (psi)	0.71
G-800A GAC Contractor Differential Pressure (psi)	8
G-800B GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	6
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	9
Discharge Temperature (F)	55.1
Discharge Pressure (psi)	0
Discharge pH (SU)	7.3
FIT-801 Discharge Flow Rate (gpm)	1900.29
Discharge Flow Totalizer (gal)	1296352896
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 23, 2025, Daily, Kyle Zafarana

7/23/2025, 8:41:17 PM UTC

CREATED

7/23/2025, 8:32:06 PM UTC
by Kyle Zafarana

UPDATED

7/23/2025, 8:41:17 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

POWERED BY Fulcrum WWW.FULCRUMAPP.COM

General

Date	July 23, 2025
Time	16:32
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	AOP recirculating into T-200 flowmeter is giving a “check sensor” alarm, will conduct further investigation into resolution.

Weather

Fetch Weather	
Weather	CLEAR, T:79.66 °F, rH:55%, Clouds: 0%, Wind:13.8mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	592.9
RW-20 Flow Totalizer (gal)	453169200
RW-21 Flow Rate (gpm)	563.2
RW-21 Flow Totalizer (gal)	455391322
RW-22 Flow Rate (gpm)	692.9
RW-22 Flow Totalizer (gal)	556701108
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	8.6
T-100 Sodium Hydroxide Tank Total Volume (gal)	4000
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3800
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1819.77
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	21
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	907.1
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	971
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.719
F-500B PIT-505 Vessel Differential Pressure (psi)	2.663
CF-700A Cartridge Filter Differential Pressure (psi)	2.09

CF-700B Cartridge Filter Differential Pressure (psi)	0.79
G-800A GAC Contractor Differential Pressure (psi)	8
G-800B GAC Contractor Differential Pressure (psi)	2
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	6
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	8.5
Discharge Temperature (F)	56
Discharge Pressure (psi)	0
Discharge pH (SU)	7.3
FIT-801 Discharge Flow Rate (gpm)	1868.48
Discharge Flow Totalizer (gal)	1299059456
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 28, 2025, Daily, Kyle Zafarana

7/28/2025, 7:32:48 PM UTC

CREATED

7/28/2025, 7:26:15 PM UTC
by Kyle Zafarana

UPDATED

7/28/2025, 7:32:48 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	July 28, 2025
Time	15:26
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:91.36 °F, rH:53%, Clouds: 20%, Wind:5.99mph S-SW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	592.6

RW-20 Flow Totalizer (gal)	457271410
RW-21 Flow Rate (gpm)	565.9
RW-21 Flow Totalizer (gal)	459493102
RW-22 Flow Rate (gpm)	703.8
RW-22 Flow Totalizer (gal)	561589458
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	8.2
T-100 Sodium Hydroxide Tank Total Volume (gal)	3500
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	227
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3400
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1877.79
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	25
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	896.4
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	956.8
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.919
F-500B PIT-505 Vessel Differential Pressure (psi)	2.75
CF-700A Cartridge Filter Differential Pressure (psi)	2.6
CF-700B Cartridge Filter Differential Pressure (psi)	1.46

G-800A GAC Contractor Differential Pressure (psi)	8
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4.5
G-800D GAC Contractor Differential Pressure (psi)	9
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	56.2
Discharge Pressure (psi)	0
Discharge pH (SU)	7.29
FIT-801 Discharge Flow Rate (gpm)	1876.43
Discharge Flow Totalizer (gal)	1312227712
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 29, 2025, Daily, Austin Shelley

7/29/2025, 6:58:28 PM UTC

CREATED

7/29/2025, 6:27:15 PM UTC
by Austin Shelley

UPDATED

7/29/2025, 6:58:28 PM UTC
by Austin Shelley

STATUS

Ready for QC

General

Date	July 29, 2025
Time	14:27
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:94.62 °F, rH:52%, Clouds: 0%, Wind:11.5mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	555

RW-20 Flow Totalizer (gal)	458062360
RW-21 Flow Rate (gpm)	577
RW-21 Flow Totalizer (gal)	460284602
RW-22 Flow Rate (gpm)	699
RW-22 Flow Totalizer (gal)	562532998
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	7.7
T-100 Sodium Hydroxide Tank Total Volume (gal)	6900
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	218
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3400
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1815
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	24
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23.46
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	916
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	979
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.9
F-500B PIT-505 Vessel Differential Pressure (psi)	2.8
CF-700A Cartridge Filter Differential Pressure (psi)	2.88
CF-700B Cartridge Filter Differential Pressure (psi)	1.78

G-800A GAC Contractor Differential Pressure (psi)	8
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	9
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	55.1
Discharge Pressure (psi)	0
Discharge pH (SU)	7.29
FIT-801 Discharge Flow Rate (gpm)	1872
Discharge Flow Totalizer (gal)	1314777344
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 30, 2025, Daily, Kyle Zafarana

7/30/2025, 6:43:48 PM UTC

CREATED

7/30/2025, 6:34:10 PM UTC
by Kyle Zafarana

UPDATED

7/30/2025, 6:43:48 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	July 30, 2025
Time	14:34
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:93.13 °F, rH:48%, Clouds: 0%, Wind:10.36mph S-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	588.3

RW-20 Flow Totalizer (gal)	458893890
RW-21 Flow Rate (gpm)	590
RW-21 Flow Totalizer (gal)	461115582
RW-22 Flow Rate (gpm)	706.9
RW-22 Flow Totalizer (gal)	563523558
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	7.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	6750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3400
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1816.56
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	23
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	872.8
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	923.1
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.825
F-500B PIT-505 Vessel Differential Pressure (psi)	2.788
CF-700A Cartridge Filter Differential Pressure (psi)	2.97
CF-700B Cartridge Filter Differential Pressure (psi)	2.03

G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	9
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.29
FIT-801 Discharge Flow Rate (gpm)	1827.22
Discharge Flow Totalizer (gal)	1317442048
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

July 31, 2025, Daily, Kyle Zafarana

7/31/2025, 7:12:56 PM UTC

CREATED

7/31/2025, 7:06:36 PM UTC
by Kyle Zafarana

UPDATED

7/31/2025, 7:12:56 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	July 31, 2025
Time	15:06
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:80.76 °F, rH:81%, Clouds: 100%, Wind:9.22mph NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	606.7

RW-20 Flow Totalizer (gal)	459739870
RW-21 Flow Rate (gpm)	584.3
RW-21 Flow Totalizer (gal)	461961462
RW-22 Flow Rate (gpm)	687.8
RW-22 Flow Totalizer (gal)	564532168
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	7.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	6625
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3300
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1821.21
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	24
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	889.5
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	939
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.85
F-500B PIT-505 Vessel Differential Pressure (psi)	2.694
CF-700A Cartridge Filter Differential Pressure (psi)	3.47
CF-700B Cartridge Filter Differential Pressure (psi)	2.51

G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	9
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	7
Discharge Temperature (F)	55.1
Discharge Pressure (psi)	0
Discharge pH (SU)	7.28
FIT-801 Discharge Flow Rate (gpm)	1839.94
Discharge Flow Totalizer (gal)	1320157056
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 1, 2025, Daily, Weekly, Monthly, Austin Shelley

8/1/2025, 7:04:53 PM UTC

CREATED

8/1/2025, 6:42:50 PM UTC
by Austin Shelley

UPDATED

8/1/2025, 7:04:53 PM UTC
by Austin Shelley

STATUS

Ready for QC

General

Date	August 1, 2025
Time	14:42
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:70.97 °F, rH:75%, Clouds: 100%, Wind:12.66mph N

Inspection Type (check all that apply)	Daily, Weekly, Monthly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	591

RW-20 Flow Totalizer (gal)	460555160
RW-21 Flow Rate (gpm)	563
RW-21 Flow Totalizer (gal)	462776152
RW-22 Flow Rate (gpm)	698
RW-22 Flow Totalizer (gal)	565502798
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	7.8
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	2
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	5
T-100 Sodium Hydroxide Tank Total Volume (gal)	6500
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	20
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	20
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3200
LOX-300 LOX Storage Tank Pressure (%)	40
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1817
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-200A Oxidation Feed Pump Influent Pressure (psi)	0
P-200A Oxidation Feed Pump Effluent Pressure (psi)	0
P-200B Oxidation Feed Pump Influent Pressure (psi)	0
P-200B Oxidation Feed Pump Effluent Pressure (psi)	17
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	0
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	23
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22.78
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	0
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	896
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	952
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.9
F-500B PIT-505 Vessel Differential Pressure (psi)	2.8
CF-700A Cartridge Filter Differential Pressure (psi)	3.9
CF-700A Cartridge Filter Influent Pressure (psi)	17
CF-700A Cartridge Filter Effluent Pressure (psi)	16
CF-700B Cartridge Filter Differential Pressure (psi)	3.09
CF-700B Cartridge Filter Influent Pressure (psi)	18
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	8
G-800A GAC Contractor Influent Pressure (psi)	11

G-800A GAC Contractor Effluent Pressure (psi)	1
G-800B GAC Contractor Differential Pressure (psi)	3
G-800B GAC Contractor Influent Pressure (psi)	15
G-800B GAC Contractor Effluent Pressure (psi)	11
G-800C GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Influent Pressure (psi)	15
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	9
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	1
G-800E GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Influent Pressure (psi)	8
G-800E GAC Contractor Effluent Pressure (psi)	1
G-800F GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Influent Pressure (psi)	14
G-800F GAC Contractor Effluent Pressure (psi)	8
G-800G GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Influent Pressure (psi)	15
G-800G GAC Contractor Effluent Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Influent Pressure (psi)	9
G-800H GAC Contractor Effluent Pressure (psi)	2
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.29
FIT-801 Discharge Flow Rate (gpm)	1864

Discharge Flow Totalizer (gal)	1322775040
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	0
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	6
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Monthly Inspection Form

Remedial Well RW-20

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-20 Inspection Complete	Yes

Remedial Well RW-21

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-21 Inspection Complete	Yes

Remedial Well RW-22

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-22 Inspection Complete	Yes

Building 109 System

Checked process water piping, valves, joints and seals for leakage.	Yes
Action/comment piping	
Checked pneumatic lines for leaks or breaks	Yes
Action/comment for line leaks:	
Inspected valves for proper positioning/seating	Yes
Action/comment for valves	
Checked pumps and pump motors for excessive noise and vibration	Yes
Action/Comment for pumps and motors	
Checked mixers and mixer motors for excessive noise and vibration	Yes

Action/Comment for mixers and motors	
Checked tanks and tank connections/fittings for leaks	Yes
Action/Comment for tank leaks	
Checked solids processing equipment and connection points for leaks	Yes
Action/Comment for equipment leaks	
Checked motor bearing lubrication and lubricate as needed	Yes
Action/Comment for motor lubrication	
Checked control panel indicator lights for alarms	Yes
Action/Comment for alarm	
Monthly B109 Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 4, 2025, Daily, Kyle Zafarana

8/4/2025, 6:08:33 PM UTC

CREATED

8/4/2025, 5:55:12 PM UTC
by Kyle Zafarana

UPDATED

8/4/2025, 6:08:33 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	August 4, 2025
Time	13:55
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:85.21 °F, rH:47%, Clouds: 0%, Wind:8.05mph N

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	574.3

RW-20 Flow Totalizer (gal)	463010690
RW-21 Flow Rate (gpm)	596.1
RW-21 Flow Totalizer (gal)	465230072
RW-22 Flow Rate (gpm)	687.1
RW-22 Flow Totalizer (gal)	568426608
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	7.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	6125
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	216
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3000
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1811.42
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	24
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	873.2
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	924.2
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.913
F-500B PIT-505 Vessel Differential Pressure (psi)	2.756
CF-700A Cartridge Filter Differential Pressure (psi)	5.93
CF-700B Cartridge Filter Differential Pressure (psi)	5.52

G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	9
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	4.5
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.29
FIT-801 Discharge Flow Rate (gpm)	1861.15
Discharge Flow Totalizer (gal)	1331108480
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 5, 2025, Daily, Kyle Zafarana

8/5/2025, 6:14:37 PM UTC

CREATED

8/5/2025, 6:07:05 PM UTC
by Kyle Zafarana

UPDATED

8/5/2025, 6:14:37 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	August 5, 2025
Time	14:07
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:81.1 °F, rH:70%, Clouds: 0%, Wind:10.36mph E-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	538.6

RW-20 Flow Totalizer (gal)	463845070
RW-21 Flow Rate (gpm)	574.5
RW-21 Flow Totalizer (gal)	466064362
RW-22 Flow Rate (gpm)	710.1
RW-22 Flow Totalizer (gal)	569420308
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	7.9
T-100 Sodium Hydroxide Tank Total Volume (gal)	6000
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	218
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3000
LOX-300 LOX Storage Tank Pressure (%)	30
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1811.12
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	28
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	28
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	913.7
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	955.9
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.781
F-500B PIT-505 Vessel Differential Pressure (psi)	2.863
CF-700A Cartridge Filter Differential Pressure (psi)	7.3
CF-700B Cartridge Filter Differential Pressure (psi)	6.87

G-800A GAC Contractor Differential Pressure (psi)	8
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.28
FIT-801 Discharge Flow Rate (gpm)	1842.6
Discharge Flow Totalizer (gal)	1333770624
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 6, 2025, Daily, Kyle Zafarana

8/6/2025, 6:41:13 PM UTC

CREATED

8/6/2025, 6:33:34 PM UTC
by Kyle Zafarana

UPDATED

8/6/2025, 6:41:13 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	August 6, 2025
Time	14:33
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:78.31 °F, rH:56%, Clouds: 0%, Wind:9.22mph E

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	583.2

RW-20 Flow Totalizer (gal)	464690960
RW-21 Flow Rate (gpm)	582.7
RW-21 Flow Totalizer (gal)	466910182
RW-22 Flow Rate (gpm)	706.2
RW-22 Flow Totalizer (gal)	570428168
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	7.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	5875
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2900
LOX-300 LOX Storage Tank Pressure (%)	30
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1819.35
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	28
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	28
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	881.1
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	924
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.919
F-500B PIT-505 Vessel Differential Pressure (psi)	2.838
CF-700A Cartridge Filter Differential Pressure (psi)	8.02
CF-700B Cartridge Filter Differential Pressure (psi)	7.81

G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8.5
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.28
FIT-801 Discharge Flow Rate (gpm)	1924.06
Discharge Flow Totalizer (gal)	1336567552
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 7, 2025, Daily, Kyle Zafarana

8/7/2025, 7:19:36 PM UTC

CREATED

8/7/2025, 7:10:46 PM UTC
by Kyle Zafarana

UPDATED

8/7/2025, 7:19:36 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	August 7, 2025
Time	15:10
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:77.36 °F, rH:52%, Clouds: 0%, Wind:12.66mph E-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	590

RW-20 Flow Totalizer (gal)	465536960
RW-21 Flow Rate (gpm)	585.7
RW-21 Flow Totalizer (gal)	467756082
RW-22 Flow Rate (gpm)	705.6
RW-22 Flow Totalizer (gal)	571436148
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	7.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	5750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	218
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2800
LOX-300 LOX Storage Tank Pressure (%)	30
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1815.72
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	28
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	28
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	879.2
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	921.9
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.894
F-500B PIT-505 Vessel Differential Pressure (psi)	2.844
CF-700A Cartridge Filter Differential Pressure (psi)	8.91
CF-700B Cartridge Filter Differential Pressure (psi)	8.72

G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	9
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.28
FIT-801 Discharge Flow Rate (gpm)	1935.78
Discharge Flow Totalizer (gal)	1339433728
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 8, 2025, Daily, Weekly, Kyle Zafarana

8/8/2025, 7:24:21 PM UTC

CREATED

8/8/2025, 7:13:37 PM UTC
by Kyle Zafarana

UPDATED

8/8/2025, 7:24:21 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	August 8, 2025
Time	15:13
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:78.37 °F, rH:45%, Clouds: 0%, Wind:12.66mph E-SE

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570.5

RW-20 Flow Totalizer (gal)	466365870
RW-21 Flow Rate (gpm)	583
RW-21 Flow Totalizer (gal)	468584842
RW-22 Flow Rate (gpm)	684.2
RW-22 Flow Totalizer (gal)	572423238
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	7.8
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	0
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	6
T-100 Sodium Hydroxide Tank Total Volume (gal)	5500
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	218
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	20
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	0
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2800
LOX-300 LOX Storage Tank Pressure (%)	25
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	
AOP Recirc Into T-200 Flow Rate (gpm)	
P-200A/B/C Discharge Pressure (psi)	
P-200A Oxidation Feed Pump Influent Pressure (psi)	0
P-200A Oxidation Feed Pump Effluent Pressure (psi)	0
P-200B Oxidation Feed Pump Influent Pressure (psi)	0
P-200B Oxidation Feed Pump Effluent Pressure (psi)	0
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	17
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	24
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	0
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	887.3
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	938.6
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.963
F-500B PIT-505 Vessel Differential Pressure (psi)	2.9
CF-700A Cartridge Filter Differential Pressure (psi)	9.89
CF-700A Cartridge Filter Influent Pressure (psi)	24
CF-700A Cartridge Filter Effluent Pressure (psi)	16
CF-700B Cartridge Filter Differential Pressure (psi)	9.75
CF-700B Cartridge Filter Influent Pressure (psi)	25
CF-700B Cartridge Filter Effluent Pressure (psi)	15
G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	1.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800B GAC Contractor Influent Pressure (psi)	14
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Influent Pressure (psi)	14
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	1.5
G-800E GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Influent Pressure (psi)	1.5
G-800E GAC Contractor Effluent Pressure (psi)	10
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800F GAC Contractor Influent Pressure (psi)	14
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Influent Pressure (psi)	14
G-800G GAC Contractor Effluent Pressure (psi)	9.5
G-800H GAC Contractor Differential Pressure (psi)	8
G-800H GAC Contractor Influent Pressure (psi)	9.5
G-800H GAC Contractor Effluent Pressure (psi)	1.5
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.28
FIT-801 Discharge Flow Rate (gpm)	1944.5

Discharge Flow Totalizer (gal)	1342250880
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	0
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A Dewatering Volute Feed Pump Pressure (psi)	0
P-1000B Dewatering Volute Feed Pump Pressure (psi)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 11, 2025, Daily, Kyle Zafarana

8/11/2025, 7:26:37 PM UTC

CREATED

8/11/2025, 7:19:01 PM UTC
by Kyle Zafarana

UPDATED

8/11/2025, 7:26:37 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	August 11, 2025
Time	15:19
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:85.69 °F, rH:51%, Clouds: 0%, Wind:14.97mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	579.9

RW-20 Flow Totalizer (gal)	468851510
RW-21 Flow Rate (gpm)	573.5
RW-21 Flow Totalizer (gal)	471070522
RW-22 Flow Rate (gpm)	706.5
RW-22 Flow Totalizer (gal)	575385708
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	7.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	5250
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4400
LOX-300 LOX Storage Tank Pressure (%)	20
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1814.33
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	21
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	905.3
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	933.2
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.931
F-500B PIT-505 Vessel Differential Pressure (psi)	2.944
CF-700A Cartridge Filter Differential Pressure (psi)	0.41
CF-700B Cartridge Filter Differential Pressure (psi)	2.12

G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.27
FIT-801 Discharge Flow Rate (gpm)	1865.8
Discharge Flow Totalizer (gal)	1350263680
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 12, 2025, Daily, Austin Shelley

8/12/2025, 7:30:38 PM UTC

CREATED

8/12/2025, 7:20:24 PM UTC
by Austin Shelley

UPDATED

8/12/2025, 7:30:38 PM UTC
by Austin Shelley

STATUS

Ready for QC

General

Date	August 12, 2025
Time	15:20
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:84.13 °F, rH:65%, Clouds: 0%, Wind:12.66mph S-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	572

RW-20 Flow Totalizer (gal)	469674160
RW-21 Flow Rate (gpm)	587
RW-21 Flow Totalizer (gal)	471879082
RW-22 Flow Rate (gpm)	702
RW-22 Flow Totalizer (gal)	576364838
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	5023
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3825
LOX-300 LOX Storage Tank Pressure (%)	20
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1831
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	34
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	32
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	944
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	1008
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.7
F-500B PIT-505 Vessel Differential Pressure (psi)	2.8
CF-700A Cartridge Filter Differential Pressure (psi)	9.4
CF-700B Cartridge Filter Differential Pressure (psi)	9

G-800A GAC Contractor Differential Pressure (psi)	8
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	9
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	7
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	55.2
Discharge Pressure (psi)	0
Discharge pH (SU)	7.27
FIT-801 Discharge Flow Rate (gpm)	2000
Discharge Flow Totalizer (gal)	1352926464
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 13, 2025, Daily, Kyle Zafarana

8/13/2025, 7:00:01 PM UTC

CREATED

8/13/2025, 6:53:03 PM UTC
by Kyle Zafarana

UPDATED

8/13/2025, 7:00:01 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	August 13, 2025
Time	14:53
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:84.22 °F, rH:73%, Clouds: 0%, Wind:17.27mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	566.5

RW-20 Flow Totalizer (gal)	470485420
RW-21 Flow Rate (gpm)	579.1
RW-21 Flow Totalizer (gal)	472690272
RW-22 Flow Rate (gpm)	704.3
RW-22 Flow Totalizer (gal)	577331098
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	7.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	4875
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4300
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1822.83
AOP Recirc Into T-200 Flow Rate (gpm)	11.5
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	29
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	29
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	910.9
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	967.3
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.644
F-500B PIT-505 Vessel Differential Pressure (psi)	2.663
CF-700A Cartridge Filter Differential Pressure (psi)	10.19
CF-700B Cartridge Filter Differential Pressure (psi)	10.54

G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	55.1
Discharge Pressure (psi)	0
Discharge pH (SU)	7.27
FIT-801 Discharge Flow Rate (gpm)	1834.79
Discharge Flow Totalizer (gal)	1355527168
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 14, 2025, Daily, Kyle Zafarana

8/14/2025, 7:19:37 PM UTC

CREATED

8/14/2025, 7:13:09 PM UTC
by Kyle Zafarana

UPDATED

8/14/2025, 7:19:37 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	August 14, 2025
Time	15:13
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	594.1

RW-20 Flow Totalizer (gal)	471324580
RW-21 Flow Rate (gpm)	566.2
RW-21 Flow Totalizer (gal)	473529302
RW-22 Flow Rate (gpm)	707.6
RW-22 Flow Totalizer (gal)	578330578
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	7.8
T-100 Sodium Hydroxide Tank Total Volume (gal)	4750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4400
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1808.94
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	33
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	33
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	904.3
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	965.8
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.856
F-500B PIT-505 Vessel Differential Pressure (psi)	2.756
CF-700A Cartridge Filter Differential Pressure (psi)	10.9
CF-700B Cartridge Filter Differential Pressure (psi)	11.25

G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.26
FIT-801 Discharge Flow Rate (gpm)	1847.61
Discharge Flow Totalizer (gal)	1358215424
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 15, 2025, Daily, Weekly, Kyle Zafarana

8/15/2025, 7:20:59 PM UTC

CREATED

8/15/2025, 7:07:16 PM UTC
by Kyle Zafarana

UPDATED

8/15/2025, 7:20:59 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	August 15, 2025
Time	15:07
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:85.21 °F, rH:58%, Clouds: 0%, Wind:9.22mph E-SE

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	570.7

RW-20 Flow Totalizer (gal)	472149250
RW-21 Flow Rate (gpm)	572.6
RW-21 Flow Totalizer (gal)	474353902
RW-22 Flow Rate (gpm)	695.7
RW-22 Flow Totalizer (gal)	579313108
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	7.7
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	0
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	5
T-100 Sodium Hydroxide Tank Total Volume (gal)	47625
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	218
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	0
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4200
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1814.69
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-200A Oxidation Feed Pump Influent Pressure (psi)	0
P-200A Oxidation Feed Pump Effluent Pressure (psi)	0
P-200B Oxidation Feed Pump Influent Pressure (psi)	0
P-200B Oxidation Feed Pump Effluent Pressure (psi)	0
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	17
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	22
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	0
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	931.5
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	1002.9
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.813
F-500B PIT-505 Vessel Differential Pressure (psi)	2.869
CF-700A Cartridge Filter Differential Pressure (psi)	2.25
CF-700A Cartridge Filter Influent Pressure (psi)	15
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	0.5
CF-700B Cartridge Filter Influent Pressure (psi)	16
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	1.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800B GAC Contractor Influent Pressure (psi)	14
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Influent Pressure (psi)	15
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	2
G-800E GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Influent Pressure (psi)	10.5
G-800E GAC Contractor Effluent Pressure (psi)	2
G-800F GAC Contractor Differential Pressure (psi)	3
G-800F GAC Contractor Influent Pressure (psi)	14
G-800F GAC Contractor Effluent Pressure (psi)	10.5
G-800G GAC Contractor Differential Pressure (psi)	6
G-800G GAC Contractor Influent Pressure (psi)	14
G-800G GAC Contractor Effluent Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Influent Pressure (psi)	9
G-800H GAC Contractor Effluent Pressure (psi)	2
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.26
FIT-801 Discharge Flow Rate (gpm)	1803.11

Discharge Flow Totalizer (gal)	1360857472
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	0
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A Dewatering Volute Feed Pump Pressure (psi)	0
P-1000B Dewatering Volute Feed Pump Pressure (psi)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 18, 2025, Daily, Kyle Zafarana

8/18/2025, 7:10:39 PM UTC

CREATED

8/18/2025, 7:02:25 PM UTC
by Kyle Zafarana

UPDATED

8/18/2025, 7:10:39 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	August 18, 2025
Time	15:02
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:72.21 °F, rH:69%, Clouds: 100%, Wind:6.91mph NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	580

RW-20 Flow Totalizer (gal)	474628700
RW-21 Flow Rate (gpm)	578.8
RW-21 Flow Totalizer (gal)	476833052
RW-22 Flow Rate (gpm)	698.6
RW-22 Flow Totalizer (gal)	582266228
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	7.7
T-100 Sodium Hydroxide Tank Total Volume (gal)	4250
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4000
LOX-300 LOX Storage Tank Pressure (%)	60
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1824.63
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	23
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	23
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	874.5
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	932.8
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.781
F-500B PIT-505 Vessel Differential Pressure (psi)	2.738
CF-700A Cartridge Filter Differential Pressure (psi)	2.49
CF-700B Cartridge Filter Differential Pressure (psi)	1.04

G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.25
FIT-801 Discharge Flow Rate (gpm)	1838.08
Discharge Flow Totalizer (gal)	1368828672
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 21, 2025, Daily, Kyle Zafarana

8/21/2025, 12:24:06 PM UTC

CREATED

8/21/2025, 12:15:50 PM UTC
by Kyle Zafarana

UPDATED

8/21/2025, 12:24:06 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	August 21, 2025
Time	08:15
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:60.4 °F, rH:95%, Clouds: 100%, Wind:14.97mph N-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	584

RW-20 Flow Totalizer (gal)	476709620
RW-21 Flow Rate (gpm)	578.3
RW-21 Flow Totalizer (gal)	478913912
RW-22 Flow Rate (gpm)	698.7
RW-22 Flow Totalizer (gal)	584747108
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	4000
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3800
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1821.88
AOP Recirc Into T-200 Flow Rate (gpm)	4.5
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	25
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	955.3
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	841.3
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	1.719
F-500B PIT-505 Vessel Differential Pressure (psi)	1.994
CF-700A Cartridge Filter Differential Pressure (psi)	4.99
CF-700B Cartridge Filter Differential Pressure (psi)	3.77

G-800A GAC Contractor Differential Pressure (psi)	8
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	7.5
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.31
FIT-801 Discharge Flow Rate (gpm)	1829.9
Discharge Flow Totalizer (gal)	1375602688
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 21, 2025, Monthly, Patrick Dellecave

9/16/2025, 12:33:21 PM UTC

CREATED

8/21/2025, 4:05:14 PM UTC
by Patrick Dellecave

UPDATED

9/16/2025, 12:33:21 PM UTC
by Patrick Dellecave

STATUS

Ready for QC

General

Date	August 21, 2025
Time	12:10
Technician	Patrick Dellecave
Completed By	Patrick Dellecave
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:65.66 °F, rH:82%, Clouds: 100%, Wind:18.41mph N-NE

Inspection Type (check all that apply)	Monthly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Monthly Inspection Form

Remedial Well RW-20

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-20 Inspection Complete	Yes

Remedial Well RW-21

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-21 Inspection Complete	Yes

Remedial Well RW-22

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-22 Inspection Complete	Yes

Building 109 System

Checked process water piping, valves, joints and seals for leakage.	Yes
Action/comment piping	

Checked pneumatic lines for leaks or breaks	Yes
Action/comment for line leaks:	
Inspected valves for proper positioning/seating	Yes
Action/comment for valves	
Checked pumps and pump motors for excessive noise and vibration	Yes
Action/Comment for pumps and motors	
Checked mixers and mixer motors for excessive noise and vibration	Yes
Action/Comment for mixers and motors	
Checked tanks and tank connections/fittings for leaks	Yes
Action/Comment for tank leaks	
Checked solids processing equipment and connection points for leaks	Yes
Action/Comment for equipment leaks	
Checked motor bearing lubrication and lubricate as needed	Yes
Action/Comment for motor lubrication	
Checked control panel indicator lights for alarms	Yes
Action/Comment for alarm	
Monthly B109 Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 25, 2025, Daily, Kyle Zafarana

8/25/2025, 7:05:31 PM UTC

CREATED

8/25/2025, 6:58:44 PM UTC
by Kyle Zafarana

UPDATED

8/25/2025, 7:05:31 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	August 25, 2025
Time	14:58
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:84.65 °F, rH:42%, Clouds: 75%, Wind:6.91mph W-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	558.5

RW-20 Flow Totalizer (gal)	479522510
RW-21 Flow Rate (gpm)	584.4
RW-21 Flow Totalizer (gal)	481726642
RW-22 Flow Rate (gpm)	702.7
RW-22 Flow Totalizer (gal)	588095428
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	3500
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3600
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1813.26
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	31
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	31
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1019.1
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	926.3
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	1.894
F-500B PIT-505 Vessel Differential Pressure (psi)	2.025
CF-700A Cartridge Filter Differential Pressure (psi)	11.26
CF-700B Cartridge Filter Differential Pressure (psi)	10.97

G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	8
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	1881.28
Discharge Flow Totalizer (gal)	1384621696
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 26, 2025, Daily, Kyle Zafarana

8/26/2025, 11:56:52 AM UTC

CREATED

8/26/2025, 11:50:00 AM UTC
by Kyle Zafarana

UPDATED

8/26/2025, 11:56:52 AM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	August 26, 2025
Time	07:50
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:64.83 °F, rH:72%, Clouds: 0%, Wind:3mph NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	590.4

RW-20 Flow Totalizer (gal)	480103410
RW-21 Flow Rate (gpm)	577.5
RW-21 Flow Totalizer (gal)	482307712
RW-22 Flow Rate (gpm)	702.2
RW-22 Flow Totalizer (gal)	588786678
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	3375
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3600
LOX-300 LOX Storage Tank Pressure (%)	50
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1813.57
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	30
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	981.8
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	895.9
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	1.85
F-500B PIT-505 Vessel Differential Pressure (psi)	2.031
CF-700A Cartridge Filter Differential Pressure (psi)	11.16
CF-700B Cartridge Filter Differential Pressure (psi)	10.89

G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	1861.33
Discharge Flow Totalizer (gal)	1386498176
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 27, 2025, Daily, Kyle Zafarana

8/27/2025, 7:05:03 PM UTC

CREATED

8/27/2025, 6:57:37 PM UTC
by Kyle Zafarana

UPDATED

8/27/2025, 7:05:03 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	August 27, 2025
Time	14:57
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:74.7 °F, rH:45%, Clouds: 20%, Wind:14.97mph N-NW

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	563.3

RW-20 Flow Totalizer (gal)	481176620
RW-21 Flow Rate (gpm)	591.9
RW-21 Flow Totalizer (gal)	483380982
RW-22 Flow Rate (gpm)	701.9
RW-22 Flow Totalizer (gal)	590063128
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	6875
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3500
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1825.81
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	21
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	992.3
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	897.2
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.019
F-500B PIT-505 Vessel Differential Pressure (psi)	2.05
CF-700A Cartridge Filter Differential Pressure (psi)	0.52
CF-700B Cartridge Filter Differential Pressure (psi)	2.01

G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	1873.16
Discharge Flow Totalizer (gal)	1389969664
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 28, 2025, Daily, Kyle Zafarana

8/28/2025, 7:28:47 PM UTC

CREATED

8/28/2025, 7:16:15 PM UTC
by Kyle Zafarana

UPDATED

8/28/2025, 7:28:47 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	August 28, 2025
Time	15:16
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:73.85 °F, rH:53%, Clouds: 75%, Wind:14.97mph S

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	601.8

RW-20 Flow Totalizer (gal)	482015230
RW-21 Flow Rate (gpm)	580.6
RW-21 Flow Totalizer (gal)	484219422
RW-22 Flow Rate (gpm)	691.3
RW-22 Flow Totalizer (gal)	591060678
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	6750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3400
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1813.61
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	22
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	919.5
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	816
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	1.781
F-500B PIT-505 Vessel Differential Pressure (psi)	1.588
CF-700A Cartridge Filter Differential Pressure (psi)	0.62
CF-700B Cartridge Filter Differential Pressure (psi)	1.89

G-800A GAC Contractor Differential Pressure (psi)	7.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	3.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	1899.97
Discharge Flow Totalizer (gal)	1392684160
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

August 29, 2025, Daily, Weekly, Monthly, Kyle Zafarana

8/29/2025, 5:55:30 PM UTC

CREATED

8/29/2025, 3:06:10 PM UTC
by Kyle Zafarana

UPDATED

8/29/2025, 5:55:30 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	August 29, 2025
Time	11:06
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:74.01 °F, rH:68%, Clouds: 40%, Wind:11.5mph SW

Inspection Type (check all that apply)	Daily, Weekly, Monthly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	580.8

RW-20 Flow Totalizer (gal)	482698700
RW-21 Flow Rate (gpm)	567.2
RW-21 Flow Totalizer (gal)	484902892
RW-22 Flow Rate (gpm)	711.7
RW-22 Flow Totalizer (gal)	591873918
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	0
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	6
T-100 Sodium Hydroxide Tank Total Volume (gal)	6750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	0
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3300
LOX-300 LOX Storage Tank Pressure (%)	45
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1828.59
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	0
P-200A Oxidation Feed Pump Effluent Pressure (psi)	16
P-200B Oxidation Feed Pump Influent Pressure (psi)	0
P-200B Oxidation Feed Pump Effluent Pressure (psi)	0
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	0
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	24
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	24
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	0
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	978
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	879.6
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	1.669
F-500B PIT-505 Vessel Differential Pressure (psi)	1.788
CF-700A Cartridge Filter Differential Pressure (psi)	0.84
CF-700A Cartridge Filter Influent Pressure (psi)	16
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	2.21
CF-700B Cartridge Filter Influent Pressure (psi)	18
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	1.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800B GAC Contractor Influent Pressure (psi)	14
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Influent Pressure (psi)	14
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	1.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	2
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800F GAC Contractor Influent Pressure (psi)	14
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800G GAC Contractor Influent Pressure (psi)	14
G-800G GAC Contractor Effluent Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Influent Pressure (psi)	9
G-800H GAC Contractor Effluent Pressure (psi)	2
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	1865.8

Discharge Flow Totalizer (gal)	1394903296
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	0
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A Dewatering Volute Feed Pump Pressure (psi)	0
P-1000B Dewatering Volute Feed Pump Pressure (psi)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Monthly Inspection Form

Remedial Well RW-20

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-20 Inspection Complete	Yes

Remedial Well RW-21

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-21 Inspection Complete	Yes

Remedial Well RW-22

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-22 Inspection Complete	Yes

Building 109 System

Checked process water piping, valves, joints and seals for leakage.	Yes
Action/comment piping	
Checked pneumatic lines for leaks or breaks	Yes
Action/comment for line leaks:	
Inspected valves for proper positioning/seating	Yes
Action/comment for valves	
Checked pumps and pump motors for excessive noise and vibration	Yes
Action/Comment for pumps and motors	
Checked mixers and mixer motors for excessive noise and vibration	Yes

Action/Comment for mixers and motors	
Checked tanks and tank connections/fittings for leaks	Yes
Action/Comment for tank leaks	
Checked solids processing equipment and connection points for leaks	Yes
Action/Comment for equipment leaks	
Checked motor bearing lubrication and lubricate as needed	Yes
Action/Comment for motor lubrication	
Checked control panel indicator lights for alarms	Yes
Action/Comment for alarm	
Monthly B109 Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 2, 2025, Daily, Kyle Zafarana

9/2/2025, 7:00:40 PM UTC

CREATED

9/2/2025, 6:54:20 PM UTC
by Kyle Zafarana

UPDATED

9/2/2025, 7:00:40 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	September 2, 2025
Time	14:54
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:73.99 °F, rH:64%, Clouds: 0%, Wind:11.5mph SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	577.5

RW-20 Flow Totalizer (gal)	486144970
RW-21 Flow Rate (gpm)	582.3
RW-21 Flow Totalizer (gal)	488346032
RW-22 Flow Rate (gpm)	702
RW-22 Flow Totalizer (gal)	595971578
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	6000
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3100
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1810.35
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	21
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	979.5
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	880.3
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	1.775
F-500B PIT-505 Vessel Differential Pressure (psi)	1.988
CF-700A Cartridge Filter Differential Pressure (psi)	1.88
CF-700B Cartridge Filter Differential Pressure (psi)	3.08

G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.32
FIT-801 Discharge Flow Rate (gpm)	1869.27
Discharge Flow Totalizer (gal)	1406052864
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 3, 2025, Daily, Kyle Zafarana

9/3/2025, 7:02:39 PM UTC

CREATED

9/3/2025, 6:55:42 PM UTC
by Kyle Zafarana

UPDATED

9/3/2025, 7:02:39 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	September 3, 2025
Time	14:55
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:74.48 °F, rH:58%, Clouds: 0%, Wind:6.91mph S-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	562.6

RW-20 Flow Totalizer (gal)	486971680
RW-21 Flow Rate (gpm)	569.6
RW-21 Flow Totalizer (gal)	489171802
RW-22 Flow Rate (gpm)	702.6
RW-22 Flow Totalizer (gal)	596954078
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	6000
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3000
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1834
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	25
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	25
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1009.3
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	911.1
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	1.863
F-500B PIT-505 Vessel Differential Pressure (psi)	2.119
CF-700A Cartridge Filter Differential Pressure (psi)	2.34
CF-700B Cartridge Filter Differential Pressure (psi)	3.58

G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.32
FIT-801 Discharge Flow Rate (gpm)	1889.36
Discharge Flow Totalizer (gal)	1408741760
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 4, 2025, Daily, Kyle Zafarana

9/4/2025, 6:58:05 PM UTC

CREATED

9/4/2025, 6:51:51 PM UTC
by Kyle Zafarana

UPDATED

9/4/2025, 6:58:05 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	September 4, 2025
Time	14:51
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:74.73 °F, rH:70%, Clouds: 20%, Wind:17.27mph S-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	576.6

RW-20 Flow Totalizer (gal)	487797670
RW-21 Flow Rate (gpm)	570.4
RW-21 Flow Totalizer (gal)	489996952
RW-22 Flow Rate (gpm)	706.9
RW-22 Flow Totalizer (gal)	597936058
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	5750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2900
LOX-300 LOX Storage Tank Pressure (%)	35
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1818.13
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	24
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	21
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1008.2
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	911.1
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	1.938
F-500B PIT-505 Vessel Differential Pressure (psi)	2.144
CF-700A Cartridge Filter Differential Pressure (psi)	2.91
CF-700B Cartridge Filter Differential Pressure (psi)	4.07

G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.32
FIT-801 Discharge Flow Rate (gpm)	1899.82
Discharge Flow Totalizer (gal)	1411435648
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 5, 2025, Daily, Weekly, Kyle Zafarana

9/5/2025, 12:03:14 PM UTC

CREATED

9/5/2025, 11:52:40 AM UTC
by Kyle Zafarana

UPDATED

9/5/2025, 12:03:14 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	September 5, 2025
Time	07:52
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:67.55 °F, rH:95%, Clouds: 0%, Wind:1.99mph SE

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	610.4

RW-20 Flow Totalizer (gal)	488384980
RW-21 Flow Rate (gpm)	573.9
RW-21 Flow Totalizer (gal)	490583602
RW-22 Flow Rate (gpm)	708.6
RW-22 Flow Totalizer (gal)	598634388
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	0
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	6
T-100 Sodium Hydroxide Tank Total Volume (gal)	5750
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	19
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	0
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2800
LOX-300 LOX Storage Tank Pressure (%)	30
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1827.7
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-200A Oxidation Feed Pump Influent Pressure (psi)	0
P-200A Oxidation Feed Pump Effluent Pressure (psi)	0
P-200B Oxidation Feed Pump Influent Pressure (psi)	0
P-200B Oxidation Feed Pump Effluent Pressure (psi)	17
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	0
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	22
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	22
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	0
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	965.8
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	876.2
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	1.919
F-500B PIT-505 Vessel Differential Pressure (psi)	2
CF-700A Cartridge Filter Differential Pressure (psi)	3.27
CF-700A Cartridge Filter Influent Pressure (psi)	19
CF-700A Cartridge Filter Effluent Pressure (psi)	16
CF-700B Cartridge Filter Differential Pressure (psi)	4.29
CF-700B Cartridge Filter Influent Pressure (psi)	19
CF-700B Cartridge Filter Effluent Pressure (psi)	15
G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	1.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800B GAC Contractor Influent Pressure (psi)	14
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Influent Pressure (psi)	14.5
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	1.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	2
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800F GAC Contractor Influent Pressure (psi)	14.5
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800G GAC Contractor Influent Pressure (psi)	15
G-800G GAC Contractor Effluent Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Influent Pressure (psi)	9
G-800H GAC Contractor Effluent Pressure (psi)	2
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.32
FIT-801 Discharge Flow Rate (gpm)	1885.6

Discharge Flow Totalizer (gal)	1413346560
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	0
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A Dewatering Volute Feed Pump Pressure (psi)	0
P-1000B Dewatering Volute Feed Pump Pressure (psi)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 8, 2025, Daily, Austin Shelley

9/8/2025, 5:59:45 PM UTC

CREATED

9/8/2025, 5:50:52 PM UTC
by Austin Shelley

UPDATED

9/8/2025, 5:59:45 PM UTC
by Austin Shelley

STATUS

Ready for QC

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General

Date	September 8, 2025
Time	13:50
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:70.63 °F, rH:48%, Clouds: 0%, Wind:8.05mph N

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	572

RW-20 Flow Totalizer (gal)	491078890
RW-21 Flow Rate (gpm)	581
RW-21 Flow Totalizer (gal)	493275722
RW-22 Flow Rate (gpm)	714
RW-22 Flow Totalizer (gal)	601837518
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	5247
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2311
LOX-300 LOX Storage Tank Pressure (%)	80
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1812
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17.6
P-400A PI-402 Discharge Pressure (psi)	26
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	26.79
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	962
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	853
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.1
F-500B PIT-505 Vessel Differential Pressure (psi)	2.1
CF-700A Cartridge Filter Differential Pressure (psi)	5.9
CF-700B Cartridge Filter Differential Pressure (psi)	6.5

G-800A GAC Contractor Differential Pressure (psi)	8
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3
G-800G GAC Contractor Differential Pressure (psi)	6
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.31
FIT-801 Discharge Flow Rate (gpm)	1839
Discharge Flow Totalizer (gal)	1422085248
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 9, 2025, Daily, Kyle Zafarana

9/9/2025, 5:12:08 PM UTC

CREATED

9/9/2025, 5:02:41 PM UTC
by Kyle Zafarana

UPDATED

9/9/2025, 5:12:08 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	September 9, 2025
Time	13:02
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:71.29 °F, rH:59%, Clouds: 20%, Wind:5.99mph E-NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	572.2

RW-20 Flow Totalizer (gal)	491875260
RW-21 Flow Rate (gpm)	566.3
RW-21 Flow Totalizer (gal)	494071602
RW-22 Flow Rate (gpm)	700.8
RW-22 Flow Totalizer (gal)	602784398
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	5000
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	221
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2600
LOX-300 LOX Storage Tank Pressure (%)	75
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1843.11
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	26
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	26
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	954.4
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	845.4
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.025
F-500B PIT-505 Vessel Differential Pressure (psi)	2.163
CF-700A Cartridge Filter Differential Pressure (psi)	6.53
CF-700B Cartridge Filter Differential Pressure (psi)	7.09

G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.31
FIT-801 Discharge Flow Rate (gpm)	1841.97
Discharge Flow Totalizer (gal)	1424665600
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 10, 2025, Monthly, Patrick Dellecave

9/10/2025, 4:38:25 PM UTC

CREATED

9/10/2025, 3:46:54 PM UTC
by Patrick Dellecave

UPDATED

9/10/2025, 4:38:25 PM UTC
by Patrick Dellecave

STATUS

Ready for QC

General

Date	September 10, 2025
Time	11:46
Technician	Patrick Dellecave
Completed By	Patrick Dellecave
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:63.72 °F, rH:89%, Clouds: 100%, Wind:14.97mph N-NE

Inspection Type (check all that apply)	Monthly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	Yes
Describe maintenance items	VFD filters in RW-20 and 21 were changed out
Any system parameters out of range?	No
Notes	

Monthly Inspection Form

Remedial Well RW-20

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-20 Inspection Complete	Yes

Remedial Well RW-21

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-21 Inspection Complete	Yes

Remedial Well RW-22

Checked well piping for excessive noise and vibration and VFD for excessive heat, dust or noise.	Yes
Action/Comment for excessive items	
Checked well piping, valves, joints and seals for leakage	Yes
Action/Comment for leakage	
Checked well control panel indicator lights for alarms	Yes
Action/Comment for alarms	
Monthly RW-22 Inspection Complete	Yes

Building 109 System

Checked process water piping, valves, joints and seals for leakage.	Yes
Action/comment piping	

Checked pneumatic lines for leaks or breaks	Yes
Action/comment for line leaks:	
Inspected valves for proper positioning/seating	Yes
Action/comment for valves	
Checked pumps and pump motors for excessive noise and vibration	Yes
Action/Comment for pumps and motors	
Checked mixers and mixer motors for excessive noise and vibration	Yes
Action/Comment for mixers and motors	
Checked tanks and tank connections/fittings for leaks	Yes
Action/Comment for tank leaks	
Checked solids processing equipment and connection points for leaks	Yes
Action/Comment for equipment leaks	
Checked motor bearing lubrication and lubricate as needed	Yes
Action/Comment for motor lubrication	
Checked control panel indicator lights for alarms	Yes
Action/Comment for alarm	
Monthly B109 Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 11, 2025, Daily, Kyle Zafarana

9/11/2025, 6:58:39 PM UTC

CREATED

9/11/2025, 6:48:58 PM UTC
by Kyle Zafarana

UPDATED

9/11/2025, 6:58:39 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	September 11, 2025
Time	14:48
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:77.97 °F, rH:44%, Clouds: 61%, Wind:4mph N

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	604.5

RW-20 Flow Totalizer (gal)	493500310
RW-21 Flow Rate (gpm)	578.3
RW-21 Flow Totalizer (gal)	495787432
RW-22 Flow Rate (gpm)	699.4
RW-22 Flow Totalizer (gal)	604825738
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	4875
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	218
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2500
LOX-300 LOX Storage Tank Pressure (%)	75
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1821.11
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	29
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	29
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	977.5
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	873.8
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.213
F-500B PIT-505 Vessel Differential Pressure (psi)	2.425
CF-700A Cartridge Filter Differential Pressure (psi)	8.05
CF-700B Cartridge Filter Differential Pressure (psi)	8.55

G-800A GAC Contractor Differential Pressure (psi)	8
G-800B GAC Contractor Differential Pressure (psi)	3
G-800C GAC Contractor Differential Pressure (psi)	4
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800E GAC Contractor Differential Pressure (psi)	8
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.33
FIT-801 Discharge Flow Rate (gpm)	1932.37
Discharge Flow Totalizer (gal)	1430125312
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 12, 2025, Daily, Weekly, Kyle Zafarana

9/12/2025, 6:58:09 PM UTC

CREATED

9/12/2025, 6:47:49 PM UTC
by Kyle Zafarana

UPDATED

9/12/2025, 6:58:09 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

General

Date	September 12, 2025
Time	14:47
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:76.89 °F, rH:47%, Clouds: 75%, Wind:9.22mph NE

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	599

RW-20 Flow Totalizer (gal)	494327350
RW-21 Flow Rate (gpm)	573.7
RW-21 Flow Totalizer (gal)	496614442
RW-22 Flow Rate (gpm)	705.2
RW-22 Flow Totalizer (gal)	605809508
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	0
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	6
T-100 Sodium Hydroxide Tank Total Volume (gal)	4625
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	20
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	0
T-300 Hydrogen Peroxide Tank Total Volume (gal)	2400
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1031.08
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	16
P-200A Oxidation Feed Pump Influent Pressure (psi)	0
P-200A Oxidation Feed Pump Effluent Pressure (psi)	16
P-200B Oxidation Feed Pump Influent Pressure (psi)	0
P-200B Oxidation Feed Pump Effluent Pressure (psi)	0
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	0
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	16
P-400A PI-402 Discharge Pressure (psi)	29
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	29
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	0
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	997.5
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	897.4
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	2.338
F-500B PIT-505 Vessel Differential Pressure (psi)	2.438
CF-700A Cartridge Filter Differential Pressure (psi)	8.77
CF-700A Cartridge Filter Influent Pressure (psi)	23
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	9.22
CF-700B Cartridge Filter Influent Pressure (psi)	25
CF-700B Cartridge Filter Effluent Pressure (psi)	15
G-800A GAC Contractor Differential Pressure (psi)	8.5
G-800A GAC Contractor Influent Pressure (psi)	10

G-800A GAC Contractor Effluent Pressure (psi)	1.5
G-800B GAC Contractor Differential Pressure (psi)	3
G-800B GAC Contractor Influent Pressure (psi)	14
G-800B GAC Contractor Effluent Pressure (psi)	10
G-800C GAC Contractor Differential Pressure (psi)	4
G-800C GAC Contractor Influent Pressure (psi)	15
G-800C GAC Contractor Effluent Pressure (psi)	10
G-800D GAC Contractor Differential Pressure (psi)	8.5
G-800D GAC Contractor Influent Pressure (psi)	10
G-800D GAC Contractor Effluent Pressure (psi)	2
G-800E GAC Contractor Differential Pressure (psi)	8
G-800E GAC Contractor Influent Pressure (psi)	10
G-800E GAC Contractor Effluent Pressure (psi)	2
G-800F GAC Contractor Differential Pressure (psi)	3.5
G-800F GAC Contractor Influent Pressure (psi)	14
G-800F GAC Contractor Effluent Pressure (psi)	10
G-800G GAC Contractor Differential Pressure (psi)	6.5
G-800G GAC Contractor Influent Pressure (psi)	14
G-800G GAC Contractor Effluent Pressure (psi)	9
G-800H GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Influent Pressure (psi)	9
G-800H GAC Contractor Effluent Pressure (psi)	2
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.31
FIT-801 Discharge Flow Rate (gpm)	1873.1

Discharge Flow Totalizer (gal)	1432807936
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	0
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A Dewatering Volute Feed Pump Pressure (psi)	0
P-1000B Dewatering Volute Feed Pump Pressure (psi)	0
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 17, 2025, Daily, Austin Shelley

9/17/2025, 6:14:13 PM UTC

CREATED

9/17/2025, 5:53:01 PM UTC
by Austin Shelley

UPDATED

9/17/2025, 6:14:13 PM UTC
by Austin Shelley

STATUS

Ready for QC

General

Date	September 17, 2025
Time	13:53
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:67.8 °F, rH:83%, Clouds: 100%, Wind:10.36mph NE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	599

RW-20 Flow Totalizer (gal)	495810680
RW-21 Flow Rate (gpm)	578
RW-21 Flow Totalizer (gal)	498095832
RW-22 Flow Rate (gpm)	687
RW-22 Flow Totalizer (gal)	607585878
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	4448
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
T-300 Hydrogen Peroxide Tank Total Volume (gal)	1977
LOX-300 LOX Storage Tank Pressure (%)	70
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1810
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17.6
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	34
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30.59
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	975
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	884
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	1.1
F-500B PIT-505 Vessel Differential Pressure (psi)	1.5
CF-700A Cartridge Filter Differential Pressure (psi)	9.84
CF-700B Cartridge Filter Differential Pressure (psi)	9.37

G-800A GAC Contractor Differential Pressure (psi)	5
G-800B GAC Contractor Differential Pressure (psi)	5
G-800C GAC Contractor Differential Pressure (psi)	7.5
G-800D GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Differential Pressure (psi)	5
G-800G GAC Contractor Differential Pressure (psi)	7.5
G-800H GAC Contractor Differential Pressure (psi)	7.5
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	10.03
FIT-801 Discharge Flow Rate (gpm)	1991
Discharge Flow Totalizer (gal)	1437582336
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 19, 2025, Daily, Weekly, Austin Shelley

9/19/2025, 5:50:46 PM UTC

CREATED

9/19/2025, 5:25:48 PM UTC
by Austin Shelley

UPDATED

9/19/2025, 5:50:46 PM UTC
by Austin Shelley

STATUS

Ready for QC

General

Date	September 19, 2025
Time	13:25
Technician	Austin Shelley
Completed By	Austin Shelley
General Comments	

Weather

Fetch Weather	
Weather	CLEAR, T:82.02 °F, rH:53%, Clouds: 0%, Wind:11.5mph NW

Inspection Type (check all that apply)	Daily, Weekly

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	556

RW-20 Flow Totalizer (gal)	497450770
RW-21 Flow Rate (gpm)	566
RW-21 Flow Totalizer (gal)	499735022
RW-22 Flow Rate (gpm)	688
RW-22 Flow Totalizer (gal)	609535758
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
P-100A Sodium Hydroxide Feed Pump Pressure (psi)	5
P-100B Sodium Hydroxide Feed Pump Pressure (psi)	5
T-100 Sodium Hydroxide Tank Total Volume (gal)	4182
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	219
P-300A Hydrogen Peroxide Feed Pump Pressure (psi)	20
P-300B Hydrogen Peroxide Feed Pump Pressure (psi)	18
T-300 Hydrogen Peroxide Tank Total Volume (gal)	3886
LOX-300 LOX Storage Tank Pressure (%)	65
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1872
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17.6
P-200A Oxidation Feed Pump Influent Pressure (psi)	0
P-200A Oxidation Feed Pump Effluent Pressure (psi)	0
P-200B Oxidation Feed Pump Influent Pressure (psi)	16
P-200B Oxidation Feed Pump Effluent Pressure (psi)	16
P-200C Oxidation Feed Pump Influent Pressure (psi)	0
P-200C Oxidation Feed Pump Effluent Pressure (psi)	0
P-200A/B/C Oxidation Feed Pumps-Visual or Auditory Anomalies?	No

P-200A/B/C Oxidation Feed Pumps - Additional Comments	
P-200A/B/C Oxidation Feed Pump Discharge Pressure (psi)	17.6
P-400A PI-402 Discharge Pressure (psi)	0
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	34
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30.75
P-400A Filter Feed Pump Influent Pressure (psi)	0
P-400B Filter Feed Pump Influent Pressure (psi)	0
P-400C Filter Feed Pump Influent Pressure (psi)	0
P-400A/B/C Filter Feed Pumps-Visual or Auditory Anomalies?	No
P-400A/B/C Filter Feed Pumps - Additional Comments	
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1018
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	836
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	1.1
F-500B PIT-505 Vessel Differential Pressure (psi)	1.6
CF-700A Cartridge Filter Differential Pressure (psi)	10.05
CF-700A Cartridge Filter Influent Pressure (psi)	24
CF-700A Cartridge Filter Effluent Pressure (psi)	17
CF-700B Cartridge Filter Differential Pressure (psi)	9.6
CF-700B Cartridge Filter Influent Pressure (psi)	25
CF-700B Cartridge Filter Effluent Pressure (psi)	16
G-800A GAC Contractor Differential Pressure (psi)	5
G-800A GAC Contractor Influent Pressure (psi)	1

G-800A GAC Contractor Effluent Pressure (psi)	9
G-800B GAC Contractor Differential Pressure (psi)	7
G-800B GAC Contractor Influent Pressure (psi)	15
G-800B GAC Contractor Effluent Pressure (psi)	1
G-800C GAC Contractor Differential Pressure (psi)	8
G-800C GAC Contractor Influent Pressure (psi)	15
G-800C GAC Contractor Effluent Pressure (psi)	1
G-800D GAC Contractor Differential Pressure (psi)	5
G-800D GAC Contractor Influent Pressure (psi)	1
G-800D GAC Contractor Effluent Pressure (psi)	10
G-800E GAC Contractor Differential Pressure (psi)	5
G-800E GAC Contractor Influent Pressure (psi)	1
G-800E GAC Contractor Effluent Pressure (psi)	9
G-800F GAC Contractor Differential Pressure (psi)	5
G-800F GAC Contractor Influent Pressure (psi)	15
G-800F GAC Contractor Effluent Pressure (psi)	1
G-800G GAC Contractor Differential Pressure (psi)	10
G-800G GAC Contractor Influent Pressure (psi)	15
G-800G GAC Contractor Effluent Pressure (psi)	1
G-800H GAC Contractor Differential Pressure (psi)	5
G-800H GAC Contractor Influent Pressure (psi)	1
G-800H GAC Contractor Effluent Pressure (psi)	9
Discharge Temperature (F)	55
Discharge Pressure (psi)	0
Discharge pH (SU)	7.43
FIT-801 Discharge Flow Rate (gpm)	1933

Discharge Flow Totalizer (gal)	1442894720
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Influent Pressure (psi)	0
P-600 Backwash Pump Effluent Pressure (psi)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A Dewatering Volute Feed Pump Pressure (psi)	6
P-1000B Dewatering Volute Feed Pump Pressure (psi)	6
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Influent Pressure (psi)	0
P-1100 Decant Pump Effluent Pressure (psi)	6
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

NG Bethpage - B-109 Inspection Log

For Daily/Weekly/Monthly Inspections Northrop Grumman Bethpage OMM

September 24, 2025, Daily, Kyle Zafarana

9/24/2025, 6:44:45 PM UTC

CREATED

9/24/2025, 6:35:55 PM UTC
by Kyle Zafarana

UPDATED

9/24/2025, 6:44:45 PM UTC
by Kyle Zafarana

STATUS

Ready for QC

POWERED BY Fulcrum WWW.FULCRUMAPP.COM

General

Date	September 24, 2025
Time	14:35
Technician	Kyle Zafarana
Completed By	Kyle Zafarana
General Comments	

Weather

Fetch Weather	
Weather	CLOUDS, T:77.43 °F, rH:76%, Clouds: 40%, Wind:4.61mph E-SE

Inspection Type (check all that apply)	Daily

Daily System Activities Summary

Operation

Status of Treatment System and Wells. Have they been operational all day? If no, provide description and associated downtime.

Treatment System	Yes (fully operational)
RW-20	Yes (fully operational)
RW-21	Yes (fully operational)
RW-22	Yes (Fully Operational)

Maintenance Log

Monitoring

Were any maintenance items identified?	No
Any system parameters out of range?	No
Notes	

Daily & Weekly Inspection Form

Remedial Wells

RW-20 Flow Rate (gpm)	576.7

RW-20 Flow Totalizer (gal)	501632060
RW-21 Flow Rate (gpm)	581.8
RW-21 Flow Totalizer (gal)	503912252
RW-22 Flow Rate (gpm)	703.6
RW-22 Flow Totalizer (gal)	614504968
Remedial Well Inspection Complete	Yes

Building 109 Treatment System Equipment

P-100A/B Sodium Hydroxide Flow Rate (gph)	6.4
T-100 Sodium Hydroxide Tank Total Volume (gal)	3625
P-300A/B Hydrogen Peroxide Flow Rate (mL/min)	220
T-300 Hydrogen Peroxide Tank Total Volume (gal)	4100
LOX-300 LOX Storage Tank Pressure (%)	55
TI-201 Influent Temperature (F)	54
P-200A/B/C AOP Influent Flow Rate (gpm)	1830.31
AOP Recirc Into T-200 Flow Rate (gpm)	0
P-200A/B/C Discharge Pressure (psi)	17
P-400A PI-402 Discharge Pressure (psi)	30
P-400B PI-404 Discharge Pressure (psi)	0
P-400C PI-406 Discharge Pressure (psi)	0
P-400A/B/C PIT-208 Combined Discharge Pressure (psi)	30
F-500A FI-501 Horiz Pressure Filter Influent Flow Rate (gpm)	1011.9
F-500B FI-503 Horiz Pressure Filter Influent Flow Rate (gpm)	845.6
F-500A FI-502 Horiz Pressure Filter B/W Totalizer (gal)	43137500
F-500B FI-504 Horiz Pressure Filter B/W Totalizer (gal)	351100
F-500A PIT-502 Vessel Differential Pressure (psi)	1.338
F-500B PIT-505 Vessel Differential Pressure (psi)	1.788
CF-700A Cartridge Filter Differential Pressure (psi)	10.74
CF-700B Cartridge Filter Differential Pressure (psi)	10.63

G-800A GAC Contractor Differential Pressure (psi)	4.5
G-800B GAC Contractor Differential Pressure (psi)	7
G-800C GAC Contractor Differential Pressure (psi)	8.5
G-800D GAC Contractor Differential Pressure (psi)	4.5
G-800E GAC Contractor Differential Pressure (psi)	4.5
G-800F GAC Contractor Differential Pressure (psi)	7
G-800G GAC Contractor Differential Pressure (psi)	11
G-800H GAC Contractor Differential Pressure (psi)	6
Discharge Temperature (F)	54.9
Discharge Pressure (psi)	0
Discharge pH (SU)	7.31
FIT-801 Discharge Flow Rate (gpm)	1965.48
Discharge Flow Totalizer (gal)	1456849920
B-109 Treatment System Inspection complete	Yes

Solids Handling

P-600 Backwash Pump Flow Rate (gpm)	0
P-600 Backwash Pump Totalizer (gal)	470682
P-1000A/B Dewatering Volute Feed Pump Flow Rate (gpm)	0
P-1000A/B Dewatering Volute Feed Pump Totalizer (gal)	0
P-1100 Decant Pump Flow Rate (gpm)	0
P-1100 Decant Pump Totalizer (gal)	466990
Solids Handling Inspection Complete	Yes

Is this record complete and ready to submit?	Yes
Note any issues, questions, or suggestions about this Fulcrum form	

Appendix D

Waste Manifests

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