Environmental
Construction
Operation &
Remediation

ECOR Federal Services, LLC
21 S High St, 2nd Floor
West Chester, PA 19382
(484) 887-7510
(610) 431-2852 (fax)

July 13, 2010

Mr. Steven Scharf
New York State Department of Environmental Conversation
Division of Environmental Remediation
Remedial Action, Bureau A
625 Broadway
Albany, NY 12233-7015

SUBJECT: **GM-38 GROUNDWATER REMEDIATION AT NWIRP BETHPAGE, NY**
QUARTERLY OPERATIONS REPORT
FOR DER SITE # 1-30-003B-OU 2

Dear Mr. Scharf:

In accordance with groundwater treatment system operational requirements for DER Site # 1-30-003B-OU 2, ECOR Federal Services, LLC. (ECOR) on behalf of the United States Department of the Navy (Navy) is submitting this quarterly operations report for the GM-38 system.

Please do not hesitate contact me with any questions regarding this report at office phone # 610-840-9200 or via email at torres@ecor-solutions.com

Sincerely,
ECOR Federal Service, LLC.

William Torres
Project Manager

cc: Lora Fly, NAVFAC
Richard Smith, NAVAIR
Henry Wilkie, NYSDEC (Albany)
William Spitz, NYSDEC (Region 1)
Walter Parrish, NYSDEC (Stony Brook)
Carol Stein, USEPA (Region II)
Gerard Ennis, Nassau County Department of Public Works
Richard Pfaender, Town of Oyster Bay
Al Taormina, ECOR Solutions, Inc.
Dave Brayack, Tetra Tech
Administrative Record
GM-38 Project Site File

DRAFT

QUARTERLY OPERATIONS REPORT

GROUNDWATER TREATMENT PLANT
GM-38 AREA GROUNDWATER REMEDIATION
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE, NEW YORK

Contract No. N62472-05-D-0031
Contract Task Order #003

Prepared for:

Naval Facilities Engineering Command Mid-Atlantic
9742 Maryland Avenue
Norfolk, VA 23511

Prepared By:

ECOR Federal Services, LLC.
21 S. High St, 2nd Floor
West Chester, PA 19382

July 2010

TABLE OF CONTENTS

1.0 Introduction 1
1.1 Background 1
1.2 GWTP Overview 1
2.0 GWTP Operations and Maintenance 2
2.1 Routine Maintenance Activities 2
2.2 Non Routine Maintenance Activities 2
2.3 Alarm Responses 3
3.0 GWTP Monitoring 5
3.1 Process Water Quality Monitoring 5
3.2 Air Quality Monitoring 5
3.3 Groundwater Quality Monitoring 5
3.3.1 Groundwater Quality Results 6
3.3.2 Quality Assurance/Quality Control Sampling 7

TABLES

TABLE 1 Discharge Monitoring Results – Second Quarter 2010
TABLE 2 Air Sampling Results – Second Quarter 2010
TABLE 3 Stack Emissions – Second Quarter 2010
TABLE 4 Groundwater Level Measurements – April 2010
TABLE 5 Summaries of Groundwater Chemistry Data – April 2010
TABLE 6 Historic Groundwater VOC Analytical Results through April 2010
TABLE 7 Calculated Relative Percent Differences – April 2010

FIGURES

FIGURE 1 Site Map
FIGURE 2 Process Flow Diagram

APPENDICES

APPENDIX A - NYSDEC Effluent Limitations and Monitoring Requirements
APPENDIX B - NYSDEC Air Permit Equivalent Approval
APPENDIX C - Field Data Sheets
APPENDIX D - Validation Report
APPENDIX E - GW Laboratory Analytical Data Package

1.0 INTRODUCTION

ECOR Federal Services, LLC (ECOR) has prepared this Quarterly Operations Report for the GM-38 Area Groundwater Treatment Plant (GWTP) at the Naval Weapons Industrial Reserve Plant (NWIRP) in Bethpage, New York, for the United States Department of the Navy (Navy), Naval Facilities Engineering Command (NAVFAC), Atlantic, under Contract No. N62472-05-D-0031Contract Task Order No. 003.

1.1 Background

NWIRP Bethpage is located in east central Nassau County, Long Island, New York, approximately 30 miles east of New York City (**Figure 1**) and is currently listed by NYSDEC as an "inactive hazardous waste site" (#1-30-003B). Historically, the Navy's property totaled approximately 109.5 acres and was a Government Owned Contractor-Operated (GOCO) facility that was operated by the Northrop Grumman Corporation (NGC) until September 1998. NWIRP Bethpage is bordered on the north, west, and south by property owned, or formerly owned, by NGC that covered approximately 605 acres, and, on the east, by a residential neighborhood.

The GM-38 Area refers to a cluster of monitoring wells that were installed in the 1990s by NGC. The GM-38 Area is approximately 8,500 feet south southeast and hydraulically down-gradient of NWIRP Bethpage. The GWTP is located within a utility easement with a street address of 100 Broadway.

The "hot spot" cleanup remedy for the GM-38 Area groundwater was originally set forth in Record of Decision (ROD) documents for Operable Unit 2 (OU 2) Groundwater for the Northrop Grumman Corporation (NGC) and NWIRP Sites (New York State Registry Site Numbers 1-30-003A & 1-30-003B, respectively) issued by NYSDEC Division of Environmental Remediation in March 2001 and for the NWIRP Bethpage Site by NAVFAC in April 2003 (Revision 1). The selected remedy was chosen in accordance with the New York State Environmental Conservation Law (ECL) and the Navy's Installation Restoration Program (IRP). It is also consistent with the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), as amended, 42 U.S.C. §§ 9601-9675.

1.2 GWTP Overview

Groundwater is extracted from recovery wells RW-1 and RW-3 and treated in the GWTP. The treatment process consists of flow equalization, air stripping and vapor-phase carbon treatment, bag filtration, liquid-phase carbon treatment and pH adjustment as needed. A process flow diagram is presented as **Figure 2**. The treated water is either re-injected into injection well IW-1 or discharged into the Nassau County Recharge Basin #495. Under CERCLA, the Navy is required to meet the effluent requirement in the NYSDEC's Storm Pollution Discharge Elimination System Permit as an ARAR.

The GWTP was designed to operate at an average flow rate of 1,100 gallons per minute (gpm) (800 gpm from RW-1 and 300 gpm from RW-3) with a maximum flow rate of 1,375 gpm, as measured by totaling the recovery wells or by the average discharge flow rate. It was determined that this flow rate would be necessary to effectively contain the limits of the higher concentration of contamination in the GM-38 Area groundwater. The average concentration of VOCs in the influent groundwater consists of 3,400 µg/l

of trichloroethene, 900 µg/l of tetrachloroethene, 300 µg/l of vinyl chloride, 1,100 µg/l of cis-1,2-dichloroethene, and smaller concentrations of 1,2-dichloroethane, benzene, toluene, and total xylenes.

The air stripper (AS) is structural aluminum tower that is packed with 3.5 inch diameter polypropylene Jaeger Tripack. Groundwater is pumped to the air stripper distribution port and sprayed over the column of Jaeger Tripack at a flow rate of approximately 1,200 gpm. This includes approximately 1,100 gpm of raw groundwater and 100 gpm of recirculation water. An induced draft countercurrent flow of air enters the air stripper below the base of the packing material at a rate of 8,000 scfm. The large surface area of the packing material allows for a mass transfer of the VOCs from the groundwater into the air stream. All of the VOCs in the off-gas, except for vinyl chloride, are removed via two 20,000 lb vapor phase granular activated carbon (VGAC) units (VGAC-1 and VGAC-2). Vinyl chloride is oxidized by a 20,000 lb potassium permanganate vessel (VGAC-3) into potassium chloride and carbon dioxide. The potassium chloride remains in the pore structure of the zeolite substrate. The treated off-gas is discharged out of the stack.

Water treated by the air stripper is passed through three 8,000 liquid phase granular activated carbon (LGAC) units in parallel prior to discharge in the recovery basin (and injection well, if necessary).

The GWTP is controlled by a PLC-based digital and analog control system, with monitoring instrumentation, such as pH, pressure, level, and flow transmitters, differential pressure transmitters, and pump signals that communicate with a PLC. In turn, the information in the PLC is made available to an operator via a human-machine interface (HMI) program. By using this program, the status of the GWTP can be displayed in real time and adjusted, if necessary, by the operator.

2.0 GWTP OPERATION AND MAINTENANCE

While designed to run completely automated, the GWTP requires regular weekly visits by an operator to record and adjust operational parameters and to perform scheduled maintenance.

2.1 Routine Maintenance Activities

Routine maintenance activities at the GWTP during the quarter were performed during the operator's weekly visits (generally; Monday, Wednesday and Friday averaging 20 hours a week). These activities include general site inspections, collection of operational data (water and vapor flowrates, pressures, tank levels and totalizer readings), measurement of depth to water in the recovery wells, adjustment of pump signal settings, collection of vapor and process water samples, changing out of bag filters, switching of lead/lag pump assignments, and preventive maintenance of system equipment.

2.2 Non-routine Maintenance Activities

The following non-routine activities were performed during the Second Quarter 2010:

- On March 24, 2010 the backflow preventer was inspected and the proper paperwork was submitted to the New York State Department of Health, Bureau of Public Water Supply Protection

- On April 2, the LGAC units were back washed because the differential pressure was approaching 15 psi.

- On April 13-16, 2010, the plant was shutdown to changeout the liquid phase carbon in all three 8,000 LGAC units. The gasket on the second LGAC unit was damaged during the changeout and the system flow was reduced to operate on only two vessels until a replacement gasket could be procured.

- On April 21, a replacement gasket was installed in the second LGAC unit and system flow was increased.

- On May 7, the building security system was repaired following damage to the key pad as a result of a power surge..

- On June 14 -19, an instrumentation subcontractor was onsite to troubleshoot deficiencies with the GWTP that were leading to repeated high air stripper alarms/shutdowns as described in the following section

2.3 Alarm Responses

The following alarms that occurred during the Second Quarter 2010 and there respective responses are listed below:

- On May 9, 2010 at 0000 hrs the operator received an alarm for Blower-1, RW-1 and RW-3 failure. The GWTP PC was off line running on battery backup due to a power failure. The PLC program and the GWTP were restarted and the system was equalized.

- On May 11, at 1000 hrs the operator received an alarm for Blower-1 failure. RW-1 and RW-3 were offline. The operator attempted to restart GWTP Pumps 3A and 3B, however, they would not operate in manual or auto positions. The Variable Frequency Drives (VFDs) were locked in override and would not operate. They were reset and the plant was restarted.

- On May 14, at 2200 hrs the operator received an alarm for Blower-1, RW-1 and RW-3 failure. The cause of the alarm was high level in the stripper tower which caused a high level in the Equalization Tank (EQ Tank) and the shutdown of RW-1 and RW-3. All vessels were drained and the system was restarted.

- On May 15, at 0000 hrs the operator received another alarm for Blower-1, RW-1 and RW-3 failure. Again the cause of the alarm was high level in the stripper tower which caused a high level in the EQ Tank and the shutdown of RW-1 and RW-3. All vessels were drained and the system was restarted.

- On May 15, at 1800 hrs the operator received another alarm for Blower-1, RW-1 and RW-3 failure. Again the cause of the alarm was high level in the stripper tower which caused a high

level in the EQ Tank and the shutdown of RW-1 and RW-3. All vessels were drained and the system was restarted.

- On May 16, at 0500 hrs the operator received another alarm for Blower-1, RW-1 and RW-3 failure. Again the cause of the alarm was high level in the stripper tower which caused a high level in the EQ Tank and the shutdown of RW-1 and RW-3. All vessels were drained and the system was restarted.

- On May 18 at 2400 hrs the operator received another alarm for Blower-1, RW-1 and RW-3 failure. Again the cause of the alarm was high level in the stripper tower which caused a high level in the EQ Tank and the shutdown of RW-1 and RW-3. All vessels were drained and the system was restarted.

3.0 GWTP MONITORING

The GWTP is not intended to remediate groundwater contamination in the local aquifer to non-detectable levels. Rather, the intent of the system is to remove mass and reduce elevated VOC levels to levels similar to those in the surrounding aquifer. Doing so will minimize the impacts on water supply wells and currently unaffected portions of the aquifer. To monitor GWTP effectiveness and for compliance with Federal and State requirements, several process (water and vapor) samples are collected on a monthly basis. In addition, groundwater samples are collected quarterly to monitor water quality and hydraulic containment.

3.1 Process Water Quality Monitoring

Processed groundwater is tested to meet the effluent limitations and monitoring requirements of the New York State Storm Pollution Discharge Elimination System (SPDES) permit. These results are also submitted to the NYSDEC on a monthly basis in the form of a Discharge Monitoring Report (DMR). A copy of the permit and submitted DMRs are included as **Appendix A**.

Samples are collected from each recovery well (RW-1 and RW-3), as well as, the effluent water discharge line. It has been decided to also sample the water exiting the air stripper to better monitor the efficiency, however, no samples were collected during this reporting period. The analytical results of monthly process water sampling performed during the Second Quarter 2010 are presented in **Table 1**. The data demonstrates that all permitted constituents were in compliance for the quarter. **Table 1** also summarizes the average monthly flowrates in gallons per minute along with the total volume of water processed.

3.2 Air Quality Monitoring

Treated off-gas discharged at the stack of the GWTP is subject to emissions limitations as described by the NYSDEC Division of Air Resources (DAR) air permit equivalent issued in July 2009. A copy of the permit equivalent is included as **Appendix B**.

While only sampling of the stack is required for NYSDEC compliance, vapor samples are also collected using 6L summa canisters at various locations to monitor for breakthrough of the VGAC units. The analytical results of monthly influent and effluent vapor samples collected during the Second Quarter 2010 are presented in **Table 2**. Air emissions calculations using the stack vapor concentrations along with discharge flowrates are presented in **Table 3**. The calculations demonstrate that all permitted constituents were in compliance.

3.3 Groundwater Quality Monitoring

The groundwater monitoring well system at the GM-38 Groundwater Remediation Area consists of 14 monitoring wells, as summarized in **Table 4**. On a quarterly basis, depth to water (DTW) measurements are performed in 12 monitoring wells while samples for water quality monitoring are collected from seven wells.

Two wells, GM-38D and GM-38D2, located at the corner of Aurthur Avenue and Broadway, are not accessible at this time and are being monitored by others.

The monitoring system includes clusters of wells located in proximity to the recovery and injection wells as described below.

Recovery Well 1(RW-1)

The RW-1 cluster consists of three monitoring wells screened between 395 and 435 feet below ground surface (bgs). RW-1 MW-1 is located approximately 140 feet northwest of RW-1 and RW-1 MW-2 is located approximately 50 feet north of RW-1. RW-1 MW-3 is located approximately 400 feet northeast of RW-1, on the eastern side of Seaford Oyster Bay Expressway. All three wells are hydraulically monitored while only RW-1MW1 and RW-1MW-3 are monitored for water quality.

Recovery Well 2(RW-2)

The RW-2 cluster consists of three monitoring wells screened between 470 and 510 feet bgs. RW-2 MW-1 is located approximately 60 feet northwest of RW-2, RW-2 MW-2 is located approximately 20 feet west of RW-2, and RW-2 MW-3 is located approximately 100 feet west of RW-2. All three wells are hydraulically monitored while only RW-2 MW1 is monitored for water quality.

Recovery Well 3(RW-3)

The RW-3 cluster consists of four monitoring wells RW-3 MW-1 and RW-3 MW-3 are screened between 320 and 340 ft bgs, RW-3 MW-2 and RW-3 MW-4 are screened between 475 and 495 feet bgs. RW-3 MW-1 and RW-3 MW-2 are located approximately 500 feet west of the GM-38 cluster, at the intersection of Arthur Avenue and Leroy Avenue. RW-3 MW-3 and RW-3 MW-4 are located approximately 400 feet north of the intersection of Arthur Avenue and Broadway. All four wells are both hydraulically monitored and monitored for water quality.

Injection Well 3(IW-1)

There is one monitoring well associated with injection well IW-1. IW-1 MW-1 is screened between 130 and 150 feet bgs and is located approximately 20 feet south of IW-1. It is only hydraulically monitored.

TP-1

TP-1 is screened between 450 and 470 feet bgs and is located approximately 25 feet north of the GWTP building, inside the fenced area. It is hydraulically monitored to observe the change in water levels due to the influence from the pumping rates at the neighboring public water supply well field near the hot spot area.

3.3.1 Groundwater Quality Results

ECOR collected groundwater samples from seven (7) monitoring wells (RW1-MW1, RW1-MW3, RW2-MW1, RW3-MW1, RW3-MW2, RW3-MW3, RW3-MW4). Samples were collected using bladder pumps following the United States Environmental Protection Agency (USEPA) micropurge and low-flow sampling methodologies. Field parameters measured during well purging included pH, specific conductance (S.C.), temperature, oxidation-reduction potential (ORP) and dissolved oxygen (DO). The results are summarized in **Table 5**. Copies of the field notes are presented in **Appendix C**. Following stabilization of field parameters, samples were collected from the pump discharge.

Groundwater samples collected were submitted to a National Environmental Laboratory Accreditation Conference (NELAC) accredited laboratory (Accutest Laboratories located in Dayton NJ) for the analysis of Target Compound List (TCL) VOCs using USEPA Method 624, Mercury using USEPA Method SW846 7470A, and TSS using USEPA Method SM20 2540D. Validated analytical results of samples collected during the monitoring event are summarized in **Table 6** along with data collected by ARCADIS in 2005 and by Tetra Tech EC in 2009 and January of 2010. The data validation report is presented in **Appendix D**. Analytical data is presented on **Appendix E**.

3.3.2 Quality Assurance/Quality Control Sampling

Additionally, the following quality assurance/quality control (QA/QC) samples were also collected: blind field duplicate (collected from RW3-MW3), field blank (FB), trip blank (TB), and matrix spike/matrix spike duplicate (MS/MSD). The results of the FB and TB samples indicate that only chloroform at an estimated concentration of 0.66J µg/L in the FB was detected above laboratory method detection limits (MDL). This shows that there was most likely no cross-contamination of samples during sample collection or transport.

For duplicate (DUP) samples, the precision between the original sample and its duplicate is evaluated by calculating the relative percent difference (RPD). ECOR has evaluated DUP samples using an acceptance criterion of twenty percent (20%) for detected primary COC. **Table 7** presents the RPDs for the groundwater. If the sample results are below MDLs a RPD cannot be calculated for that sample. As shown on **Table 7**, none of the calculated RPDs were above the 20% criteria. The overall consistency between the samples indicates that proper sample collection methods were followed.

TABLES

Table 1
GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Discharge Monitoring Results
Second Quarter 2010

SPDES Parameters	Daily Maximum Limit	Units	April 2010				May 2010				June 2010			
Process Stream			RW-1	RW-3	Influent	Effluent	RW-1	RW-3	Influent	Effluent	RW-1	RW-3	Influent	Effluent
Sampling Date			4/12/10				5/13/10				6/8/10			
Average Flowrate	1100	GPM	442	196	638	664	587	265	853	856	691	257	948	1014
Total Flow		gallons	NR	NR	27,561,600	28,679,040	NR	NR	38,062,080	38,227,680	NR	NR	40,943,631	43,788,185
pH	5.5 - 8.5	SU	NR	NR	5.6	6.68	NR	NR	5.6	7.3	NR	NR	5.6	6.77
1,1-Dichloroethane	5	µg/l	3	1.9	2.7	ND	3.6	1.9	3.1	ND	3.3	1.8	2.9	ND
1,2-Dichloroethane	0.6	µg/l	ND	ND	ND	ND	0.53	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	µg/l	7.3	2.7	5.9	ND	10.2	2.4	7.8	ND	8.4	2.1	6.7	ND
Carbon Tetrachloride	N/A	µg/l	ND	ND	ND	ND	0.52	ND	0	ND	0.55	ND	0	ND
cis 1,2-Dichloroethene	5	µg/l	101	3.3	71	2.6	112	2.9	78.1	ND	91.7	2.7	67.6	0.27
trans 1,2-Dichloroethene	5	µg/l	2.8	0.24	2.0	ND	2.3	ND	2	ND	1.6	ND	1	ND
Tetrachloroethene	5	µg/l	180	ND	125	ND	132	ND	91	ND	130	ND	95	ND
1,1,1-Trichloroethene	5	µg/l	9.9	1.4	7	ND	7.7	1.3	6	ND	8.1	1.3	6	ND
Trichloroethene	5	µg/l	747	536	682	0.98	569	431	526	0.25	443	388	428	0.26
Vinyl Chloride	2	µg/l	15.5	ND	11	ND	16.4	ND	11.3	ND	14.4	ND	10.5	ND
Mercruy	0.25	µg/l	<0.20	0.48	0.1	ND	< 0.20	<0.20	<0.20	<0.20	< 0.20	<0.20	<0.20	<0.20

Notes:
J, B - Estimated result less than reporting limit
ND - Not Detected
NR - Not Recorded
SU - standard units
µg/l - micrograms per liter
gpm - gallons per minute

Table 2
GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Air Sampling Results
Second Quarter 2010

DAR Parameters	SGC	Units	April 2010		May 2010		June 2010	
Process Stream			Influent	Effluent	Influent	Effluent	Influent	Effluent
Sampling Date			4/8/10		5/13/10		6/10/10	
Average Flowrate		CFM		6,818		7,782		8,544
Trichloroethene	14000	$\mu g/m^3$	3100	ND	2600	5.1	3700	13
Tetrachloroethene	1000	$\mu g/m^3$	700	ND	490	ND	650	ND
Vinyl Chloride	180000	$\mu g/m^3$	140	22	110	28	100	31
trans 1,2-Dichloroethene	-	$\mu g/m^3$	10	ND	7.7	ND	9.3	ND
cis 1,2-Dichloroethene	-	$\mu g/m^3$	760	ND	660	ND	760	ND
1,2-Dichloroethane	-	$\mu g/m^3$	ND	ND	ND	ND	ND	ND
Toluene	37000	$\mu g/m^3$	ND	ND	ND	ND	ND	ND
Xylene	4300	$\mu g/m^3$	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	-	$\mu g/m^3$	ND	ND	ND	ND	ND	ND

Notes:
ND - Not detected
NR - Not recorded
SGC - Short-term Guideline Concentration
$\mu g/m^3$ - micrograms per cubic meter
CFM - cubic feet per minute
DAR - Division of Air Rescources

Table 3
GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Stack Emissions
Second Quarter 2010

DAR Parameters	Discharge Limit	Units	April	May 2010	June 2010
Sampling Date			4/8/10	5/13/10	6/10/10
Average Flowrate		CFM	6,818	7,782	8,544
Total Flow		ft^3	294,534,720	336,164,284	369,120,738
Total Flow		m^3	8,335,333	9,513,449	10,446,117
Trichloroethene	0.09	lb/hr	0.00	0.000144	0.000415
Tetrachloroethene	0.02	lb/hr	0.00	0.00	0.00
Vinyl Chloride	0.01	lb/hr	0.000561	0.000789	0.000991
1,2 Dichloroethene	0.03	lb/hr	0.00	0.00	0.00
1,2-Dichloroethane	BRT	lb/hr	0.00	0.00	0.00
Toluene	BRT	lb/hr	0.00	0.00	0.00
Xylene	BRT	lb/hr	0.00	0.00	0.00
1,1,2 Trichloroethane	BRT	lb/hr	0.00	0.00	0.00

Notes:
BRT - Below reporting thresholds
lb/hr - pounds per hour
DAR - Divison of Air Resources
CFM - Cubic feet per minute

Table 4
GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Groundwater Level Measurements
Second Quarter 2010

Monitoring Well ID	Date	Time	Total Depth (ft)	Screen Interval (ft)	Depth to Water (ft)
RW1-MW1	04/21/10	1335	435	395-435	30.89
RW1-MW2	04/21/10	0955	435	395-435	32.38
RW1-MW3	04/21/10	1200	435	395-435	23.80
RW2-MW1	04/21/10	1015	510	470-510	33.90
RW2-MW2	04/21/10	1010	510	470-510	33.62
RW2-MW3	04/21/10	1007	510	470-510	33.05
RW3-MW1	04/21/10	1325	350	330-350	32.83
RW3-MW2	04/21/10	1320	495	475-795	35.10
RW3-MW3	04/21/10	1310	340	320-340	34.50
RW3-MW4	04/21/10	1305	495	475-495	36.00
TP-1	04/21/10	1000	470	450-470	29.00
IW1-MW1	04/21/10	NA	NA	NA	NA
GM38D	04/21/10	NA	340	320-340	NA
GM382D	04/21/10	NA	495	475-495	NA

Notes:
ft - Feet
NA - Not Available

Table 5
Summary of Final Groundwater Chemistry Data
GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Summary of Groundwater Chemistry Data
Second Quarter 2010

Location	pH (SU)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (ºC)	ORP (MV)	Color (Visual)
RW1-MW1	6.45	0.176	5.50	1.30	15.56	43.4	clear
RW1-MW3	7.51	0.186	22.1	0.50	14.79	11.0	clear
RW2-MW1	10.89	0.101	1.02	0.43	12.82	-100.5	clear
RW3-MW1	7.95	0.118	1.79	3.47	12.32	16.7	clear
RW3-MW2	8.97	0.111	10.53	0.76	13.37	-9.8	clear
RW3-MW3	8.52	0.130	4.52	3.00	14.15	8.1	clear
RW3-MW4	8.78	0.082	12.50	4.09	13.06	-31.6	clear

Notes:
S.C. = Specific Conductance
mS/cm = milliSiemens per centimeter
NTU = nephelometric turbidity units
mg/L = milligrams per liter
ºC = degrees celsius
MV = millivolts
SU = standard units
ORP = oxidation/reduction potential
NWIRP = Naval Weapons Industrial Reserve Plant

Table 6
GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Summary of Groundwater Data thru April 2010

Sample ID	IW-1 MW-1	IW-1	RW1-MW1					RW1-MW2			TP-01
Sample Date	5/3/2005	5/27/2009	5/4/2005	7/22/2005	5/27/2009	1/21/2010	4/21/2010	5/4/2005	7/22/2005	5/28/2009	1/21/2010
Comments											
TCL VOC (8260B/624) ug/L											
acetone	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NR
benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromodichloromethane	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NR
bromoform	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NR
bromomethane	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NR
2-butanone	R	ND	R	R	ND	NR	ND	R	R	ND	NR
carbon disulfide	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NR
carbon tetrachloride	ND	ND	ND	ND	0.32J	ND	ND	ND	ND	ND	ND
chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR
chloroform	0.94J	0.98J	ND	0.7J	1.1	ND	0.70J	ND	1.4	ND	ND
chloromethane	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NR
cyclohexane	NR	ND	NR	NR	ND	NR	NR	NR	NR	ND	NR
dibromochloromethane	NR	ND	NR	NR	ND	NR	ND	NR	NR	ND	NR
1,1-dichloroethane	0.39J	0.22J	0.74J	0.79J	3.3	2.9J	2.8	4.6	5.5	3.4	3.6J
1,2-dichloroethane	ND	ND	ND	ND	0.29J	ND	ND	ND	ND	ND	ND
1,1-dichloroethene	ND	ND	1.3	2.8	3.1	1.7J	1.9	3.2	12.3	ND	ND
cis-1,2-dichloroethene	ND	ND	78.6	80.4	180D	130	121	181.0	47.6	160.0	190
trans-1,2-dichloroethene	ND	ND	2.0	1.3J	2.8	4J	2.9	2.5	7.6	2.5	3.0J
1,2-dichloropropane	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NR
cis-1,3-dichloropropene	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NR
trans-1,3-dichloropropene	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NR
1,4-dioxane	NR	NR	1.75J	NR	NR	NR	NR	4.01	NR	NR	NR
ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-hexanone	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NR
methylene chloride	ND	ND	ND	ND	ND	NR	ND	1.0	ND	ND	NR
4-methyl-2-pentanone	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NR
methyl-tert-butyl-ether	NR	0.46J	NR	NR	ND	ND	NR	NR	NR	ND	ND
styrene	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NR
1,1,2,2-tetrachloroethane	ND	ND	ND	ND	ND	NR	ND	ND	ND	ND	NR
1,2,4-trichlorobenzene	NR	ND	NR	NR	ND	NR	NR	NR	NR	ND	NR
tetrachloroethene	ND	ND	ND	ND	0.72J	ND	0.42J	ND	134.0	19.0	3.4J
1,1,1-trichloroethane	0.47	0.49J	ND	ND	0.71J	ND	0.52J	1.3	1.0	ND	ND
1,1,2-trichloroethane	ND	ND	ND	ND	0.58J	NR	ND	ND	0.65J	ND	ND
trichloroethene	ND	0.17J	53.6	52.7	140.0	79	116	158.0	198.0	200.0	65
trichlorofluoromethane	NR	ND	NR	NR	ND	NR	NR	NR	NR	ND	NR
toluene	ND	0.19J	ND	0.33J	0.68	ND	ND	0.32J	ND	ND	ND
vinyl chloride	ND	ND	ND	ND	1.6	ND	ND	12.9	187.0	4.1	ND
xylenes (total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury (SW846-7470A) ug/L	NR	0.20	NR	NR	ND	0.20	<0.20	NR	NR	0.20	NR
TSS (SM20 2540D) mg/L	NR	2.4	NR	NR	2.8	2.8	6.0	NR	NR	4.0	NR

Note:

VOC analysis changed to EPA Method 624 in January 2010

D-dilution

J-estimated value

ND-not detected

NR-not requested

R-Rejected

mg/L - milligrams per liter

µg/l - micrograms per liter

Table 6
GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Summary of Groundwater Data thru April 2010

Sample ID	RW1-MW3		RW2-MW1					RW2-MW2		RW2-MW3		
Sample Date	1/20/2010	4/21/2010	5/4/2005	7/20/2005	5/27/2009	1/18/2010	4/21/2010	5/4/2005	7/21/2005	5/3/2005	7/20/2005	5/26/2009
Comments						EPA 624						
TCL VOC (8260B/624) ug/L												
acetone	NR	ND	ND	ND	ND	NR	ND	ND	ND	ND	ND	ND
benzene	ND	ND	ND	ND	ND	ND	0.15J	ND	ND	ND	ND	ND
bromodichloromethane	NR	ND	ND	ND	ND	NR	ND	ND	ND	ND	ND	ND
bromoform	NR	ND	ND	ND	ND	NR	ND	ND	ND	ND	ND	ND
bromomethane	NR	ND	ND	ND	ND	NR	ND	ND	ND	ND	ND	ND
2-butanone	NR	ND	R	R	ND	NR	ND	R	R	R	R	ND
carbon disulfide	NR	ND	ND	ND	ND	NR	ND	ND	ND	ND	ND	ND
carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroethane	NR	ND	ND	ND	ND	NR	ND	ND	ND	ND	ND	ND
chloroform	0.67J	0.80J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloromethane	NR	ND	ND	ND	ND	NR	ND	ND	ND	ND	ND	ND
cyclohexane	NR	NR	NR	NR	ND	NR	NR	NR	NR	NR	NR	ND
dibromochloromethane	NR	NR	NR	NR	ND	NR	ND	NR	NR	NR	NR	ND
1,1-dichloroethane	2.4	4.6	0.53J	0.93J	1.2J	0.82J	0.60J	ND	0.78J	0.68J	0.31J	1.4
1,2-dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethene	0.42J	1.10	ND	0.58J	0.55J	0.63J	ND	D	0.41J	ND	ND	0.42J
cis-1,2-dichloroethene	0.54J	0.48J	ND	0.55J	1.9	1.0	0.78J	0.33J	0.41J	0.40J	0.66J	2.3
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-dichloropropane	NR	ND	ND	ND	ND	NR	ND	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	NR	ND	ND	ND	ND	NR	ND	ND	ND	ND	ND	ND
trans-1,3-dichloropropene	NR	ND	ND	ND	ND	NR	ND	ND	ND	ND	ND	ND
1,4-dioxane	NR	NR	5.34	NR	NR	NR	NR	7.45J	NR	7.42J	NR	NR
ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-hexanone	NR	ND	ND	ND	ND	NR	ND	ND	ND	ND	ND	ND
methylene chloride	NR	ND	ND	ND	ND	NR	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone	NR	NR	ND	ND	ND	NR	ND	ND	ND	ND	ND	ND
methyl-tert-butyl-ether	ND	NR	NR	NR	ND	ND	NR	NR	NR	NR	NR	ND
styrene	NR	ND	ND	ND	ND	NR	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	NR	ND	ND	ND	ND	NR	ND	ND	ND	ND	ND	ND
1,2,4-trichlorobenzene	NR	NR	NR	NR	ND	NR	ND	NR	NR	NR	NR	ND
tetrachloroethene	ND	049J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-trichloroethane	0.41J	0.98J	ND	0.37J	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-trichloroethane	0.62J	0.60J	ND	ND	ND	ND	ND	D	ND	ND	ND	ND
trichloroethene	1.2	1.6	37.6	34.6	12.0	15.0	0.42J	7.8	13.8	16.2	20.6	18.0
trichlorofluoromethane	NR	NR	NR	NR	ND	NR	NR	NR	NR	NR	NR	ND
toluene	ND	ND	ND	0.85J	1.0	ND	0.52J	0.33J	0.53J	ND	0.50J	0.39J
vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
xylenes (total)	ND	ND	ND	1.4J	ND	ND	ND	ND	ND	ND	ND	ND
Mercury (SW846-7470A) ug/L	NR	<0.20	NR	NR	0.05J	NR	<0.20	NR	NR	NR	NR	ND
TSS (SM20 2540D) mg/L	NR	8.0	NR	NR	2260.0	NR	58.0	NR	NR	NR	NR	14.8

Note:
VOC analysis changed to EPA Method
D-dilution
J-estimated value
ND-not detected
NR-not requested
R-Rejected
mg/L - milligrams per liter
µg/l - micrograms per liter

Table 5
GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Summary of Groundwater Data thru April 2010

Sample ID	RW3-MW1		RW3-MW2			RW3-MW3			RW3-MW4	
Sample Date	1/19/2010	4/22/2010	1/19/2010	1/19/2010	4/22/2010	1/20/2010	4/22/2010	4/22/2010	1/20/2010	4/22/2010
Comments				duplicate				duplicate		
TCL VOC (8260B/624) ug/L										
acetone	NR	ND	NR	NR	ND	NR	ND	ND	NR	ND
benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bromodichloromethane	NR	ND	NR	NR	ND	NR	ND	ND	NR	ND
bromoform	NR	ND	NR	NR	ND	NR	ND	ND	NR	ND
bromomethane	NR	ND	NR	NR	ND	NR	ND	ND	NR	ND
2-butanone	NR	ND	NR	NR	ND	NR	ND	ND	NR	ND
carbon disulfide	NR	ND	NR	NR	ND	NR	ND	ND	NR	ND
carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroethane	NR	ND	NR	NR	ND	NR	NR	NR	NR	NR
chloroform	ND	ND	ND	ND	ND	ND	ND	0.40 J	ND	ND
chloromethane	NR	ND	NR	NR	ND	NR	ND	ND	NR	ND
cyclohexane	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
dibromochloromethane	NR	ND	NR	NR	ND	NR	ND	ND	NR	ND
1,1-dichloroethane	1.6	1.5	ND	ND	0.54J	ND	1.6	1.6	2.5	0.6
1,2-dichloroethane	0.27J	ND	ND	ND	ND	ND	0.52J	0.54J	ND	ND
1,1-dichloroethene	1.2	1.3	ND	ND	1.2	ND	1.1	1.3	1.0	ND
cis-1,2-dichloroethene	0.37J	ND	1.5J	1.6J	2.4	ND	2.1	2.1	0.46J	ND
trans-1,2-dichloroethene	ND	ND	ND	ND	0.43 J	ND	ND	ND	ND	ND
1,2-dichloropropane	NR	ND	NR	NR	ND	NR	ND	ND	NR	ND
cis-1,3-dichloropropene	NR	ND	NR	NR	ND	NR	ND	ND	NR	ND
trans-1,3-dichloropropene	NR	ND	NR	NR	ND	NR	ND	ND	NR	ND
1,4-dioxane	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-hexanone	NR	ND	NR	NR	ND	NR	ND	ND	NR	ND
methylene chloride	NR	ND	NR	NR	ND	NR	ND	ND	NR	ND
4-methyl-2-pentanone	NR	ND	NR	NR	ND	NR	ND	ND	NR	ND
methyl-tert-butyl-ether	ND	NR	ND	ND	NR	ND	NR	NR	ND	NR
styrene	NR	ND	NR	NR	ND	NR	ND	ND	NR	ND
1,1,2,2-tetrachloroethane	NR	ND	NR	NR	ND	NR	ND	ND	NR	ND
1,2,4-trichlorobenzene	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
tetrachloroethene	0.49J	0.81J	ND	ND	ND	ND	0.45J	0.49J	ND	ND
1,1,1-trichloroethane	ND	0.98J	ND	ND	0.58J	ND	0.95J	1.0J	ND	ND
1,1,2-trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trichloroethene	35.0	53.2	160.0	170.0	211.0	350	397	382	21	11
trichlorofluoromethane	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
xylenes (total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury (SW846-7470A) ug/L	NR	<0.20	NR	NR	<0.20	NR	<0.20	<0.20	NR	<0.20
TSS (SM20 2540D) mg/L	NR	<0.40	NR	NR	5.0	NR	4.0	5.0	NR	16.0

Note:
VOC analysis changed to EPA Method
D-dilution
J-estimated value
ND-not detected
NR-not requested
R-Rejected
mg/L - milligrams per liter
µg/l - micrograms per liter

Table 7
GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Calculated Relative Percent Difference
Second Quarter 2010

Well ID RW3-MW3

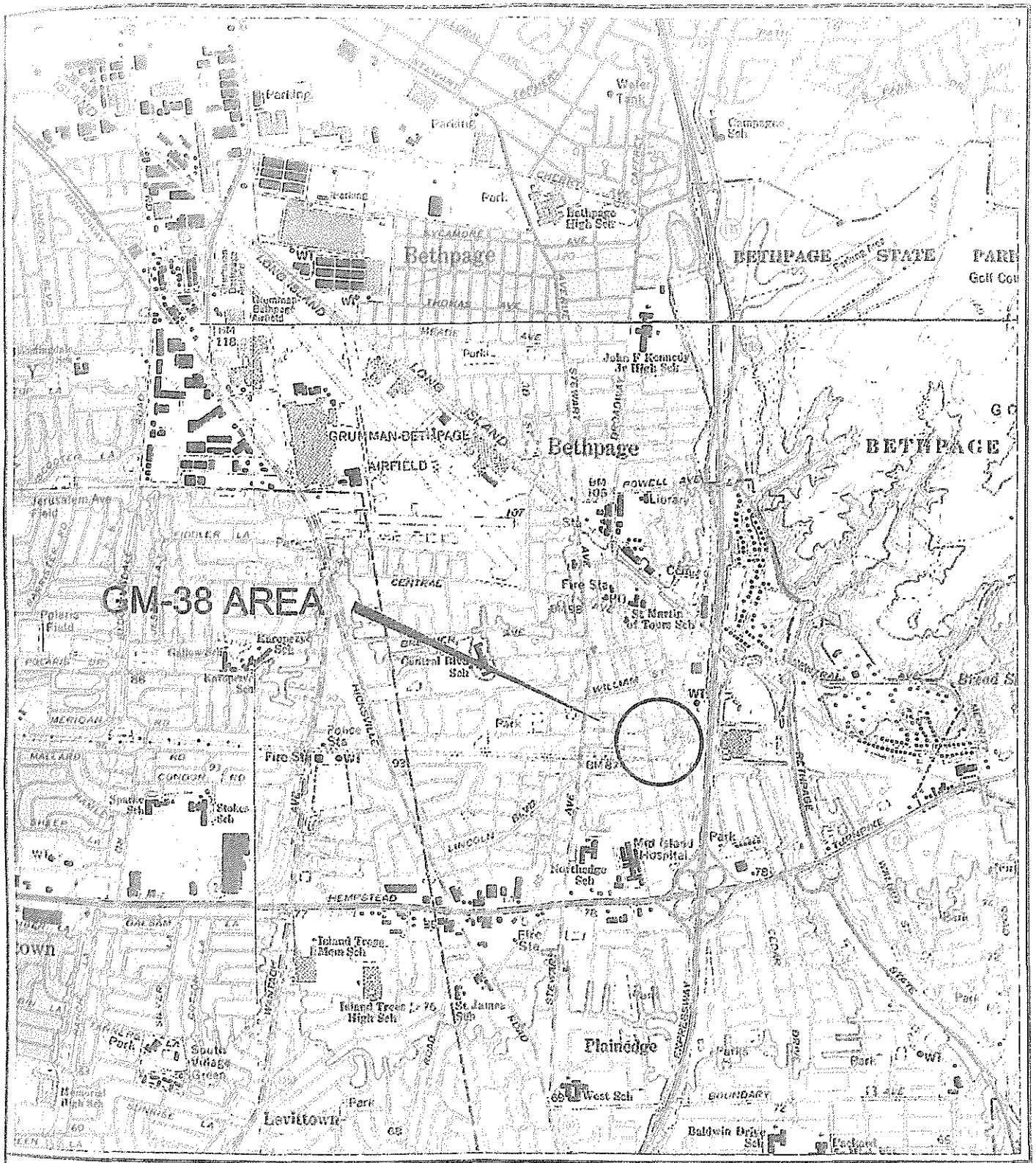
Blind Duplicate Sample ID DUP-1

Constituent	Concentration (µg/L)		RPD
	Original	Duplicate	
Carbon Tetrachloride	ND	ND	NC
Chloroform	ND	0.4 J	NC
1,1-Dichloroethane	1.6	1.6	0%
1,2-Dichloroethane	0.52 J	0.54 J	4%
1,1-Dichloroethene	1.1	1.3	17%
cis-1,2-Dichloroethene	2.1	2.1	0%
trans-1,2-Dichloroethene	ND	ND	NC
Tetrachloroethene	0.45 J	0.49 J	9%
1,1,1-Trichloroethane	0.95 J	1.0 J	5%
1,1,2-Trichloroethane	ND	ND	NC
Trichloroethene	397	382	4%
Toluene	ND	ND	NC
Vinyl Chloride	ND	ND	NC

Notes:
J = Estimated value
NC = not calculated
ND = not detected above laboratory detection limit
mg/L = micrograms per liter

$$\text{RPD = Relative Percent Difference} = \frac{\text{(Original Concentration - Duplicate Concentration)}}{\text{[(Original Concentration + Duplicate Concentration)/2]}} \times 100$$

FIGURES



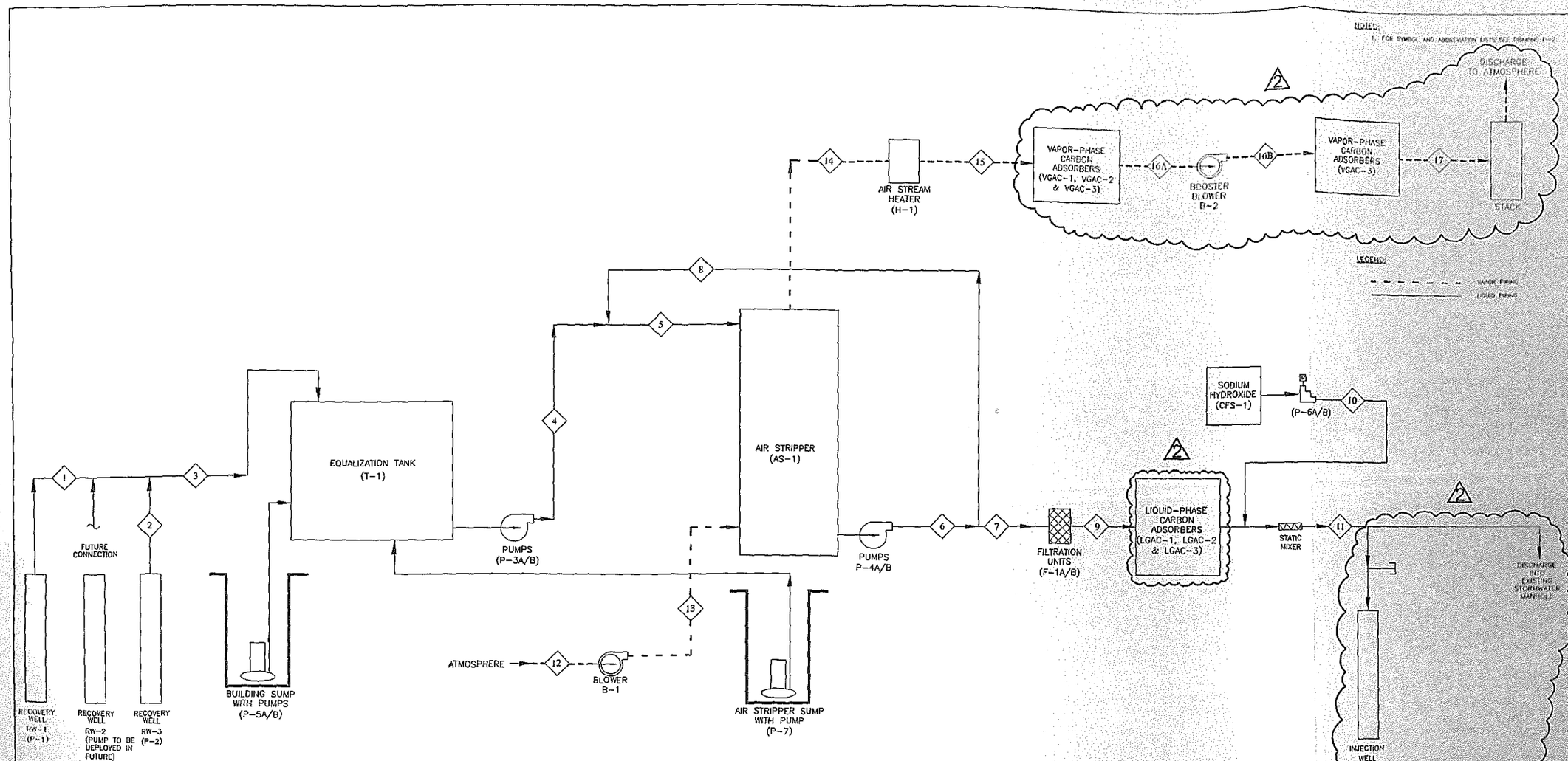
Source: U.S.G.S. Topographic Maps (7.5 Minute)
Amityville, Freeport, Hicksville, Huntington, NY Quadrangles

U.S. Navy RAC
Engineering Field Activity, Northeast

GM-38 Area (Offsite)
NWIRP Bethpage
Bethpage, NY

Figure 1
Site Location Map

NOTES:
1. FOR SYMBOL AND ABBREVIATION LISTS, SEE DRAWING P-2.



STREAM NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
COMPOSITION (UG/L, UNLESS OTHERWISE NOTED)																
BENZENE	4	4	4	4	3	-	-	-	-		-					
TOLUENE	15	15	15	15	12	-	-	-	-		-					
XYLENES, TOTAL	16	16	16	16	12	-	-	-	-		-					
1,2-DICHLOROETHANE	3	3	3	3	2.8						2.7 E-07					
cis 1,2-DICHLOROETHENE	1100	1100	1100	1100	1008	0.10	0.10	0.10	0.10		1.0 E-04					
VINYL CHLORIDE	300	300	300	300	275	0.03	0.03	0.03	0.03		2.7 E-05					
TETRACHLOROETHENE (PCE)	900	900	900	900	825	0.08	0.08	0.08	0.08		8.2 E-05					
TRICHLOROETHENE (TCE)	3400	3400	3400	3400	3117	3.12	3.12	3.12	3.12		3.1 E-05					
WATER FLOW RATE (GPM)	800	300	1100	1100	1200	1200	1100	100	1100	1.1 gpd	1100					
TEMPERATURE (°F)	55	55	55	55	55	55	55	55	55	60	55					
PRESSURE (PSIG)												-0.27	1.50	1.36	1.18	0.53
DENSITY (lb/ft³)										95.5		0.077	0.085	0.084	0.082	0.079
MASS FLOW RATE (lb/hr)	400364	150136	550500	550500	600545	600545	550500	50,045	550500	0.59	550500	36,960	40,800	40,320	39,360	37,920
RELATIVE HUMIDITY (%)												50	50	100	50	50
STATIC PRESSURE (PSIA)												0.214	0.214	0.214	0.275	0.275
pH (S.U.)	5.5	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.0	14	7.0					
VAPOR FLOW RATE (CFM)												8000	8000	8000	8000	8000
TOTAL VAPOR VOC (PPMV)												-	-	25.5	25.5	1.2
TOTAL VAPOR VOC (LBS/HR)												-	-	3.18	3.18	0.15

TETRA TECH ENGINEERING CORPORATION P.C.

ENGINEERING FIELD ACTIVITY - NORTHEAST
GU-12 AREA
GROUNDWATER TREATMENT PLANT
PROCESS FLOW DIAGRAM - GROUNDWATER AND VAPOR TREATMENT

APPENDIX A
NYSDEC Effluent Limitations and Monitoring Requirements

New York State Department of Environmental Conservation
Division of Water
Bureau of Water Permits, 4th Floor
625 Broadway, Albany, New York 12233-3505
Phone: (518) 402-8111 • FAX: (518) 402-9029
Website: www.dec.state.ny.us

Alexander B. Grannis
Commissioner

RECEIVED
JUN - 9 2008
BUREAU OF EASTERN

MEMORANDUM

TO: Steven Scharf, DER

FROM: Jean Occidental, DOW, Bureau of Water Permits JO

SUBJECT: Naval Weapons Industrial Reserve Plant (NWIRP); DER Site # 1-01-001

DRAINAGE BASIN: na

DATE: June 6, 2008

In response to your request and the permittee's SPDES Permit Equivalent Application dated April 27, 2008, attached is the effluent criteria for the above noted groundwater remediation discharge.

The Division of Water does not have any regulatory authority over a discharge from a State, PRP, or Federal Superfund Site. The Division of Environmental Remediation will be responsible for ensuring compliance with the attached effluent criteria and approval of all engineering submissions. Additional Condition (1) identifies the contact to send all effluent results, engineering submissions, and modification requests. The Regional Water Engineer should be kept appraised of the status of these discharges and, in accordance with the attached criteria, receive a copy of the effluent results for informational purposes.

If you have any questions, please call me at (518) 402-8116.

Attachment

cc: (w/att) RWE, Region 1
C. Webber
BWP Permit Coordinator

Naval Weapons Industrial Reserve Plant

DER site # 1-01-001

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning: April 1, 2009

and lasting until: April 1, 2014

the discharges from the treatment facility to Groundwater shall be limited and monitored by the operator as specified below:

Outfall and Parameters	Limitations		Units	Minimum Monitoring Requirements	
	Daily Avg.	Daily Max.		Measurement Frequency	Sample Type
Treated Groundwater Remediation Discharge from: Recovery Wells 1, 2, and 3					
Flow	Monitor	1100	GPM	Continuous	Recorder
pH (range)	5.5 - 8.5		SU	Weekly	Grab
1,1-Dichloroethane	NA	5	µg/l	Monthly [1]	Grab
1,2-Dichloroethane	NA	0.6	µg/l	Monthly [1]	Grab
1,1-Dichloroethene	NA	5	µg/l	Monthly [1]	Grab
cis-1,2-Dichloroethene	NA	5	µg/l	Monthly [1]	Grab
trans-1,2-Dichloroethene	NA	5	µg/l	Monthly [1]	Grab
Tetrachloroethene	NA	5	µg/l	Monthly [1]	Grab
1,1,1-Trichloroethane	NA	5	µg/l	Monthly [1]	Grab
Trichloroethene	NA	5	µg/l	Monthly [1]	Grab
Vinyl chloride	NA	2	µg/l	Monthly [1]	Grab
Mercury	NA	0.25	µg/l	Monthly [1]	Grab

Footnotes:

(1) The minimum measurement frequency shall be monthly following a period of 24 consecutive weekly sampling events showing no exceedances of the stated discharge limitations.

Naval Weapons Industrial Reserve Plant

DER site # 1-01-001

Additional Conditions:

(1) Discharge is not authorized until such time as an engineering submission showing the method of treatment is approved by the Department. The discharge rate may not exceed the effective or design treatment system capacity. All monitoring data, engineering submissions and modification requests must be submitted to:

Steven Scharf
Division of Environmental Remediation
NYSDEC, 625 Broadway
Albany, NY 12233-7015
Phone: (518) 402-9620

With a copy sent to:

Regional Water Engineer
NYSDEC - Region 1
Building 40, SUNY Campus
Stony Brook, New York 11790-2356
Phone: (631) 444-0354

(2) Only site generated wastewater is authorized for treatment and discharge.

(3) Authorization to discharge is valid only for the period noted above but may be renewed if appropriate. A request for renewal must be received 6 months prior to the expiration date to allow for a review of monitoring data and reassessment of monitoring requirements.

(4) Any use of corrosion/scale inhibitors, biocidal-type compounds, or other water treatment chemicals used in the treatment process must be approved by the department prior to use.

(5) This discharge and administration of this discharge must comply with the substantive requirements of 6NYCRR Part 750.

APPENDIX B
NYSDEC Air Permit Equivalent Approval

Environmental
Construction
Operation &
Remediation

ECOR Solutions, Inc.
1075 Andrew Drive, Suite I
West Chester, PA 19380
(610) 840-9200
(610) 431-2852 (fax)

May 17, 2010

Mr. Steven Scharf
New York State Department of Environmental Conversation
Division of Environmental Remediation
Remedial Action, Bureau A
625 Broadway
Albany, NY 12233-7015

SUBJECT: **GM-38 GROUNDWATER REMEDIATION AT NWIRP BETHPAGE, NY MONTHLY REPORT ON GROUNDWATER AND AIR DISCHARGE FOR DER SITE # 1-30-003B-OU 2**

Dear Mr. Scharf:

In accordance with groundwater treatment system operational requirements for DER Site # 1-30-003B-OU 2, ECOR Solutions, Inc. (ECOR) on behalf of the United State Department of the Navy is submitting this monthly report of the groundwater and air discharge results for the GM-38 system.

Continuous plant operations began on September 14, 2009 by Tetra Tech EC, Inc. (TtEC's). TtEC's period of performance to operate and maintain (O&M) the GM-38 system expired on March 14, 2010 at which time ECOR assumed O&M responsibilities. Sampling requirements have been reduced from weekly during the 6 month prove-out period to monthly for the remainder of ECOR's period of performance thru March 2011. The enclosed data is for treatment system operations from April 1 thru April 30, 2010.

The SPDES discharge criteria and air permit equivalent permit with application are also included for your reference as Attachments 2 and 3, respectively. All constituents were within permit limitations.

Please do not hesitate contact me with any questions regarding this letter or report at office phone # 610-840-9200 or via email at lapp@ecor-solutions.com

Sincerely,
ECOR Solutions, Inc.

Matthew Lapp
Project Engineer

Attachments:

- Attachment 1 – Groundwater and Air Sampling Results from April 1 - 30, 2010
- Attachment 2 - NYSDEC memorandum dated June 6, 2008 with Effluent Limitations and Monitoring Requirements
- Attachment 3 – NYSDEC letter dated July 24, 2009 for Air Permit Equivalent Approval

cc: Jean Occidental, NYSDEC Division of Water
William Spitz, NYSDEC – Region 1 Water Engineer
Gerard Ennis, Nassau County Department of Public Works
Richard Pfaender, Town of Oyster Bay
Lora Fly, Navy Mid-Atlantic RPM
Al Taormina, ECOR Solutions, Inc.
GM-38 Project Site File

GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Discharge Monitoring Report
April 2010

SPDES Parameters	Daily Maximum	Units	April 2010			
Process Stream			RW-1	RW-3	Influent	Effluent
Sampling Date			4/12/10			
Average Flowrate	1100	GPM	442	196	638	664
Total Flow		gallons	NR	NR	27,561,600	28,679,040
pH (range)	5.5 - 8.5	SU	NR	NR	5.6	6.6-6.8
1,1-Dichloroethane	5	µg/l	3	1.9	2.7	ND
1,2-Dichloroethane	0.6	µg/l	ND	ND	ND	ND
1,1-Dichloroethene	5	µg/l	7.3	2.7	5.9	ND
cis 1,2-Dichloroethene	5	µg/l	101	3.3	71	2.6
trans 1,2-Dichloroethene	5	µg/l	2.8	0.24	2.0	ND
Tetrachloroethene	5	µg/l	180	ND	125	ND
1,1,1-Trichloroethene	5	µg/l	9.9	1.4	7	ND
Trichloroethene	5	µg/l	747	536	682	0.98
Vinyl Chloride	2	µg/l	15.5	ND	11	ND
Mercruy	0.25	µg/l	<0.20	0.48	0.1	ND

Notes:
J, B - Estimated result less than reporting limit
ND - Not Detected
NR - Not Recorded

GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Air Sampling Results
April 2010

DAR Parameters	SGC	Units	April 2010	
Process Stream			Influent	Effluent
Sampling Date			4/8/10	
Average Flowrate		CFM		6818
Total Flow		ft^3	NR	294,534,720
Total Flow		m^3	NR	8,335,333
Trichloroethene	14000	$\mu g/m^3$	3100	ND
Tetrachloroethene	1000	$\mu g/m^3$	700	ND
Vinyl Chloride	180000	$\mu g/m^3$	140	22
trans 1,2-Dichloroethene	-	$\mu g/m^3$	10	ND
cis 1,2-Dichloroethene	-	$\mu g/m^3$	760	ND
1,2-Dichloroethane	-	$\mu g/m^3$	ND	ND
Toluene	37000	$\mu g/m^3$	ND	ND
Xylene	4300	$\mu g/m^3$	ND	ND
1,1,2-Trichloroethane	-	$\mu g/m^3$	ND	ND

Notes:
ND - Not detected
NR - Not recorded
SGC - Short-term Guideline Concentration

GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Controlled Stack Emissions
April 2010

DAR Parameters	Discharge Limit	Units	April
Sampling Date			4/8/10
Average Flowrate		CFM	6818
Total Flow		ft^3	294,534,720
Total Flow		m^3	8,335,333
Trichloroethene	0.09	lb/hr	0.00
Tetrachloroethene	0.02	lb/hr	0.00
Vinyl Chloride	0.01	lb/hr	0.000561
1,2 Dichloroethene	0.03	lb/hr	0.00
1,2-Dichloroethane	BRT	lb/hr	0.00
Toluene	BRT	lb/hr	0.00
Xylene	BRT	lb/hr	0.00
1,1,2-Trichloroethane	BRT	lb/hr	0.00

Notes:
BRT - Below reporting thresholds

Environmental
Construction
Operation &
Remediation

ECOR Solutions, Inc.
1075 Andrew Drive, Suite I
West Chester, PA 19380
(610) 840-9200
(610) 431-2852 (fax)

June 7, 2010

Mr. Steven Scharf
New York State Department of Environmental Conversation
Division of Environmental Remediation
Remedial Action, Bureau A
625 Broadway
Albany, NY 12233-7015

SUBJECT: **GM-38 GROUNDWATER REMEDIATION AT NWIRP BETHPAGE, NY MONTHLY REPORT ON GROUNDWATER AND AIR DISCHARGE FOR DER SITE # 1-30-003B-OU 2**

Dear Mr. Scharf:

In accordance with groundwater treatment system operational requirements for DER Site # 1-30-003B-OU 2, ECOR Solutions, Inc. (ECOR) on behalf of the United States Department of the Navy is submitting this monthly report of the groundwater and air discharge results for the GM-38 system. The enclosed data, presented as Attachment 1, is for treatment system operations from May 1 thru May 31, 2010.

The SPDES discharge criteria and air permit equivalent permit are also included for your reference as Attachments 2 and 3, respectively. All constituents were within permit limitations.

Please do not hesitate contact me with any questions regarding this letter or report at office phone # 610-840-9200 or via email at lapp@ecor-solutions.com

Sincerely,
ECOR Solutions, Inc.

Matthew Lapp
Project Engineer

Attachments:

- Attachment 1 – Groundwater and Air Sampling Results from May 1 - 31, 2010
- Attachment 2 - NYSDEC memorandum dated June 6, 2008 with Effluent Limitations and Monitoring Requirements
- Attachment 3 – NYSDEC letter dated July 24, 2009 for Air Permit Equivalent Approval

cc: Jean Occidental, NYSDEC Division of Water
William Spitz, NYSDEC – Region 1 Water Engineer
Gerard Ennis, Nassau County Department of Public Works
Richard Pfaender, Town of Oyster Bay
Lora Fly, Navy Mid-Atlantic RPM
Al Taormina, ECOR Solutions, Inc.
GM-38 Project Site File

GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Discharge Monitoring Report
May 2010

SPDES Parameters	Daily Maximum	Units	May 2010			
Process Stream			RW-1	RW-3	Influent	Effluent
Sampling Date			5/13/10			
Average Flowrate		GPM	587	265	853	856
Total Flow		gallons	NR	NR	38,062,080	38,227,680
pH (range)	5.5 - 8.5	SU	NR	NR	5.6	7.3
1,1-Dichloroethane	5	µg/l	3.6	1.9	3.1	ND
1,2-Dichloroethane	0.6	µg/l	0.53	ND	ND	ND
1,1-Dichloroethene	5	µg/l	10.2	2.4	7.8	ND
Carbon Tetrachloride	N/A	µg/l	0.52	ND	0	ND
cis 1,2-Dichloroethene	5	µg/l	112	2.9	78.1	ND
trans 1,2-Dichloroethene	5	µg/l	2.3	ND	2	ND
Tetrachloroethene	5	µg/l	132	ND	91	ND
1,1,1-Trichloroethene	5	µg/l	7.7	1.3	6	ND
Trichloroethene	5	µg/l	569	431	526	0.25
Vinyl Chloride	2	µg/l	16.4	ND	11.3	ND
Mercruy	0.25	µg/l	< 0.20	<0.20	<0.20	<0.20

Notes:
J, B - Estimated result less than reporting limit
ND - Not Detected
NR - Not Recorded
N/A - Not Applicable

GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Air Sampling Results
May 2010

DAR Parameters	SGC	Units	May 2010	
Process Stream			Influent	Effluent
Sampling Date			5/13/10	
Average Flowrate		CFM		7782
Total Flow		ft^3	NR	336,164,284
Total Flow		m^3	NR	9,513,449
Trichloroethene	14000	$\mu g/m^3$	2600	5.1
Tetrachloroethene	1000	$\mu g/m^3$	490	ND
Vinyl Chloride	180000	$\mu g/m^3$	110	28
trans 1,2-Dichloroethene	-	$\mu g/m^3$	7.7	ND
cis 1,2-Dichloroethene	-	$\mu g/m^3$	660	ND
1,2-Dichloroethane	-	$\mu g/m^3$	ND	ND
Toluene	37000	$\mu g/m^3$	ND	ND
Xylene	4300	$\mu g/m^3$	ND	ND
1,1,2-Trichloroethane	-	$\mu g/m^3$	ND	ND

Notes:
ND - Not detected
NR - Not recorded
SGC - Short-term Guideline Concentration

GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Controlled Stack Emissions
May 2010

DAR Parameters	Discharge Limit	Units	May 2010
Sampling Date			5/13/10
Average Flowrate		CFM	7782
Total Flow		ft^3	336,164,284
Total Flow		m^3	9,513,449
Trichloroethene	0.09	lb/hr	0.000144
Tetrachloroethene	0.02	lb/hr	0.00
Vinyl Chloride	0.01	lb/hr	0.000789
1,2 Dichloroethene	0.03	lb/hr	0.00
1,2-Dichloroethane	BRT	lb/hr	0.00
Toluene	BRT	lb/hr	0.00
Xylene	BRT	lb/hr	0.00
1,1,2-Trichloroethane	BRT	lb/hr	0.00

Notes:
BRT - Below reporting thresholds

Environmental
Construction
Operation &
Remediation

ECOR Federal Services, LLC
21 S High St, 2nd Floor
West Chester, PA 19382
(484) 887-7510
(610) 431-2852 (fax)

July 9, 2010

Mr. Steven Scharf
New York State Department of Environmental Conversation
Division of Environmental Remediation
Remedial Action, Bureau A
625 Broadway
Albany, NY 12233-7015

SUBJECT: **GM-38 GROUNDWATER REMEDIATION AT NWIRP BETHPAGE, NY MONTHLY REPORT ON GROUNDWATER AND AIR DISCHARGE FOR DER SITE # 1-30-003B-OU 2**

Dear Mr. Scharf:

In accordance with groundwater treatment system operational requirements for DER Site # 1-30-003B-OU 2, ECOR Federal Services, LLC. (ECOR) on behalf of the United States Department of the Navy is submitting this monthly report of the groundwater and air discharge results for the GM-38 system. The enclosed data, presented as Attachment 1, is for treatment system operations from June 1 thru June 30, 2010.

The SPDES discharge criteria and air permit equivalent permit are also included for your reference as Attachments 2 and 3, respectively. All constituents were within permit limitations.

Please do not hesitate contact me with any questions regarding this letter or report at office phone # 610-840-9200 or via email at lapp@ecor-solutions.com

Sincerely,
ECOR Federal Services, LLC.

Matthew Lapp
Project Engineer

Attachments:

- Attachment 1 – Groundwater and Air Sampling Results from June 1 - 30, 2010
- Attachment 2 - NYSDEC memorandum dated June 6, 2008 with Effluent Limitations and Monitoring Requirements
- Attachment 3 – NYSDEC letter dated July 24, 2009 for Air Permit Equivalent Approval

cc: Jean Occidental, NYSDEC Division of Water
William Spitz, NYSDEC – Region 1 Water Engineer
Gerard Ennis, Nassau County Department of Public Works
Richard Pfaender, Town of Oyster Bay
Lora Fly, Navy Mid-Atlantic RPM
Al Taormina, ECOR Solutions, Inc.
GM-38 Project Site File

GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Discharge Monitoring Report
June 2010

SPDES Parameters	Daily Maximum	Units	June 2010			
Process Stream			RW-1	RW-3	Influent	Effluent
Sampling Date			6/8/10			
Average Flowrate		GPM	691	257	948	1014
Total Flow		gallons	NR	NR	40,943,631	43,788,185
pH (range)	5.5 - 8.5	SU	NR	NR	5.6	6.77
1,1-Dichloroethane	5	µg/l	3.3	1.8	2.9	ND
1,2-Dichloroethane	0.6	µg/l	ND	ND	ND	ND
1,1-Dichloroethene	5	µg/l	8.4	2.1	6.7	ND
Carbon Tetrachloride	N/A	µg/l	0.55	ND	0	ND
cis 1,2-Dichloroethene	5	µg/l	91.7	2.7	67.6	0.27
trans 1,2-Dichloroethene	5	µg/l	1.6	ND	1	ND
Tetrachloroethene	5	µg/l	130	ND	95	ND
1,1,1-Trichloroethene	5	µg/l	8.1	1.3	6	ND
Trichloroethene	5	µg/l	443	388	428	0.26
Vinyl Chloride	2	µg/l	14.4	ND	10.5	ND
Mercruy	0.25	µg/l	< 0.20	<0.20	<0.20	<0.20

Notes:
J, B - Estimated result less than reporting limit
ND - Not Detected
NR - Not Recorded
N/A - Not Applicable

GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Air Sampling Results
June 2010

DAR Parameters	SGC	Units	June 2010	
Process Stream			Influent	Effluent
Sampling Date			6/10/10	
Average Flowrate		CFM		8544
Total Flow		ft^3	NR	369,120,738
Total Flow		m^3	NR	10,446,117
Trichloroethene	14000	$\mu g/m^3$	3700	13
Tetrachloroethene	1000	$\mu g/m^3$	650	ND
Vinyl Chloride	180000	$\mu g/m^3$	100	31
trans 1,2-Dichloroethene	-	$\mu g/m^3$	9.3	ND
cis 1,2-Dichloroethene	-	$\mu g/m^3$	760	ND
1,2-Dichloroethane	-	$\mu g/m^3$	ND	ND
Toluene	37000	$\mu g/m^3$	ND	ND
Xylene	4300	$\mu g/m^3$	ND	ND
1,1,2-Trichloroethane	-	$\mu g/m^3$	ND	ND

Notes:
ND - Not detected
NR - Not recorded
SGC - Short-term Guideline Concentration

GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Controlled Stack Emissions
June 2010

DAR Parameters	Discharge Limit	Units	June 2010
Sampling Date			6/10/10
Average Flowrate		CFM	8544
Total Flow		ft^3	369,120,738
Total Flow		m^3	10,446,117
Trichloroethene	0.09	lb/hr	0.000415
Tetrachloroethene	0.02	lb/hr	0.00
Vinyl Chloride	0.01	lb/hr	0.000991
1,2 Dichloroethene	0.03	lb/hr	0.00
1,2-Dichloroethane	BRT	lb/hr	0.00
Toluene	BRT	lb/hr	0.00
Xylene	BRT	lb/hr	0.00
1,1,2-Trichloroethane	BRT	lb/hr	0.00

Notes:
BRT - Below reporting thresholds

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Remedial Action A
625 Broadway, 11th Floor
Albany, New York 12233-7015
Phone: (518) 402-9625 • Fax: (518) 402-9022
Website: www.dec.state.ny.us

Alexander P.
Grannis
Commissioner

July 24, 2009

Lora Fly, Project Manager
Naval Facilities Engineering Command-Midlant
9742 Maryland Avenue .
Norfolk, VA 23511-3095

RE: Naval Weapons Industrial Research Plant(NWIRP)
Site-Bethpage, NYSDEC No. 1-30-003B.
Grumman Aerospace Site, NYSDEC Site No. 1-30-003A

Dear Ms. Fly:

Tetra Tech FW, on behalf of the Department of the Navy (Navy), has submitted the enclosed New York State Department of Environmental Conservation (NYSDEC) Division of Air Resources (DAR) Air Permit Application as a permit equivalent. This DAR Air permit equivalent is for the air stripper discharge at the GM 38 Area groundwater remediation system, Near Broadway and North Herman Avenue in Bethpage, NY. The NYSDEC Division of Environmental Remediation (DER) has reviewed the permit equivalent and, by means of this letter approves the GM 38 Area remedy air discharge for immediate operation.

The GM 38 Area remedial system utilizes the best available control technology (BACT) with activated carbon followed by potassium permanganate impregnated xeolite resin. The air discharge will be periodically monitored at start up and will be added for routine monitoring in the operation, maintenance and monitoring (OMM) plan, to be submitted shortly for Departmental review.

If you have any questions, please contact me at your earliest convenience at (518)402-9620.

Sincerely,

Steven M. Scharf, P.E.
Project Engineer
Division of Environmental Remediation
Bureau of Remedial Action A

Enclosure
ec/w/enc:
J. Swartwout/S. Scharf/File
W. Parish, Region 1 NYSDEC
A. J. Shah, region 1 NYSDEC
S. Patselos, Tetra Tech FW
J. Cofman, Northrop Grumman]
edocs: Region 1, Nassau, Oyster Bay (T): Grumman Aerospace 130003A-OU2-OMM and NWIRP Bethpage 130003B-OU2-OMM

New York State Department of Environmental Conservation
Air Permit Application

DEC ID	APPLICATION ID	OFFICE USE ONLY
- -	- /	

Section I - Certification

Title V Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information [required pursuant to 6 NYCRR 201-6.3(d)] I believe the information is, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Responsible Official	Title
Signature	Date / /

State Facility Certification

I certify that this facility will be operated in conformance with all provisions of existing regulations.

Responsible Official	Title
Signature	Date / /

Section II - Identification Information

Title V Facility Permit N/A	State Facility Permit N/A
☐ New ☐ Significant Modification ☐ Administrative Amendment	☐ New ☐ Modification
☐ Renewal ☐ Minor Modification General Permit Title:	General Permit Title:
☒ Application involves construction of new facility ☐ Application involves construction of new emission unit(s)	

Owner/Firm

Name	US Navy/NAVFAC Midlant		
Street Address	9742 Maryland Ave, Bldg Z-144		
City Norfolk	State VA	Country US	Zip 23511-3095
Owner Classification ☒ Federal ☐ State ☐ Municipal ☐ Corporation/Partnership ☐ Individual			Taxpayer ID

Facility ☐ Confidential

Name	Naval Weapons Industrial Reserve Plant (NWIRP) GM-38 Area	
Location Address	Bethpage	
☐ City / ☒ Town / ☐ Village	Oyster Bay, New York	Zip 11714

Project Description ☐ Continuation Sheet(s)

Air stripping of groundwater to remove VOCs

Owner/Firm Contact Mailing Address

Name (Last, First, Middle Initial)	Fly, Lora		Phone No. (757) 444-0781
Affiliation	Department of the Navy	Title Remedial PM	Fax No. ( )
Street Address	9742 Maryland Ave. Bldg Z-144		
City Norfolk	State VA	Country US	Zip 23511-3095

Facility Contact Mailing Address

Name (Last, First, Middle Initial)	Same		Phone No. ( )
Affiliation		Title	Fax No. ( )
Street Address			
City	State	Country	Zip

New York State Department of Environmental Conservation
Air Permit Application

DEC ID
1-[ ][ ][ ][ ]-[ ][ ][ ][ ]

Section III - Facility Information

Classification

☐ Hospital ☐ Residential ☐ Educational/Institutional ☐ Commercial ☒ Industrial ☐ Utility

Affected States (Title V Only) N/A

☐ Vermont ☐ Massachusetts ☐ Rhode Island ☐ Pennsylvania Tribal Land:_____
☐ New Hampshire ☐ Connecticut ☐ New Jersey ☐ Ohio Tribal Land:_____

SIC Codes

9999												

Facility Description ☐ Continuation Sheet(s)

Groundwater Remediation by Air Stripping followed by Vapor-Phase GAC for emission control

Compliance Statements (Title V Only) N/A

I certify that as of the date of this application the facility is in compliance with all applicable requirements: ☐ YES ☐ NO

If one or more emission units at the facility are not in compliance with all applicable requirements at the time of signing this application (the 'NO' box must be checked), the noncomplying units must be identified in the "Compliance Plan" block on page 8 of this form along with the compliance plan information required. For all emission units at this facility that are operating in compliance with all applicable requirements complete the following:

- ☐ This facility will continue to be operated and maintained in such a manner as to assure compliance for the duration of the permit, except those units referenced in the compliance plan portion of Section IV of this application.
- ☐ For all emission units, subject to any applicable requirements that will become effective during the term of the permit, this facility will meet all such requirements on a timely basis.
- ☐ Compliance certification reports will be submitted at least once a year. Each report will certify compliance status with respect to each requirement, and the method used to determine the status.

Facility Applicable Federal Requirements N/A ☐ Continuation Sheet(s)

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause
	CERCLA	all substantive requirements							

Facility State Only Requirements ☐ Continuation Sheet(s)

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause

DEC ID
- - -

Section III - Facility Information (continued)

Facility Compliance Certification N/A ☐ Continuation Sheet(s)

Rule Citation

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause

☐ Applicable Federal Requirement ☐ State Only Requirement ☐ Capping

CAS No.	Contaminant Name
- -	

Monitoring Information

☐ Ambient Air Monitoring ☐ Work Practice Involving Specific Operations ☐ Record Keeping/Maintenance Procedures

Description

Work Practice Type	Process Material Code	Process Material Description	Reference Test Method

Parameter Code	Parameter Description	Manufacturer Name/Model No.

Limit Upper	Limit Lower	Limit Units Code	Limit Units Description

Averaging Method Code	Averaging Method Description	Monitoring Frequency Code	Monitoring Frequency Description	Reporting Requirements Code	Reporting Requirements Description

Facility Emissions Summary ☐ Continuation Sheet(s)

CAS No.	Contaminant Name	PTE (lbs/yr)	PTE Range Code	Actual (lbs/yr)
NY075 - 00 - 5	PM-10			
NY075 - 00 - 0	PARTICULATES			
7446 - 09 - 5	SULFUR DIOXIDE			
NY210 - 00 - 0	OXIDES OF NITROGEN			
630 - 08 - 0	CARBON MONOXIDE			
7439 - 92 - 1	LEAD			
NY998 - 00 - 0	VOC	117		
NY100 - 00 - 0	HAP	110		
0079 - 01 - 6	Trichloroethylene	99		
00075 - 01 - 4	Vinyl Chloride	3.7		
00540 - 59 - 0	1,2-Dichloroethylene	7.3		
- -				
- -				

New York State Department of Environmental Conservation
Air Permit Application

DEC ID
1-[ ][ ][ ][ ]-[ ][ ][ ][ ]

Section IV - Emission Unit Information

Emission Unit Description

❑ Continuation Sheet(s)

EMISSION UNIT 0-00EU1

Air Stripper AS-1 for groundwater remediation, provided with activated carbon for emission control. The emission point is stack 00ST-1. The 2-stage VGAC is followed by a 3rd vessel containing a potassium permanganate zeolite media for increased VC capacity.

Building

❑ Continuation Sheet(s)

Building	Building Name	Length (ft)	Width (ft)	Orientation
BLDG-1	Treatment Plant	75	75	0

Emission Point

❑ Continuation Sheet(s)

EMISSION PT. 00ST1

Ground Elev. (ft)	Height (ft)	Height Above Structure (ft)	Inside Diameter (in)	Exit Temp. (°F)	Cross Section Length (in)	Cross Section Width (in)
90	40	15	36	80		
Exit Velocity (FPS)	**Exit Flow (ACFM)**	**NYTM (E) (KM)**	**NYTM (N) (KM)**	**Building**	**Distance to Property Line (ft)**	**Date of Removal**
19	8020			BLDG-1	50	

EMISSION PT.

Ground Elev. (ft)	Height (ft)	Height Above Structure (ft)	Inside Diameter (in)	Exit Temp. (°F)	Cross Section Length (in)	Cross Section Width (in)
Exit Velocity (FPS)	**Exit Flow (ACFM)**	**NYTM (E) (KM)**	**NYTM (N) (KM)**	**Building**	**Distance to Property Line (ft)**	**Date of Removal**

Emission Source/Control

❑ Continuation Sheet(s)

Emission Source ID	Emission Source Type	Date of Construction	Date of Operation	Date of Removal	Control Type Code	Control Type Description	Manufacturer's Name/Model No.
AS-1	I				048	Granular Act. Carbon	Air Stripping Column

Design Capacity	Design Capacity Units Code	Design Capacity Units Description	Waste Feed Code	Waste Feed Description	Waste Type Code	Waste Type Description

Emission Source ID	Emission Source Type	Date of Construction	Date of Operation	Date of Removal	Control Type Code	Control Type Description	Manufacturer's Name/Model No.

Design Capacity	Design Capacity Units Code	Design Capacity Units Description	Waste Feed Code	Waste Feed Description	Waste Type Code	Waste Type Description

DEC ID
[- | | | | - | | | |]

Section IV - Emission Unit Information (continued)

Process Information

☐ Continuation Sheet(s)

EMISSION UNIT [0 - 0 0 E U 1] PROCESS [P R 1]

Description

The remedial system is air stripping, using a packed column at a groundwater flow rate of 1,100 gpm (plus 100 gpm recycle, for a total of 1,200 gpm). Vapor phase treatment includes the use of 3 vessels, a 2-stage GAC unit, followed by a 3rd vessel containing a potassium permanganate impregnated zeolite for increased VC capacity. Prior to entering the vapor-phase GAC adsorption system, the humidity of the air stripper exhaust is reduced to approximately 50 percent or less to optimize the efficiency of the vapor-phase GAC.

Air Stripper AS-1: Existing. Type: Vertical, Cylindrical Construction: Aluminum

Packing: 25-foot Jaeger Tripack. Dimensions: 10.0 ft. Dia x 47 ft. H

Source Classification Code (SCC)	Total Thruput		Thruput Quantity Units	
	Quantity/Hr	Quantity/Yr	Code	Description

☐ Confidential ☒ Operating at Maximum Capacity ☐ Activity with Insignificant Emissions	Operating Schedule		Building	Floor/Location
	Hrs/Day	Days/Yr		
	24	365	BLDG-1	Main

Emission Source/Control Identifier(s)

AS-1							

EMISSION UNIT [-] PROCESS [ ]

Description

Source Classification Code (SCC)	Total Thruput		Thruput Quantity Units	
	Quantity/Hr	Quantity/Yr	Code	Description

☐ Confidential ☐ Operating at Maximum Capacity ☐ Activity with Insignificant Emissions	Operating Schedule		Building	Floor/Location
	Hrs/Day	Days/Yr		

Emission Source/Control Identifier(s)

New York State Department of Environmental Conservation
Air Permit Application

DEC ID
[ ]-[ ][ ][ ][ ]-[ ][ ][ ][ ][ ]

Section IV - Emission Unit Information (continued)

Emission Unit	Emission Point	Process	Emission Source	Emission Unit Applicable Federal Requirements ☐ Continuation Sheet(s)									
				Title	Type	Part	Sub Part	Section	Sub Division	Parag.	Sub Parag.	Clause	Sub Clause
-													
-													
-													
-													

Emission Unit	Emission Point	Process	Emission Source	Emission Unit State Only Requirements ☐ Continuation Sheet(s)									
				Title	Type	Part	Sub Part	Section	Sub Division	Parag.	Sub Parag.	Clause	Sub Clause
-													
-													
-													
-													

Emission Unit Compliance Certification ☐ Continuation Sheet(s)

Rule Citation

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause
6	NYCRR	212							

☒ Applicable Federal Requirement ☐ State Only Requirement ☐ Capping

Emission Unit	Emission Point	Process	Emission Source	CAS No.	Contaminant Name
0-00EU1	00ST1	PR1	AS-1	00079 - 01 - 6	Trichloroethylene

Monitoring Information

☐ Continuous Emission Monitoring
☒ Intermittent Emission Testing
☐ Ambient Air Monitoring
☐ Monitoring of Process or Control Device Parameters as Surrogate
☐ Work Practice Involving Specific Operations
☐ Record Keeping/Maintenance Procedures

Description

Monthly grab samples analyzed for VOCs from the vapor phase treatment system influent, effluent and two intermediate locations.

Work Practice Type	Process Material Code	Process Material Description	Reference Test Method

Parameter Code	Parameter Description	Manufacturer Name/Model No.
23	Concentration	

Limit Upper	Limit Lower	Limit Units Code	Limit Units Description
3,125		255	micrograms per cubic meter

Averaging Method Code	Averaging Method Description	Monitoring Frequency Code	Monitoring Frequency Description	Reporting Requirements Code	Reporting Requirements Description
01	Instantaneous	05	Monthly	10	Upon Request

DEC ID
- - - -

Section IV - Emission Unit Information (continued)

Determination of Non-Applicability (Title V Only) N/A ☐ Continuation Sheet(s)

Rule Citation

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause

Emission Unit	Emission Point	Process	Emission Source	☐ Applicable Federal Requirement ☐ State Only Requirement
-				

Description

Rule Citation

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause

Emission Unit	Emission Point	Process	Emission Source	☐ Applicable Federal Requirement ☐ State Only Requirement
-				

Description

Process Emissions Summary ☐ Continuation Sheet(s)

EMISSION UNIT 0-00EU1 PROCESS PR1

CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined
0079 - 01 - 6	Trichloroethylene			95	1.87	02

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)
0.09	99			02		

EMISSION UNIT 0-00EU1 PROCESS PR1

CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined
00075 - 01 - 4	Vinyl Chloride			95	0.17	03

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)
0.01	3.7			02		

EMISSION UNIT 0-00EU1 PROCESS PR1

CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined
000540 - 59 - 0	1,2-Dichloroethylene			95	0.6	02

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)
0.03	7.3			02		

New York State Department of Environmental Conservation
Air Permit Application

DEC ID
- - -

Section IV - Emission Unit Information (continued)

EMISSION UNIT 0-00EU1	Emission Unit Emissions Summary			☐ Continuation Sheet(s)
CAS No.	Contaminant Name			
00107-06-2	1,2-Dichloroethane			
ERP (lbs/yr)	PTE Emissions		Actual	
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)
13.4	Below Reporting Threshold BRT			
CAS No.	Contaminant Name			
00108-88-3	Toluene			
ERP (lbs/yr)	PTE Emissions		Actual	
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)
72.7	BRT	BRT		
CAS No.	Contaminant Name			
01330-20-7	Xylene			
ERP (lbs/yr)	PTE Emissions		Actual	
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)
77.1	BRT	BRT		
CAS No.	Contaminant Name			
- -	1,1,2-Trichloroethane			
ERP (lbs/yr)	PTE Emissions		Actual	
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)
	BRT	BRT		

Compliance Plan

☐ Continuation Sheet(s)

For any emission units which are not in compliance at the time of permit application, the applicant shall complete the following

Consent Order — Certified progress reports are to be submitted every 6 months beginning ___/___/___

Emission Unit	Process	Emission Source	Applicable Federal Requirement									
			Title	Type	Part	Sub Part	Section	Sub Division	Parag.	Sub Parag.	Clause	Sub Clause
-												

Remedial Measure / Intermediate Milestones	R/I	Date Scheduled

DEC ID
- - - - - - - - - -

Section IV - Emission Unit Information (continued)

Request for Emission Reduction Credits

☐ Continuation Sheet(s)

EMISSION UNIT - - - - - - -

Emission Reduction Description

Contaminant Emission Reduction Data

Baseline Period ___/___/___ to ___/___/___

Reduction Date ___/___/___ Method

CAS No.	Contaminant Name	ERC (lbs/yr) Netting	ERC (lbs/yr) Offset
- -			
- -			
- -			

Facility to Use Future Reduction

Name

APPLICATION ID - - - - - / - -

Location Address

☐ City / ☐ Town / ☐ Village | State | Zip

Use of Emission Reduction Credits

☐ Continuation Sheet(s)

EMISSION UNIT - - - - - - -

Proposed Project Description

Contaminant Emissions Increase Data

CAS No.	Contaminant Name	PEP (lbs/yr)
- -		

Statement of Compliance

☐ All facilities under the ownership of this "ownership/firm" are operating in compliance with all applicable requirements and state regulations including any compliance certification requirements under Section 114(a)(3) of the Clean Air Act Amendments of 1990, or are meeting the schedule of a consent order.

Source of Emission Reduction Credit - Facility

Name

PERMIT ID - - - - - / - -

Location Address

☐ City / ☐ Town / ☐ Village | State | Zip

Emission Unit	CAS No.	Contaminant Name	ERC (lbs/yr) Netting	ERC (lbs/yr) Offset
-	- -			
-	- -			
-	- -			

DEC ID
- - -

Supporting Documentation

- ☒ P.E. Certification (form attached)
- ☐ List of Exempt Activities (form attached)
- ☒ Plot Plan
- ☐ Methods Used to Determine Compliance (form attached)
- ☒ Calculations
- ☐ Air Quality Model (_____ / _____ / _____)
- ☐ Confidentiality Justification
- ☐ Ambient Air Monitoring Plan (_____ / _____ / _____)
- ☐ Stack Test Protocols/Reports (_____ / _____ / _____)
- ☐ Continuous Emissions Monitoring Plans/QA/QC (_____ / _____ / _____)
- ☐ MACT Demonstration (_____ / _____ / _____)
- ☐ Operational Flexibility: Description of Alternative Operating Scenarios and Protocols
- ☐ Title IV: Application/Registration
- ☐ ERC Quantification (form attached)
- ☐ Use of ERC(s) (form attached)
- ☐ Baseline Period Demonstration
- ☐ Analysis of Contemporaneous Emission Increase/Decrease
- ☐ LAER Demonstration (_____ / _____ / _____)
- ☐ BACT Demonstration (_____ / _____ / _____)
- ☐ Other Document(s): _____ (___ / ___ / ____)

ATTACHMENT 1
Emission Estimate

Feed Water Flow 1,100 gpm: max or normal
250 m^3/hr
Water Flow Including Recycle 1,200 gpm: max or normal
273 m^3/hr
Air Flow 8,000 cfm
13,592 m^3/hr
A/W vol ratio 50

EXAMPLE EMISSION CALC: Vinyl Chloride
4.8 ug/L x 1000 L/m^3 x 250 m^3 water/13,623 m^3 air = 88 ug/m^3

Name	CAS Number	Toxicity: H/M/L[2]	VOC[3]	HAP[4]	GW Conc.[1] Max ug/L	GW Conc.[1] Avg ug/L	Effluent Conc[1] Max ug/L	Effluent Conc[1] Avg ug/L	Uncontrolled Stripper Exhaust Max lb/day	Avg lb/day	Max lb/hr	Avg lb/hr	Max gm/sec	Avg gm/sec	Max ug/m^3	Avg ug/m^3
1,1,1-Trichloroethane (Methyl Chloroform)	00071-55-6	L	No	Yes	3	3.0			0.04	0.04	0.00	0.00	2.08E-04	2.08E-04	55	55
1,1,2-Trichloroethane	00079-00-5	M	Yes	Yes	3.5	0.3			0.05	0.00	0.00	0.00	2.43E-04	2.08E-05	64	6
1,1-Dichloroethane	00075-34-3	L	Yes	Yes	4	0.7			0.05	0.01	0.00	0.00	2.77E-04	4.85E-05	74	13
1,2-Dichloroethane	00107-06-2	M	Yes	Yes	3	1.0	0.3	0.1	0.04	0.01	0.00	0.00	1.87E-04	6.24E-05	55	18
1,1-Dichloroethylene (Vinylidene Chloride)	00075-35-4	M	Yes	Yes	9	1.6			0.12	0.02	0.00	0.00	6.24E-04	1.11E-04	165	29
1,2-Dichloroethylene	00540-59-0	M	Yes	No	1,100	31.5	1.3	0.0	14.51	0.42	0.60	0.02	7.62E-02	2.18E-03	20,219	579
Benzene	00071-43-2	H	Yes	Yes	4	0.1			0.05	0.00	0.00	0.00	2.77E-04	6.94E-06	74	2
Carbon Tetrachloride	00056-23-5	H	Yes	Yes	4	0.1			0.05	0.00	0.00	0.00	2.77E-04	6.94E-06	74	2
Chlorobenzene (Monochlorobenzene)	00108-90-7	M	Yes	Yes	1	0.1			0.01	0.00	0.00	0.00	6.94E-05	6.94E-06	18	2
Chloroform	00067-66-3	M	Yes	Yes	2	0.8			0.03	0.01	0.00	0.00	1.39E-04	5.55E-05	37	15
Methyl Tert Butyl Ether	01634-04-4	M	Yes	Yes	2	0.1			0.03	0.00	0.00	0.00	1.39E-04	6.94E-06	37	2
Tetrachloroethylene	00127-18-4	M	Yes	Yes	900	33.8	0.9	0.0	11.88	0.45	0.49	0.02	6.24E-02	2.34E-03	16,543	621
Toluene	00108-88-3	L	Yes	Yes	15	0.7			0.20	0.01	0.01	0.00	1.04E-03	4.85E-05	276	13
Trichloroethylene	00079-01-6	M	Yes	Yes	3,400	411.5	4.5	0.5	44.86	5.43	1.87	0.23	2.35E-01	2.85E-02	62,494	7,564
Vinyl chloride	00075-01-4	H	Yes	Yes	300	4.8	0.0	0.0	3.96	0.06	0.17	0.00	2.08E-02	3.33E-04	5,514	88
Xylenes	01330-20-7	M	Yes	Yes	16	0.2			0.21	0.00	0.01	0.00	1.11E-03	1.39E-05	294	4
Total VOCs					5,764	487.3	7.0	0.6	76.05	6.43	3.17	0.27				
Total HAPs					4,667	458.8	5.7	0.6	61.57	6.05	2.57	0.25				

Total Uncontrolled VOC 2,347 lb/yr
Total Uncontrolled HAP 2,209 lb/yr

1. Source: "GM-38 Groundwater Remedy Analysis Report", February 2003
2. Source: DAR-1 AGC/SGC Tables, NYSDEC Division of Air Resources, Air Toxics Section, September 10, 2007.
3. Source: 6 NYCRR Part 200.1(cg)
4. Source: 6 NYCRR Part 200.1(ag)

ATTACHMENT 1
Emission Estimate

Feed Water Flow	1,100	gpm: max or normal
	250	m^3/hr
Water Flow Including Recycle	1,200	gpm: max or normal
	273	m^3/hr
Air Flow	8,000	cfm
	13,592	m^3/hr
A/W vol ratio	50	

Name	CAS Number	Toxicity: H/M/L[2]	VOC[3]	HAP[4]	Control by GAC	Max lb/day	Avg lb/day	Controlled Stripper Exhaust: Max gm/sec	Avg gm/sec
1,1,1-Trichloroethane (Methyl Chloroform)	00071-55-6	L	No	Yes	95%	0.00	0.00	1.04E-05	1.04E-05
1,1,2-Trichloroethane	00079-00-5	M	Yes	Yes	95%	0.00	0.00	1.21E-05	1.04E-06
1,1-Dichloroethane	00075-34-3	L	Yes	Yes	95%	0.00	0.00	1.39E-05	2.43E-06
1,2-Dichloroethane	00107-06-2	M	Yes	Yes	95%	0.00	0.00	9.36E-06	3.12E-06
1,1-Dichloroethylene (Vinylidene Chloride)	00075-35-4	M	Yes	Yes	95%	0.01	0.00	3.12E-05	5.55E-06
1,2-Dichloroethylene	00540-59-0	M	Yes	No	95%	0.73	0.02	3.81E-03	1.09E-04
Benzene	00071-43-2	H	Yes	Yes	95%	0.00	0.00	1.39E-05	3.47E-07
Carbon Tetrachloride	00056-23-5	H	Yes	Yes	95%	0.00	0.00	1.39E-05	3.47E-07
Chlorobenzene (Monochlorobenzene)	00108-90-7	M	Yes	Yes	95%	0.00	0.00	3.47E-06	3.47E-07
Chloroform	00067-66-3	M	Yes	Yes	95%	0.00	0.00	6.94E-06	2.77E-06
Methyl Tert Butyl Ether	01634-04-4	M	Yes	Yes	95%	0.00	0.00	6.94E-06	3.47E-07
Tetrachloroethylene	00127-18-4	M	Yes	Yes	95%	0.59	0.02	3.12E-03	1.17E-04
Toluene	00108-88-3	L	Yes	Yes	95%	0.01	0.00	5.20E-05	2.43E-06
Trichloroethylene	00079-01-6	M	Yes	Yes	95%	2.24	0.27	1.18E-02	1.43E-03
Vinyl chloride	00075-01-4	H	Yes	Yes	95%	0.20	0.00	1.04E-03	1.66E-05
Xylenes	01330-20-7	M	Yes	Yes	95%	0.01	0.00	5.55E-05	6.94E-07
Total VOCs						3.80	0.32		
Total HAPs						3.08	0.30		

Total Controlled VOC	117	lb/yr
Total Controlled HAP	110	lb/yr

1. Source: "GM-38 Groundwater Remedy Analysis Report", February 2003
2. Source: DAR-1 AGC/SGC Tables, NYSDEC Division of Air Resources, Air Tox
3. Source: 6 NYCRR Part 200.1(cg)
4. Source: 6 NYCRR Part 200.1(ag)

ATTACHMENT 2
AIR SCREENING ANALYSIS:
Annual

BETHPAGE SCREENING ANALYSIS					1-Hour Impact	405.7	(ug/m^3)	
ANNUAL IMPACTS COMPARED TO ANNUAL GUIDELINE CONCENTRATIONS (AGCs)					Annual Impact	32.456	(ug/m^3)	
		NYSDEC Guideline	Estimated Emissions		Predicted Annual Impact		Maximum Percent of AGC	
Pollutant	CAS Number	AGC (ug/m^3)	Uncontrolled (g/s)	Controlled (g/s)	Uncontrolled (ug/m^3)	Controlled (ug/m^3)	Uncontrolled Pct	Controlled Pct
1,1,1-Trichloroethane (Methyl Chloroform)	00071-55-6	1000.00	2.08E-04	1.04E-05	0.0068	0.0003	0.0%	0.0%
1,1,2-Trichloroethane	00079-00-5	1.40	2.08E-05	1.04E-06	0.0007	0.0000	0.0%	0.0%
1,1-Dichloroethane	00075-34-3	0.63	4.85E-05	2.43E-06	0.0016	0.0001	0.3%	0.0%
1,2-Dichloroethane	00107-06-2	0.04	6.24E-05	3.12E-06	0.0020	0.0001	5.3%	0.3%
1,1-Dichloroethylene (Vinylidene Chloride)	00075-35-4	70.00	1.11E-04	5.55E-06	0.0036	0.0002	0.0%	0.0%
1,2-Dichloroethylene	00540-59-0	63.00	2.18E-03	1.09E-04	0.0709	0.0035	0.1%	0.0%
Benzene	00071-43-2	0.13	6.94E-06	3.47E-07	0.0002	0.0000	0.2%	0.0%
Carbon Tetrachloride	00056-23-5	0.07	6.94E-06	3.47E-07	0.0002	0.0000	0.3%	0.0%
Chlorobenzene (Monochlorobenzene)	00108-90-7	110.00	6.94E-06	3.47E-07	0.0002	0.0000	0.0%	0.0%
Chloroform	00067-66-3	0.04	5.55E-05	2.77E-06	0.0018	0.0001	4.2%	0.2%
Methyl tert-Butyl Ether	01634-04-4	3000.00	6.94E-06	3.47E-07	0.0002	0.0000	0.0%	0.0%
Tetrachloroethylene	00127-18-4	1.00	2.34E-03	1.17E-04	0.0761	0.0038	7.6%	0.4%
Toluene	00108-88-3	5000.00	4.85E-05	2.43E-06	0.0016	0.0001	0.0%	0.0%
Trichloroethylene	00079-01-6	0.50	2.85E-02	1.43E-03	0.9252	0.0463	185.0%	9.3%
Vinyl Chloride	00075-01-4	0.11	3.33E-04	1.66E-05	0.0108	0.0005	9.8%	0.5%
Xylenes	01330-20-7	100.00	1.39E-05	6.94E-07	0.0005	0.0000	0.0%	0.0%

ATTACHMENT 2
AIR SCREENING ANALYSIS:
Short term

BETHPAGE SCREENING ANALYSIS					1-Hour Impact	405.7	(ug/m^3)
SHORT-TERM IMPACTS COMPARED TO SHORT-TERM GUIDELINE CONCENTRATIONS (SGCs)					Annual Impact	32.456	(ug/m^3)
		NYSDEC Guideline	Estimated Emissions		Predicted Short-term Impact		Maximum Percent of SGC	
		SGC	Uncontrolled	Controlled	Uncontrolled	Controlled	Uncontrolled	Controlled
Pollutant	CAS Number	(ug/m^3)	(g/s)	(g/s)	(ug/m^3)	(ug/m^3)	Pct	Pct
1,1,1-Trichloroethane (Methyl Chloroform)	00071-55-6	68000.00	2.08E-04	1.04E-05	0.084	0.004	0.0%	0.0%
1,1,2-Trichloroethane	00079-00-5	-	2.43E-04	1.21E-05	0.098	0.005	-	-
1,1-Dichloroethane	00075-34-3	-	2.77E-04	1.39E-05	0.113	0.006	-	-
1,2-Dichloroethane	00107-06-2	-	1.87E-04	9.36E-06	0.076	0.004	-	-
1,1-Dichloroethylene (Vinylidene Chloride)	00075-35-4	-	6.24E-04	3.12E-05	0.253	0.013	-	-
1,2-Dichloroethylene	00540-59-0	-	7.62E-02	3.81E-03	30.915	1.546	-	-
Benzene	00071-43-2	1300.00	2.77E-04	1.39E-05	0.113	0.006	0.0%	0.0%
Carbon Tetrachloride	00056-23-5	1900.00	2.77E-04	1.39E-05	0.113	0.006	0.0%	0.0%
Chlorobenzene (Monochlorobenzene)	00108-90-7	-	6.94E-05	3.47E-06	0.028	0.001	-	-
Chloroform	00067-66-3	150.00	1.39E-04	6.94E-06	0.056	0.003	0.0%	0.0%
Methyl tert-Butyl Ether	01634-04-4	-	1.39E-04	6.94E-06	0.056	0.003	-	-
Tetrachloroethylene	00127-18-4	1000.00	6.24E-02	3.12E-03	25.298	1.265	2.5%	0.1%
Toluene	00108-88-3	37000.00	1.04E-03	5.20E-05	0.422	0.021	0.0%	0.0%
Trichloroethylene	00079-01-6	14000.00	2.35E-01	1.18E-02	95.541	4.777	0.7%	0.0%
Vinyl Chloride	00075-01-4	180000.00	2.08E-02	1.04E-03	8.441	0.422	0.0%	0.0%
Xylenes	01330-20-7	4300.00	1.11E-03	5.55E-05	0.450	0.023	0.0%	0.0%

ATTACHMENT 2
AIR SCREENING ANALYSIS:
Short term

BETHPAGE SCREENING ANALYSIS					1-Hour Impact	405.7	(ug/m^3)
SHORT-TERM IMPACTS COMPARED TO SHORT-TERM GUIDELINE CONCENTRATIONS (SGCs)					Annual Impact	32.456	(ug/m^3)

		NYSDEC Guideline	Estimated Emissions		Predicted Short-term Impact		Maximum Percent of SGC	
		SGC	Uncontrolled	Controlled	Uncontrolled	Controlled	Uncontrolled	Controlled
Pollutant	CAS Number	(ug/m^3)	(g/s)	(g/s)	(ug/m^3)	(ug/m^3)	Pct	Pct
1,1,1-Trichloroethane (Methyl Chloroform)	00071-55-6	68000.00	2.08E-04	1.04E-05	0.084	0.004	0.0%	0.0%
1,1,2-Trichloroethane	00079-00-5	-	2.43E-04	1.21E-05	0.098	0.005	-	-
1,1-Dichloroethane	00075-34-3	-	2.77E-04	1.39E-05	0.113	0.006	-	-
1,2-Dichloroethane	00107-06-2	-	1.87E-04	9.36E-06	0.076	0.004	-	-
1,1-Dichloroethylene (Vinylidene Chloride)	00075-35-4	-	6.24E-04	3.12E-05	0.253	0.013	-	-
1,2-Dichloroethylene	00540-59-0	-	7.62E-02	3.81E-03	30.915	1.546	-	-
Benzene	00071-43-2	1300.00	2.77E-04	1.39E-05	0.113	0.006	0.0%	0.0%
Carbon Tetrachloride	00056-23-5	1900.00	2.77E-04	1.39E-05	0.113	0.006	0.0%	0.0%
Chlorobenzene (Monochlorobenzene)	00108-90-7	-	6.94E-05	3.47E-06	0.028	0.001	-	-
Chloroform	00067-66-3	150.00	1.39E-04	6.94E-06	0.056	0.003	0.0%	0.0%
Methyl tert-Butyl Ether	01634-04-4	-	1.39E-04	6.94E-06	0.056	0.003	-	-
Tetrachloroethylene	00127-18-4	1000.00	6.24E-02	3.12E-03	25.298	1.265	2.5%	0.1%
Toluene	00108-88-3	37000.00	1.04E-03	5.20E-05	0.422	0.021	0.0%	0.0%
Trichloroethylene	00079-01-6	14000.00	2.35E-01	1.18E-02	95.541	4.777	0.7%	0.0%
Vinyl Chloride	00075-01-4	180000.00	2.08E-02	1.04E-03	8.441	0.422	0.0%	0.0%
Xylenes	01330-20-7	4300.00	1.11E-03	5.55E-05	0.450	0.023	0.0%	0.0%

03/16/09
11:26:15

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 96043 ***

Bethpage GM-38 Air Stripper Uncontrolled

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	POINT
EMISSION RATE (G/S)	=	1.00000
STACK HEIGHT (M)	=	12.2000
STK INSIDE DIAM (M)	=	.9100
STK EXIT VELOCITY (M/S)	=	5.7700
STK GAS EXIT TEMP (K)	=	294.0000
AMBIENT AIR TEMP (K)	=	293.0000
RECEPTOR HEIGHT (M)	=	.0000
URBAN/RURAL OPTION	=	URBAN
BUILDING HEIGHT (M)	=	7.6000
MIN HORIZ BLDG DIM (M)	=	22.9000
MAX HORIZ BLDG DIM (M)	=	22.9000

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

BUOY. FLUX = .040 M**4/S**3; MOM. FLUX = 6.869 M**4/S**2.

*** FULL METEOROLOGY ***

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
10.	.1323E-07	1	1.5	1.5	480.0	22.39	3.65	2.99	NO
100.	278.3	3	1.0	1.0	320.0	27.34	22.00	20.46	NO
200.	339.9	6	1.0	1.1	10000.0	20.81	21.31	14.25	NO
MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 10. M:									
201.	339.9	6	1.0	1.1	10000.0	20.81	21.51	14.37	NO

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 2. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
210.	405.7	6	1.0	1.1	10000.0	18.81	22.32	14.86	NO
300.	307.9	6	1.0	1.1	10000.0	18.81	31.28	20.08	NO
400.	219.2	6	1.0	1.1	10000.0	18.81	40.93	25.42	NO

500.	162.3	6	1.0	1.1	10000.0	18.81	50.27	30.34	NO
600.	125.2	6	1.0	1.1	10000.0	18.81	59.32	34.91	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 210. M:

210.	405.7	6	1.0	1.1	10000.0	18.81	22.32	14.86	NO

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 9. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
610.	133.2	6	1.0	1.1	10000.0	11.81	60.21	35.35	NO
700.	107.4	6	1.0	1.1	10000.0	11.81	68.10	39.19	NO
800.	87.22	6	1.0	1.1	10000.0	11.81	76.63	43.22	NO
900.	72.75	6	1.0	1.1	10000.0	11.81	84.93	47.03	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 610. M:

610.	133.2	6	1.0	1.1	10000.0	11.81	60.21	35.35	NO

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 11. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1000.	62.47	6	1.0	1.1	10000.0	9.81	93.00	50.66	NO
1100.	54.05	6	1.0	1.1	10000.0	9.81	100.86	54.11	NO
1200.	47.42	6	1.0	1.1	10000.0	9.81	108.53	57.42	NO
1300.	42.10	6	1.0	1.1	10000.0	9.81	116.01	60.60	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1000. M:

1000.	62.47	6	1.0	1.1	10000.0	9.81	93.00	50.66	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
* SUMMARY OF TERRAIN HEIGHTS ENTERED FOR *
* SIMPLE ELEVATED TERRAIN PROCEDURE *
****

TERRAIN HT (M)	DISTANCE RANGE (M) MINIMUM	MAXIMUM
0.	10.	200.
2.	210.	600.
9.	610.	920.

```
          11.         1000.        1300.

*****************************************
     *** REGULATORY (Default) ***
    PERFORMING CAVITY CALCULATIONS
  WITH ORIGINAL SCREEN CAVITY MODEL
           (BRODE, 1988)
*****************************************
```

*** CAVITY CALCULATION - 1 ***			*** CAVITY CALCULATION - 2 ***		
CONC (UG/M**3)	=	.0000	CONC (UG/M**3)	=	.0000
CRIT WS @10M (M/S)	=	99.99	CRIT WS @10M (M/S)	=	99.99
CRIT WS @ HS (M/S)	=	99.99	CRIT WS @ HS (M/S)	=	99.99
DILUTION WS (M/S)	=	99.99	DILUTION WS (M/S)	=	99.99
CAVITY HT (M)	=	7.84	CAVITY HT (M)	=	7.84
CAVITY LENGTH (M)	=	22.86	CAVITY LENGTH (M)	=	22.86
ALONGWIND DIM (M)	=	22.90			

APPENDIX C
Field Data Sheets

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name:	NWIRP Bethpage GM-38	Project No.:	EF032.300
Location:	Bethpage, NY	Personnel:	JG, GG
Weather Conditions:		Measuring Device:	Heron Dipper T
Tidally Influenced:	Yes ___ No ___	Remarks:	

Monitoring Well ID	Date	Time	Total Well Depth (feet)*	Depth to Water (feet)*	Thickness of Water Column (feet)*	PID (ppm)	Comments
RW1-MW1	4/21/10	1335	—	30.89			
RW1-MW2	↓	0955	—	32.38			Bolt miss-ng, plug broken off to screw in
RW1-MW3		1200	—	23.50			Good
RW2-MW1		1015	—	33.90			Bolt miss-g
RW2-MW2		1010	—	33.02			Bolt miss-g
RW2-MW3		1007	—	33.05			Bolt miss-g
RW3-MW1		1321		32.83			Bolt miss-g
RW3-MW2		1320	—	35.10			
RW3-MW3		1310	—	34.00			
RW3-MW4		1305	—	36.00			
TP-1		1000	—	29.00			
IW-1-MW-1	↓	CANNOT	LOCATE!				
GM38D	---	---	---	---	---	---	Not accessible
GM38D2	---	---	---	---	---	---	Not accessible

*All measurements to the nearest 0.01 foot

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Former Monarch Chemicals Facility
Project No.: EF032.300

Sample ID No.: RW1 - MW1 (NWIRP-GM-38-GW-05/21/2010)
Sample Location: Bethpage, NY RW1 - MW1
Sampled By: JG, GG

SAMPLING DATA:	FINAL VALUES:						
Date: 4/21/10	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/l)	Temp (°C)	ORP (MV)
Time: 1415							
Purge Method: Low Flow	Clear	6.45	0.136	5.50	1.30	15.96	43.4

PURGE DATA:

Date:	4/21/10
Purge Method:	Low Flow - bladder pump
PID Reading (ppm):	---
Well Casing Diameter & Material:	4"
Total Well Depth (TD):	435
Static Water Level (DTW):	30.89
Start Purge (hrs):	1340
End Purge (hrs):	1415
Total Purge Time (min):	35
Total Vol. Purged (gal/L):	~ 1½ gal

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	40 mL CG	3
TSS	HNO_3	500 mL PL	1
Mercury	---	250 mL PL	1

OBSERVATIONS/NOTES:

Screen 395-435', stinger tube ~ 320', pump tubing ≈ 95'

Circle if Applicable: MS/MSD | Duplicate ID No.:

Signature(s):

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 4/2/10

Sample ID No.: RW 1 - MW 1

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	°C	(mV)	
	Target drawdown ≤0.3'	*200-500*	*±0.1 unit*	*±3%*	*±10%, >1 NTU*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
1345		140	6.30	0.176	16.4	3.05	16.79	50.3	
1350	30.80		6.60	0.176	8.38	2.28	16.40	35.5	
1355			6.34	0.177	7.08	1.80	16.18	46.2	
1400	30.80		6.49	0.177	8.14	1.78	16.08	40.7	
1405			6.45	0.176	5.40	1.48	16.06	43.8	
1410			6.44	0.177	5.55	1.35	16.00	43.6	
1415	30.81		6.45	0.176	5.50	1.30	15.96	43.4	

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Former Monarch Chemicals Facility
Project No.: EF032.300
Sample ID No.: RW 1 - MW 3 (DUP-GM-SB-GW - RW1-MW3-04212010)
Sample Location: Bethpage, NY
Sampled By: JG, GG

SAMPLING DATA:	FINAL VALUES:						
Date: 4/21/10	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/l)	Temp (°C)	ORP (MV)
Time: 1242							
Purge Method: Low Flow	Clear	7.51	0.186	22.1	0.50	14.79	110

PURGE DATA:

Date:	4/21/10
Purge Method:	Low Flow - bladder pump
PID Reading (ppm):	---
Well Casing Diameter & Material:	4"
Total Well Depth (TD):	435
Static Water Level (DTW):	23.50
Start Purge (hrs):	1207
End Purge (hrs):	1242
Total Purge Time (min):	45
Total Vol. Purged (gal/L):	~3 1/2

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	40 mL CG	3
TSS	HNO_3	500 mL PL	1
Mercury	---	250 mL PL	1

OBSERVATIONS/NOTES:

Screen 395-435', Sample tube ~ 350', pump tubing ~ 65'
Very slight odor from sample, large clump of trees

Circle If Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Contact @ Bethpage DPW mailroom
Will Mr. A 135 down shoulder

John Petroff 516 578 5898

ECOR Solutions Inc

PURGE DATA SHEET

Date: 4&1/10

Sample ID No.: RW1 - MW3

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	°C	(mV)	
	Target drawdown ≤0.3'	*200-500*	*±0.1 unit*	*±3%*	*±10%, >1 NTU*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
1207		350	6.88	0.155	17.7	2.09	15.02	52.7	
1212	23.85		7.21	0.177	24.3	1.42	14.79	33.2	
1217			7.48	0.186	30.1	0.88	14.75	18.1	
1222	23.92		7.55	0.186	24.5	0.69	14.70	14.1	
1227			7.53	0.186	23.8	0.61	14.68	12.7	
1232	23.92		7.53	0.186	21.3	0.52	14.67	10.7	
1237			7.52	0.186	21.5	0.51	14.67	10.8	
1242			7.51	0.186	22.1	0.50	14.79	11.0	

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Former Monarch Chemicals Facility
Project No.: EF032.300
Sample ID No.: RW2-MW1 (DUSRP-GM-58-GW-RW2-MW1-04212010)
Sample Location: Bethpage, NY
Sampled By: JG, GG

SAMPLING DATA:

Date: 4/21/10
Time: 1155
Purge Method: Low Flow

FINAL VALUES:

Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/l)	Temp (°C)	ORP (MV)
Clear	10.89	0.101	1.02	0.43	12.82	-101.5

PURGE DATA:

Date: 4/21/10
Purge Method: Low Flow - bladder pump
PID Reading (ppm): ---
Well Casing Diameter & Material: 4"
Total Well Depth (TD): 510
Static Water Level (DTW): 33.90
Start Purge (hrs): 1025
End Purge (hrs): 1105
Total Purge Time (min): 40
Total Vol. Purged (gal/L): 2 1/2 gal

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	40 mL CG	3
TSS	HNO_3	500 mL PL	1
Mercury	—	250 mL PL	1

OBSERVATIONS/NOTES:

Screen 470-510', Stinger tube ~410', pump tubing ~80'

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 4/6/10

Sample ID No.: RW2-MW1

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	°C	(mV)	
	Target drawdown ≤0.3'	*200-500*	*±0.1 unit*	*±3%*	*±10%, >1 NTU*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
1030		160	10.31	0.110	4.08	2.01	13.84	-79.9	
1035	34.07		10.48	0.103	2.45	1.43	12.85	-93.8	
1040			10.77	0.103	2.80	1.12	12.75	-95.4	
1045	34.20		10.86	0.104	1.91	1.16	12.88	-94.8	
1050			10.75	0.101	0.15	0.69	12.74	-91.8	
1055	34.22		10.80	0.101	1.75	0.47	12.82	-94.9	
1100			10.87	0.101	2.98	0.45	12.84	-98.8	
1105			10.89	0.101	1.02	0.43	12.82	-100.5	

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Former Monarch Chemicals Facility
Project No.: EF032.300
Sample ID No.: RW3MW1 (NWIRP-GM-38-GW-RW3-MW1-042220)
Sample Location: Bethpage, NY
Sampled By: JG, GG

SAMPLING DATA:	FINAL VALUES:						
Date: 4/22/10	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/l)	Temp (°C)	ORP (MV)
Time: 1140							
Purge Method: Low Flow	clear	7.15	0.118	1.79	3.47	12.32	16.2

PURGE DATA:

Date: 4/22/10
Purge Method: Low Flow - bladder pump
PID Reading (ppm): ---
Well Casing Diameter & Material: 4"
Total Well Depth (TD): 350
Static Water Level (DTW): 32.83
Start Purge (hrs): 1110
End Purge (hrs): 1140
Total Purge Time (min): 30
Total Vol. Purged (gal/L): ~2 gal

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	40 mL CG	3 x 2 = 6
TSS	HNO_3	500 mL PL	1 x 2 = 2
Mercury	---	250 mL PL	1

OBSERVATIONS/NOTES:

Screen 330-350', stinger tube ~ 300', pump tubing ~ 40'
Equipment Blank (NWIRP-GM-38-GW-FB-042120) collected @ 1200
for VOCs & Hg only

Circle if Applicable:
MS/MSD | Duplicate ID No.:

Signature(s):

NSX sample please to sample from drop tube extension
sample from 40' instead

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 4/ /10

Sample ID No.: RW 3- MW 1

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	°C	(mV)	
	Target drawdown ≤0.3'	*200-500*	*±0.1 unit*	*±3%*	*±10%, >1 NTU*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
1115		350	7.96	0.117	14.9	3.63	12.39	14.2	
1120	32.60		8.14	0.118	7.68	3.67	12.80	11.6	
1125			7.97	0.118	4.69	3.52	12.35	16.2	
1130			7.95	0.118	3.33	3.49	12.37	16.4	
1135	32.60		7.95	0.118	2.56	3.48	12.37	16.5	
1140			7.95	0.118	1.79	3.47	12.37	16.7	

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Former Monarch Chemicals Facility
Project No.: EF032.300
Sample ID No.: RW3-MW2 (NWIRP-GM-38-GW-RW3-MW2-04222010)
Sample Location: Bethpage, NY
Sampled By: JG, GG

SAMPLING DATA:	FINAL VALUES:						
Date: 4/22/10	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/l)	Temp (°C)	ORP (MV)
Time: Clear 1248							
Purge Method: Low Flow	Clear	8.97	2.11	10.53	0.76	13.37	-9.8

PURGE DATA:

Date: 4/22/10
Purge Method: Low Flow - bladder pump
PID Reading (ppm): ---
Well Casing Diameter & Material: 4"
Total Well Depth (TD): 495'
Static Water Level (DTW): 35.10
Start Purge (hrs): 1208
End Purge (hrs): 1248
Total Purge Time (min): 40
Total Vol. Purged (gal/L): ~2½ gal

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	40 mL CG	3
TSS	HNO_3	500 mL PL	1
Mercury	---	250 mL PL	1

OBSERVATIONS/NOTES:

Screened 475-495', Stinger tube ~ 400', pump tubing ~ 85'

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

ECOR Solutions Inc

PURGE DATA SHEET

Date: 4/[illegible]10

Sample ID No.: RW3-MW2

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	°C	(mV)	
	Target drawdown ≤0.3'	*200-500*	*±0.1 unit*	*±3%*	*±10%, >1 NTU*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
1213		260	8.84	0.151	24.0	2.42	13.99	-4.0	
1218	35.18		8.71	0.150	15.8	1.50	13.65	-4.5	
1223			8.69	0.126	11.8	1.11	13.37	-1.9	
1228	35.41		8.89	0.112	17.0	0.85	13.70	-9.5	
1233			8.94	0.111	12.8	0.81	13.59	-11.0	
1238	35.41		8.99	0.112	11.3	0.79	13.30	-10.6	
1243			8.98	0.111	11.1	0.75	13.23	-10.0	
1248			8.97	0.111	10.53	0.76	13.37	-9.8	

Signature(s): [signature]

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Former Monarch Chemicals Facility
Project No.: EF032.300
Sample ID No.: RW3-MW3 (NWIRP-GM-38-GW-RW3-MW3-042210)
Sample Location: Bethpage, NY
Sampled By: JG, GG

SAMPLING DATA:	FINAL VALUES:						
Date: 4/22/10	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/l)	Temp (°C)	ORP (MV)
Time: 0845							
Purge Method: Low Flow	clear	8.52	0.130	4.52	3.00	14.15	8.1

PURGE DATA:

Date: 4/22/10
Purge Method: Low Flow - bladder pump
PID Reading (ppm): ---
Well Casing Diameter & Material: 4"
Total Well Depth (TD): 340
Static Water Level (DTW): 31.00
Start Purge (hrs): 0810
End Purge (hrs): 0845
Total Purge Time (min): 35
Total Vol. Purged (gal/L): ~2 1/2 gal

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	40 mL CG	3 x 4 = 12
TSS	HNO_3	500 mL PL	1 x 4 = 4
Mercury	---	250 mL PL	1 x 2 = 2

NO MS/MSD for TSS

OBSERVATIONS/NOTES:

Screened 320 - 340', stinger tube ~ 250', pump tubing ~ 50'

Circle if Applicable: MS/MSD
Duplicate ID No.: NWIRP-GM-38-RW3-MW3-042210 DUP
Signature(s):

MS/MSD for VOCs & Hg only

ECOR Solutions Inc

PURGE DATA SHEET

Date: 4/22/10

Sample ID No.: RW3 - MW3

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	°C	(mV)	
	Target drawdown ≤0.3'	*200-500*	*±0.1 unit*	*±3%*	*±10%, >1 NTU*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
0815		350	8.26	0.133	4.59	4.28	13.88	24.3	
0820			8.28	0.131	5.12	3.27	14.06	19.1	
0825	33.85		8.40	0.130	5.82	3.10	14.17	13.9	
0830			8.41	0.130	4.30	3.06	14.17	12.5	
0835	33.85		8.47	0.130	4.95	2.99	14.22	10.1	
0840			8.51	0.133	5.19	2.98	14.16	8.4	
0845			8.52	0.130	4.52	3.00	14.15	8.1	

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Former Monarch Chemicals Facility
Project No.: EF032.300
Sample ID No.: RW3-MW4/NWIRP-GM-38-GW - RW3-MW4-04222010)
Sample Location: Bethpage, NY
Sampled By: JG, GG

SAMPLING DATA:	FINAL VALUES:						
Date: 4/22/10	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/l)	Temp (°C)	ORP (MV)
Time: 1025							
Purge Method: Low Flow	Clear	8.78	0.082	12.5	4.09	14.58	3.0

PURGE DATA:

Date: 4/ /10
Purge Method: Low Flow - bladder pump
PID Reading (ppm): ---
Well Casing Diameter & Material: 4"
Total Well Depth (TD): 495
Static Water Level (DTW): 36.00
Start Purge (hrs): 0945
End Purge (hrs): 1025
Total Purge Time (min): 40
Total Vol. Purged (gal/L): ~1 1/2 gal

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	40 mL CG	3
TSS	HNO_3	500 mL PL	1
Mercury	---	250 mL PL	1

OBSERVATIONS/NOTES:

Screened 475-495'; stinger tube ~ 402'; pump tubing ~ 85' Not enough pressure Cannot sample by exhaustion
Exhaust tube has leak somewhere - cannot find - pull out & just sample from bottom of pump ~ 55' down ~55' down

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

Need to bring pulley tubing for bladder to have next time

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 4/22/10

Sample ID No.: RW3-MW4

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	°C	(mV)	
	Target drawdown ≤0.3'	*200-500*	*±0.1 unit*	*±3%*	*±10%, >1 NTU*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
0950		130	8.43	0.080	21.3	6.40	14.55	2.5	
0955	35.42		8.47	0.081	20.6	4.48	14.43	2.4	
1000			8.48	0.081	18.9	4.35	14.42	3.7	
1005	35.43		8.50	0.082	13.4	4.25	14.51	5.7	
1010			8.67	0.082	13.1	4.17	14.49	4.5	
1015	35.40		8.79	0.082	11.9	4.08	14.50	2.2	
1020			8.79	0.082	11.7	4.07	14.55	2.6	
1025			8.78	0.082	12.5	4.09	14.58	3.0	

Signature(s):

APPENDIX D
Validation Report

VOLATILE ORGANIC COMPOUNDS
USEPA Region II – Tier II Data Validation

Project Name:	Naval Weapons Industrial Reserve Plant, GM-38 Area
Location:	100 Broadway, Bethpage, NY
Project Number:	EF032.300
SDG #:	JA44897
Client:	ECOR Solutions, Inc.
Date:	05/27/2010
Laboratory:	Accutest Laboratories, Dayton, NJ
Reviewer:	Samir A. Naguib

Summary:

1. Tier II data validation was performed on the data for eight (8) water samples, one (1) trip blank and one (1) field blank analyzed for Volatiles by EPA624.

2. The samples were collected on 04/21 and 22/2010. The samples were submitted to Accutest Laboratories, Dayton, NJ on 04/23/2010 for analysis.

3. The USEPA Region II SOP HW-24, Revision No.: 2, October 2006: Validating Volatile Organic Compounds by SW-846 Method 8260B, EPA Method 624 and Quality Assurance Project Plan for GM-38 Area, Naval Weapons Industrial Reserve Plant, Bethpage, NY; September 3, 2009 were used in evaluating the Volatiles data in this summary report.

4. In general, the data are valid as reported and may be used for decision making purposes. Selected data points were qualified due to nonconformance of certain Quality Control criteria (See discussion below).

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Matrix	Sample Status
NWIRP-GM-38-RW1-MW1-04212010	JA44897-1	04/21/10	Water	
NWIRP-GM-38-RW1-MW3-04212010	JA44897-2	04/21/10	Water	
NWIRP-GM-38-RW2-MW1-04212010	JA44897-3	04/21/10	Water	
NWIRP-GM-38-RW3-MW1-04222010	JA44897-4	04/22/10	Water	
NWIRP-GM-38-RW3-MW2-04222010	JA44897-5	04/22/10	Water	
NWIRP-GM-38-RW3-MW3-04222010	JA44897-6	04/22/10	Water	
NWIRP-GM-38-RW3-MW3-04222010DUP	JA44897-7	04/21/10	Water	Field Duplicate of sample NWIRP-GM-38-RW3-MW3-04222010
NWIRP-GM-38-RW3-MW4-04222010	JA44897-8	04/22/10	Water	
NWIRP-GM-38-GW-FB-04222010	JA44897-9	04/22/10	Water	Field Blank
NWIRP-GM-38-GW-TB-04222010	JA44897-10	04/22/10	Water	Trip Blank

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within 14days from sample collection. No qualifications were required.

2. All water samples were properly preserved (pH<2.0). No qualifications were required.

GC/MS Tuning:

1. All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria. No qualifications were required.

Initial Calibration:

1. Initial calibration curve analyzed on 03/22/2010 (GCMS2E) exhibited acceptable %RSD and average RRF values for all compounds. No qualifications were required.

Initial Calibration Verification (ICV):

1. Initial calibration verification analyzed on 03/23/2010 (GCMS3E) exhibited acceptable %D's (≤25.0%). No qualifications were required.

Continuing Calibration Verification (CCV):

1. CCV analyzed on 04/26/2010 @09:40AM (GCMS2E) exhibited acceptable %D's (≤20.0%) for CCC compounds and RRF values for SPCC compounds. Also %D's for all other compounds were ≤15.0% with the following exception(s):

Compound	%D
Carbon disulfide	18.3
Methylene chloride	26.7
Carbon tetrachloride	-25.3
Bromoform	-18.5

Client Sample ID	Laboratory Sample ID	Compound	Action
NWIRP-GM-38-RW1-MW1-04212010	JA44897-1	Carbon disulfide, Methylene chloride, Carbon tetrachloride, Bromoform	UJ UJ
NWIRP-GM-38-RW1-MW3-04212010	JA44897-2	Carbon disulfide, Methylene chloride, Carbon tetrachloride, Bromoform	UJ UJ
NWIRP-GM-38-RW2-MW1-04212010	JA44897-3	Carbon disulfide, Methylene chloride, Carbon tetrachloride, Bromoform	UJ UJ
NWIRP-GM-38-RW3-MW1-04222010	JA44897-4	Carbon disulfide, Methylene chloride, Carbon tetrachloride, Bromoform	UJ UJ
NWIRP-GM-38-RW3-MW2-04222010	JA44897-5	Carbon disulfide, Methylene chloride, Carbon tetrachloride, Bromoform	UJ UJ
NWIRP-GM-38-RW3-MW3-04222010	JA44897-6	Carbon disulfide, Methylene chloride, Carbon tetrachloride, Bromoform	UJ UJ
NWIRP-GM-38-RW3-MW3-04222010DUP	JA44897-7	Carbon disulfide, Methylene chloride, Carbon tetrachloride, Bromoform	UJ UJ
NWIRP-GM-38-RW3-MW4-04222010	JA44897-8	Carbon disulfide, Methylene chloride, Carbon tetrachloride, Bromoform	UJ UJ
NWIRP-GM-38-GW-FB-04222010	JA44897-9	Carbon disulfide, Methylene chloride, Carbon tetrachloride, Bromoform	UJ UJ
NWIRP-GM-38-GW-TB-04222010	JA44897-10	Carbon disulfide, Methylene chloride, Carbon tetrachloride, Bromoform	UJ UJ

2. CCV analyzed on 04/27/2010 @09:28AM (GCMS2E) exhibited acceptable %D's (≤20.0%) for CCC compounds and RRF values for SPCC compounds. Also %D for Trichloroethene was ≤20.0%. No qualifications were required.

Surrogates:

1. All surrogates %REC's values for all water samples and associated QC were within the laboratory control limits. No qualifications were required.

Internal Standard (IS) Area Performance:

1. All samples exhibited acceptable area count for all five internal standards. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Trip Blank (TB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (V2E2292-MB) analyzed on 04/27/2010 was free of contaminations. No qualifications were required.

2. Method Blank (V2E2293-MB) analyzed on 04/27/2010 was free of contaminations. No qualifications were required.

3. Field Blank (NWIRP-GM-38-FB-0422010) was analyzed on 04/27/2010.

Compound	Results (µg/L)	Action Level (CRQL)* (µg/L)	Sample Affected	Action
Chloroform	0.66	1.0	NWIRP-GM-38-RW1-MW1-04212010 NWIRP-GM-38-RW1-MW3-04212010 NWIRP-GM-38-RW3-MW3-04222010DUP	U U U

*= If sample concentration less than the Action Level (AL), then sample result qualified as non-detect (U). If sample concentration greater than the Action Level (AL) or sample result was not detected, no qualifications/action required

4. Trip Blank (NWIRP-GM-38-GW-TB-0422010) analyzed on 04/27/2010 was free of contaminations. No qualifications were required.

Laboratory Control Sample (LCS)/ Laboratory Control Sample Duplicate (LCSD):

1. Laboratory Control Sample (V2E2292-BS) was analyzed on 04/27/2010. All %REC's were within the laboratory control limits. No qualifications were required.

2. Laboratory Control Sample (V2E2293-BS) was analyzed on 04/27/2010. Trichloroethene %REC was within the laboratory control limits. No qualifications were required.

Field Duplicate:

1. Sample NWIRP-GM-38-GW-RW3-MW3-0422010DUP (JA44897-7) was collected as field duplicate for sample NWIRP-GM-38-GW-RW3-MW3-0422010 (JA44897-6). All RPD's were <50%. No qualifications were required.

Field Sample	Analyte	Analytical Method	Result	Units	Field Duplicate	Result	Units	RPD	Qualifier
NWIRP-GM-38-RW3-MW3-0422010	1,1-Dichloroethane	EPA 624	1.6	µg/L	NWIRP-GM-38-RW3-MW3-0422010DUP	1.6	µg/L	0.0	None
NWIRP-GM-38-RW3-MW3-0422010	1,1-Dichloroethene	EPA 624	1.1	µg/L	NWIRP-GM-38-RW3-MW3-0422010DUP	1.3	µg/L	16.7	None
NWIRP-GM-38-RW3-MW3-0422010	cis-1,2-Dichloroethene	EPA 624	2.1	µg/L	NWIRP-GM-38-RW3-MW3-0422010DUP	2.1	µg/L	0.0	None
NWIRP-GM-38-RW3-MW3-0422010	1,2-Dichloroethene (total)	EPA 624	2.1	µg/L	NWIRP-GM-38-RW3-MW3-0422010DUP	2.1	µg/L	0.0	None
NWIRP-GM-38-RW3-MW3-0422010	Trichloroethene	EPA 624	397	µg/L	NWIRP-GM-38-RW3-MW3-0422010DUP	382	µg/L	3.9	None

Matrix Spike (MS)/ Matrix Spike Duplicate (MSD):

1. Matrix Spike (MS) and Matrix Spike Duplicate (MSD) were performed on sample NWIRP-GM-38-GW-RW3-MW3-0422010 (JA44897-6). All %REC's and RPD's were within the laboratory control limits with the following exception(s):

Compound	%R/%R/RPD	Action
Bromoform	138/148/A	None
Dibromochloromethane	A/141/A	None
Trans-1,3-Dichloropropene	A/129/A	None

A= Acceptable

Compound Quantitation and Reported Contract Required Quantitation Limits (CRQLs):

1. All results were within the linear calibration range. No qualifications were required.

Target Compound Identification:

1. All Relative Retention Times (RRTs) of the reported compounds were within ± 0.06 RRT units of the standard (opening CCV).
2. Sample compound spectra were compared against the laboratory standard spectra.
3. No QC deviations were observed.

Comments:

1. Validation qualifiers (if required) were entered into the EDD for SDG: JA44897.

TRACE METALS
USEPA Region II – Tier II Data Validation

Project Name:	Naval Weapons Industrial Reserve Plant, GM-38 Area
Location:	100 Broadway, Bethpage, NY
Project Number:	EF032.300
SDG #:	JA44897
Client:	ECOR Solutions, Inc.
Date:	05/27/2010
Laboratory:	Accutest Laboratories, Dayton, NJ
Reviewer:	Samir A. Naguib

Summary:

1. Tier II data validation was performed on the data for eight (8) water samples and one (1) field blank analyzed for Mercury by SW-846 Method 7470A.

2. The samples were collected on 04/21 and 22/2010. The samples were submitted to Accutest Laboratories, Dayton, NJ on 04/23/2010 for analysis.

3. The USEPA Region II SOP No. HW-2, Revision 13, September 2006, for Evaluation of Metals Data for Contract Laboratory Program (CLP), based on SOW-ILM05.3 (SOP Revision 13) and Quality Assurance Project Plan for GM-38 Area, Naval Weapons Industrial Reserve Plant, Bethpage, NY; September 3, 2009 were used in evaluating the Mercury data in this summary report.

4. In general, the data are valid as reported and may be used for decision making purposes. Selected data points were qualified due to nonconformance of certain Quality Control criteria (See discussion below).

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Matrix	Sample Status
NWIRP-GM-38-RW1-MW1-04212010	JA44897-1	04/21/10	Water	
NWIRP-GM-38-RW1-MW3-04212010	JA44897-2	04/21/10	Water	
NWIRP-GM-38-RW2-MW1-04212010	JA44897-3	04/21/10	Water	
NWIRP-GM-38-RW3-MW1-04222010	JA44897-4	04/22/10	Water	
NWIRP-GM-38-RW3-MW2-04222010	JA44897-5	04/22/10	Water	
NWIRP-GM-38-RW3-MW3-04222010	JA44897-6	04/22/10	Water	
NWIRP-GM-38-RW3-MW3-04222010DUP	JA44897-7	04/21/10	Water	Field Duplicate of sample NWIRP-GM-38-RW3-MW3-04222010
NWIRP-GM-38-RW3-MW4-04222010	JA44897-8	04/22/10	Water	
NWIRP-GM-38-GW-FB-04222010	JA44897-9	04/22/10	Water	Field Blank

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were digested and analyzed within the 28days holding times for Mercury. No qualifications were required.

Initial and Continuing Calibration Verification (ICV and CCV):

Mercury:

1 All correlation coefficient for Mercury calibration curve analyzed were ≥0.995. No qualifications were required.

2. All ICV's and CCV's %REC values were within the QC limits (80-120%). No qualifications were required.

CROL Check Standard (CRI):

1. All CRI %REC's were within the control limits (70-130%). No qualifications were required.

Blanks (Method Blank, ICB and CCB):

1. All ICB's and CCB's were free of contaminations. No qualifications were required.

2. Method Blank (MP52521) digested on 05/03/2010 was free of contaminations. No qualifications were required.

Field Blank (FB) and Equipment Blank (EB):

1. Field Blank (NWIRP-GM-38-FB-0422010) analyzed on 05/04/2010 was free of contaminations. No qualifications were required.

Laboratory Control Sample (LCS)/ Laboratory Control Sample Duplicate (LCSD):

1. Mercury %REC in Laboratory Control Sample was within the laboratory control limits. No qualifications were required.

Field Duplicate:

1. Sample NWIRP-GM-38-GW-RW3-MW3-0422010DUP (JA44897-7) was collected as field duplicate for sample NWIRP-GM-38-GW-RW3-MW3-0422010 (JA44897-6). Both samples were reported as non-detects. No qualifications were required.

Matrix Spike (MS)/ Matrix Spike Duplicate (MSD):

1. Matrix Spike (MS) and Matrix Spike Duplicate (MSD) were performed on sample NWIRP-GM-38-GW-RW3-MW3-0422010 (JA44897-6). All %REC's and RPD were within the laboratory control limits with the following exception(s):

Element	%REC/%REC/RPD	Sample Affected	Action
Mercury	A/70/A	NWIRP-GM-38-RW1-MW1-04212010	UJ
		NWIRP-GM-38-RW1-MW3-04212010	UJ
		NWIRP-GM-38-RW2-MW1-04212010	UJ
		NWIRP-GM-38-RW3-MW1-04222010	UJ
		NWIRP-GM-38-RW3-MW2-04222010	UJ
		NWIRP-GM-38-RW3-MW3-04222010	UJ
		NWIRP-GM-38-RW3-MW3-04222010DUP	UJ
		NWIRP-GM-38-RW3-MW4-04222010	UJ
		NWIRP-GM-38-GW-FB-04222010	

A=Acceptable

Laboratory Duplicate:

1. MS and MSD were performed instead to calculate RPD.

Compound Quantitation and Reported Detection Limits:

1. All sample results were reported within the linear calibration range.

Comments:

1. Validation qualifiers (if required) were entered into the EDD for SDG: JA44897.

GENERAL CHEMISTRY
USEPA Region II – Tier II Data Validation

Project Name:	Naval Weapons Industrial Reserve Plant, GM-38 Area
Location:	100 Broadway, Bethpage, NY
Project Number:	EF032.300
SDG #:	JA44897
Client:	ECOR Solutions, Inc.
Date:	05/27/2010
Laboratory:	Accutest Laboratories, Dayton, NJ
Reviewer:	Samir A. Naguib

Summary:

1. Tier II data validation was performed on the data for eight (8) water samples analyzed for Solids, Total Suspended (TSS) by SM20th 2540D.

2. The samples were collected on 04/21 and 22/2010. The samples were submitted to Accutest Laboratories, Dayton, NJ on 04/23/2010 for analysis.

3. The USEPA Region II SOP No. HW-2, Revision 13, September 2006, for Evaluation of Metals Data for Contract Laboratory Program (CLP), based on SOW-ILM05.3 (SOP Revision 13) was used in evaluating the Solids, Total Suspended data in this summary report.

4. In general, the data are valid as reported and may be used for decision making purposes. Selected data points were qualified due to nonconformance of certain Quality Control criteria (See discussion below).

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Matrix	Sample Status
NWIRP-GM-38-RW1-MW1-04212010	JA44897-1	04/21/10	Water	
NWIRP-GM-38-RW1-MW3-04212010	JA44897-2	04/21/10	Water	
NWIRP-GM-38-RW2-MW1-04212010	JA44897-3	04/21/10	Water	
NWIRP-GM-38-RW3-MW1-04222010	JA44897-4	04/22/10	Water	
NWIRP-GM-38-RW3-MW2-04222010	JA44897-5	04/22/10	Water	
NWIRP-GM-38-RW3-MW3-04222010	JA44897-6	04/22/10	Water	
NWIRP-GM-38-RW3-MW3-04222010DUP	JA44897-7	04/21/10	Water	Field Duplicate of sample NWIRP-GM-38-RW3-MW3-04222010
NWIRP-GM-38-RW3-MW4-04222010	JA44897-8	04/22/10	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within the 7days holding times for solids, Total Suspended. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank associated with Batch ID: GN36817 was free of contaminations. No qualifications were required.

2. Field Blanks were not submitted for this analysis.

Field Duplicate:

1. Sample NWIRP-GM-38-GW-RW3-MW3-0422010DUP (JA44897-7) was collected as field duplicate for sample NWIRP-GM-38-GW-RW3-MW3-0422010 (JA44897-6). RPD was <50%. No qualifications were required.

Field Sample	Analyte	Analytical Method	Result	Units	Field Duplicate	Result	Units	RPD	Qualifier
NWIRP-GM-38-RW3-MW3-0422010	TSS	SM20 2540D	4.0	mg/L	NWIRP-GM-38-RW3-MW3-0422010DUP	5.0	mg/L	22.2	None

Laboratory Duplicate:

1. Laboratory duplicate was performed on sample NWIRP-GM-38-RW1-MW1-04212010 (JA44897-1). RPD was within the QC limits (<10%). No qualifications were required.

Compound Quantitation and Reported Detection Limits:

1. All sample results were reported within the linear calibration range.

Comments:

1. Validation qualifiers (if required) were entered into the EDD for SDG: JA44897.

H&S

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE-GM-38 AREA
100 BROADWAY, BETHPAGE, NY
DATA SUMMARY TABLE
AQUEOUS
SDG: JA44897

Sample Name	Lab ID	Analytical Method	Sample Date	Dilution Factor	Analyte	Result	Unit	Qualifier	MDL	RL
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	1,1,1-Trichloroethane	0.52	ug/l	J	0.21	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	1,1,2,2-Tetrachloroethane		ug/l	U	0.13	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	1,1,2-Trichloroethane		ug/l	U	0.46	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	1,1-Dichloroethane	2.8	ug/l		0.26	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	1,1-Dichloroethene	1.9	ug/l		0.38	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	1,2-Dichloroethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	1,2-Dichloroethene (total)	124	ug/l		0.20	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	1,2-Dichloropropane		ug/l	U	0.40	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	2-Butanone (MEK)		ug/l	U	1.4	5.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	2-Hexanone		ug/l	U	1.1	5.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	4-Methyl-2-pentanone(MIBK)		ug/l	U	0.94	5.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Acetone		ug/l	U	2.2	5.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Benzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Bromodichloromethane		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Bromoform		ug/l	UJ	0.26	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Bromomethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Carbon disulfide		ug/l	UJ	0.19	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Carbon tetrachloride		ug/l	UJ	0.18	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Chlorobenzene		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Chloroethane		ug/l	U	0.48	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Chloroform	0.70	ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Chloromethane		ug/l	U	0.34	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	cis-1,2-Dichloroethene	121	ug/l		0.22	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	cis-1,3-Dichloropropene		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Dibromochloromethane		ug/l	U	0.26	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Ethylbenzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Methylene chloride		ug/l	UJ	0.30	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Styrene		ug/l	U	0.56	2.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Tetrachloroethene	0.42	ug/l	J	0.18	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Toluene		ug/l	U	0.19	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	trans-1,2-Dichloroethene	2.9	ug/l		0.20	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	trans-1,3-Dichloropropene		ug/l	U	0.31	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Trichloroethene	116	ug/l		0.14	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Vinyl chloride		ug/l	U	0.21	1.0

H&S

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE-GM-38 AREA
100 BROADWAY, BETHPAGE, NY

DATA SUMMARY TABLE
AQUEOUS
SDG: JA44897

Sample Name	Lab ID	Analytical Method	Sample Date	Dilution Factor	Analyte	Result	Unit	Qualifier	MDL	RL
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	EPA624	04/21/10	1	Xylenes (total)		ug/l	U	0.27	1.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	SM202540D	04/21/10	1	Solids, Total Suspended	6.0	mg/l		4.0	4.0
NWIRP-GM-38-GW-RW1-MW1-0421201	JA44897-1	SW8467470A	04/21/10	1	Mercury		ug/l	UJ	0.20	0.20
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	1,1,1-Trichloroethane		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	1,1,2,2-Tetrachloroethane		ug/l	U	0.13	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	1,1,2-Trichloroethane		ug/l	U	0.46	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	1,1-Dichloroethane		ug/l	U	0.26	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	1,1-Dichloroethene		ug/l	U	0.38	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	1,2-Dichloroethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	1,2-Dichloroethene (total)		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	1,2-Dichloropropane		ug/l	U	0.40	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	2-Butanone (MEK)		ug/l	U	1.4	5.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	2-Hexanone		ug/l	U	1.1	5.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	4-Methyl-2-pentanone(MIBK)		ug/l	U	0.94	5.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Acetone		ug/l	U	2.2	5.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Benzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Bromodichloromethane		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Bromoform		ug/l	UJ	0.26	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Bromomethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Carbon disulfide		ug/l	UJ	0.19	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Carbon tetrachloride		ug/l	UJ	0.18	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Chlorobenzene		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Chloroethane		ug/l	U	0.48	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Chloroform		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Chloromethane		ug/l	U	0.34	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	cis-1,2-Dichloroethene		ug/l	U	0.22	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	cis-1,3-Dichloropropene		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Dibromochloromethane		ug/l	U	0.26	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Ethylbenzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Methylene chloride		ug/l	UJ	0.30	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Styrene		ug/l	U	0.56	2.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Tetrachloroethene		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Toluene		ug/l	U	0.19	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	trans-1,2-Dichloroethene		ug/l	U	0.20	1.0

H&S

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE-GM-38 AREA
100 BROADWAY, BETHPAGE, NY
DATA SUMMARY TABLE
AQUEOUS
SDG: JA44897

Sample Name	Lab ID	Analytical Method	Sample Date	Dilution Factor	Analyte	Result	Unit	Qualifier	MDL	RL
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	trans-1,3-Dichloropropene		ug/l	U	0.31	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Trichloroethene		ug/l	U	0.14	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Vinyl chloride		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-TB-04222010	JA44897-10	EPA624	04/22/10	1	Xylenes (total)		ug/l	U	0.27	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	1,1,1-Trichloroethane	0.98	ug/l	J	0.21	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	1,1,2,2-Tetrachloroethane		ug/l	U	0.13	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	1,1,2-Trichloroethane	0.60	ug/l	J	0.46	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	1,1-Dichloroethane	4.6	ug/l		0.26	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	1,1-Dichloroethene	1.1	ug/l		0.38	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	1,2-Dichloroethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	1,2-Dichloroethene (total)	0.48	ug/l	J	0.20	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	1,2-Dichloropropane		ug/l	U	0.40	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	2-Butanone (MEK)		ug/l	U	1.4	5.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	2-Hexanone		ug/l	U	1.1	5.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	4-Methyl-2-pentanone(MIBK)		ug/l	U	0.94	5.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Acetone		ug/l	U	2.2	5.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Benzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Bromodichloromethane		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Bromoform		ug/l	UJ	0.26	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Bromomethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Carbon disulfide		ug/l	UJ	0.19	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Carbon tetrachloride		ug/l	UJ	0.18	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Chlorobenzene		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Chloroethane		ug/l	U	0.48	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Chloroform	0.80	ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Chloromethane		ug/l	U	0.34	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	cis-1,2-Dichloroethene	0.48	ug/l	J	0.22	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	cis-1,3-Dichloropropene		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Dibromochloromethane		ug/l	U	0.26	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Ethylbenzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Methylene chloride		ug/l	UJ	0.30	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Styrene		ug/l	U	0.56	2.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Tetrachloroethene	0.49	ug/l	J	0.18	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Toluene		ug/l	U	0.19	1.0

H&S

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE-GM-38 AREA
100 BROADWAY, BETHPAGE, NY

DATA SUMMARY TABLE
AQUEOUS
SDG: JA44897

Sample Name	Lab ID	Analytical Method	Sample Date	Dilution Factor	Analyte	Result	Unit	Qualifier	MDL	RL
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	trans-1,2-Dichloroethene		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	trans-1,3-Dichloropropene		ug/l	U	0.31	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Trichloroethene	1.6	ug/l		0.14	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Vinyl chloride		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	EPA624	04/21/10	1	Xylenes (total)		ug/l	U	0.27	1.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	SM202540D	04/21/10	1	Solids, Total Suspended	8.0	mg/l		4.0	4.0
NWIRP-GM-38-GW-RW1-MW3-0421201	JA44897-2	SW8467470A	04/21/10	1	Mercury		ug/l	UJ	0.20	0.20
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	1,1,1-Trichloroethane		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	1,1,2,2-Tetrachloroethane		ug/l	U	0.13	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	1,1,2-Trichloroethane		ug/l	U	0.46	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	1,1-Dichloroethane	0.60	ug/l	J	0.26	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	1,1-Dichloroethene		ug/l	U	0.38	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	1,2-Dichloroethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	1,2-Dichloroethene (total)	0.78	ug/l	J	0.20	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	1,2-Dichloropropane		ug/l	U	0.40	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	2-Butanone (MEK)		ug/l	U	1.4	5.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	2-Hexanone		ug/l	U	1.1	5.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	4-Methyl-2-pentanone(MIBK)		ug/l	U	0.94	5.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Acetone		ug/l	U	2.2	5.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Benzene	0.15	ug/l	J	0.15	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Bromodichloromethane		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Bromoform		ug/l	UJ	0.26	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Bromomethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Carbon disulfide		ug/l	UJ	0.19	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Carbon tetrachloride		ug/l	UJ	0.18	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Chlorobenzene		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Chloroethane		ug/l	U	0.48	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Chloroform		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Chloromethane		ug/l	U	0.34	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	cis-1,2-Dichloroethene	0.78	ug/l	J	0.22	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	cis-1,3-Dichloropropene		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Dibromochloromethane		ug/l	U	0.26	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Ethylbenzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Methylene chloride		ug/l	UJ	0.30	1.0

H&S

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE-GM-38 AREA
100 BROADWAY, BETHPAGE, NY
DATA SUMMARY TABLE
AQUEOUS
SDG: JA44897

Sample Name	Lab ID	Analytical Method	Sample Date	Dilution Factor	Analyte	Result	Unit	Qualifier	MDL	RL
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Styrene		ug/l	U	0.56	2.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Tetrachloroethene		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Toluene	0.52	ug/l	J	0.19	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	trans-1,2-Dichloroethene		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	trans-1,3-Dichloropropene		ug/l	U	0.31	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Trichloroethene	0.42	ug/l	J	0.14	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Vinyl chloride		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	EPA624	04/21/10	1	Xylenes (total)		ug/l	U	0.27	1.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	SM202540D	04/21/10	1	Solids, Total Suspended	58.0	mg/l		4.0	4.0
NWIRP-GM-38-GW-RW2-MW1-0421201	JA44897-3	SW8467470A	04/21/10	1	Mercury		ug/l	UJ	0.20	0.20
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	1,1,1-Trichloroethane	0.98	ug/l	J	0.21	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	1,1,2,2-Tetrachloroethane		ug/l	U	0.13	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	1,1,2-Trichloroethane		ug/l	U	0.46	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	1,1-Dichloroethane	1.5	ug/l		0.26	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	1,1-Dichloroethene	1.3	ug/l		0.38	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	1,2-Dichloroethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	1,2-Dichloroethene (total)		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	1,2-Dichloropropane		ug/l	U	0.40	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	2-Butanone (MEK)		ug/l	U	1.4	5.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	2-Hexanone		ug/l	U	1.1	5.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	4-Methyl-2-pentanone(MIBK)		ug/l	U	0.94	5.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Acetone		ug/l	U	2.2	5.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Benzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Bromodichloromethane		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Bromoform		ug/l	UJ	0.26	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Bromomethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Carbon disulfide		ug/l	UJ	0.19	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Carbon tetrachloride		ug/l	UJ	0.18	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Chlorobenzene		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Chloroethane		ug/l	U	0.48	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Chloroform		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Chloromethane		ug/l	U	0.34	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	cis-1,2-Dichloroethene		ug/l	U	0.22	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	cis-1,3-Dichloropropene		ug/l	U	0.20	1.0

100 BROADWAY, BETHPAGE, NY
DATA SUMMARY TABLE
AQUEOUS
SDG: JA44897

Sample Name	Lab ID	Analytical Method	Sample Date	Dilution Factor	Analyte	Result	Unit	Qualifier	MDL	RL
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Dibromochloromethane		ug/l	U	0.26	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Ethylbenzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Methylene chloride		ug/l	UJ	0.30	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Styrene		ug/l	U	0.56	2.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Tetrachloroethene	0.81	ug/l	J	0.18	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Toluene		ug/l	U	0.19	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	trans-1,2-Dichloroethene		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	trans-1,3-Dichloropropene		ug/l	U	0.31	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Trichloroethene	53.2	ug/l		0.14	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Vinyl chloride		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	EPA624	04/22/10	1	Xylenes (total)		ug/l	U	0.27	1.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	SM202540D	04/22/10	1	Solids, Total Suspended		mg/l	U	4.0	4.0
NWIRP-GM-38-GW-RW3-MW1-0422201	JA44897-4	SW8467470A	04/22/10	1	Mercury		ug/l	UJ	0.20	0.20
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	1,1,1-Trichloroethane	0.58	ug/l	J	0.21	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	1,1,2,2-Tetrachloroethane		ug/l	U	0.13	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	1,1,2-Trichloroethane		ug/l	U	0.46	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	1,1-Dichloroethane	0.54	ug/l	J	0.26	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	1,1-Dichloroethene	1.2	ug/l		0.38	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	1,2-Dichloroethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	1,2-Dichloroethene (total)	2.8	ug/l		0.20	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	1,2-Dichloropropane		ug/l	U	0.40	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	2-Butanone (MEK)		ug/l	U	1.4	5.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	2-Hexanone		ug/l	U	1.1	5.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	4-Methyl-2-pentanone(MIBK)		ug/l	U	0.94	5.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Acetone		ug/l	U	2.2	5.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Benzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Bromodichloromethane		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Bromoform		ug/l	UJ	0.26	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Bromomethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Carbon disulfide		ug/l	UJ	0.19	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Carbon tetrachloride		ug/l	UJ	0.18	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Chlorobenzene		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Chloroethane		ug/l	U	0.48	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Chloroform		ug/l	U	0.18	1.0

H&S

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE-GM-38 AREA
100 BROADWAY, BETHPAGE, NY
DATA SUMMARY TABLE
AQUEOUS
SDG: JA44897

Sample Name	Lab ID	Analytical Method	Sample Date	Dilution Factor	Analyte	Result	Unit	Qualifier	MDL	RL
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Chloromethane		ug/l	U	0.34	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	cis-1,2-Dichloroethene	2.4	ug/l		0.22	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	cis-1,3-Dichloropropene		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Dibromochloromethane		ug/l	U	0.26	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Ethylbenzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Methylene chloride		ug/l	UJ	0.30	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Styrene		ug/l	U	0.56	2.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Tetrachloroethene		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Toluene		ug/l	U	0.19	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	trans-1,2-Dichloroethene	0.43	ug/l	J	0.20	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	trans-1,3-Dichloropropene		ug/l	U	0.31	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	10	Trichloroethene	211	ug/l		1.4	10
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Vinyl chloride		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	EPA624	04/22/10	1	Xylenes (total)		ug/l	U	0.27	1.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	SM202540D	04/22/10	1	Solids, Total Suspended	5.0	mg/l		4.0	4.0
NWIRP-GM-38-GW-RW3-MW2-0422201	JA44897-5	SW8467470A	04/22/10	1	Mercury		ug/l	UJ	0.20	0.20
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	1,1,1-Trichloroethane	0.95	ug/l	J	0.21	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	1,1,2,2-Tetrachloroethane		ug/l	U	0.13	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	1,1,2-Trichloroethane		ug/l	U	0.46	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	1,1-Dichloroethane	1.6	ug/l		0.26	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	1,1-Dichloroethene	1.1	ug/l		0.38	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	1,2-Dichloroethane	0.52	ug/l	J	0.43	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	1,2-Dichloroethene (total)	2.1	ug/l		0.20	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	1,2-Dichloropropane		ug/l	U	0.40	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	2-Butanone (MEK)		ug/l	U	1.4	5.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	2-Hexanone		ug/l	U	1.1	5.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	4-Methyl-2-pentanone(MIBK)		ug/l	U	0.94	5.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Acetone		ug/l	U	2.2	5.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Benzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Bromodichloromethane		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Bromoform		ug/l	UJ	0.26	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Bromomethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Carbon disulfide		ug/l	UJ	0.19	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Carbon tetrachloride		ug/l	UJ	0.18	1.0

BETHPAGE-GM-38 AREA
100 BROADWAY, BETHPAGE, NY
DATA SUMMARY TABLE
AQUEOUS
SDG: JA44897

Sample Name	Lab ID	Analytical Method	Sample Date	Dilution Factor	Analyte	Result	Unit	Qualifier	MDL	RL
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Chlorobenzene		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Chloroethane		ug/l	U	0.48	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Chloroform		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Chloromethane		ug/l	U	0.34	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	cis-1,2-Dichloroethene	2.1	ug/l		0.22	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	cis-1,3-Dichloropropene		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Dibromochloromethane		ug/l	U	0.26	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Ethylbenzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Methylene chloride		ug/l	UJ	0.30	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Styrene		ug/l	U	0.56	2.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Tetrachloroethene	0.45	ug/l	J	0.18	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Toluene		ug/l	U	0.19	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	trans-1,2-Dichloroethene		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	trans-1,3-Dichloropropene		ug/l	U	0.31	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	10	Trichloroethene	397	ug/l		1.4	10
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Vinyl chloride		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	EPA624	04/22/10	1	Xylenes (total)		ug/l	U	0.27	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	SM202540D	04/22/10	1	Solids, Total Suspended	4.0	mg/l		4.0	4.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-6	SW8467470A	04/22/10	1	Mercury		ug/l	UJ	0.20	0.20
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	1,1,1-Trichloroethane	1.0	ug/l		0.21	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	1,1,2,2-Tetrachloroethane		ug/l	U	0.13	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	1,1,2-Trichloroethane		ug/l	U	0.46	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	1,1-Dichloroethane	1.6	ug/l		0.26	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	1,1-Dichloroethene	1.3	ug/l		0.38	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	1,2-Dichloroethane	0.54	ug/l	J	0.43	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	1,2-Dichloroethene (total)	2.1	ug/l		0.20	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	1,2-Dichloropropane		ug/l	U	0.40	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	2-Butanone (MEK)		ug/l	U	1.4	5.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	2-Hexanone		ug/l	U	1.1	5.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	4-Methyl-2-pentanone(MIBK)		ug/l	U	0.94	5.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Acetone		ug/l	U	2.2	5.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Benzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Bromodichloromethane		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Bromoform		ug/l	UJ	0.26	1.0

H&S

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE-GM-38 AREA
100 BROADWAY, BETHPAGE, NY
DATA SUMMARY TABLE
AQUEOUS
SDG: JA44897

Sample Name	Lab ID	Analytical Method	Sample Date	Dilution Factor	Analyte	Result	Unit	Qualifier	MDL	RL
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Bromomethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Carbon disulfide		ug/l	UJ	0.19	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Carbon tetrachloride		ug/l	UJ	0.18	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Chlorobenzene		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Chloroethane		ug/l	U	0.48	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Chloroform	0.40	ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Chloromethane		ug/l	U	0.34	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	cis-1,2-Dichloroethene	2.1	ug/l		0.22	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	cis-1,3-Dichloropropene		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Dibromochloromethane		ug/l	U	0.26	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Ethylbenzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Methylene chloride		ug/l	UJ	0.30	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Styrene		ug/l	U	0.56	2.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Tetrachloroethene	0.49	ug/l	J	0.18	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Toluene		ug/l	U	0.19	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	trans-1,2-Dichloroethene		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	trans-1,3-Dichloropropene		ug/l	U	0.31	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	10	Trichloroethene	382	ug/l		1.4	10
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Vinyl chloride		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	EPA624	04/22/10	1	Xylenes (total)		ug/l	U	0.27	1.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	SM202540D	04/22/10	1	Solids, Total Suspended	5.0	mg/l		4.0	4.0
NWIRP-GM-38-GW-RW3-MW3-0422201	JA44897-7	SW8467470A	04/22/10	1	Mercury		ug/l	UJ	0.20	0.20
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	1,1,1-Trichloroethane		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	1,1,2,2-Tetrachloroethane		ug/l	U	0.13	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	1,1,2-Trichloroethane		ug/l	U	0.46	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	1,1-Dichloroethane	0.60	ug/l	J	0.26	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	1,1-Dichloroethene		ug/l	U	0.38	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	1,2-Dichloroethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	1,2-Dichloroethene (total)		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	1,2-Dichloropropane		ug/l	U	0.40	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	2-Butanone (MEK)		ug/l	U	1.4	5.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	2-Hexanone		ug/l	U	1.1	5.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	4-Methyl-2-pentanone(MIBK)		ug/l	U	0.94	5.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Acetone		ug/l	U	2.2	5.0

BETHPAGE-GM-38 AREA

100 BROADWAY, BETHPAGE, NY

DATA SUMMARY TABLE

AQUEOUS

SDG: JA44897

Sample Name	Lab ID	Analytical Method	Sample Date	Dilution Factor	Analyte	Result	Unit	Qualifier	MDL	RL
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Benzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Bromodichloromethane		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Bromoform		ug/l	UJ	0.26	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Bromomethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Carbon disulfide		ug/l	UJ	0.19	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Carbon tetrachloride		ug/l	UJ	0.18	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Chlorobenzene		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Chloroethane		ug/l	U	0.48	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Chloroform		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Chloromethane		ug/l	U	0.34	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	cis-1,2-Dichloroethene		ug/l	U	0.22	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	cis-1,3-Dichloropropene		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Dibromochloromethane		ug/l	U	0.26	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Ethylbenzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Methylene chloride		ug/l	UJ	0.30	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Styrene		ug/l	U	0.56	2.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Tetrachloroethene		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Toluene		ug/l	U	0.19	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	trans-1,2-Dichloroethene		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	trans-1,3-Dichloropropene		ug/l	U	0.31	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Trichloroethene	11.3	ug/l		0.14	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Vinyl chloride		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	EPA624	04/22/10	1	Xylenes (total)		ug/l	U	0.27	1.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	SM202540D	04/22/10	1	Solids, Total Suspended	16.0	mg/l		4.0	4.0
NWIRP-GM-38-GW-RW3-MW4-0422201	JA44897-8	SW8467470A	04/22/10	1	Mercury		ug/l	UJ	0.20	0.20
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	1,1,1-Trichloroethane		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	1,1,2,2-Tetrachloroethane		ug/l	U	0.13	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	1,1,2-Trichloroethane		ug/l	U	0.46	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	1,1-Dichloroethane		ug/l	U	0.26	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	1,1-Dichloroethene		ug/l	U	0.38	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	1,2-Dichloroethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	1,2-Dichloroethene (total)		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	1,2-Dichloropropane		ug/l	U	0.40	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	2-Butanone (MEK)		ug/l	U	1.4	5.0

H&S

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE-GM-38 AREA
100 BROADWAY, BETHPAGE, NY
DATA SUMMARY TABLE
AQUEOUS
SDG: JA44897

Sample Name	Lab ID	Analytical Method	Sample Date	Dilution Factor	Analyte	Result	Unit	Qualifier	MDL	RL
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	2-Hexanone		ug/l	U	1.1	5.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	4-Methyl-2-pentanone(MIBK)		ug/l	U	0.94	5.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Acetone		ug/l	U	2.2	5.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Benzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Bromodichloromethane		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Bromoform		ug/l	UJ	0.26	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Bromomethane		ug/l	U	0.43	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Carbon disulfide		ug/l	UJ	0.19	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Carbon tetrachloride		ug/l	UJ	0.18	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Chlorobenzene		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Chloroethane		ug/l	U	0.48	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Chloroform	0.66	ug/l	J	0.18	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Chloromethane		ug/l	U	0.34	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	cis-1,2-Dichloroethene		ug/l	U	0.22	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	cis-1,3-Dichloropropene		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Dibromochloromethane		ug/l	U	0.26	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Ethylbenzene		ug/l	U	0.15	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Methylene chloride		ug/l	UJ	0.30	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Styrene		ug/l	U	0.56	2.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Tetrachloroethene		ug/l	U	0.18	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Toluene		ug/l	U	0.19	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	trans-1,2-Dichloroethene		ug/l	U	0.20	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	trans-1,3-Dichloropropene		ug/l	U	0.31	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Trichloroethene		ug/l	U	0.14	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Vinyl chloride		ug/l	U	0.21	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	EPA624	04/22/10	1	Xylenes (total)		ug/l	U	0.27	1.0
NWIRP-GM-38-GW-FB-04222010	JA44897-9	SW8467470A	04/22/10	1	Mercury		ug/l	UJ	0.20	0.20

APPENDIX E
GW Laboratory Analytical Data Package

Sample Summary

Ecor Solutions

Job No: JA44897

GM-38, 100 Broadway, Bethpage, NY
Project No: EF032.300 NWIRP Bethpage-GM-38 LTM

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JA44897-1	04/21/10	14:15 JG	04/23/10	AQ	Ground Water	NWIRP-GM-38-GW-RW1-MW1-04212010
JA44897-2	04/21/10	12:42 JG	04/23/10	AQ	Ground Water	NWIRP-GM-38-GW-RW1-MW3-04212010
JA44897-3	04/21/10	11:05 JG	04/23/10	AQ	Ground Water	NWIRP-GM-38-GW-RW2-MW1-04212010
JA44897-4	04/22/10	11:40 JG	04/23/10	AQ	Ground Water	NWIRP-GM-38-GW-RW3-MW1-04222010
JA44897-5	04/22/10	12:48 JG	04/23/10	AQ	Ground Water	NWIRP-GM-38-GW-RW3-MW2-04222010
JA44897-6	04/22/10	08:45 JG	04/23/10	AQ	Ground Water	NWIRP-GM-38-GW-RW3-MW3-04222010
JA44897-6D	04/22/10	08:45 JG	04/23/10	AQ	Water Dup/MSD	NWIRP-GM-38-GW-RW3-MW3-04222010
JA44897-6S	04/22/10	08:45 JG	04/23/10	AQ	Water Matrix Spike	NWIRP-GM-38-GW-RW3-MW3-04222010
JA44897-7	04/22/10	08:45 JG	04/23/10	AQ	Ground Water	NWIRP-GM-38-GW-RW3-MW3-04222010DUP
JA44897-8	04/22/10	10:25 JG	04/23/10	AQ	Ground Water	NWIRP-GM-38-GW-RW3-MW4-04222010
JA44897-9	04/22/10	12:00 JG	04/23/10	AQ	Field Blank Water	NWIRP-GM-38-GW-FB-04222010
JA44897-10	04/22/10	12:48 JG	04/23/10	AQ	Trip Blank Water	NWIRP-GM-38-GW-TB-04222010

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-RW1-MW1-04212010		
Lab Sample ID:	JA44897-1	**Date Sampled:**	04/21/10
Matrix:	AQ - Ground Water	**Date Received:**	04/23/10
Method:	EPA 624	**Percent Solids:**	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E51267.D	1	04/27/10	JRL	n/a	n/a	V2E2292
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.2	ug/l	
71-43-2	Benzene	ND	1.0	0.15	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	1.0	0.26	ug/l	
74-83-9	Bromomethane	ND	1.0	0.43	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.4	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.18	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.21	ug/l	
75-00-3	Chloroethane	ND	1.0	0.48	ug/l	
67-66-3	Chloroform	0.70	1.0	0.18	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.34	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	2.8	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.43	ug/l	
75-35-4	1,1-Dichloroethene	1.9	1.0	0.38	ug/l	
156-59-2	cis-1,2-Dichloroethene	121	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	2.9	1.0	0.20	ug/l	
540-59-0	1,2-Dichloroethene (total)	124	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.40	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.31	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.15	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.94	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.30	ug/l	
100-42-5	Styrene	ND	2.0	0.56	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.13	ug/l	
127-18-4	Tetrachloroethene	0.42	1.0	0.18	ug/l	J
108-88-3	Toluene	ND	1.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	0.52	1.0	0.21	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.46	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-RW1-MW1-04212010		
Lab Sample ID:	JA44897-1	**Date Sampled:**	04/21/10
Matrix:	AQ - Ground Water	**Date Received:**	04/23/10
Method:	EPA 624	**Percent Solids:**	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	116	1.0	0.14	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	112%		64-135%
2037-26-5	Toluene-D8 (SUR)	91%		76-117%
460-00-4	4-Bromofluorobenzene (SUR)	90%		72-122%
1868-53-7	Dibromofluoromethane (S)	104%		76-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-RW1-MW1-04212010		
Lab Sample ID:	JA44897-1	**Date Sampled:**	04/21/10
Matrix:	AQ - Ground Water	**Date Received:**	04/23/10
		Percent Solids:	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Mercury	< 0.20	0.20	ug/l	1	05/03/10	05/04/10	JF	SW846 7470A [1]	SW846 7470A [2]

(1) Instrument QC Batch: MA24225
(2) Prep QC Batch: MP52521

RL = Reporting Limit

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-RW1-MW1-04212010		
Lab Sample ID:	JA44897-1	**Date Sampled:**	04/21/10
Matrix:	AQ - Ground Water	**Date Received:**	04/23/10
		Percent Solids:	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Total Suspended	6.0	4.0	mg/l	1	04/27/10	DD	SM20 2540D

RL = Reporting Limit

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-RW1-MW3-04212010		
Lab Sample ID:	JA44897-2	**Date Sampled:**	04/21/10
Matrix:	AQ - Ground Water	**Date Received:**	04/23/10
Method:	EPA 624	**Percent Solids:**	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E51268.D	1	04/27/10	JRL	n/a	n/a	V2E2292
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.2	ug/l	
71-43-2	Benzene	ND	1.0	0.15	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	1.0	0.26	ug/l	
74-83-9	Bromomethane	ND	1.0	0.43	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.4	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.18	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.21	ug/l	
75-00-3	Chloroethane	ND	1.0	0.48	ug/l	
67-66-3	Chloroform	0.80	1.0	0.18	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.34	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	4.6	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.43	ug/l	
75-35-4	1,1-Dichloroethene	1.1	1.0	0.38	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.48	1.0	0.22	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.20	ug/l	
540-59-0	1,2-Dichloroethene (total)	0.48	1.0	0.20	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.40	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.31	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.15	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.94	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.30	ug/l	
100-42-5	Styrene	ND	2.0	0.56	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.13	ug/l	
127-18-4	Tetrachloroethene	0.49	1.0	0.18	ug/l	J
108-88-3	Toluene	ND	1.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	0.98	1.0	0.21	ug/l	J
79-00-5	1,1,2-Trichloroethane	0.60	1.0	0.46	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-RW1-MW3-04212010		
Lab Sample ID:	JA44897-2	**Date Sampled:**	04/21/10
Matrix:	AQ - Ground Water	**Date Received:**	04/23/10
Method:	EPA 624	**Percent Solids:**	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	1.6	1.0	0.14	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	117%		64-135%
2037-26-5	Toluene-D8 (SUR)	90%		76-117%
460-00-4	4-Bromofluorobenzene (SUR)	91%		72-122%
1868-53-7	Dibromofluoromethane (S)	108%		76-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-RW1-MW3-04212010		
Lab Sample ID:	JA44897-2	**Date Sampled:**	04/21/10
Matrix:	AQ - Ground Water	**Date Received:**	04/23/10
		Percent Solids:	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Mercury	< 0.20	0.20	ug/l	1	05/03/10	05/04/10	JF	SW846 7470A [1]	SW846 7470A [2]

(1) Instrument QC Batch: MA24225
(2) Prep QC Batch: MP52521

RL = Reporting Limit

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-RW1-MW3-04212010		
Lab Sample ID:	JA44897-2	**Date Sampled:**	04/21/10
Matrix:	AQ - Ground Water	**Date Received:**	04/23/10
		Percent Solids:	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Total Suspended	8.0	4.0	mg/l	1	04/27/10	DD	SM20 2540D

RL = Reporting Limit

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-RW3-MW3-04222010DUP		
Lab Sample ID:	JA44897-7	**Date Sampled:**	04/22/10
Matrix:	AQ - Ground Water	**Date Received:**	04/23/10
Method:	EPA 624	**Percent Solids:**	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	382 [a]	10	1.4	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	120%	120%	64-135%
2037-26-5	Toluene-D8 (SUR)	93%	92%	76-117%
460-00-4	4-Bromofluorobenzene (SUR)	91%	93%	72-122%
1868-53-7	Dibromofluoromethane (S)	110%	110%	76-120%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-RW3-MW3-04222010DUP		
Lab Sample ID:	JA44897-7	**Date Sampled:**	04/22/10
Matrix:	AQ - Ground Water	**Date Received:**	04/23/10
		Percent Solids:	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Mercury	< 0.20	0.20	ug/l	1	05/03/10	05/04/10	JF	SW846 7470A [1]	SW846 7470A [2]

(1) Instrument QC Batch: MA24225
(2) Prep QC Batch: MP52521

RL = Reporting Limit

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-RW3-MW3-04222010DUP		
Lab Sample ID:	JA44897-7	**Date Sampled:**	04/22/10
Matrix:	AQ - Ground Water	**Date Received:**	04/23/10
		Percent Solids:	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Total Suspended	5.0	4.0	mg/l	1	04/27/10	DD	SM20 2540D

RL = Reporting Limit

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-RW3-MW4-04222010		
Lab Sample ID:	JA44897-8	**Date Sampled:**	04/22/10
Matrix:	AQ - Ground Water	**Date Received:**	04/23/10
Method:	EPA 624	**Percent Solids:**	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E51273.D	1	04/27/10	JRL	n/a	n/a	V2E2292
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.2	ug/l	
71-43-2	Benzene	ND	1.0	0.15	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	1.0	0.26	ug/l	
74-83-9	Bromomethane	ND	1.0	0.43	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.4	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.18	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.21	ug/l	
75-00-3	Chloroethane	ND	1.0	0.48	ug/l	
67-66-3	Chloroform	ND	1.0	0.18	ug/l	
74-87-3	Chloromethane	ND	1.0	0.34	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	0.60	1.0	0.26	ug/l	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.43	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.38	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.20	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.40	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.31	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.15	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.94	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.30	ug/l	
100-42-5	Styrene	ND	2.0	0.56	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.13	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.18	ug/l	
108-88-3	Toluene	ND	1.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.21	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.46	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-RW3-MW4-04222010		
Lab Sample ID:	JA44897-8	**Date Sampled:**	04/22/10
Matrix:	AQ - Ground Water	**Date Received:**	04/23/10
Method:	EPA 624	**Percent Solids:**	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	11.3	1.0	0.14	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	120%		64-135%
2037-26-5	Toluene-D8 (SUR)	90%		76-117%
460-00-4	4-Bromofluorobenzene (SUR)	90%		72-122%
1868-53-7	Dibromofluoromethane (S)	112%		76-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-RW3-MW4-04222010		
Lab Sample ID:	JA44897-8	**Date Sampled:**	04/22/10
Matrix:	AQ - Ground Water	**Date Received:**	04/23/10
		Percent Solids:	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Mercury	< 0.20	0.20	ug/l	1	05/03/10	05/04/10	JF	SW846 7470A [1]	SW846 7470A [2]

(1) Instrument QC Batch: MA24225
(2) Prep QC Batch: MP52521

RL = Reporting Limit

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-RW3-MW4-04222010		
Lab Sample ID:	JA44897-8	**Date Sampled:**	04/22/10
Matrix:	AQ - Ground Water	**Date Received:**	04/23/10
		Percent Solids:	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Total Suspended	16.0	4.0	mg/l	1	04/27/10	DD	SM20 2540D

RL = Reporting Limit

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-FB-04222010		
Lab Sample ID:	JA44897-9	**Date Sampled:**	04/22/10
Matrix:	AQ - Field Blank Water	**Date Received:**	04/23/10
Method:	EPA 624	**Percent Solids:**	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E51274.D	1	04/27/10	JRL	n/a	n/a	V2E2292
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.2	ug/l	
71-43-2	Benzene	ND	1.0	0.15	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	1.0	0.26	ug/l	
74-83-9	Bromomethane	ND	1.0	0.43	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.4	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.18	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.21	ug/l	
75-00-3	Chloroethane	ND	1.0	0.48	ug/l	
67-66-3	Chloroform	0.66	1.0	0.18	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.34	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.43	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.38	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.20	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.40	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.31	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.15	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.94	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.30	ug/l	
100-42-5	Styrene	ND	2.0	0.56	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.13	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.18	ug/l	
108-88-3	Toluene	ND	1.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.21	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.46	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-FB-04222010		
Lab Sample ID:	JA44897-9	**Date Sampled:**	04/22/10
Matrix:	AQ - Field Blank Water	**Date Received:**	04/23/10
Method:	EPA 624	**Percent Solids:**	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.14	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	121%		64-135%
2037-26-5	Toluene-D8 (SUR)	92%		76-117%
460-00-4	4-Bromofluorobenzene (SUR)	90%		72-122%
1868-53-7	Dibromofluoromethane (S)	113%		76-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-FB-04222010		
Lab Sample ID:	JA44897-9	**Date Sampled:**	04/22/10
Matrix:	AQ - Field Blank Water	**Date Received:**	04/23/10
		Percent Solids:	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Mercury	< 0.20	0.20	ug/l	1	05/03/10	05/04/10	JF	SW846 7470A [1]	SW846 7470A [2]

(1) Instrument QC Batch: MA24225
(2) Prep QC Batch: MP52521

RL = Reporting Limit

Report of Analysis

Client Sample ID:	NWIRP-GM-38-GW-TB-04222010		
Lab Sample ID:	JA44897-10	**Date Sampled:**	04/22/10
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/23/10
Method:	EPA 624	**Percent Solids:**	n/a
Project:	GM-38, 100 Broadway, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E51275.D	1	04/27/10	JRL	n/a	n/a	V2E2292
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.2	ug/l	
71-43-2	Benzene	ND	1.0	0.15	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	1.0	0.26	ug/l	
74-83-9	Bromomethane	ND	1.0	0.43	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.4	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.18	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.21	ug/l	
75-00-3	Chloroethane	ND	1.0	0.48	ug/l	
67-66-3	Chloroform	ND	1.0	0.18	ug/l	
74-87-3	Chloromethane	ND	1.0	0.34	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.43	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.38	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.20	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.40	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.31	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.15	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.94	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.30	ug/l	
100-42-5	Styrene	ND	2.0	0.56	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.13	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.18	ug/l	
108-88-3	Toluene	ND	1.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.21	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.46	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

CHAIN OF CUSTODY

PAGE 1 OF 1

ACCUTEST Laboratories

2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

Accutest Quote #: [illegible] | Accutest Job #: JA44897

Client / Reporting Information

Company Name: ECOR Solutions, Inc.
Street Address: 1075 Andrew Dr., Suite F
City: West Chester, State: PA, Zip: 19380
Project Contact: J. Good, E-mail: jgood@ecor-solutions.com
Phone #: 610-431-8731, Fax #:
Sampler(s) Name(s): J. Good, G. Gangemi, Phone #: 610-431-8731

Project Information

Project Name: NWIRP Bethpage - GM-38 LTM
Street: 100 Broadway St
City: Bethpage, State: NY
Project #: EF032.350
Client Purchase Order #:
Project Manager: W. Torres
Attention:

Billing Information (if different from Report to)

Company Name:
Street Address:
City, State, Zip:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED - Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB - Equipment Blank; RB - Rinse Blank; TB - Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	ASCOR	ENCORE	TCL VOCs (624)	Mercury	TSS	LAB USE ONLY
-1	NWIRP-GM-38-GW-RW1-MW3	04212010	4/21/10	1445	JG	GW	5	X		X		X				3	1	1	
-2	NWIRP-GM-38-GW-RW1-MW3	04212010		1112															2084
-3	NWIRP-GM-38-GW-RW2-MW1	04212010		1105															AMEIB
-4	NWIRP-GM-38-GW-RW3-MW1	04222010	4/22/10	1140															WC12
-5	NWIRP-GM-38-GW-RW3-MW2	04222010		1248															2096
-6	NWIRP-GM-38-GW-RW3-MW3	04222010		0845			13									9	3		
-7	NWIRP-GM-38-GW-RW3-MW3	04222010	DUP	0845			5									3	1		
-8	NWIRP-GM-38-GW-RW3-MW4	04222010		1015			4									1	1		
-9	NWIRP-GM-38-GW-FB	04222010		1200			4									1	1		
-10	NWIRP-GM-38-GW-TB	04222010					2									2			

Turnaround Time (Business days)

- [X] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY

Emergency & Rush T/A data available VIA Labtrk

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULL T1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

* MS/MSD for VOCs + Mercury

*Received 4/23/10 8:00 4-23-10 TH

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler	Date Time	Received By	Relinquished By	Date Time	Received By
1		4/22/10 1900	1 E.K	2 E.K	4/23/10 0930	2
3	Relinquished by Sampler	Date Time:	3	4	Date Time:	4
5	Relinquished by:	Date Time:	5	Custody Seal # 603/604	Intact / Not Intact	Preserved where applicable / On Ice / Cooler Temp. 5.5/5.3K

ACCUTEST

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA44897 Client: Immediate Client Services Action Required: No

Date / Time Received: 4/23/2010 Delivery Method: Client Service Action Required at Login: No

Project: No. Coolers: 2 Airbill #'s:

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

Quality Control Preservatio	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JA44897: Chain of Custody
Page 2 of 2