Environmental Restoration Program Final Technical Memorandum Supplemental Remedial Investigation/Pilot Test

174th Fighter Wing New York Air National Guard Hancock Air National Guard Base Syracuse, New York

March 2010



NGB/A7OR Andrews AFB, Maryland

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LIST OF ACRONYMS

<u>Acronym</u> <u>Definition</u>

μg/L Micrograms per liter (parts per billion)

AFB Air Force Base
ANG Air National Guard
AOC Area of Concern

BEX Benzene, Ethylbenzene and Xylenes

BGC Brooklawn Golf Course bgs Below ground surface

BTEX Benzene, Toluene, Ethylbenzene, and Xylenes

CaO₂ Calcium Peroxide

DPI Direct-Push Investigation

ERM Environmental Resources Management

FFS Focused Feasibility Study

ft Feet

FW Fighter Wing
GE General Electric

Hancock ANGB Hancock Air National Guard Base
IDW Investigation Derived Waste
IRA Interim Remedial Action
LSL Life Science Laboratories

MW Monitoring Well

ND Non-detect

NTU Nephelometric Turbidity Unit

NYSDEC New York State Department of Environmental Conservation

NYSDOH New York State Department of Health

PCB Poly-chlorinated Bi-phenol PID Photoionization Detector

ppm Parts per million

PT Pilot Test

QA/QC Quality Assurance/Quality Control RamTech Raman and Borick Technical Consultants

RI Remedial Investigation

SCG Standards, Criteria, and Guidance

TM Technical Memorandum

USEPA United States Environmental Protection Agency

VOC Volatile Organic Compound

EXECUTIVE SUMMARY

Environmental Resources Management (ERM) is assisting the Air National Guard (ANG) with an Interim Remedial Action (IRA) at Site 15 of the 174th Fighter Wing (FW), Hancock ANG Base (Hancock ANGB) in DeWitt, New York. The ANG requested ERM to prepare a technical and cost proposal associated with their 3 April 2008 letter and Statement of Work entitled "Statement of Work - Environmental Restoration Program Services for Supplemental Remedial Investigation (RI) and Focused Feasibility Study (FFS) at 174th FW; Hancock ANGB; Syracuse, New York; Project Number: HAAW20077054." The ANG accepted ERM's technical cost proposal on 11 June 2008.

During the investigation associated with ERM's June 2008 Technical Memorandum (TM) for Site 15, ERM recommended an additional investigation and remediation of Site 15, including the off-site portion of the plume.

ERM prepared and submitted the Site 15 Supplemental RI/Pilot Test (PT) Work Plan in October 2008. This Work Plan addressed a Supplemental RI and an enhanced natural attenuation PT that was to be conducted at the 174th FW. All data collected during execution of the Work Plan is presented in this TM.

ERM conducted the work outlined in the Work Plan in four phases. The first phase of work included a direct-push investigation on Niagara Mohawk Power Company dba National Grid property adjacent to the southern and eastern property lines of General Electric (GE) to determine if benzene, ethylbenzene, and xylenes (BEX)-affected soil and/or groundwater were located in these areas. The second phase of work included a baseline groundwater sampling effort in selected wells followed by the PT injection of calcium peroxide (CaO₂) in 20 locations. The third phase of work was along the western edge of the GE property on the unpaved portion of Fairway Drive and along the southeast portions of Brooklawn Golf Course (BGC) and included a direct-push investigation to determine if BEX-affected soil and/or groundwater were located in This third phase also included the installation of two additional permanent monitoring wells, one south of the GE property line and one east of the GE property line with a follow-up of an additional round of sampling of the previously referenced (second phase) selected wells plus the two new wells. The fourth phase consisted of a soil vapor

evaluation adjacent to the Raman and Borick Technical Consultants (RamTech) Facility and along the northern property line of GE and a groundwater sampling event that incorporated all existing wells.

Based on this additional investigation described in this TM, the extent of benzene, toluene, ethylbenzene, and xylenes (BTEX)/BEX-affected groundwater has been delineated on the Hancock ANGB property, BGC property, and the RamTech property with the plume dissipating within the boundaries of the GE Property. The PT indicated that the injection of CaO₂ enhanced the natural attenuation process. Evaluation of soil vapor concentrations in the vicinity of the RamTech building indicates that indoor air sampling should be performed.

ERM recommends the following actions based on the results of the Supplemental RI to facilitate remediation of Site 15, including the off-site portion of the plume:

- A formal Addendum to the February 2002 FFS Report should be prepared incorporating the significant amount of additional data obtained during the recent investigations and the proposed IRA. A Draft FFS was presented to ANG in September 2008 and the Draft Final revision is being developed in conjunction with this TM.
- The preparation of a Proposed Plan and Record of Decision using available Supplemental Remedial Investigation and Pilot Study data should be conducted upon ANG and New York State Department of Environmental Conservation (NYSDEC) approval of the upcoming Draft Final and Final Focused Feasibility Study Reports.
- Based on currently available information, ERM recommends conducting an indoor air evaluation at the RamTech Engineering Building.
- Continue monitoring natural attenuation at the monitoring wells on Site 15 and down gradient through appropriate sampling, laboratory analyses, and associated reporting prior to implementation of the final approved remedial alternative.

SECTION 1.0

INTRODUCTION

ERM is assisting the Air National Guard ANG with an IRA at Site 15 of the 174th FW, Hancock ANGB in DeWitt, New York. The ANG requested ERM to prepare a technical and cost proposal associated with their 3 April 2008 letter and Statement of Work entitled "Statement of Work - Environmental Restoration Program Services for Supplemental RI/FFS at 174th FW; Hancock ANGB; Syracuse, New York; Project Number: HAAW20077054". The ANG accepted ERM's technical cost proposal on 11 June 2008.

During the investigation associated with ERM's June 2008 TM for Site 15 (See Figure 1 for a Site Location Map and Figure 2 for a Site Layout Map), ERM recommended the following actions based on the results of the Supplemental RI to facilitate additional investigation and remediation of Site 15, including the off-site portion of the plume.

- A soil IRA consisting of the excavation and off-site disposal of approximately 3,000-tons of petroleum-affected soil from the unsaturated zone in the on-site source area near the former pump house should be performed. The removal of remaining residual petroleum in soil above the groundwater table will prevent or minimize additional contamination of Site 15 groundwater and therefore will improve the effectiveness of the contemplated groundwater remediation. This recommended soil IRA was performed in August 2008 and has been detailed in a Construction Completion Report dated January 2009.
- A groundwater IRA/PT consisting of enhanced in situ bioremediation
 was recommended at selected locations to prevent or minimize
 additional migration of the BTEX plume on down-gradient properties.
 Based on available information, it was anticipated that the
 groundwater IRA/PT would be performed at the following locations:
 - 1. The current leading edge of the plume off-site on the BGC and the RamTech properties immediately adjacent to Fairway Drive;
 - 2. The Base property boundary; and

- 3. A soil hotspot located in the source area of Site 15 (near the former pump house).
- Delineation of the full extent of the BTEX plume on properties south and southeast of the RamTech Facility was also recommended. Collection of additional data in these area(s) will allow for preparation of a more complete FFS Report and Record of Decision.

ERM prepared and submitted the Site 15 Supplemental RI/PT Work Plan in October 2008. This Work Plan addressed a Supplemental RI and an enhanced natural attenuation PT that was conducted at the 174th FW. All data collected during execution of the Work Plan is presented in this TM.

1.1 Project Objectives and Scope

The objective of the Supplemental RI is to characterize the down-gradient leading edge of the BEX plume on properties south of the 174th FW.

The scope of work for the Supplemental RI was to:

- Install up to 40 soil borings using direct-push technology;
- Collect up to 30 groundwater samples for laboratory analysis of BEX;
- Install six to eight monitoring wells;
- Develop and survey the monitoring wells; and
- Collect groundwater samples from the newly installed wells for laboratory analysis of BEX and natural attenuation parameters.

The objectives of the enhanced natural attenuation PT were to:

- Evaluate the effectiveness of enhanced natural attenuation in treating BEX in groundwater; and
- Prevent further migration of the BEX plume onto down-gradient properties.

The scope of work for the enhanced natural attenuation PT was to:

- Install up to 20 injection points using a Geoprobe® rig;
- Inject CaO₂ into the groundwater; and

• Collect groundwater samples from all existing monitoring wells and submit the samples for laboratory analysis of BEX, alkalinity, ammonia, methane, nitrate, sulfate, total hardness, and ferrous iron.

All activities were conducted in accordance with the United States Environmental Protection Agency (USEPA) guidance documents, ANG requirements, and NYSDEC regulations.

1.2 General Investigation Approach

The proposed Supplemental RI approach as presented in the Work Plan included the following main components:

- Perform an off-site direct-push investigation (DPI) to evaluate the current extent of BTEX-affected groundwater and obtain additional hydrogeologic information potentially relevant to site remediation.
- Install permanent monitoring wells south and east of the RamTech Facility and GE, at locations to be determined subsequent to review of results from the direct-push investigation.
- Perform the CaO₂ PT as described.
- The new monitoring wells will be developed and all existing and new wells sampled to evaluate current groundwater conditions.

All work performed during the Supplemental RI was performed according to the NYSDEC-approved Site-Specific Health and Safety Plan. In addition, ERM performed a soil vapor evaluation adjacent to the RamTech Facility and their southern boundary (Northern boundary of GE) to evaluate the potential for soil vapor intrusion issues in off-site buildings.

1.3 Technical Memorandum Structure

This TM was written in general conformance with the guidelines presented in ANG's Environmental *Restoration Program Investigation Guidance* (ANG 2005). It provides a description of the planned activities and is organized as follows:

• Section 1.0 – Introduction;

- Section 2.0 Site Description;
- Section 3.0 Environmental Setting;
- Section 4.0 Field Program;
- Section 5.0 Investigation Findings;
- Section 6.0 Conclusions;
- Section 7.0 Recommendations;
- Section 8.0 References;
- Appendix A Daily Field Logs;
- Appendix B Soil Boring Logs and Field Data;
- Appendix C Laboratory Reports; and
- Appendix D- QA/QC Evaluation Results.

SITE DESCRIPTION

2.1 Installation Description

This section provides an overview of the project site as related to the Hancock ANGB Supplemental RI. The 174th FW of the New York ANG is based at Hancock Field, an active international airport and a former Air Force Base (AFB) located 2 miles north-northeast of the City of Syracuse in Onondaga County in central New York (Figure 1). The 174th FW supplies air reconnaissance for the eastern portion of the United States.

The ANG facility is currently operating within the southern portion of the former Hancock AFB located south of the municipal airport. Facilities on the base include hangers, support buildings, offices and maintenance buildings (Figure 2). The ANG Readiness Center at Andrews AFB in Maryland manages Installation Restoration Program-related efforts for ANG installations. Hancock ANGB is bordered by the airport to the north, the Town of Dewitt to the east and south, and the Town of Salina to the west.

2.2 Site 15 Description

Site 15 was formerly used as a pump house. It is approximately 2.5 acres in area, and originally consisted of brush and wooded vegetation, a large concrete pad, a bermed area where a 215,000-gallon aboveground tank was formerly located, and two drainage swales. One drainage swale borders the Site along the north-northeast side, and a second drainage swale borders the west side of the Site. The drainage swales contain water only intermittently following storm events. Water within the drainage swales does not appear to be hydraulically connected to underlying groundwater (Parsons 2004).

Site 15 has sustained spills of polychlorinated biphenyl, Jet Propulsion (JP)-4, and JP-8 fuels over the years. Several Site structures were removed in 2003 as part of a removal action for polychlorinated biphenyl -impacted soils. Structures removed include a transformer pad, the foundation of

the former pump house, and associated underground structures consisting of six underground tanks, three drainage sumps, and an oil-water separator (Parsons 2004).

2.3 Summary of Remedial Investigation Results

During RI activities conducted in 2006, elevated photoionization detector (PID) readings and visual evidence of residual petroleum (sheen) were noted in soil overlying the groundwater table within the former pump house area at Site 15. A total of 44 soil borings were installed during a supplemental RI in August 2007 to delineate the extent of the source area located above saturated soil at Site 15. PID results from soil screening in the unsaturated zone ranged from not-detected to 1,754 parts per million (ppm) in the soil borings at Site 15.

Ten soil samples were selected for laboratory analysis based on field observation at the sample location and also to cover the full spectrum of recorded volatile organic compound (VOC) concentrations measured in the field with a calibrated PID. One of the ten soil samples contained compounds of potential concern at concentrations exceeding recommended soil cleanup objectives for protection of groundwater as outlined in NYSDEC Part 375-6.8(b). Specific VOCs that exceeded recommended soil cleanup objectives include BEX.

ERM performed a supplemental investigation in August 2007 and January/February 2008 to delineate BEX-impacted soil in the former source area, and the leading edge of the dissolved BEX plume on off-site RamTech property. The off-site portion of the supplemental investigation involved the installation of soil borings and monitoring wells using direct -push technology.

Geologic cross sections of the subsurface soil on the 174th FW and down-gradient off-site areas suggest that a sand channel within the soil may be a preferential flow path for dissolved-phase VOCs.

The data indicated that BEX were detected at concentrations greater than the respective NYSDEC standards of 1.0 micrograms per liter (μ g/L), 5.0 μ g/L, and 5 μ g/L, respectively. In addition, the leading edge of the BEX plumes were not laterally defined in the down-gradient area located south of the off-site RamTech facility, and additional characterization was required to adequately characterize the plumes. Concentrations of methyl

tert-butyl ether and toluene were not detected above the respective NYSDEC standards in the sampled wells.

ENVIRONMENTAL SETTING

This section summarizes pertinent information relative to the environmental setting of the project site as related to the Supplemental RI.

3.1 Climate

Syracuse has a four-season continental climate with marked seasonal changes. Geographical location, cyclonic systems and cold air masses affect the Syracuse weather, making winters cold with significant amounts of snow. During the summer and parts of spring and autumn, temperatures customarily rise during the daytime to fall rapidly after unset, so the nights are relatively cool and comfortable. Temperatures (Fahrenheit) average 23 degrees in January; 46 degrees in April; 70 degrees in July; and 61 degrees in September.

3.2 Topography

The Hancock ANG Base is in Onondaga County in the northwest portion of the United States Geologic Survey Syracuse East quadrangle. The Hancock ANG Base is on generally flat terrain gently sloping to the southeast. Surface elevations generally range from 395 to 415 feet (ft) above mean sea level

3.3 Geology

The surficial geology at Site 15 consists of glaciofluvial sediments deposited by glacial meltwater underlying by poorly sorted till deposited directly by glaciers. The glaciofluvial sediments include silty clays, sands, and gravels, with thickness ranging from 45 to 55 ft. The underlying till consists of gravel, cobbles, and boulders entrained in a silty clay matrix and ranges in thickness from 30 to 100 ft (Lockheed 1997).

Bedrock is encountered at depths ranging from 75 to 109 ft below ground surface (bgs), and is one of the Upper Silurian Vernon Formation. This formation consists of thinly bedded soft red shale with thin beds of green shale, gypsum, halite, and dolomite. Competence varies from soft and crumbly to dense and hard. The degree of competence appears to be proportional to the density of the fractures in the shale. The shale is characterized by enlarged fractures, joints, and bedding planes (Lockheed 1997).

3.4 Hydrogeology

The overburden at Site 15 consists of fine-grained sediments. The subgrade soils are fairly uniform, with the upper 10 to 15 ft of the soil characterized by relatively soft, dark yellowish-brown silt and silty clay. Towards the southeast the interval thins to approximately 5 ft. Beneath the silty clay are fine- to medium-grained sands, yellowish brown to dark brown with silt, and trace amounts of clay down to a depth of approximately 20 ft. Underlying these silty sands is a lens of stiff clayey silts (often called glacial till). Till was encountered at as much as 15 ft thick (Lockheed 1997).

3.5 Critical Habitats and Endangered Species

There are no known occurrences of endangered plant or animal species within or near the Site.

SECTION 4.0

FIELD PROGRAM

4.1 Summary

ERM conducted the work outlined in the Work Plan in four phases as outlined below:

- 1) The first phase of work included a DPI on National Grid property adjacent to the southern and eastern property lines of GE to determine if BEX-affected soil and/or groundwater were located in these areas. ERM initiated the investigation south and east of the GE Property in February 2009.
- 2) The second phase of work included a baseline groundwater sampling effort in selected wells followed by the PT injection of CaO₂ in 20 locations. The PT (second) phase of the investigation was initiated in April 2009.
- 3) The third phase of work was along the western edge of the GE property on the unpaved portion of Fairway Drive and along the southeast portions of BGC and included a DPI to determine if BEX-affected soil and/or groundwater were located in these areas. This third phase also included the installation of two additional permanent monitoring wells, one south of the GE property line and one east of the GE property line with a follow-up of an additional round of sampling of the previously referenced (second phase) selected wells plus the two new wells. The third phase of the investigation west of GE Property and along the unpaved portion of Fairway Drive was initiated at the end of July 2009
- 4) The fourth phase consisted of a soil vapor evaluation adjacent to the RamTech Facility and along the northern property line of GE and a groundwater sampling event that incorporated all existing wells and the two newly-installed wells. The fourth phase was performed in October 2009. The investigative activities and sampling events are summarized in this section. Daily Field Logs associated with the above referenced activities are presented in Appendix A.

4.1.1 Access Agreement

The ANG worked with PCI Paper Conversions Inc., National Grid, the Estate of Anne R. Easter (the BGC), Midcourt Builders Corporation, and RamTech to attain access agreements to continue the investigation along the leading edge of the BEX-affected groundwater. Data from ERM's 2007 investigation on RamTech property suggested that BEX concentrations exceeding regulatory standards migrated down-gradient onto the GE property and potentially the National Grid and PCI properties. ERM proposed a DPI to delineate the leading edge of the plume, including borings and wells on GE, National Grid, and PCI Paper Conversions Inc. property. ANG arranged and received access agreements from PCI Paper Conversions Inc., National Grid, BGC, Midcourt Builders Corporation, ANG contacted GE concerning site access and GE and RamTech. responded by placing restrictions and requests of the ANG that would set precedents thus delaying access for the investigation. discussions with ANG personnel, it was determined that the off-site investigation should proceed as soon as possible without the access agreement with GE due to concerns relating to possible expansion of the groundwater plume.

4.1.2 Direct-Push Investigation South and East of GE Property

The drilling subcontractor filed a request through Dig Safely New York for subsurface utility clearance of member companies. ERM conducted a geo-physical survey with New York Leak Detection at each proposed boring location to verify that underground utilities were not present.

ERM used USEPA's Triad Approach to implement a soil boring program in the vicinity of soil borings GP-123 through GP-141 as shown on referenced on Figure 3. ERM set up a boring grid at approximate 30-foot spacing along the southern and eastern property lines of GE (Note: All borings were accessed and installed on National Grid Property and PCI Property).

The DPI was conducted using a Geoprobe[®]. Macrocore samplers were used to collect continuous soil cores during drilling operations. An ERM geologist inspected the soil cores and recorded soil color, grain size, moisture content, field-screening results, percent recovery, and other pertinent observations on soil boring logs (Appendix B). A calibrated PID was used to conduct headspace VOC screening of the soil cores. As per previous investigations, "Clean" soils were determined based upon field

screening of soil with a PID reading less than 20 ppm. This investigation did not reveal any samples greater than 0.3 ppm, thus no soil samples were retained or submitted for laboratory analysis. Each soil boring was advanced to saturated soil conditions (approximately 19 to 25 ft bgs) to the geologic unit where BEX-affected groundwater has been encountered during previous investigations.

All of the soil borings were extended into the groundwater table and groundwater samples were collected using an SP-16 sampler. The SP-16 sampler was driven with a Geoprobe® to the desired sample interval based on field observation and screening. The protective casing on the sampler was pulled back to expose the 4-foot screen within the desired sample interval. A peristaltic pump and dedicated polyethylene tubing were utilized to purge groundwater from the temporary sampling point. ERM purged approximately 1 gallon from each of the temporary points prior to collection of representative groundwater samples into laboratory-supplied sample containers. Water samples were held under proper chain-of-custody and were stored in pre-chilled coolers until they were transported to Life Science Laboratories, Inc. (LSL) in East Syracuse, New York, an Environmental Laboratory Approved Program certified laboratory for analyses. Sample from soil borings obtained during this investigation are presented in Table 1. Laboratory Data associated with the samples collected from the soil borings are presented in Table 2.

Soil boring locations were marked with temporary field markers until the location and elevation were surveyed by a New York-licensed surveyor. Surveying was conducted as soon as the intrusive work was completed. In addition, ERM kept a project map updated during the DPI with each of the soil boring locations marked out as they were completed. The following pertinent information was recorded to assess the field data as it was collected:

- Designation of the borings;
- Location of the boring (using a measuring tape and global positioning system coordinates);
- Highest PID reading recorded at the boring and the depth below surface grade;
- Depth of saturated soil;
- Depth of the contact with the sand geologic unit; and
- Visual or olfactory field observations.

4.1.3 Pilot Test Phase

Due to delays in getting agreement with GE to access their site to continue the Supplemental RI, ANG and ERM discussed the most logical step in keeping the project moving forward. It was agreed that a "baseline" round of groundwater sampling from select monitoring wells adjacent and down-gradient of the PT be sampled prior to performing the PT.

On 13 April 2009, the following monitoring wells were sampled: Monitoring Well (MW)-19, MW-105, MW-106, MW-107, MW-111 and MW-112. The wells were sampled in general conformance with USEPA low-flow (minimal drawdown) well purging and sample collection techniques (USEPA 1996). The low-flow groundwater purging/sampling technique employs the use of a flow-through cell equipped with probes connected to an electronic water quality meter for measuring parameters such as pH, temperature, conductivity, dissolved oxygen, and oxidation reduction potential. Examples of water quality meters that may be used include the Horiba U-22 and the YSI 600XL.

The following general procedures were used for this "baseline" groundwater sampling event:

- Monitoring wells were located in the field and opened to allow access for sampling activities. The exterior of each well was visually inspected for signs of damage or tampering and relevant information will be recorded in the field notebook or on an appropriate form.
- Field personnel wore appropriate health and safety equipment as outlined in the Level II Health and Safety Form. Samplers put on new sampling gloves at each individual well location prior to sampling.
- The locking well cap was unlocked and a calibrated PID with a minimum 10.2 eV lamp was used to measure the concentration of VOCs at the top of the well riser.
- Depth to water and the depth to the bottom of the well were measured to the nearest 0.01-ft using an electronic water level indicator or an interface probe. The water level indicator or the interface probe was cleaned between wells using decontamination procedures described in the *Groundwater Monitoring Work Plan* (ERM 2006).
- Adjustable-rate, peristaltic pumps were utilized for purging/sampling of each well. The dedicated tubing was slowly lowered into the well to a depth approximately 6-inches above the bottom of the well to prevent mobilization of any sediment.

- During purging the depth to water, pumping rates, turbidity, temperature, specific conductance, pH, oxygen reduction potential, and dissolved oxygen were measured and recorded every 5 minutes or as appropriate based on field conditions.
- Pumping rates were adjusted to minimize drawdown and/or to facilitate stabilization of field parameters as required.
- Purging ceased when the turbidity dropped below 50 Nephelometric Turbidity Units and/or field parameters have stabilized as follows for three consecutive readings:
 - o ± 0.1 for pH;
 - o Temperature ±0.1 degree Celsius; and
 - ±10 percent for specific conductance (conductivity).
- Before sampling, the flow-through cell was disconnected to collect groundwater samples before the flow-through cell. Each of the sample containers were filled by allowing the pump discharge to flow gently down the inside of the container with minimal turbulence and agitation.
- Sample bottles were labeled using waterproof pens. All samples were placed into a pre-chilled cooler for subsequent delivery to LSL.

The groundwater samples submitted to LSL were analyzed for BEX by USEPA Method 8260. In addition, during the "baseline" groundwater sampling event, all monitoring wells were analyzed for the following natural attenuation parameters to evaluate the performance of the PT:

- Alkalinity using SM 18 2320B;
- Ammonia using USEPA 350.2;
- Methane using GC FID;
- Nitrate using USEPA 300;
- Sulfate using USEPA 300; and
- Total hardness using USEPA 200.7.

All natural attenuation parameters listed above were analyzed at LSL, an approved environmental laboratory using USEPA-approved or standard methods. In addition, the samples were field-tested for ferrous iron using a Hach Model IR-18C ferrous iron test kit (1,10-phenanthroline iron reagent method). The results of ferrous iron analyses in the field were recorded in the field notebook and/or on appropriate sampling forms.

Laboratory data reports are presented in Appendix C. Associated Quality Assurance/Quality Control (QA/QC) samples were collected in accordance with the project Quality Assurance Project Plan. QA/QC information is presented in Appendix D of this Final TM.

ERM conducted an enhanced natural attenuation PT southwest of the RamTech facility, west of along Fairway Drive, north and south Molloy Road to evaluate the effectiveness of enhanced natural attenuation within the BEX-plume. The goal of the PT was to decrease the concentrations of BEX in groundwater, and to prevent further migration of the BEX plume onto off-site property. The CaO₂ slurry was injected into the saturated zone within the BEX plume during the PT. The introduction of CaO₂ provides a controlled release of oxygen which permeates throughout the substrate enhancing microbial activity which biodegrade BEX compounds.

Twenty injection points were installed over a period of 4 days using direct-push technology in the locations depicted on Figure 4. Each injection point was advanced to the bottom of the targeted injection zone within the predominately sand geologic unit (approximately 15 to 30 ft bgs), where BEX has historically been observed in groundwater. A maximum of 50 pounds of CaO₂ was injected at each location. Injection of the CaO₂ started on the northern most injection area on ANG property and move southward.

4.1.4 Borings Along Fairway Drive and Monitoring Well Installations

Due to the slow progress in obtaining access to GE Property, ERM discussed implementing an additional boring program just west of GE Property with the ANG on 29 July 2009. The drilling subcontractor filed a request through Dig Safely New York for subsurface utility clearance of member companies. ERM conducted a geo-physical survey with New York Leak Detection at each proposed boring location to verify that underground utilities were not present. ERM implemented the soil boring program characterizing and field screening continuous soil samples collected from boring locations GP-142 through GP-146 as shown

on Figure 3. A groundwater sample was collected and analyzed for BEX from each boring location as outlined in Section 4.1.2.

Soil boring locations were marked with temporary field markers until the location and elevation were surveyed by a New York-licensed surveyor. Surveying was conducted as soon as the intrusive work was completed. The planned horizontal and vertical accuracy of the survey is \pm 0.1 ft and \pm 0.01 ft, respectively. In addition, ERM kept a map of the project and updated during the DPI, and recorded each of the soil boring locations as they were completed including the following pertinent information:

- Designation of the borings;
- Location of the boring (using a measuring tape);
- Highest PID reading recorded at the boring and the depth below surface grade;
- Depth, date, and time each soil sample was collected;
- Depth of saturated soil;
- Depth of the contact with the sand geologic unit; and
- Visual or olfactory field observations.

Two new groundwater monitoring wells (MW-113 and MW-114) were installed during this Supplemental RI. The two new off-site wells were installed just south of the south central portion of the GE property line (MW-113) and just east of the east central portion of the GE Property line MW-114). Based on previous SP-16 sampling results obtained during the February 2009 phase of this Supplemental RI, these wells should be considered sentinel wells. The two new monitoring well locations are presented on Figure 3.

Each of the new monitoring wells was installed using direct-push and hollow-stem auger drilling techniques to drive 3.25-inch stainless steel casing into the sand unit. A 1.5-inch Schedule 40 polyvinyl chloride pre-pack well screen was placed down each casing until the 10-foot length of screen was set approximately 1-foot above the top of the sand unit. The 0.01-inch factory pre-slotted screens were threaded (flush-jointed) to Schedule 40 polyvinyl chloride casing to surface grade. The disposable stainless steel point was knocked out of the leading edge of the stainless steel casing and the casing was removed. A Morie #0 sand filter pack was placed on top of the pre-pack well screens to a depth of approximately

1-foot above the top of the well screen. A 2-foot thick seal of pre-hydrated bentonite chips was installed above each sand filter pack. Once the bentonite seal was in place, the remaining annular space was backfilled with cement-bentonite grout to near surface grade. Each well was fitted with a protective steel casing which was cemented in place. A locking expansion well cap was placed on each well.

Each of the newly installed monitoring wells was developed prior to being incorporated into the post PT sampling events and will be included in the future routine sampling events. The location and elevation of the wells were surveyed by a New York-licensed surveyor. The planned horizontal and vertical accuracy of the land survey is \pm 0.1 ft and \pm 0.01 ft, respectively. On 5 August 2009, the following monitoring wells were sampled: MW-19, MW-105, MW-106, MW-107, MW-111, MW-112, MW-113, and MW-114. The wells were sampled as described above in Section 4.1.3.

Laboratory data reports are presented in Appendix C. Associated QA/QC samples were collected in accordance with the project Quality Assurance Project Plan. QA/QC information has been completed and is presented in Appendix D of this revised Final TM.

4.1.5 Groundwater Sampling

A complete groundwater sampling event was conducted by ERM during the week of 5 October 2009. All existing monitoring wells and the two newly installed wells (total of 30 wells) were sampled as described above in Section 4.1.3. All monitoring well locations are presented on Figure 5.

Depth to groundwater was measured to the nearest 0.01-foot using an electronic water level indicator or an interface probe. The water level indicator and the interface probe were decontaminated between wells using decontamination procedure outlined in the Work Plan. A summary of groundwater elevations is presented in Table 3. A static groundwater elevation contour map for October 2008 is also presented on Figure 5.

All associated field data sheets are presented with the soil boring logs in Appendix B. A summary of monitoring well analytical data is presented in Table 4. All other parameters listed above to evaluate natural attenuation processes at the Site were performed at an approved environmental laboratory using USEPA-approved or standard methods.

4.1.6 Soil Vapor Survey

ERM performed a soil vapor survey on 5 and 6 October 2009 at four locations as shown on Figure 3. A soil vapor sample was collected adjacent to the west and south exterior walls of the RamTech Building and, one location along RamTech's southern property line (northern boundary of GE) proximal to the building located on the GE Property. Soil vapor samples were collected from a depth consistent with a typical commercial building footer (approximately 3 to 4 ft bgs) or a minimum of 1 foot above groundwater. In addition, an ambient outdoor air sample was collected upwind during soil vapor sampling activities. The samples were used to evaluate the potential for vapor intrusion risks in the buildings.

The soil vapor samples were installed and collected as per Section 2.7.1 of the *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (New York State Department of Health [NYSDOH] 2006). Stainless steel rods equipped with a detachable stainless steel drive point were driven to the desired sampling depth. At the desired depth, the rods were retracted and the treaded drive point was detached to anchor the soil 6-inch vapor sampling implant (sampling screen) at the base of the borehole. Dedicated Teflon® tubing was attached to the soil vapor sampling implant. Implants were lowered into the borehole and attached to the detachable stainless steel anchor. The borehole was backfilled with glass beads to a minimum of 6 inches above the soil vapor sampling implant to establish a sampling zone of approximately 1-foot in length. The remainder of the annular space was filled with bentonite chips and immediately hydrated.

The soil vapor sampling implants were allowed to set for a minimum of 24-hours to allow the bentonite to hydrate prior to helium testing. Prior to collection of each soil vapor sample, the temporary soil vapor sampling implant and tubing was purged in accordance with NYSDOH final guidance (2006). One to three implant volumes was purged from each implant at a rate not exceeding 0.2 liters per minute. In addition, ERM placed an enclosed container over the soil vapor sampling implant creating a seal. The container was filled with a helium tracer gas and soil vapor from the sampling zone was monitored with a helium detector to determine if ambient air was being drawn into the sampling zone. The results confirmed a tight seal between the bentonite and soils at each soil vapor sampling location.

Soil vapor samples were collected in axial sorbent tubes using positive displacement pumping. Sorbent methodology uses USEPA Method TO-17 to analyze soil vapor samples for the presence of VOCs and for this application the analytes were limited to BEX. Method TO-17 is an approved analytical method in the *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (NYSDOH 2006).

The pumps ran for an approximate 2-hour sampling period and all QA/QC samples associated with the method were collected. The soil vapor samples were logged and transported under chain-of-custody to a certified laboratory.

4.2 Deviations from the Work Plan

The scope of work for the Supplemental RI assumed access to the GE Property. Since access to GE was never received during this investigation, the scope of work varied as described below:

- Proposed: Install up to 40 soil borings using direct-push technology on GE and surrounding down-gradient properties. Performed: Twenty-four soil borings were installed around the perimeter of the GE Property.
- Proposed: Collect up to 30 groundwater samples for laboratory analysis of BEX associated with the soil borings. Performed: Twenty-four groundwater samples were obtained and analyzed.
- Proposed: Install six to eight monitoring wells within the plume and in down-gradient areas. Performed: Two sentinel wells were installed, one on National Grid Property (MW-113) and one on PCI Property (MW-114).
- Development and a survey of the new monitoring wells were performed.
- Proposed: Collection of groundwater samples from the newly installed wells for laboratory analysis of BEX and natural attenuation parameters was anticipated. Performed: ERM performed a "baseline" assessment of six selected wells and followed that up with an additional round of sampling of the six selected wells plus the two additional wells. The planned complete round of groundwater sampling was also performed.

 As an additional investigative item, ERM performed a soil vapor evaluation adjacent to the RamTech Facility and along their southern boundary (Northern boundary of GE) to evaluate the potential for soil vapor intrusion issues for off-site buildings.

4.3 Field Screening Activity

ERM utilized a Mini RAE 2000 PID to conduct all field screening. ERM calibrated the PID at the start of each field day. Calibrations included a fresh air calibration/zero and calibration with 100 ppm isobutylene span gas. All field screening data was recorded directly on soil boring logs presented in Appendix B.

4.4 Analytical Activity

ERM conducted the TM investigation between 25 February 2009 and 9 October 2009. During the ERM's investigation along the western, southern, and eastern property lines of GE, ERM collected 24 Geoprobe[®] SP-16 groundwater samples for BEX analysis. Three distinct groundwater sampling events were performed during this investigation resulting in 44-groundwater samples being obtained. QA/QC samples were obtained as required with the above referenced samples.

A summary of samples associated with the soil borings is presented in Table 1. A summary of off-site DPI data - groundwater is presented in Table 2. A summary of groundwater elevation data is presented in Table 3, and a summary of monitoring well analytical data is presented in Table 4. A static groundwater contour map based on October 2009 field data is presented on Figure 5.

Laboratory reports are presented in Appendix C. QA/QC information has been completed and is presented in Appendix D of this revised Final TM.

4.5 Investigation-Derived Waste Management

Section 4.5 of *Management of Investigation-Derived Wastes During Site Inspections* (USEPA 1991) states that non-hazardous soil and liquid investigation-derived waste (IDW) should be left on-site within the area of concern (AOC) unless other circumstances, such as a State Applicable or

Relevant and Appropriate Requirements or a high probability of community concerns, require off-site disposal. USEPA does not prohibit the disposal of non-hazardous groundwater and/or decontamination fluids in the AOC if they have been containerized and sampled. The following options for non-hazardous IDW management are cited from Section 4.5 of USEPA (1991):

- *Soil cuttings*: spread around well, put back into boring, or put in a pit within the AOC;
- *Groundwater*: pour onto ground next to well and allow infiltration;
- Decontamination fluids: pour onto ground from containers to allow infiltration; and
- Decontaminated personal protective equipment and disposable sampling equipment: double bag and deposit at the Facility, in a USEPA dumpster, or at a municipal landfill.

Non-hazardous IDW generated during the TM was managed in a manner consistent with the options listed above. Soil cuttings were spread around the ground surface adjacent to the particular boring location. Groundwater was containerized in 5-gallon buckets and upon completion of sampling; the containerized groundwater was spread on the ground surface adjacent to the particular well location. Used personal protective equipment and disposable sampling equipment was bagged after use and placed in a Base dumpster for subsequent disposal at a NYSDEC-permitted solid waste disposal facility.

INVESTIGATION FINDINGS

5.1 Summary

The primary chemical-specific Applicable or Relevant and Appropriate Requirements for groundwater at the Site are the NYSDEC Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. These criteria are contained in the NYSDEC Division of Water *Technical and Operational Guidance Series Memorandum Number 1.1.1* (TOGS 1.1.1; NYSDEC 1998).

The NYSDEC criteria for the compounds present in groundwater analyzed during this TM are listed below. The values shown for BEX are ambient water quality standards.

• Benzene: 1 μg/L

• Ethylbenzene: 5 μg/L

• Xylene: 5 μg/L

The results of the Supplemental RI conducted to date indicate that BEX-affected groundwater extends across the BGC and RamTech properties further down-gradient towards the south-southeast (GE Property) but does not migrate off GE Property. ERM was able to establish the NYSDEC-requested well(s) down-gradient of the plume without obtaining access agreements with GE.

5.2 Field Findings

ERM performed all fieldwork associated with the Work Plan and as described above between 25 February 2009 and 9 October 2009. This section summarizes field results and findings from implementation of the Supplemental RI.

5.2.1 Direct-Push Investigation South and East of GE Property

A DPI utilizing USEPA's Triad Approach was conducted south and east of the GE Property that focused on delineating the extent of BEX-affected groundwater. A total of 19 borings were required to determine that the BEX-affected groundwater plume did not extend beyond the southern and eastern properties lines of GE. Each boring was advanced to depths between 19- to 25-ft bgs. The average depth of saturated soil in this area during the investigation was 2- to 5- ft bgs.

Unconsolidated geologic material at the Site consists predominantly of glacio-fluvial and glacio-lacustrine deposits underlain by glacial till. These geologic materials were transported, deposited, and re-worked during the Wisconsin glaciation (previous ice ages). Glacio-fluvial deposits are generally sandy relative to glacio-lacustrine deposits which are generally fine-grained (i.e., contain predominantly silt and clay). Glacial tills are characterized by a highly compressed, unsorted variation of particle sizes ranging from cobles to silts, generally with high clay content. In terms of matrix porosity and permeability, the underlying glacial till is less transmissive than the overlying glacio-fluvial and glacio-lacustrine deposits which were encountered during this DPI.

This uppermost unit at the Site consists predominantly of light brown to grayish brown silty clay to silt with a trace amount of very fine- to fine-grained sand. Previous geotechnical analysis of the silt unit resulted in a saturated hydraulic conductivity of 3.64 X 10⁻⁷ centimeters per second. Beneath the silt unit is a sand-dominated unit consisting predominantly of brown to gray, fine- to medium-grained silty sand. Previous geotechnical analysis of the sand unit resulted in a saturated hydraulic conductivity of 4.09 X 10⁻⁴ centimeters per second.

PID results from soil screening in the unsaturated zone ranged from non-detect (ND) to 0.3 ppm. All PID results were noted on the borings logs which are presented in Appendix B. All 19 of the borings were extended to the groundwater table to define the extent of groundwater contamination and to locate "clean" conditions at the southern and eastern GE property lines. As shown on Table 2, BEX was not detected above the laboratory's reporting limit of each compound in all 19 of these referenced samples.

5.2.2 Pilot Test Phase

It was agreed between ANG and ERM that a "baseline" round of groundwater sampling in monitoring wells adjacent and down-gradient of the PT be sampled prior to performing the PT. The following monitoring wells were sampled: MW-19, MW-105, MW-106, MW-107, MW-111, and MW-112. The wells were sampled in general conformance with USEPA low-flow (minimal drawdown) well purging and sample collection techniques (USEPA 1996).

Analytical data are presented in Appendix C and summarized in Table 4 along with the NYSDEC standards and guidance values for groundwater. BEX compounds were not detected in three of the six groundwater samples (MW-106, MW-107, and MW-112). The concentration of benzene (6.2 to 13 μ g/L), ethylbenzene (17,120 and 250 μ g/L) and xylene (20, 260, and 480 μ g/L) in groundwater samples collected from MW-19, MW-105, and MW-112 exceeded the NYSDEC ambient groundwater quality standards of 1 μ g/L, 5 μ g/L, and 5 μ g/L, respectively.

On 12 May 2009, initiation of the PT began. Approximately 20 injection points were installed using a Geoprobe® rig in the locations depicted on Figure 4. Each injection point was advanced to the bottom of the targeted injection zone within the sand unit (approximately 15 to 25-ft bgs). Potable water was obtained from the 174th FW in a 300-gallon poly tank supplied by the drilling contractor. The solid CaO₂ and potable water mixed thoroughly into 20-gallon batches of a slurry like solution and were transferred into a portable pump skid. The slurry was slowly injected into the groundwater using a re-circulation pump. The CaO₂ slurry was injected in a "bottom-to-top" method in three 5-ft injection intervals, starting at the bottom of the targeted injection zone. The Geoprobe® was used to slowly retracted drilling rods while the CaO₂ slurry was injection over the targeted zone. No significant problems were encountered during the injection process.

5.2.3 Borings Along Fairway Drive and Monitoring Well Installations

The installation of five additional borings was conducted west of the GE Property that focused on delineating the extent of BEX-affected groundwater. The five borings were required to determine that the BEX-affected groundwater plume did not extend beyond the western property lines of GE. Each boring was advanced to depths between 19- to 25-ft bgs. The average depth of saturated soil in this area during the investigation was 3- to 4-ft bgs.

PID results from soil screening in the unsaturated zone were ND. All PID results were noted on the borings logs which are presented in Appendix B. All five of the borings were extended to the groundwater table to define the extent of groundwater contamination and to locate "clean" conditions along the western GE property lines. As shown in Table 2, BEX was not detected above the laboratory's reporting limit of each compound in all five of these referenced samples.

Two new groundwater monitoring wells (MW-113 and MW-114) were installed during this Supplemental RI. The two new off-site wells were installed just south of the south central portion of the GE property line (MW-113) and just east of the east central portion of the GE Property line MW-114). Based on previous SP-16 sampling results obtained during the February 2009 phase of this Supplemental RI, these wells should be considered sentinel wells.

On 5 August 2009, the following monitoring wells were sampled: MW-19, MW-105, MW-106, MW-107, MW-111, MW-112, MW-113, and MW-114. The wells were sampled in general conformance with USEPA low-flow (minimal drawdown) well purging and sample collection techniques Analytical data are presented in Appendix C and (USEPA 1996). summarized in Table 4 along with the NYSDEC standards and guidance values for groundwater. BEX compounds were not detected in five of the eight groundwater samples (MW-106, MW-107, MW-112, MW-113, and The concentration of benzene (6.0, 3.3 and 6.9 μ g/L), MW-114). ethylbenzene (410 and 300 $\mu g/L$) and xylene (760 and 170 $\mu g/L$) in groundwater samples collected from MW-19, MW-105, and MW-112 exceeded the NYSDEC ambient groundwater quality standards of 1 µg/L, 5 µg/L, and 5 µg/L, respectively. Review of this data indicates that the injection of CaO₂ slurry, in general, enhanced the natural attenuation process.

5.2.4 Groundwater Sampling

A complete groundwater sampling event was conducted by ERM during the week of 5 October 2009. All 28 existing monitoring wells and the two newly installed wells were sampled as described above in Section 4.1.3. All monitoring well locations are presented on Figure 5.

Laboratory data associated with groundwater sampling are presented in Table 4. Analytical laboratory reports are presented in Appendix C. The groundwater analysis indicated BEX concentrations below laboratory method reporting limits in 20 of the 30 monitoring wells. Concentrations

of BEX above Standards, Criteria, and Guidance (SCG) were present in MW-2, MW-11, MW-14, MW-15, MW-19, MW-22, MW-101, MW-103, MW-105, and MW-112. Total BEX concentrations are presented on Figure 6.

Benzene concentrations in these ten wells ranged from ND to 49 $\mu g/L$. Figure 7 shows the lateral extent of benzene in groundwater in October 2009 using all 30 MW sampling locations and relative to the NYSDEC ambient groundwater quality standard of 1 $\mu g/L$ (NYSDEC 1998). The highest concentration of benzene was found in the area immediately north of Molloy Road on the ANG property.

Figure 8 illustrates the distribution of dissolved ethylbenzene in October 2009 using all the 30 MW locations and relative to the NYSDEC ambient groundwater quality standard of 5 μ g/L. Ethylbenzene concentrations in these ten wells ranged from ND to 380 μ g/L. Ethylbenzene concentrations were highest in the vicinity of well MW-19 north of Molloy Road on the ANG property.

Figure 9 shows the distribution of dissolved xylenes in October 2009 using all 30 MW sampling locations and relative to the NYSDEC ambient groundwater quality standard of 5 μ g/L. Xylene concentrations in these ten wells ranged from ND to 420 μ g/L. Xylene concentrations were highest in the vicinity of well MW-19 north of Molloy Road on the ANG property.

Detailed review of the natural attenuation parameters has been completed by ERM. Results of this review and associated recommendations have been detailed in Appendix A of the Draft Final FFS submitted to the ANG and the NYSDEC on 7 December 2009.

Based on the additional investigation previously described in this TM, the extent of BTEX-affected groundwater has been delineated on the Hancock ANGB property, BGC property, and on the RamTech property with the plume dissipating within the boundaries of the GE Property.

5.2.5 Soil Vapor Survey

New York State does not currently have any SCG values for concentrations of VOC in subsurface vapors. Additionally, there are no current databases available with background levels of VOC in soil vapor. In the absence of this information, soil vapor sampling results are reviewed "as a whole," in conjunction with the results of other environmental sampling and the site. To put some perspective on the

data, the NYDOH and NYSDEC often compare the soil vapor results to the NYSDOH's background database that was used to evaluate outdoor air data (NYSDOH 2006).

The results of the soil vapor evaluation conducted on RamTech's property are summarized in the table below. The study was conducted to characterize the nature and potential extent of subsurface vapor contamination on the property. The results of the soil vapor evaluation are compared to a statistical evaluation of background concentrations of VOC in outdoor air which are summarized in the *Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes* (NYSDOH 2003).

Identification	Benzene	Ethylbenzene	m,p - Xylene	o- Xylene
SV-06	2.14	0.97	0.90	0.57
SV-07	3.43	3.12	4.19	2.92
SV-08	12.1	1.08	1.14	0.61
Ambient	< 0.79	< 0.39	< 0.39	< 0.39
Indoor 90th	15	7.4	12	7.6
Outdoor 90th	4.3	1.1	1.4	1.7

(Concentrations in µg/cubic meter)

The bolded concentrations in the tabular summary exceed the background outdoor air concentrations of 90 percent of samples collected in the NYSDOH study. According the NYSDOH, soil vapor data alone typically can not be relied alone to rule out the potential for vapor intrusion in a buildings. Based on the evaluation of soil vapor and groundwater data collected in the vicinity of the RamTech building, ERM recommends that indoor air evaluation should be performed. Based on ERM's current knowledge on the construction of the RamTech facility, ERM recommends collecting two sets of indoor air samples (one sub-slab soil gas and one indoor air sample from each location) and one ambient outdoor air sample. The data collected during the indoor air evaluation will be used to assess the current Site conditions and to address potential exposure risk.

SECTION 6.0

CONCLUSIONS

The Supplemental RI was performed to address several data gaps that exist regarding off-site and down gradient BTEX-affected soil and groundwater relating to Site 15. A significant amount of additional data was obtained during implementation of the Supplemental RI. The following technical conclusions are derived from implementation of this Supplemental RI Work Plan:

- 1. Dissolved-phase BTEX in groundwater at concentrations above applicable SCGs has migrated completely across portions of the BGC and RamTech properties to properties further down gradient. This additional environmental investigation determined that the end of the plume is somewhere on GE Property as indicated by BEX sampling on the west, south, and east sides of the GE Property.
- 2. Natural attenuation of BTEX in groundwater is occurring in Site 15 groundwater. However, the rate of natural attenuation is not sufficient to prevent additional migration of BTEX in groundwater as evidenced by fluctuations of the dissolved-phase BTEX plume.
- 3. The PT indicated the injection of CaO₂ was effective and natural attenuation was enhanced with chemical injection.
- 4. Evaluation of soil vapor concentrations in the vicinity of the RamTech building indicates that indoor air sampling should be performed.

SECTION 7.0

RECOMMENDATIONS

ERM recommends the following actions based on the results of the Supplemental RI to facilitate remediation of Site 15, including the off-site portion of the plume.

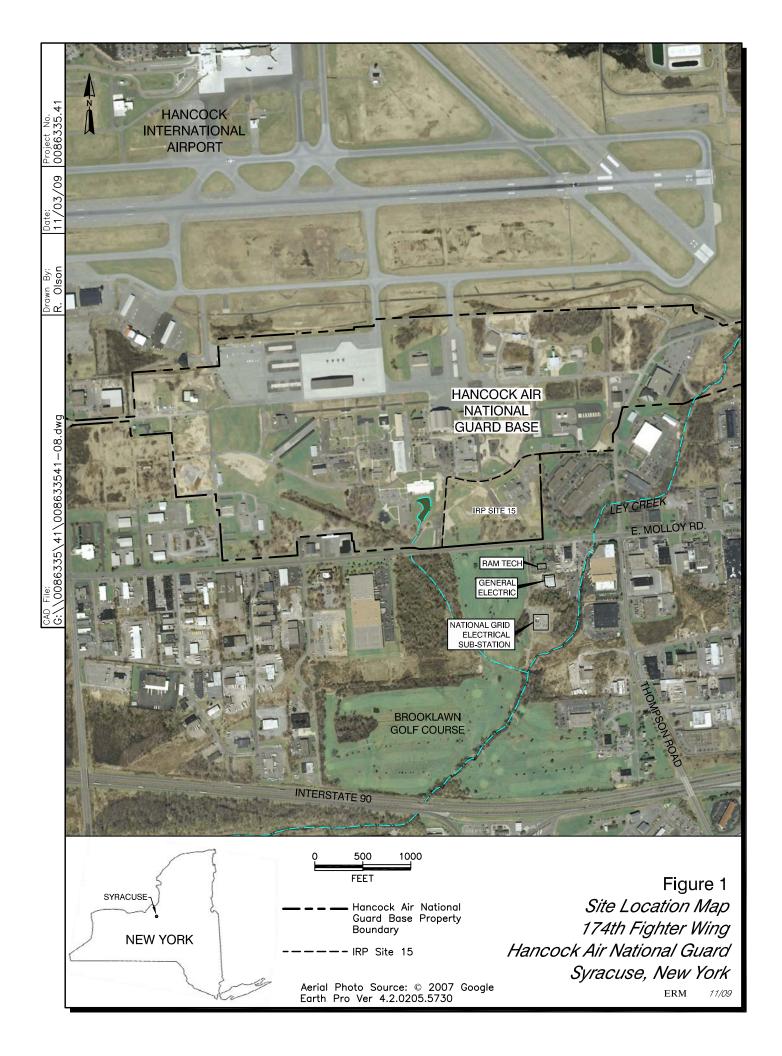
- A formal Addendum to the February 2002 FFS Report should be prepared incorporating the significant amount of additional data obtained during the recent investigations and the proposed IRAs. A Draft FFS was presented to ANG in September 2008 and the Draft Final revision is being developed in conjunction with this TM.
- The preparation of a Proposed Plan and Record of Decision should be conducted upon ANG and New York State Department of Environmental Conservation (NYSDEC) approval of the upcoming Draft Final and Final Focused Feasibility Study Reports
- Based on currently available information, ERM recommends conducting an indoor air evaluation at the RamTech Engineering Building.
- Continue monitoring natural attenuation at the monitoring wells on Site 15 and down gradient through appropriate sampling, laboratory analyses, and associated reporting prior to implementation of the final approved remedial alternative.

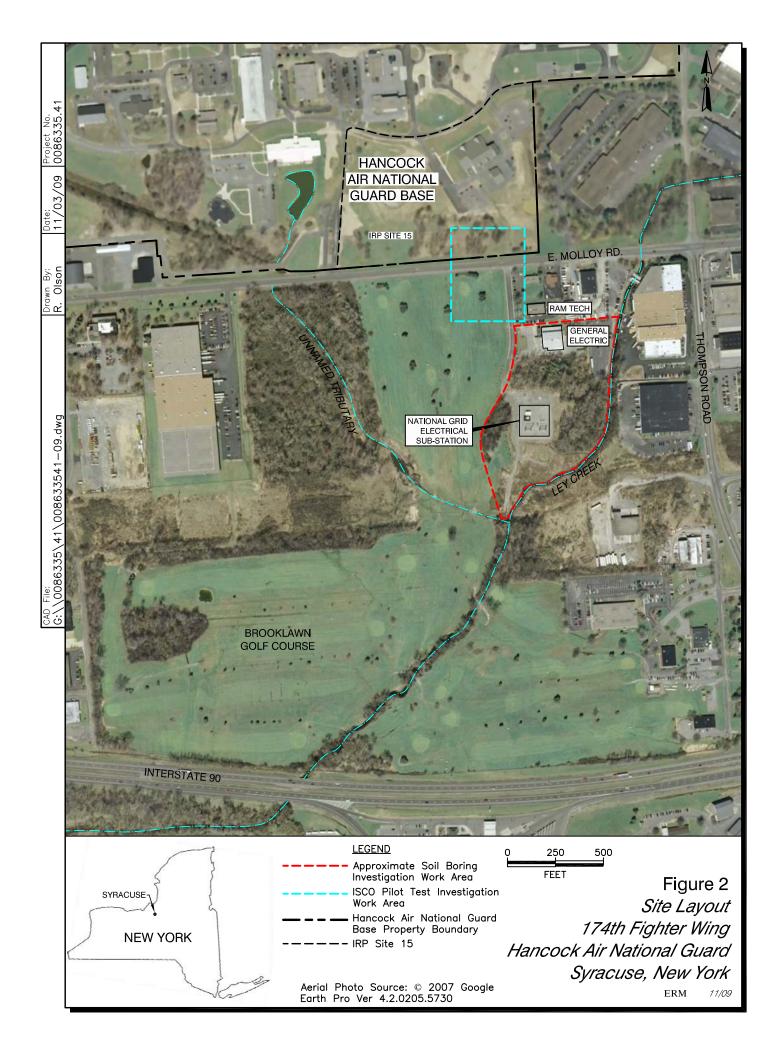
SECTION 8.0

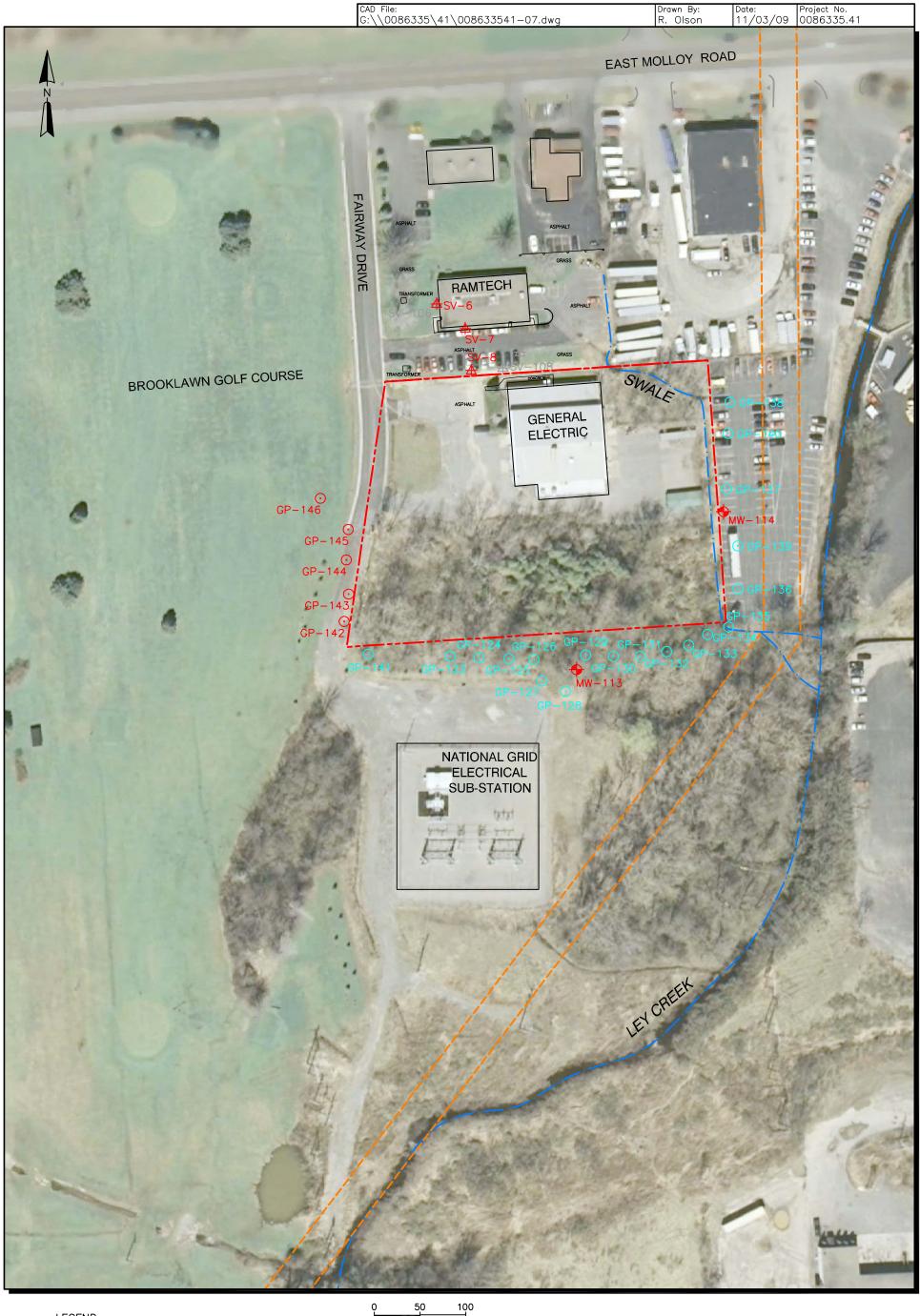
REFERENCES

- ANG, 2005. Environmental Restoration Program Investigation Guidance
- ERM, 2009, Site 15 Interim Remedial Action Draft Final Focused Feasibility Study, 174th Fighter Wing New York Air National Guard- Hancock Air National Guard Base Syracuse, New York ERM, Dewitt, New York, December 2009.
- ERM, 2006, Site 15 Interim Remedial Action Groundwater Monitoring Work Plan, 174th Fighter Wing New York Air National Guard- Hancock Air National Guard Base Syracuse, New York ERM, Dewitt, New York, June 2006.
- NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. NYSDEC Division of Water Technical and Operational Guidance Series Memorandum Number 1.1.1., June 1998 (latest amendment April 2000).
- NYSDEC, 2002. *Draft DER-10: Technical Guidance for Site Investigation and Remediation*. NYSDEC Division of Environmental Remediation, Albany, December 2002, 136 pp.
- NYSDOH, 2003, Volatile Organic Chemicals in Air of Fuel Oil Heated Homes.
- NYSDOH, 2006. Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006).
- Parsons, 2004. Remedial Action Plan For Hancock Air National Guard Site 15. Parsons Engineering Science, Inc., Liverpool, New York, January 2004.
- USEPA, 1991. *Management of Investigation-Derived Wastes during Site Inspections*. United States Environmental Protection Agency, Office of Emergency and Remedial Response Directive Number 9345.3-02, EPA/540/G-91/009, Washington, D.C., 88 pp.
- USEPA, 1996. Low-flow (minimal drawdown) groundwater sampling procedures. United States Environmental Protection Agency Groundwater Issue, Office of Research and Development and Office of Solid Waste and Emergency Response, EPA/540/S-95/504, 12 pp.

FIGURES







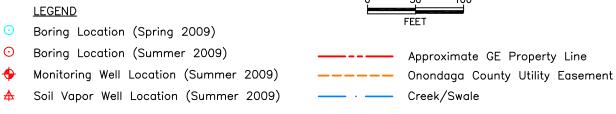


Figure 3
2009 Investigation Boring Locations
174th Fighter Wing
Hancock Air National Guard
Syracuse, New York

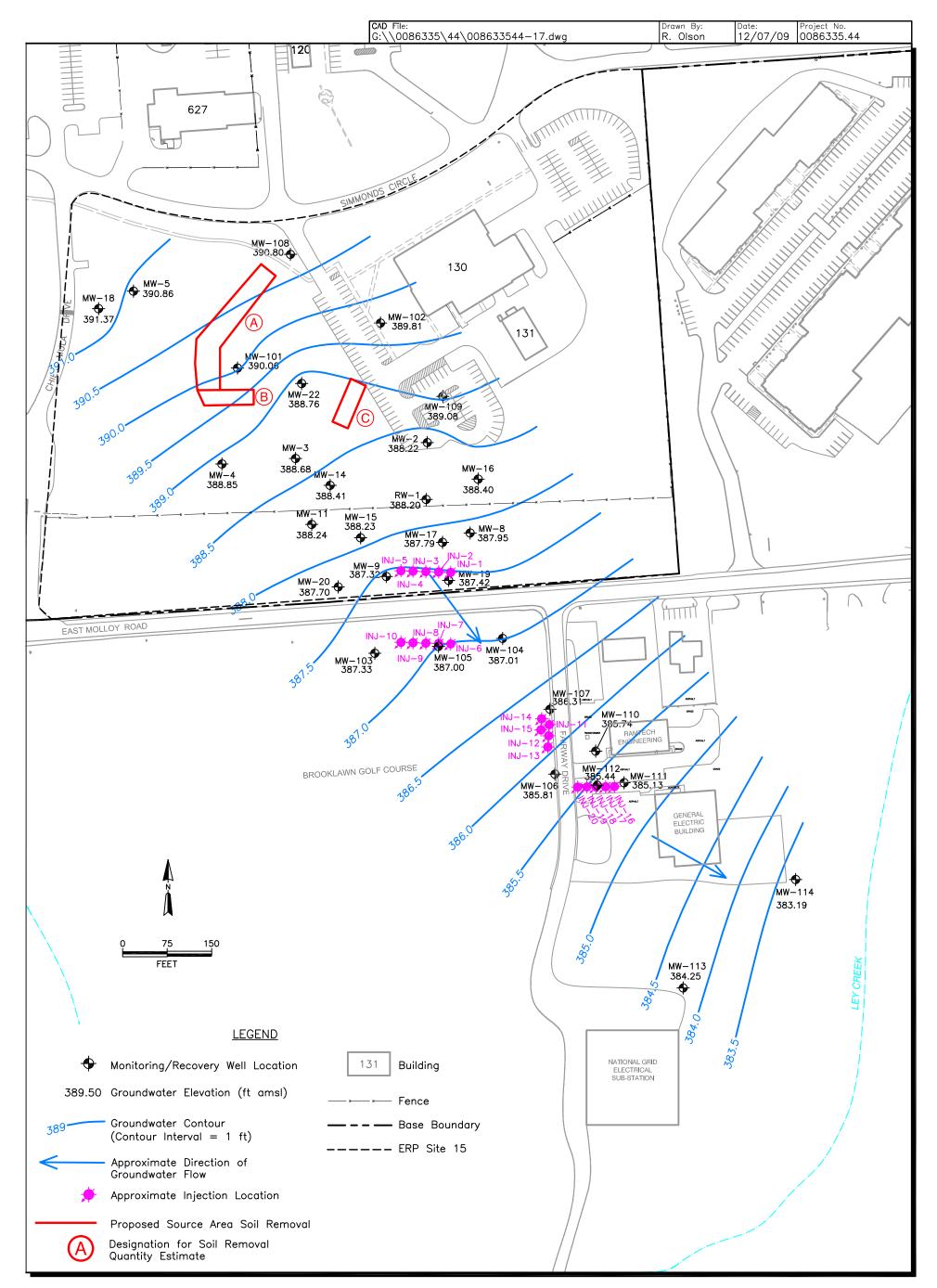


Figure 4

Pilot Test Activity Locations

174th Fighter Wing

Hancock Air National Guard

Syracuse, New York

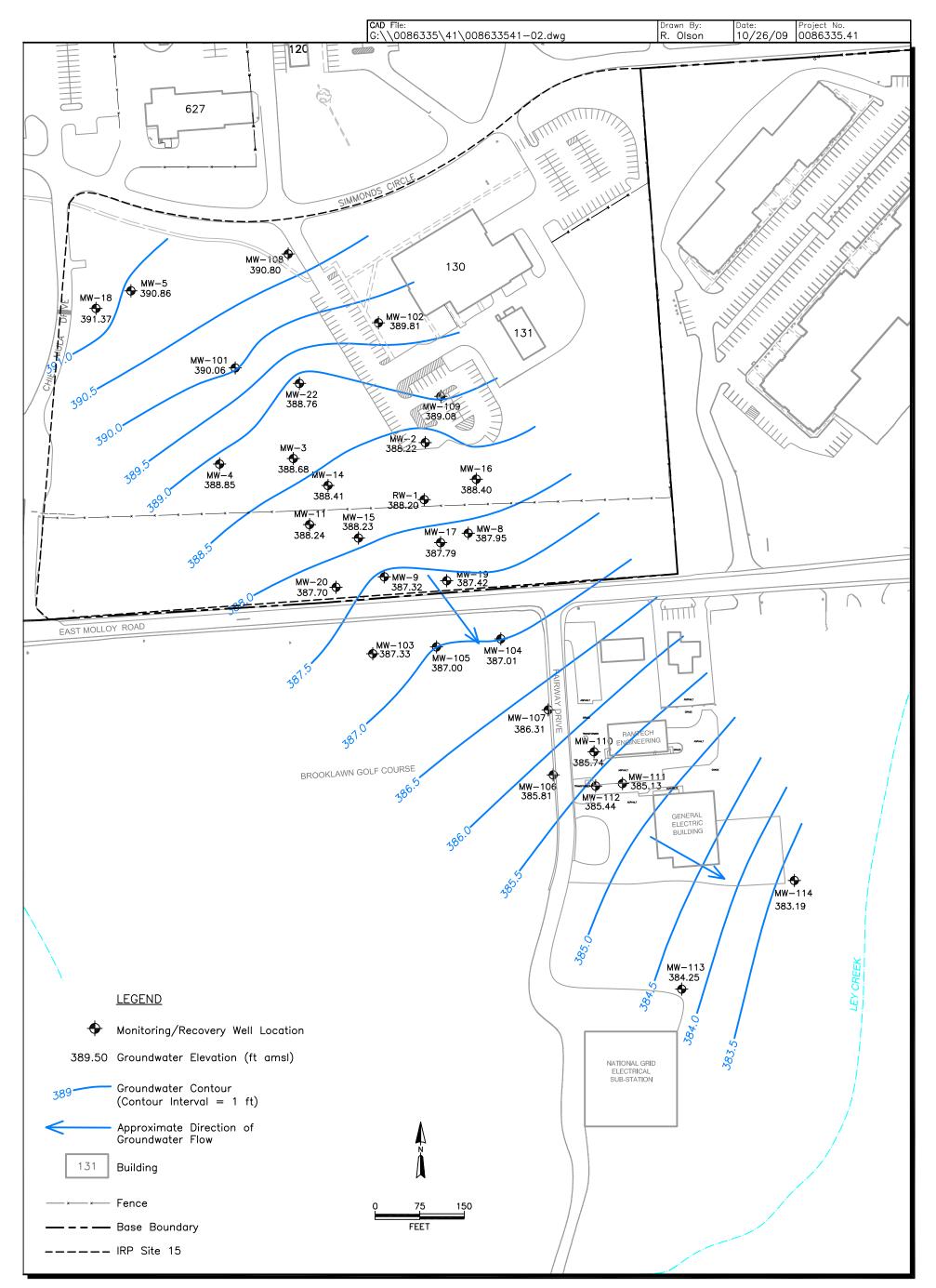


Figure 5 Static Groundwater Contour Map 6 October 2009 174th Fighter Wing Hancock Air National Guard Syracuse, New York

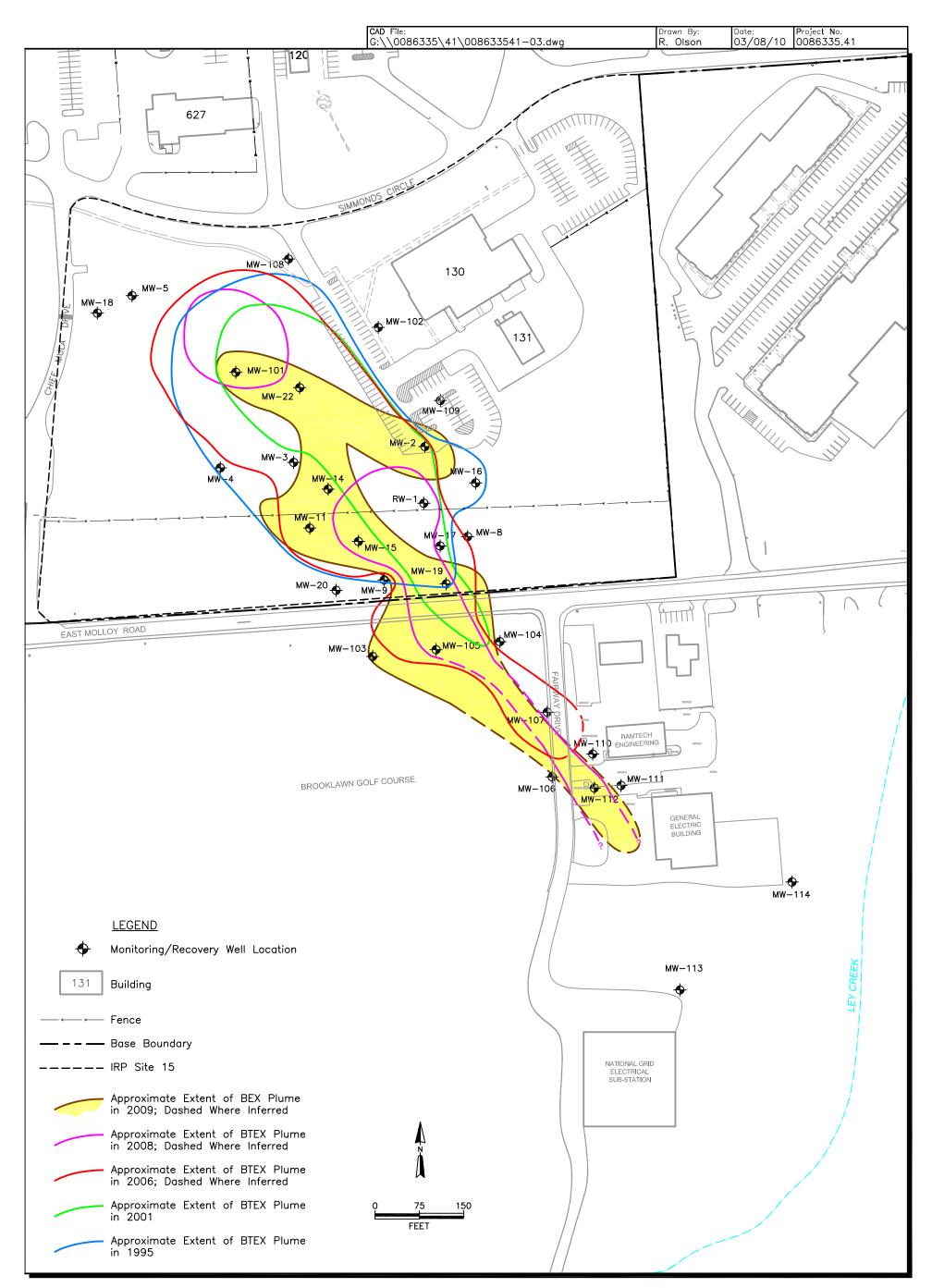


Figure 6

Estimated BTEX Extent

1995 to 2009

174th Fighter Wing

Hancock Air National Guard

Syracuse, New York

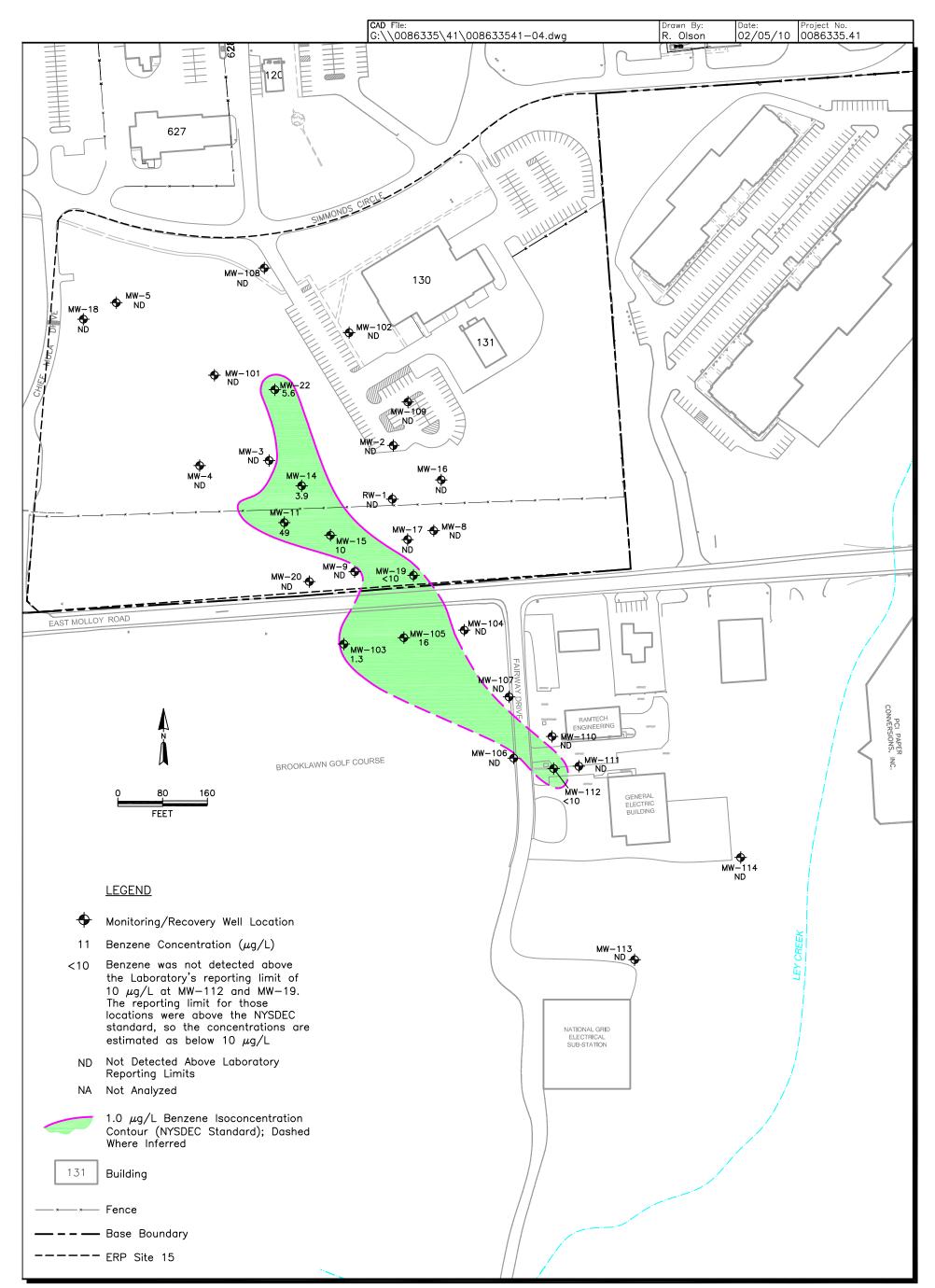


Figure 7 Groundwater Isoconcentration Map, Benzene October 2009 174th Fighter Wing Hancock Air National Guard Syracuse, New York

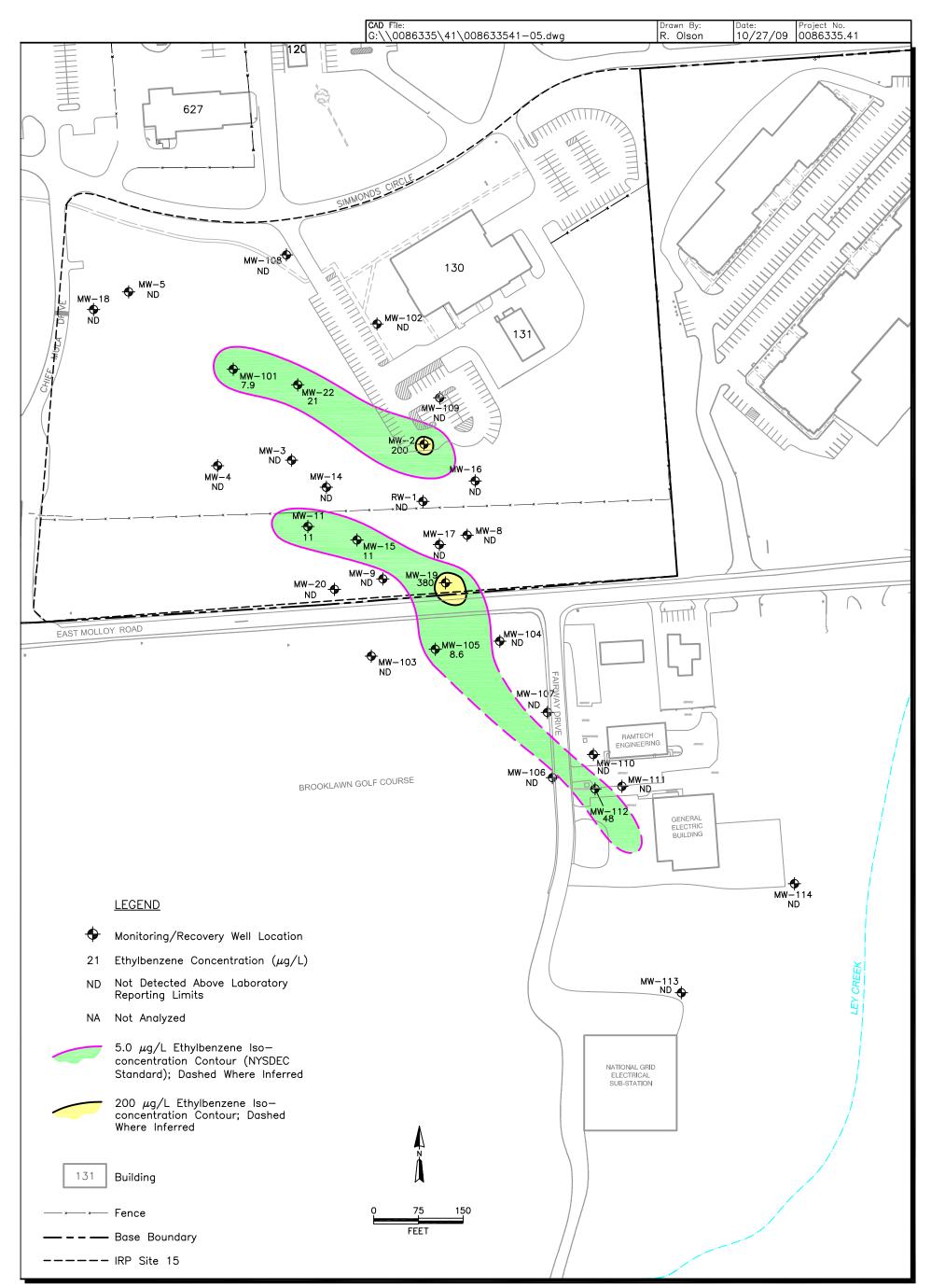


Figure 8
Groundwater Isoconcentration Map, Ethylbenzene
October 2009
174th Fighter Wing
Hancock Air National Guard
Syracuse, New York

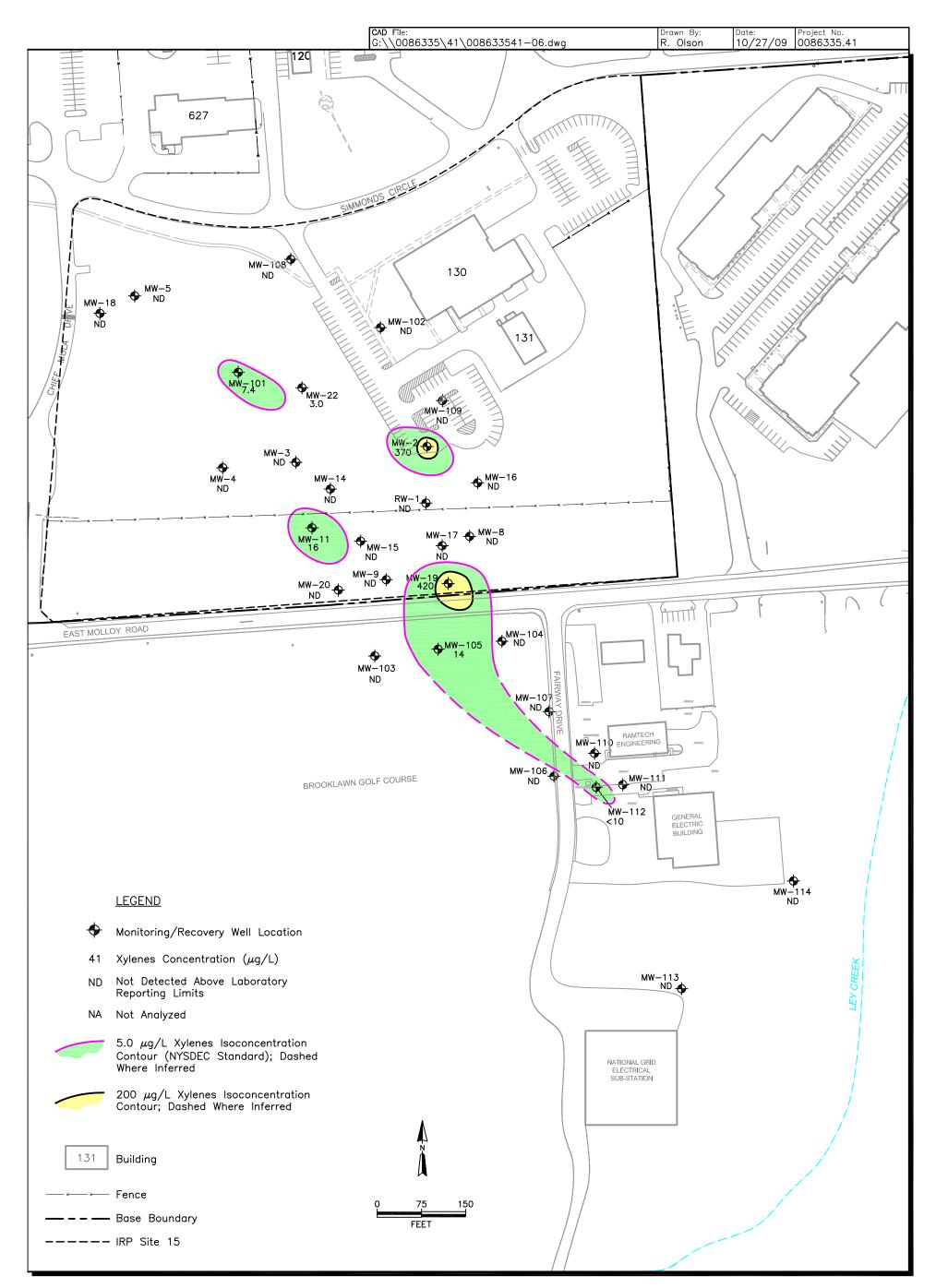


Figure 9
Groundwater Isoconcentration Map, Xylenes
October 2009
174th Fighter Wing
Hancock Air National Guard
Syracuse, New York

TABLES

TABLE 1

SUMMARY OF SAMPLES HANCOCK AIR NATIONAL GUARD BASE- SYRACUSE, NEW YORK NYSDEC SITE NUMBER 734054 ERM PROJECT NUMBER 0086335

Location ID	Media	Analysis	Sample Date	Sample Time
ANG-GP-123	Ground Water	BEX	25-Feb-09	11:15
ANG-GP-124	Ground Water	BEX	25-Feb-09	12:30
ANG-GP-125	Ground Water	BEX	25-Feb-09	14:05
ANG-GP-126	Ground Water	BEX	25-Feb-09	15:05
ANG-EB	Lab Water	BEX, QA/QC	25-Feb-09	11:30
ANG-GP-127	Ground Water	BEX	26-Feb-09	9:25
ANG-GP-128	Ground Water	BEX	26-Feb-09	11:10
ANG-GP-129	Ground Water	BEX	26-Feb-09	12:40
ANG-GP-130	Ground Water	BEX	26-Feb-09	13:50
ANG-GP-131	Ground Water	BEX	26-Feb-09	17:10
ANG-GP-132	Ground Water	BEX	26-Feb-09	16:10
ANG-GP-133	Ground Water	BEX	27-Feb-09	10:45
ANG-GP-134	Ground Water	BEX	27-Feb-09	9:45
ANG-GP-134 MS	Ground Water	BEX, QA/QC	27-Feb-09	9:45
ANG-GP-134 MSD	Ground Water	BEX, QA/QC	27-Feb-09	9:45
ANG-GP-135	Ground Water	BEX	27-Feb-09	8:40
ANG-GP-136	Ground Water	BEX	27-Feb-09	12:55
ANG-GP-137	Ground Water	BEX	27-Feb-09	13:50
ANG-GP-138	Ground Water	BEX	27-Feb-09	14:35
ANG-GP- Dupe	Ground Water	BEX, QA/QC	27-Feb-09	
ANG-GP-139	Ground Water	BEX	3-Mar-09	11:45
ANG-GP-140	Ground Water	BEX	3-Mar-09	1:12
ANG-GP-141	Ground Water	BEX	3-Mar-09	15:20
ANG-GP-142	Ground Water	BEX	29-Jul-09	12:00
ANG-GP-143	Ground Water	BEX	29-Jul-09	13:10
ANG-GP-143 MS	Ground Water	BEX, QA/QC	29-Jul-09	13:10
ANG-GP-143 MSD	Ground Water	BEX, QA/QC	29-Jul-09	13:10
ANG-GP-144	Ground Water	BEX	29-Jul-09	14:40
ANG-GP-145	Ground Water	BEX	29-Jul-09	15:45
ANG- GP- DUPE	Ground Water	BEX, QA/QC	29-Jul-09	
ANG-GP-146	Ground Water	BEX	30-Jul-09	10:20
ANG-Trip Blank	Lab Water	BEX, QA/QC	30-Jul-09	

NOTES:

--- - Not Applicable

BEX- benzene, ethylbenzene and xylenes by USEPA Method 8260 for groundwater and EPA TO-17 for soil gas

QA/QC- quality assurance and quality control samples as specified in the QAPP.

MNA- Select parameters to assist in the evaluation of the reductive attenuation of $\ensuremath{\mathsf{BTEX}}$

Lab Water- deionized or organic free water provided by the laboratory

TABLE 1

SUMMARY OF SAMPLES HANCOCK AIR NATIONAL GUARD BASE- SYRACUSE, NEW YORK NYSDEC SITE NUMBER 734054 ERM PROJECT NUMBER 0086335

Location ID	Media	Analysis	Sample Date	Sample Time
ANG- MW-19 (04/09)	Ground Water	BEX, MNA	13-Apr-09	15:20
ANG- MW-105 (04/09)	Ground Water	BEX, MNA	13-Apr-09	12:05
ANG- MW-105 (04/09) MS	Ground Water	BEX, MNA, QA/QC	13-Apr-09	12:05
ANG- MW-105 (04/09) MSD	Ground Water	BEX, MNA, QA/QC	13-Apr-09	12:05
ANG- MW-106 (04/09)	Ground Water	BEX, MNA	13-Apr-09	16:40
ANG- MW-107 (04/09)	Ground Water	BEX, MNA	13-Apr-09	15:40
ANG- MW-111 (04/09)	Ground Water	BEX, MNA	13-Apr-09	11:15
ANG- MW-112 (04/09)	Ground Water	BEX, MNA	13-Apr-09	12:37
ANG- DUP (04/09)	Ground Water	BEX, MNA	13-Apr-09	12:37
ANG- EB (04/09)	Lab Water	BEX, MNA, QA/QC	13-Apr-09	11:20
ANG- MW-19 (04/09)	Ground Water	BEX, MNA	5-Aug-09	14:15
ANG- MW-105 (04/09)	Ground Water	BEX, MNA	5-Aug-09	14:15
ANG- MW-106 (04/09)	Ground Water	BEX, MNA	5-Aug-09	11:45
ANG- MW-107 (04/09)	Ground Water	BEX, MNA	5-Aug-09	15:30
ANG- MW-111 (04/09)	Ground Water	BEX, MNA	5-Aug-09	10:45
ANG- MW-111 (04/09) MS	Ground Water	BEX, MNA, QA/QC	5-Aug-09	10:45
ANG- MW-111 (04/09) MSD	Ground Water	BEX, MNA, QA/QC	5-Aug-09	10:45
ANG- MW-112 (04/09)	Ground Water	BEX, MNA	5-Aug-09	10:35
ANG- DUP (04/09)	Ground Water	BEX, MNA	5-Aug-09	13:00
ANG- MW-113 (04/09)	Ground Water	BEX, MNA	5-Aug-09	17:05
ANG- MW-114 (04/09)	Ground Water	BEX, MNA	5-Aug-09	16:00
ANG- EB (04/09)	Lab Water	BEX, MNA, QA/QC	5-Aug-09	17:25
ANG- MW-103 (10/09)	Ground Water	BEX, MNA	6-Oct-09	15:45
ANG- MW-104 (10/09)	Ground Water	BEX, MNA	6-Oct-09	16:30
ANG- MW-105 (10/09)	Ground Water	BEX, MNA	6-Oct-09	15;25
ANG- MW-106 (10/09)	Ground Water	BEX, MNA	6-Oct-09	16:45
ANG- MW-107 (10/09)	Ground Water	BEX, MNA	6-Oct-09	15:45
ANG- MW-110 (10/09)	Ground Water	BEX, MNA	6-Oct-09	14:15
ANG- MW-111 (10/09)	Ground Water	BEX, MNA	6-Oct-09	12:05
ANG- MW-112 (10/09)	Ground Water	BEX, MNA	6-Oct-09	10:40
ANG- MW-113 (10/09)	Ground Water	BEX, MNA	6-Oct-09	13:48

NOTES:

--- - Not Applicable

 $BEX-\ benzene,\ ethylbenzene\ and\ xylenes\ by\ USEPA\ Method\ 8260\ for\ groundwater\ and\ EPA\ TO-17\ for\ soil\ gas$

QA/QC- quality assurance and quality control samples as specified in the QAPP.

MNA- Select parameters to assist in the evaluation of the reductive attenuation of BTEX

Lab Water- deionized or organic free water provided by the laboratory

TABLE 1

SUMMARY OF SAMPLES HANCOCK AIR NATIONAL GUARD BASE- SYRACUSE, NEW YORK NYSDEC SITE NUMBER 734054 ERM PROJECT NUMBER 0086335

Location ID	Media	Analysis	Sample Date	Sample Time
ANG- MW-114 (10/09)	Ground Water	BEX, MNA	6-Oct-09	17:00
ANG- MW-114 (04/09) MS	Ground Water	BEX, MNA, QA/QC	6-Oct-09	17:00
ANG- MW-114 (04/09) MSD	Ground Water	BEX, MNA, QA/QC	6-Oct-09	17:00
ANG- EB (10/09)	Lab Water	BEX, MNA, QA/QC	6-Oct-09	17:20
RAM- SV-06	Soil Gas	BEX	6-Oct-09	11:40
RAM- SV-07	Soil Gas	BEX	6-Oct-09	11:50
RAM- SV-08	Soil Gas	BEX	6-Oct-09	11:55
RAM- SV-Ambient	Soil Gas	BEX	6-Oct-09	12:00
ANG- MW-20 (10/09)	Ground Water	BEX, MNA	7-Oct-09	8:40
ANG- MW-9 (10/09)	Ground Water	BEX, MNA	7-Oct-09	8:45
ANG- MW-2 (10/09)	Ground Water	BEX, MNA	7-Oct-09	9:35
ANG- MW-101 (10/09)	Ground Water	BEX, MNA	7-Oct-09	9:55
ANG- MW-19 (10/09)	Ground Water	BEX, MNA	7-Oct-09	10:15
ANG- DUP-2 (10/09)	Ground Water	BEX, MNA	7-Oct-09	10:15
ANG- MW-22 (10/09)	Ground Water	BEX, MNA	7-Oct-09	10:40
ANG- MW-22 (10/09)	Ground Water	BEX, MNA	7-Oct-09	10:55
ANG- MW-108 (10/09)	Ground Water	BEX, MNA	7-Oct-09	14:05
ANG- MW-102 (10/09)	Ground Water	BEX, MNA	7-Oct-09	14:20
ANG- EB (10/09)	Lab Water	BEX, MNA, QA/QC	7-Oct-09	14:37
ANG- MW-105 (10/09)	Ground Water	BEX, MNA	7-Oct-09	15:10
ANG- MW-18 (10/09)	Ground Water	BEX, MNA	7-Oct-09	15:35
ANG- MW-3 (10/09)	Ground Water	BEX, MNA	7-Oct-09	16:30
ANG- MW-4 (10/09)	Ground Water	BEX, MNA	7-Oct-09	16:35
ANG- RW-1 (10/09)	Ground Water	BEX, MNA	8-Oct-09	9:25
ANG- MW-14 (10/09)	Ground Water	BEX, MNA	8-Oct-09	9:55
ANG- MW-16 (10/09)	Ground Water	BEX, MNA	8-Oct-09	11:10
ANG- MW-15 (10/09)	Ground Water	BEX, MNA	8-Oct-09	12:25
ANG- MW-15 (10/09) MS	Ground Water	BEX, MNA, QA/QC	8-Oct-09	12:25
ANG- MW-15 (10/09) MSD	Ground Water	BEX, MNA, QA/QC	8-Oct-09	12:25
ANG- MW-17 (10/09)	Ground Water	BEX, MNA	8-Oct-09	14:15
ANG- MW-8 (04/09)	Ground Water	BEX, MNA	8-Oct-09	14:25

NOTES:

BEX- benzene, ethylbenzene and xylenes by USEPA Method 8260 for groundwater and EPA TO-17 for soil gas

QA/QC- quality assurance and quality control samples as specified in the QAPP.

MNA- Select parameters to assist in the evaluation of the reductive attenuation of BTEX

Lab Water- deionized or organic free water provided by the laboratory

^{--- -} Not Applicable

Final

TABLE 2 SUMMARY OF DIRECT PUSH INVESTIGATION DATA- GROUNDWATER SITE 15- 174th FIGHTER WING AIR NATIONAL GUARD HANCOCK FIELD, SYRACUSE, NY NYSDEC SITE NUMBER 734054 ERM PROJECT NUMBER 0086335

WELL ID Sample Date		GP-124 2/25/2009	GP-125 2/25/2009	GP-126 2/25/2009	GP-127 2/26/2009	GP-128 2/26/2009	GP-129 2/26/2009	GP-130 2/26/2009	GP-131 2/26/2009	GP-132 2/26/2009	GP-133 2/27/2009	GP-134 2/27/2009	NYSDEC STANDARD
VOCs (ug/l)													
BENZENE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1
ETHYL BENZENE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	5
XYLENE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	5

WELL ID Sample Date	GP-135 2/27/2009	GP-136 2/27/2009	GP-137 2/27/2009	GP-138 2/27/2009	GP-139 3/3/2009	GP-140 3/3/2009	GP-141 3/3/2009	GP-142 7/29/2009	GP-143 7/29/2009	GP-144 7/29/2009	GP-145 7/29/2009	GP-146 7/29/2009	NYSDEC STANDARD
VOCs (ug/l)													
BENZENE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1
ETHYL BENZENE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	5
XYLENE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	5

NOTES:

ug/L = Micrograms per liter

VOCs - volatile organic compounds determined by USEPA Method 8260

< = the compound was not detected at a concentration above the laboratory reporting limit. The number proceeding the less than symbol (<) is the laboratory's reporting limit for the compound. NYSDEC Standards - NYS Division of Water Technical and Operational Guidance Series (1.1.1) 1998

Final

TABLE 3 SUMMARY OF GROUNDWATER ELEVATION DATA- OCTOBER 2009 HANCOCK AIR NATIONAL GUARD BASE- SYRACUSE, NEW YORK NYSDEC SITE NUMBER 734054 ERM PROJECT NUMBER 0086335

Well ID	MW-2	MW-3	MW-4	MW-5	MW-8	MW-9	MW-11	MW-14	MW-15	MW-16	MW-17	MW-18	MW-19	MW-20	MW-22	RW-1
Top of Casing	399.45	399.91	399.80	400.34	398.00	396.15	399.69	402.92	402.17	402.18	400.33	400.10	396.35	397.81	401.11	400.11
Date																
11-Apr-2005	391.17	391.72	391.99	394.76	389.28	390.97	390.14	391.45	390.95	390.71	390.24	394.32	389.66	390.22	392.58	390.87
28-Sep-2005	388.33	388.44	388.67	390.52	387.63	386.99	388.05	388.20	388.00	388.05	387.49	391.12	387.10	387.47	389.26	387.92
6-Nov-2006	390.02	390.96	391.13	393.25	389.69	389.74	390.37	390.65	390.25	390.07	389.60	393.36	389.13	389.58	390.88	390.15
4-Feb-2008	390.04	390.80	392.18	393.26	389.58	389.79	390.18	390.36	390.11	390.00	389.50	393.41	389.11	389.63	390.58	390.06
13-Apr-2009	390.52	391.49	391.62	394.41	390.22	390.57	390.84	391.11	390.65	390.54	390.02	394.08	389.54	389.93	391.50	390.57
6-Oct-2009	388.22	388.68	388.85	390.86	387.95	387.32	388.24	388.41	388.23	388.40	387.79	391.37	387.42	387.70	388.76	388.20

Well ID	MW-101	MW-102	MW-103	MW-104	MW-105	MW-106	MW-107	MW-108	MW-109	MW-110	MW-111	MW-112	MW-113	MW-114
Top of Casing	401.58	400.70	397.74	394.43	396.38	388.54	391.85	401.73	400.00	389.77	388.05	388.33	385.93	383.19
Date														
11-Apr-2005	NM													
28-Sep-2005	NM													
6-Nov-2006	392.08	391.60	388.95	388.22	388.57	386.48	387.15	NM						
4-Feb-2008	391.79	391.56	389.09	388.30	388.63	386.63	387.41	392.60	390.77	386.51	385.61	386.01	NM	NM
13-Apr-2009	392.74	392.18	389.27	388.62	388.83	386.87	387.65	393.29	391.33	386.76	385.80	386.26	NM	NM
6-Oct-2009	390.06	389.81	387.33	387.01	387.00	385.81	386.31	390.80	389.08	385.74	385.13	385.44	384.25	383.19

NOTES:

- Top of casing provided by others.

- Measurements reported in feet.

NM - Not measured.

TABLE 4 - Final SUMMARY OF GROUNDWATER ANALYTICAL DATA - 2005 through 2009 SITE 15- 174th FIGHTER WING AIR NATIONAL GUARD HANCOCK FIELD, SYRACUSE, NY NYSDEC SITE NUMBER 734054 ERM PROJECT NUMBER 0086335

WELL ID			MW-2					MW-3					MW-4					MW-5			NYSDEC
Sample Date	Apr-05	Sep-05	Nov-06	Feb-08	Oct-09	Apr-05	Sep-05	Nov-06	Feb-08	Oct-09	Apr-05	Sep-05	Nov-06	Feb-08	Oct-09	Apr-05	Sep-05	Nov-06	Feb-08	Oct-09	STANDARD
VOCs (ug/l)																					
BENZENE						200	57	75													1
ETHYL BENZENE	3.5	83	52		200	200	16	61													5
TOLUENE					NA			0.34J		NA					NA					NA	5
XYLENE	2	98	44		370	95	15	28													5
MTBE					NA	10															
NATURAL ATTENUATION PARAMETERS	(mg/l)																				
NITRATE	0.55		0.17	0.86	< 0.1	0.21			0.33	< 0.1	0.13	0.41		0.18	0.21	1.20	0.98	0.28	1.3	< 0.1	NA
SULFATE	67.0	7.5	37	98	2.8	2.8	2.4	4	6.0	9.3	26.0	26.0	8.9	3.7	37.0	12.0	15.0	11	8.0	8.6	NA
ALKALINITY	300	310	380	190	400	270	350	300	120	360	190	250	240	40	290	220	260	340	140	280	NA
TOTAL HARDNESS	740	310	350	820	590	380	310	230	57	500	240	250	180	37	350	280	260	270	180	310	NA
AMMONIA		0.088	UJ	0.046	0.20		0.76	0.065J		0.75		0.18			0.11			UJ		< 0.03	NA
METHANE		8.800		0.0076	4.4	0.100	1.600			0.28	0.011	0.011			0.012					0.02	NA
PARAMETERS MEASURED IN THE FIELD																					
FERROUS IRON		3.8	0.9	0.8	4.2	6.1	3.3	2.2	0	2.1		1.200	0	0	1		0.300	0	0	1.7	NA
рН	7.06	6.95	8.26	6.96	7.54	6.92	6.45	6.77	6.3	6.33	7.30	6.88	8.26	7.16	7.43	7.12	8.21	6.68	7.04	7.14	NA
DISSOLVED OXYGEN	0.00	0.00	0.29	2.28	0.18	0.00	0.00	2.79	7.99	0.12	1.15	0.00	0	0.64	0.49	4.80	0.00	0.77	7.70	0.00	NA
OXIDATION REDUCTION POTENTIAL	76	-127	-76	123.9	44.4	-61	-81	-8	146.6	-71	43	-113	-46	186.9	44	146	-50	121	41.6	-109	NA
CONDUCTIVITY	1.120	0.999	1.4	6.794	1.471	0.531	0.811	0.76	0.106	0.822	0.366	0.803	0.391	0.067	0.440	0.391	0.362	0.577	0.377	0.595	NA
FIELD OBSERVATIONS						Odor	Odor	Odor													

NOTES:

ug/L = Micrograms per liter

VOCs - volatile organic compounds determined by USEPA Method 8260

NYSDEC Standards - NYS Division of Water Technical and Operational Guidance Series (1.1.1) 1998

The MTBE ground water standard is from NYSDEC's TAGM 8086

- $\ Bold \ white \ type \ with \ black \ background \ indicates \ exceedance \ of \ the \ NYSDEC \ Standards \ or \ Guidance \ Value$
- J = Results greater than the reporting limit that are considered estimated.
- UJ= Results less than the reporting limit that are considered estimated.
- ---- = the compound was not detected at a concentration above the laboratory reporting limit

Natural Attenuation Parameters are used to characterize the physical, chemical and biological response of a hydrologic system to contamination.

Dissolved Oxygen, Oxidation Reduction Potential, pH and conductivity were measured in the field using a Horiba U-22 and flow through cell just prior to collecting samples.

Ferrous Iron concentration were measured using a HACH Test Kit

Ferrous Iron and DO are reported in mg/L

pH is reported in standard units

Oxidation Reduction Potential is reported in mV

Conductivity is reported in ms/cm

Odor = "Petroleum-like" odor

mg/L= Milligrams per liter

WELL ID			MW-8					MW-9					MW-11					MW-14			NYSDEC
Sample Date	Apr-05	Sep-05	Nov-06	Feb-08	Oct-09	Apr-05	Sep-05	Nov-06	Feb-08	Oct-09	Apr-05	Sep-05	Nov-06	Feb-08	Oct-09	Apr-05	Sep-05	Nov-06	Feb-08	Oct-09	STANDARDS
VOCs (ug/l)																					
BENZENE											32	31	17		49	3.7	4.5	2		3.9	1
ETHYL BENZENE	6.4											1.4	0.63J		11		1.2	0.22J			5
TOLUENE					NA					NA			0.11J		NA					NA	5
XYLENE	4											5.2	0.36J		16						5
MTBE					NA					NA		2.2			NA		1.9			NA	10
NATURAL ATTENUATION PARAMETERS	(mg/l)																				
NITRATE	0.20			1.2	< 0.1	0.16	0.37	0.1	0.91	< 0.1	0.23	0.15		0.34	<0.1	0.77			0.26	<0.1	NA
SULFATE	24.0	28.0	42	8.7	52.0	38.0	21.0	20	6.1	12.0	8.8	22.0	22	72	4.5	24.0	43.0	45	66.0	45.0	NA
ALKALINITY	320	320	250	88	400	110	200	270	32	260	330	330	260	370	360	230	320	370	350	340	NA
TOTAL HARDNESS	380	120	370	96	650	130	360	83	26	220	320	320	370	440	510	230	350	380	400	470	NA
AMMONIA			UJ		< 0.03		0.25	0.12J	0.14	0.37			0.042J		< 0.03			0.2		< 0.03	NA
METHANE	0.730	0.015		0.0024	0.011		0.020				0.006	0.740		0.052	1.6	1.800	0.130	0.039	0.14	0.16	NA
PARAMETERS MEASURED IN THE FIELD	1										•		•	•			3	-		•	
FERROUS IRON	2.0	2.4	1	0.8	1.2	0.1	2.0	1.05	1.1	2.0	4.0	4.4	1.6	2.5	2.2	0.5	2.8	NM	1.4	2.0	NA
pH	6.94	7.12	4.58	6.29	7.70	6.27	6.51	6.41	6.64	8.31	7.38	7.19	4.51	7.29	7.00	6.96	7.07	7.33	7.13	7.68	NA
DISSOLVED OXYGEN	0.00	0.00	10.9	6.21	0.35	0.00	0.00	0	10.09	3.02	0.00	0.00	11.36	0.23	0.00	2.12	0.00	0	0.20	0.15	NA
OXIDATION REDUCTION POTENTIAL	-28	-126	271	41	12.8	152	-26	0.43	109.9	-144.7	-271	-155	270	-93.1	-163	-14	-137	-121	-50.2	14.7	NA
CONDUCTIVITY	0.706	0.999	0	0.172	0.873	1.270	0.969	0.83	0.137	1.006	0.643	0.97	0	1.056	1.280	0.496	0.9	0.91	0.567	0.467	NA
FIELD OBSERVATIONS						Odor	Odor				Odor	Odor			Odor	Odor	Odor	Odor	Dye Visible	Dye Visible	

NOTES:

ug/L = Micrograms per liter

VOCs - volatile organic compounds determined by USEPA Method 8260

 $NYSDEC\ Standards-NYS\ Division\ of\ Water\ Technical\ and\ Operational\ Guidance\ Series\ (1.1.1)\ 1998$

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- $\ Bold \ white \ type \ with \ black \ background \ indicates \ exceedance \ of \ the \ NYSDEC \ Standards \ or \ Guidance \ Value$
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Dissolved Oxygen, Oxidation Reduction Potential, pH and conductivity were measured in the field using a Horiba U-22 and flow through cell just prior to collecting samples.

Ferrous Iron concentration were measured using a HACH Test Kit

Ferrous Iron and DO are reported in mg/L

pH is reported in standard units

Oxidation Reduction Potential is reported in mV

Conductivity is reported in ms/cm

Odor = "Petroleum-like" odor

mg/L= Milligrams per liter

WELL ID			MW-15					MW-16					MW-17					MW-18			NYSDEC
Sample Date	Apr-05	Sep-05	Nov-06	Feb-08	Oct-09	Apr-05	Sep-05	Nov-06	Feb-08	Oct-09	Apr-05	Sep-05	Nov-06	Feb-08	Oct-09	Apr-05	Sep-05	Nov-06	Feb-08	Oct-09	STANDARDS
VOCs (ug/l)																					
BENZENE	100	140	66	6.8	10								0.18J								1
ETHYL BENZENE	28	33	38		11			0.25J				2	49								5
TOLUENE					NA			0.38J		NA					NA					NA	5
XYLENE	3												31								5
MTBE		2.8			NA					NA					NA					NA	10
NATURAL ATTENUATION PARAMETERS	(mg/l)																				
NITRATE	0.21			0.8	<0.1	0.20		0.11	0.48	<0.1	3.20	0.13		3.3	<0.1	1.40	0.34	0.83	0.52	<0.1	NA
SULFATE	37.0	17.0	27	28	31	62.0	37.0	99	63	63	58.0	16.0	41	27	19	13.0	12.0	13	6.0	14.0	NA
ALKALINITY	380	340	290	410	340	260	350	520	400	370	260.0	360.0	320	260	370	290	310	320	92	390	NA
TOTAL HARDNESS	430	370	380	460	420	450	390	480	530	550	300	370	370	260	540	300	280	300	99	430	NA
AMMONIA			0.11J	0.041	< 0.03			5.1J		< 0.03	1.50	1.20	0.13J		0.22			UJ		< 0.03	NA
METHANE	2.100	1.400		0.93	0.19		0.057	0.0078		0.0089	0.033	1.400			1.1					0.0029	NA
PARAMETERS MEASURED IN THE FIELD)		•			,		3	,				3				3	3		•	
FERROUS IRON	4.6	3.1	2.95	2.2	2.4		0.400	NM	0.2	0.2		2.200	3.2	0	1.4		0.000	0	0	0	NA
pH	7.00	6.88	7.2	7.16	7.55	7.17	6.99	7.15	6.67	7.60	7.35	6.83	7.01	6.75	6.69	7.25	8.10	7.13	7.07	7.49	NA
DISSOLVED OXYGEN	0.00	0.00	0	0.31	0.13	1.70	0.00	0	1.30	0.42	0.00	0.00	0	6.29	0.00	0.20	0.00	0	1.06	1.11	NA
OXIDATION REDUCTION POTENTIAL	-67	150	-153	-99.1	7.8	-85	-16	-19	153.8	18.9	-308	-139	-98	53.9	-115	-202	127	185	181.1	44.5	NA
CONDUCTIVITY	1.170	1.01	0.99	0.630	525	1.050	0.97	3.06	1.052	0.891	0.623	0.6	0.9	0.522	1.260	0.486	0.378	0.986	0.143	0.568	NA
FIELD OBSERVATIONS			Odor		Odor				Dye Visible	Dye Visible											

NOTES:

ug/L = Micrograms per liter

VOCs - volatile organic compounds determined by USEPA Method 8260

NYSDEC Standards - NYS Division of Water Technical and Operational Guidance Series (1.1.1) 1998

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Ferrous Iron and DO are reported in mg/L

pH is reported in standard units

Oxidation Reduction Potential is reported in $\ensuremath{\text{mV}}$

Conductivity is reported in ms/cm

Odor = "Petroleum-like" odor

mg/L= Milligrams per liter

WELL ID				MW-19						MW-20					MW-22			NYSDEC
Sample Date	Apr-05	Sep-05	Nov-06	Feb-08	Apr-09	Aug-09	Oct-09	Apr-05	Sep-05	Nov-06	Feb-08	Oct-09	Apr-05	Sep-05	Nov-06	Feb-08	Oct-09	STANDARDS
VOCs (ug/l)																		
BENZENE	28	33	17J		0.71 J	6	< 10						110	70	51		5.6	1
ETHYL BENZENE	300	610	270	8.5	17	410	380						89	32	82		21	5
TOLUENE					NA	NA	NA					NA			0.34J		NA	5
XYLENE	650	860	460	9	20	760	420						88	46	90		3	5
MTBE					NA	NA	NA					NA					NA	10
NATURAL ATTENUATION PARAMETERS	(mg/l)																	
NITRATE	0.19			0.28			<0.1	0.45			1.4	<0.1	1.50		0.3	1.9	<0.1	NA
SULFATE	15.0		11	25.0	20.0	6.7	4.9	36.0	15.0	240	11.0	9.4	32.0	8.8	41	16.0	31.0	NA
ALKALINITY	350	330	240	410	330	330	340	340	340	370	67	350	330	400	370	170	410	NA
TOTAL HARDNESS	340	350	330	350	400	560	550	420	330	300	83	330	390	340	340	160	570	NA
AMMONIA			0.75J			0.077	0.16			0.03J		< 0.03		0.12	0.1		< 0.03	NA
METHANE	3.400	3.500		0.99	0.61	0.98	3	0.018	0.027			0.13	2.300	1.800	1.3	0.017	1.0	NA
PARAMETERS MEASURED IN THE FIELD		-	•	-	-	-		•	•	-		-	•	•				
FERROUS IRON		4.100	2.2	2	1.7	2.7	1.9		2.500	1.2	0	1.8		5.300	NM	0	0.8	NA
рН	6.78	6.68	4.66	6.37	7.1	6.64	8.21	7.06	6.71	4.69	6.47	7.48	6.87	7.81	5.19	6.57	6.85	NA
DISSOLVED OXYGEN	0.00	0.00	10.95	0.88	0.71	0.29	0.21	0.00	0.00	11.17	0.26	0.23	5.70	0.00	9.55	0.16	0.00	NA
OXIDATION REDUCTION POTENTIAL	-79	-101	267	23.7	11.6	-33.4	-132.6	-390	-76	261	207.5	-50.1	-242	-92	226	174.9	-25	NA
CONDUCTIVITY	1.210	0.91	0	1.260	0.997	1.052	1.450	0.839	0.954	0	0.143	0.807	0.607	1.07	0	0.155	1.410	NA
FIELD OBSERVATIONS						Odor							Odor	Odor		Odor		

NOTES:

ug/L = Micrograms per liter

VOCs - volatile organic compounds determined by USEPA Method 8260

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Ferrous Iron and DO are reported in mg/L

pH is reported in standard units

Oxidation Reduction Potential is reported in $\ensuremath{\text{mV}}$

Conductivity is reported in ms/cm

Odor = "Petroleum-like" odor

mg/L= Milligrams per liter

WELL ID			RW-1				MW-101			MW-102			MW-103			MW-104		NYSDEC
Sample Date	Apr-05	Sep-05	Nov-06	Feb-08	Oct-09	Nov-06	Feb-08	Oct-09	Nov-06	Feb-08	Oct-09	Nov-06	Feb-08	Oct-09	Nov-06	Feb-08	Oct-09	STANDARDS
VOCs (ug/l)																		
BENZENE		2.4	1.4J			8.9								1.3				1
ETHYL BENZENE	11.0	18	60	45		110	22	7.9										5
TOLUENE			0.4J		NA			NA			NA			NA			NA	5
XYLENE	21.0	36.0	30	60		230	41	7.4										5
MTBE					NA			NA			NA			NA			NA	10
NATURAL ATTENUATION PARAMETERS	(mg/l)																	
NITRATE	0.12			0.18	<0.1	0.72	0.47	<0.1	0.13	0.42	<0.1	0.34	0.32	<0.1	0.38	0.3	<0.1	NA
SULFATE	13.0	19.0	170	6.7	5	44	35	42	50	52	5	27	36	33	39	4.5	41	NA
ALKALINITY	200	310	310	250	310	380	300	360	410	390	340	250	340	330	330	54	370	NA
TOTAL HARDNESS	240.0	310.0	380	280	430	430	420	490	550	520	640	310	360	510	440	22	500	NA
AMMONIA	0.45	0.34	1.1	0.44	0.82	0.12		< 0.03	UJ		< 0.03			< 0.03	0.13	0.34	< 0.03	NA
METHANE	1.300	1.300	6.3	4.4	1.3	0.63	0.55	0.44	0.026	0.016	0.0084	0.27	0.90	0.0970	0.055		0.033	NA
PARAMETERS MEASURED IN THE FIELD)			-	-				,			,		•	,		3	
FERROUS IRON	1.0	3.2	NM	1.3	2.5	2.8	1.6	1.2	0.6	0.4	1.8	1.2	0.9	2.9	0.2	0.0	2.1	NA
рН	7.11	7.01	6.8	6.90	6.83	5.15	7.82	6.98	4.89	6.93	7.40	4.65	7.12	6.82	7.27	6.99	7.55	NA
DISSOLVED OXYGEN	0.00	0.00	0	0.13	0.00	9.84	0.50	0.00	9.9	0.72	0.16	10.92	0.33	0.00	0	12.38	0.28	NA
OXIDATION REDUCTION POTENTIAL	-129	-166	-200	-248.8	-156	238	-35.2	-103	267	46.3	46.8	275	-48.9	-132	-51	112.3	-70.5	NA
CONDUCTIVITY	0.605	0.999	12.1	0.666	1.100	0	0.731	1.280	0	1.459	1.532	0	1.776	1.420	1.49	0.034	1.674	NA
FIELD OBSERVATIONS	Odor/ Sheen	Odor	Odor	Odor/sheen	Dye Visible/ Odor	Odor/sheen												

NOTES:

ug/L = Micrograms per liter

VOCs - volatile organic compounds determined by USEPA Method 8260

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Ferrous Iron and DO are reported in mg/L

pH is reported in standard units

Oxidation Reduction Potential is reported in mV

Conductivity is reported in ms/cm

Odor = "Petroleum-like" odor

mg/L= Milligrams per liter

WELL ID			MW-10	5				MW-106					MW-107			NYSDEC
Sample Date	Nov-06	Feb-08	Apr-09	Aug-09	Oct-09	Nov-06	Feb-08	Apr-09	Aug-09	Oct-09	Nov-06	Feb-08	Apr-09	Aug-09	Oct-09	STANDARDS
VOCs (ug/l)																
BENZENE	110	86	6.2	3.3	16						0.52J					1
ETHYL BENZENE	300	260	120		8.6						30					5
TOLUENE			NA	NA	NA			NA	NA	NA			NA	NA	NA	5
XYLENE	480	430	260		14						0.41J		0.27 J			5
MTBE			NA	NA	NA	0.34J		NA	NA	NA			NA	NA	NA	10
NATURAL ATTENUATION PARAMETERS (mg/l)																
NITRATE	0.11	0.29	0.21		<0.1		0.12			<0.1	1.1	2.6	2.1	0.41	0.54	NA
SULFATE	6.3	5.6	8.1	25	14	28	42	49	48	36	17	12	15	45	42	NA
ALKALINITY	270	420	380	320	360	420	340	390	340	340	290	100	200	190	180	NA
TOTAL HARDNESS	370	320	370	370	460	430	410	450	550	380	360	120	200	510	330	NA
AMMONIA	0.054				< 0.03	UJ				< 0.03	0.099				< 0.03	NA
METHANE	3.3	7.8	2.8	1.5	0.51	0.14	0.07	0.051	0.28	0.045	0.29		0.0049	0.033	0.057	NA
PARAMETERS MEASURED IN THE FIELD	PARAMETERS MEASURED IN THE FIELD															
FERROUS IRON	2.2	1.1	3.5	0.8	2.9	0	0.0	0.8	0.0	0.0	1.6	0.0	0.0	5.2	3.5	NA
рН	4.64	6.97	7.39	7.21	7.77	7.32	7.35	6.97	7.53	7.38	5	6.88	6.92	7.62	7.49	NA
DISSOLVED OXYGEN	11.09	0.38	0.29	2.95	0.38	0	0.19	0.23	0.26	0.14	10.45	7.57	4.89	2.57	2.24	NA
OXIDATION REDUCTION POTENTIAL	272	-66.1	-43.1	86.1	-107.1	-20	-58.7	-5.3	10.1	-6.0	255	99.8	21.4	-21.7	-17.7	NA
CONDUCTIVITY	0	0.567	817	0.956	1.128	1.66	0.558	1.404	0.850	0.854	0	0.490	0.845	0.915	1.238	NA
FIELD OBSERVATIONS	Odor/sheen	Odor	Odor	Oxidant in H2O												

NOTES:

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pH is reported in standard units

Oxidation Reduction Potential is reported in mV

Conductivity is reported in ms/cm

Odor = "Petroleum-like" odor

mg/L= Milligrams per liter

WELL ID	MW	7-108	MW	7-109	MW	/ -110		MW	'-111			MW	-112		MW	-113	MW	7-114	NYSDEC
Sample Date	Feb-08	Oct-09	Feb-08	Oct-09	Feb-08	Oct-09	Feb-08	Apr-09	Aug-09	Oct-09	Feb-08	Apr-09	Aug-09	Oct-09	Feb-08	Oct-09	Feb-08	Oct-09	STANDARDS
VOCs (ug/l)																			
BENZENE												13	6.9	< 10					1
ETHYL BENZENE											410	250	300	48					5
TOLUENE		NA		NA		NA		NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	5
XYLENE											740	480	170	<20					5
MTBE		NA		NA		NA		NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	10
NATURAL ATTENUATION PARAMETERS (mg/l)																			
NITRATE	0.39	<0.1	0.66	<0.1		<0.1				<0.1				1.4		<0.1		<0.1	NA
SULFATE	41	44	70	65	41	57	65	45	48	49	19	11	11	8.4	11	62	11	56	NA
ALKALINITY	400	380	410	340	370	380	350	360	330	360	370	360	330	340	330	470	330	350	NA
TOTAL HARDNESS	510	540	460	420	450	570	410	490	600	540	380	570	530	510	530	540	530	400	NA
AMMONIA	< 0.03	< 0.03	< 0.03	< 0.03		< 0.03				< 0.03				0.051		< 0.03		< 0.03	NA
METHANE	0.018	0.0082	0.28	0.0078	0.048	0.061	0.044	0.040	0.051	0.039	7.2	3	1.6	1.4	1.6	0.021	1.6	0.0044	NA
PARAMETERS MEASURED IN THE FIELD	PARAMETERS MEASURED IN THE FIELD																		
FERROUS IRON	1.6	1.2	0.0	0.2	0.4	0.0	0.0	0.0	0.2	0.0	1.3	2.1	2.2	0.0	1.7	1.5	1.8	1.4	NA
pH	6.92	6.93	6.95	7.49	7.14	7.54	7.23	7.34	7.24	7.21	7.25	8.30	6.57	7.33	7.06	7.19	6.90	7.12	NA
DISSOLVED OXYGEN	0.39	0	0.04	0.68	0.11	0.17	0.10	0.28	0.33	0.15	0.42	0.16	0.37	0.26	0.30	0.00	0.14	0.00	NA
OXIDATION REDUCTION POTENTIAL	27.6	-61	162.5	59.1	0.4	30.7	14.7	22.3	28.8	27.9	-110.2	-74.6	-71.3	21.5	-57.8	-42.7	-43.3	-112	NA
CONDUCTIVITY	1.033	2.16	1.269	1	0.970	1.311	0.725	0.848	1.199	1.750	0.599	0.855	15.890	1.481	1.349	1.863	1.055	1.38	NA
FIELD OBSERVATIONS											Odor	Odor	Odor	Odor			artesian	artesian	

NOTES:

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Conductivity is reported in ms/cm

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mg/L= Milligrams per liter

APPENDIX A

DAILY FIELD LOGS

ERM DAILY FIELD REPORT	DATE: z/z5/o		JOB NO:	
LOCATION: Notional Grid Preporty FILED BY: RS		OPI Polis	J.S	
FORMS ATTACHED TO THIS REPORT: Chain of Custody Shipping Manifest Field Sampling Equipment Chain	=		Subcontra Injury Rep	actor Invoice port
1. Significant work accomplished today? - Conduct health & Safely on - Complete 5 basings and Samples w/ SP-16	ooting	5 ra (west	\$
Samples u/SP-16				
Draw a sketch showing the location of site activity.				
Prive Lodd	ed Property 4 123 124	cline izs i	7C 55	reding
Gate			. —	128
National Grid	(chi		7	
/ National Urio	1 525-2441-	7		
2. What field personnel and equipment were used today? Dave Myors Rob Sonts	Field u PID	whie	las	
	PPE			

DAILY FIELD REPORT PAGE 2	PROJECT NO.: 86335 DATE:
3. What unusual events happened today? Describe:	
4. Was any property damaged? Y Explain:	ES NO
5. What were the weather conditions at the	e site?
Time of Observation: \$:30 Precipitation: no Skies: c(cc) Wind (direction and speed): —	Ground moisture: Fweeto, Source Cource Air Temperature: £12°-£
6. Were there any visitors to the site? YI NAME - COMPANY - PURPOSE O	
•	
7. Were any photographs taken by ERM per Please detail location and description:	ersonnel? (YES) NO
3. Additional comments (i.e. Additional wo	ork performed outside of ERMs initial scope of work):

ERM DAILY FIELD REPORT	DATE: Z 769 JOB NO: 86335 TIME: (arrive) 7:05 (depart) 18:00
LOCATION: Uchianal Goid Proper	ACTIVITY: DPT off 5:4e SIGNATURE:
FORMS ATTACHED TO THIS REPORT: Chain of Custody Shipping Manifest Equipment Chain	
1. Significant work accomplished today? - Conduct houlth and safet - Docon an base prop - co-pleted 6 borings Water sample a Go-prose 6610	y monting orty and collect G stab SP-IC sample— wsing
Draw a sketch showing the location of site activity.	
see field bo	oK
2. What field personnel and equipment were used today	PIO
Deve myers	field valide

DAILY FIELD REPORT PAGE 2	PROJECT NO.: 86335	DATE: Z/ZC/CS
3. What unusual events happened today Describe:	?	
4. Was any property damaged? Explain:	YES NO	
5. What were the weather conditions at the Time of Observation: 7:65 Precipitation: 50 Skies: 6000000000000000000000000000000000000	Ground moisture: らっこ こと Air Temperature: 生々。 仁	
6. Were there any visitors to the site? YOURD ON THE STATE OF SCALES	ES NO OF VISIT	
7. W		
7. Were any photographs taken by ERM p Please detail location and description:	see dient disital	-16)4
2 Additional comments (i.e. Additional v	roul nouformed outside of EDMs initial o	
3. Additional comments (i.e. Additional w	les to additional	comments
, ,	· · · · · · · · · · · · · · · · · · ·	

ERM DAILY FIELD REPORT	DATE: z(z7/c5 TIME: (arrive) 7:0	JOB NO: 86335 (depart) [6:00]
LOCATION: Notional Grid 8 CPT Mag		
FORMS ATTACHED TO THIS REPORT: Chain of Custody Shipping Manifest Equipment Cl	ng Reports harge	Subcontractor Invoice Injury Report
1. Significant work accomplished today? - Caructed health and Saf - Calibrate equipment - Completed 5 barings water sample using - Lamples drapped of	and collections and collections considered to project the collections at the	y :15 greb ct Casaratany
Draw a sketch showing the location of site activity.		
sae field	Scot	
2. What field personnel and equipment were used toda	. ,	
Red Sents Pere Myors		(es

DAILY FIELD REPORT PAGE 2	PROJECT NO.: 8633	DATE: Z Z7/05
3. What unusual events happened today? Describe:		
4. Was any property damaged? YI Explain:	ES (NO)	
	•	
5. What were the weather conditions at the Time of Observation: Precipitation: Skies: Wind (direction and speed): 20-40	Ground moisture:	and verywot
6. Were there any visitors to the site? (XE) NAME - COMPANY - PURPOSE OF		
7. Were any photographs taken by ERM pe Please detail location and description:	rsonnel? (YES) NO	
7	client folder, soe - dotail	Firld book
3. Additional comments (i.e. Additional wo	ork performed outside of ERMs initial	scope of work):

ERM DAILY FIELD REPORT	DATE: 3/3/05 TIME: (arrive) 8:3	
LOCATION: CPI Property FILED BY:	ACTIVITY: DP . SIGNATURE:	I off site
FORMS ATTACHED TO THIS REPORT: Chain of Custody Field Sampling Shipping Manifest Equipment Cha	• •	Subcontractor Invoice Injury Report
1. Significant work accomplished today? - Connect a hoelff and So - Conpleted 3 soil be 3 sees ground water	fely menti.	Zallect
3 grass ground water	samples	
<u>.</u>	•	
Draw a sketch showing the location of site activity.		
see field note b	ook	
,		
2. What field personnel and equipment were used today	Field vel	.;de
	PTO PPE	

DAILY FIELD REPORT PAGE 2	PROJECT NO.: 86335	DATE: 3/3/05
3. What unusual events happened today Describe:	?	
	ne :	
4. Was any property damaged?	YES NO	
Explain:		
•••		
5. What were the weather conditions at t	he site?	
Time of Observation:		
Precipitation:	Ground moisture:	
Skies: Aust cast	Air Temperature: #10°f	
Wind (direction and speed): 0-15 o	ut NU	
6. Were there any visitors to the site?	YES NO	
NAME - COMPANY - PURPOSE	OF VISIT	
ŁCST:	- sesconfrected dr	iller
Were any photographs taken by ERM person in the ERM person	personnel? YES NO	
	in dient file	
8. Additional comments (i.e. Additional w	vork performed outside of ERMs initial s	cope of work):
see fieldno	tos for additional	comments

ERM DAILY FIELD REPORT	DATE: 4/13/09 JOB NO: 86335 TIME: (arrive) 9:00 (depart) 17:00
LOCATION: filed BY:	ACTIVITY: G.W. Sampling SIGNATURE: Signature:
FORMS ATTACHED TO THIS REPORT: Chain of Custody Shipping Manifest Field Sampling Equipment Co	
1. Significant work accomplished today? Conducted hoelfth and Complete round of Sample select wall mu-19, mu-107, m Drop sample at 1 in chilled coalers	Safety monting static liquid levels Is MU-111, MU-105, MU-112 Ju-106 ab under prepar C.O.C.
Draw a sketch showing the location of site activity.	
no sk	tefely
2. What field personnel and equipment were used toda Ros Sonts Potol, Shannon	Field wehicle weter level indicators Pemps YSIs turk maters PIO

DAILY FIELD REPORT PAGE 2	PROJECT NO.: 86335	DATE: 4/13/65
3. What unusual events happened today? Describe:	?	
	Λ ΄	
4. Was any property damaged? Y Explain:	(ES (NO)	
5. What were the weather conditions at the Fime of Observation: Precipitation: Skies: Wind (direction and speed):		
. Were there any visitors to the site? Y. NAME - COMPANY - PURPOSE C	ES NO DF VISIT	
. Were any photographs taken by ERM polease detail location and description:	ersonnel? YES NO	
Additional comments (i.e. Additional wo	ork performed outside of ERMs initial	scope of work):

ERM RCM DAILY FIELD REPORT	DATE: $5 / 11 / 66$ JOB NO: $0.066335.32$ TIME: (arrive) 1015 (depart) 1330
LOCATION: ANG Property, Golf (user, Rar	nH(ACTIVITY: SIGNATURE:
FORMS ATTACHED TO THIS REPORT: Chain of Custody Field Sampling I Shipping Manifest Equipment Char	-
ANG Airbre Base Pordering	lie in 4 locations. East Molloy Road g East Molloy Road in East Molloy Road GE.
Draw a sketch showing the location of site activity. See Affached	
Clearl areas outli	
Tid not recomme dilly marked ort.	wil in even of INJ-18 + INJ-19 until all UFFO's utility
2. What field personnel and equipment were used today? OPR UNIT WITHIAM UPPORO Ford Truck	

DAILY FIELD REPORT PAGE 2	PROJECT NO.:	DATE: 5/11/0 0
. What unusual events happened toda	ay?	
Describe: Nove		
WANNAMATOR POTENTIAL TO THE TOTAL THE TOTAL TO THE TOTAL THE TOTAL TO	· · · · · · · · · · · · · · · · · · ·	
TAY	VEC	
. Was any property damaged?	YES (NO)	
Explain:		LL LL DECOLUE AND LL DECOLUE AND ADDRESS A
. What were the weather conditions at	the site?	
ime of Observation: " \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
recipitation: No	Ground moisture:	***************************************
kies: Clear	Air Temperature: $\sim 70^\circ$) aug
Vind (direction and speed): (alm		
•		
Were any photographs taken by ERM	I RCM personnel? YES (NO))
lease detail location and description:		
	The state of the s	volabelel (A) de la
Additional comments (i.e. Additional	work performed outside of FPM PCN	Me initial econo of xuarle)
Additional comments (i.e. Additional	work performed outside of ERW KC	us indai scope of work).
A		WALLAND THE TANK THE
<i></i>		
Personal Safety Contract (PSC) Cards:		
umber of PSC Cards Distributed:		
umber of PSC Cards Received:		
omments:	The second secon	
		WHITE WAS A CASE OF THE SECOND STATE OF THE SE

,

ERM DAILY FIELD REPORT	DATE: May 09 JOB NO: 0086335.37 TIME: (arrive) (depart)
LOCATION: ANG Harcock Field - Syl	SIGNATURE: Row Signature:
FORMS ATTACHED TO THIS REPORT: Chain of Custody Field Sam Shipping Manifest Equipmen	pling Reports Subcontractor Invoice at Charge Injury Report
1. Significant work accomplished today? Set up decan equipment as for subconfractors	nd sat tomporary base passes a project, rowice HASP and take
- Initiate inject on ANG	proporty just north of
- 50 lbs of Pormaox in in a slusry, utilities	jacted over the target zone and sarface enter menitoried
Draw a sketch showing the location of site activity.	Aroca
#mw-q	*Injertion location mw-19
~	rellay Rd.
• • • • • • • • • • • • • • • • • • • •	Field volicles
Dave Myers	PPE

NAME - COMPANY - PURPOSE OF VISIT ECST - Sescond actor desillors BB • F - ANG corresish 7. Were any photographs taken by ERM personnel? Please detail location and description: Soc attacked	DAILY FIELD REPORT PAGE 2 PROJECT NO.: 008 6335.32 DATE: 57	12/09
Explain: Minimal James to grass from treet of Comprobe on ANG proporty.		
Explain: Minimal James to grass from treet of Comprobe on ANG proporty.		
5. What were the weather conditions at the site? Time of Observation: Precipitation: OBOR Ground moisture: Skies: Air Temperature: 140 Wind (direction and speed): 6. Were there any visitors to the site? ECST - Subconfactal drillors BBIF - ANG aursight 7. Were any photographs taken by ERM personnel? Please detail location and description: Sog attacks 8. Additional comments (i.e. Additional work performed outside of ERMs initial scope of work):	4. Was any property damaged? YES NO	
Time of Observation: Precipitation: Ocal Skies: Clac Air Temperature: Wind (direction and speed): Colo Wind (direction and speed): Ocal NAME - COMPANY - PURPOSE OF VISIT ECST - Sesconfacted drillers BRIF - ANG corresish 7. Were any photographs taken by ERM personnel? Please detail location and description: See affected 8. Additional comments (i.e. Additional work performed outside of ERMs initial scope of work):	Explain: Minimal demage to grass from track of Graprobe on ANG proport	/ -
Precipitation: Skies: Clear Air Temperature: # 40 6. Were there any visitors to the site? ECST - Subconfracted drillers BRIF - ANG ourreight 7. Were any photographs taken by ERM personnel? Please detail location and description: See affected 8. Additional comments (i.e. Additional work performed outside of ERMs initial scope of work):	5. What were the weather conditions at the site?	
Skies: Clar Air Temperature: 140 Wind (direction and speed): Color 6. Were there any visitors to the site? VES NO NAME - COMPANY - PURPOSE OF VISIT ECST - Secondar Clark decision decision decision decision and description: 7. Were any photographs taken by ERM personnel? YES NO Please detail location and description: Soe attacked 8. Additional comments (i.e. Additional work performed outside of ERMs initial scope of work):		
Wind (direction and speed): Color 6. Were there any visitors to the site? ECST - Sescond act of drillors BR'F - ANG corresish 7. Were any photographs taken by ERM personnel? Please detail location and description: Soc attacks 8. Additional comments (i.e. Additional work performed outside of ERMs initial scope of work):	•	
NAME - COMPANY - PURPOSE OF VISIT ECST - Selector of cillors BB+E - ANG corrector of cillors BB+E - ANG corrector of cillors 7. Were any photographs taken by ERM personnel? Please detail location and description: Soc attached 8. Additional comments (i.e. Additional work performed outside of ERMs initial scope of work):		
7. Were any photographs taken by ERM personnel? Soc attacks 8. Additional comments (i.e. Additional work performed outside of ERMs initial scope of work):		
Please detail location and description: Soc attacked 8. Additional comments (i.e. Additional work performed outside of ERMs initial scope of work):		
8. Additional comments (i.e. Additional work performed outside of ERMs initial scope of work):	Please detail location and description:	
	See attached	A.W. T.
	8. Additional comments (i.e. Additional work performed outside of ERMs initial scope of work):	

ERM DAILY FIELD REPORT	DATE: 13 May 09 JOB NO: 0086335 TIME: (arrive) 7:30 (depart) 16:50
LOCATION: ANG Harcock Folder	Syr. NY ACTIVITY: ISCO PILATOST SIGNATURE: Pour Just
-	Sampling Reports Subcontractor Invoice ment Charge Injury Report
1. Significant work accomplished today? - Conducted a health an - Injected 450 lbs of a 5 court pump and - Health and safety audit - over sight by Josh Sch	Pormoox in a slarry using a Graprobe by Ernie Severt.
Draw a sketch showing the location of site act	ivity. Arce Arce
molloy Re	
Green No. 15	
2. What field personnel and equipment were under the source of the sourc	sed today? Field Ushicles Disital Cemera Hend tools PPE

DAILY FIELD REPORT PAGE 2	PROJECT NO.: 0086335 DATE: 5/13/09
3. What unusual events happened today? Describe:	
4. Was any property damaged? (YES)	NO
Explain: Minimal damage	e alone to gress by tracks
5. What were the weather conditions at the site? Time of Observation: 7:70	
	ound moisture:
Skies: clas Ai	r Temperature: ±50
6. Were there any visitors to the site? YES NAME - COMPANY - PURPOSE OF VISI ECSI - Subconfice	actad drillo
BB+F- ANG	ourrsight
7. Were any photographs taken by ERM personne Please detail location and description:	el? (YES) NO
8. Additional comments (i.e. Additional work per	formed outside of ERMs initial scope of work):
<i>□/i</i> ∩ 5 cc	ab6 ,

ERM DAILY FIELD REPORT	DATE: 14 May 09 JOB NO: 0086535 TIME: (arrive) 7:00 (depart) 8:00
LOCATION: ANG Hancock Field	Syp. NY ACTIVITY: ISCO PILOT TOST SIGNATURE: Res Jes
	Sampling Reports Subcontractor Invoice Injury Report
1. Significant work accomplished today?	
Thunder storm one his strikes reported in	due to weether conditions, parted wind over 60 mph. our away w/ 40 lightening 10 minutes. Serface water flows for Permedx, none scane vity.
2. What field personnel and equipment were us	ed today? Field Ushicle Digital Campra

DAILY FIELD REPORT PAGE 2	PROJECT NO.: 0086335	DATE:5/14/09
3. What unusual events happened today? Describe: weether we were well as well	ark cancolal for h to minimize doma	oelth 8 setot
4. Was any property damaged? YI Explain:	ES NO	
5. What were the weather conditions at the Time of Observation: Precipitation: Skies: Wind (direction and speed):	Ground moisture:	
6. Were there any visitors to the site? YE NAME - COMPANY - PURPOSE OF	S) NO	
ECSI - seb	contrado dilla	
7. Were any photographs taken by ERM per Please detail location and description:		
3. Additional comments (i.e. Additional wo	rk performed outside of ERMs initial sco	ppe of work):
200	n\$	

ERM DAILY FIELD REPORT	DATE: 15 May 09 JOB NO: 0086335 TIME: (arrive) 7:30 (depart) 17:40
LOCATION: ANG Horock Field-	Syr, NY ACTIVITY: ISCO PILOT TOST SIGNATURE: Pour Justine
the state of the s	Sampling Reports Subcontractor Invoice ment Charge Injury Report
- Health and Schoty - - Demobilize equipmen	rmode in a slurry using pump and: t by Tim Pac t CPI's parking let from
Draw a sketch showing the location of site acti	vity.
Jan fox	sed today? Liold vohicles Disital Camera Hend tools PPS

DAILY FIELD REPORT PAGE 2	PROJECT NO.: 0686335	DATE:5/15/09
3. What unusual events happened today? Describe:		
4. Was any property damaged? YES Explain:	NO	
5. What were the weather conditions at the sir Time of Observation:	te?	
***************************************	Ground moisture:	11
Precipitation: Skies: Close	Air Temperature: ±50°£	to wet
Wind (direction and speed):		
6. Were there any visitors to the site? YES NAME - COMPANY - PURPOSE OF V ECST - Salce	NO NO Ariller	
7. Were any photographs taken by ERM perso	onnel? YES NO	
Please detail location and description:	soe attached	
8. Additional comments (i.e. Additional work	performed outside of ERMs initial	scope of work):
200	• '	

ERM DAILY FIELD REPORT	DATE: 18 May 09 JOB NO: 0086335 TIME: (arrive) 3:00 (depart) 13:20
LOCATION: AND Honcock Field-	Syr., NY ACTIVITY: 1500 Pilot Tost SIGNATURE: Res Jes
	Sampling Reports Subcontractor Invoice ment Charge Injury Report
1. Significant work accomplished today?	
- Houlth & sately mont - Photo decument sa societ. There were Pormo Ox	ing wile, crook & chacked no visual signs of
Draw a sketch showing the location of site activ	rity.
707 (
2. What field personnel and equipment were us	ed today?
Todd Mersh	Field Vahicle Digital Compre

DAILY FIELD REPORT PAGE 2 PROJECT NO.: 0086335 DATE: 5/18/07
3. What unusual events happened today? Describe:
4. Was any property damaged? YES NO Explain:
5. What were the weather conditions at the site?
Time of Observation: Precipitation: Skies: Clar Air Temperature: # 46 f Wind (direction and speed): 0-15 mpl out of NW
6. Were there any visitors to the site? YES NAME - COMPANY - PURPOSE OF VISIT
7. Were any photographs taken by ERM personnel? YES NO Please detail location and description:
8. Additional comments (i.e. Additional work performed outside of ERMs initial scope of work):
<u> </u>

ERM DAILY FIELD REPORT	DATE: 74-30 TIME: (arrive)		-	
LOCATION: FILED BY:	ACTIVITY: SIGNATURE:	7100	Jes	12:00
FORMS ATTACHED TO THIS REPORT: Chain of Custody Shipping Manifest Field Sampling Equipment Cha	-		Subcontra Injury Rej	actor Invoice port
1. Significant work accomplished today? - Paily hostith and select - Completed 5 soil box 5 cannol water sample	y moot	ling.	a 5 F	25
grand water sample ul SP-16 sampler Installed two monitori	from a	?ec4 5	leck	tion
Draw a sketch showing the location of site activity.		,		
	GP-146	GR144 GR144 GR143 GR142	JA NOT	tonal
2. What field personnel and equipment were used today: Rob Sorts Doug Myers	field us	-hicles		

DAILY FIELD REPORT PAGE 2	PROJECT NO.: 86335	DATE: 24-30 July Co
3. What unusual events happened today Describe:	1	
Describe:	nc .	
4. Was any property damaged?	YES NO	
5. What were the weather conditions at the Time of Observation:		
Precipitation:	Ground moisture:	
	Air Temperature: 🛂 🚜 🕻	
6. Were there any visitors to the site? (7) NAME - COMPANY - PURPOSE (
est.	-suscentracted drill	le
 Were any photographs taken by ERM p Please detail location and description: 	personnel? YES NO	
	mana an	
Additional comments (i.e. Additional w	vork performed outside of ERMs initial so	

ERM DAILY FIELD REPORT	DATE: 8/5/05 TIME: (arrive)	JOB NO: 86335 (depart)
LOCATION: Location: Filed BY:	ACTIVITY: 6-0	J Sampling
FORMS ATTACHED TO THIS REPORT: Chain of Custody Field Sam Shipping Manifest Equipmer	pling Reports nt Charge	Subcontractor Invoice Injury Report
1. Significant work accomplished today? - Paily haelth & safate - Cample to round of - Sample Salact man flow sample motha MNA & BEX. MW-19, MW-19, MW-19	5, MW-107, MW-	ls susing lew ellowhood for 10C, MW-111
Draw a sketch showing the location of site activity.		
2. What field personnel and equipment were used to Sonts Shannon Pold		ing Excipment

DAILY FIELD REPORT PAGE 2	PROJECT NO.: <u>86335</u>	date: \$\s\c_
3. What unusual events happened today? Describe:		·
4. Was any property damaged? Yl Explain:	ES NO	
5. What were the weather conditions at the Time of Observation: Precipitation: Skies: Wind (direction and speed):	Ground moisture: 1,	
6. Were there any visitors to the site? YE NAME - COMPANY - PURPOSE O	es NO	
7. Were any photographs taken by ERM pe Please detail location and description:	ersonnel? YES NO	
8. Additional comments (i.e. Additional wo	ork performed outside of ERMs initia	I scope of work);
		*

ERM DAILY FIELD REPORT	DATE: tolclo	JOB NO: 86335 G:30 (depart) 1260
FILED BY: PS	ACTIVITY: SIGNATURE:	of soil sampling Implants
	mpling Reports ent Charge	Subcontractor Invoice Injury Report
1. Significant work accomplished today? - ERM conducts hackled - Maats w/ Rem Tach complated over the	to discuss	mosting boing
- Sot three 6" soil	vapor som	pling implent
	•	
Draw a sketch showing the location of site activition of site activities activ	y. + sucip	su-cs
Beilding	Perking lot	beild: 25
the side	dk	
Foirway Dri		
2. What field personnel and equipment were used Rob Sonts	•	
Dave Myers		=(5
	Soil ver	per sampling agripment

DAILY FIELD REPORT PAGE 2	PROJECT NO.: 86335 DATE:	
3. What unusual events happened today? Describe:		
4. Was any property damaged? YE Explain:	. NO	
5. What were the weather conditions at the Time of Observation: 9:36 Precipitation: 90 Skies: 008CCGS+ Wind (direction and speed):	Ground moisture: Air Temperature: + CG	
6. Were there any visitors to the site? YES NAME - COMPANY - PURPOSE OF		
7. Were any photographs taken by ERM per Please detail location and description:	rsonnel? (YES) NO	
\$	e client file	
3. Additional comments (i.e. Additional wor	rk performed outside of ERMs initial scope of work):	· 5

ERM DAILY FIELD REPORT	DATE: 10/C/ TIME: (arrive)	, SG JOB NO: 8:55 (depart)	86335 17:40
LOCATION: Hencock ANG -Sy	SIGNATURE:	su and aw Political	Sampling
	ampling Reports nent Charge	Subcontr	actor Invoice port
1. Significant work accomplished today? - Haciffy & sefety m - Ha tast soil upper up serboat fuses sample parsod - Sand SU sample - Lew flow parso of Molley Read	semple lections and pemps to lab wie semple	tc- Z	
Draw a sketch showing the location of site activ	/		
2. What field personnel and equipment were use News Myers Reb Sonts Shennon Patch	FIED VOW PID Ho det	oder	1000 a

DAILY FIELD REPORT PAGE 2	PROJECT NO.: 86335	DATE:
3. What unusual events happened today? Describe:		
4. Was any property damaged? YES Explain:	S (NO)	
5. What were the weather conditions at the s Time of Observation:	site?	
Precipitation: No Skies: Perfly clendy. Wind (direction and speed): —	Ground moisture:	
6. Were there any visitors to the site? YES NAME - COMPANY - PURPOSE OF YES Broat Ly		
7. Were any photographs taken by ERM pers Please detail location and description:	sonnel? (YES) NO	
See Fiednotes	performed outside of ERMs initial sco	ope of work):

ERM DAILY FIELD REPORT	DATE: 10/7/09 JOB NO: 86335 TIME: (arrive) 8:30 (depart) 15:00
LOCATION: Syrecuse Hencek ANG FILED BY:	ACTIVITY: GW Sampling SIGNATURE:
FORMS ATTACHED TO THIS REPORT: Chain of Custody Shipping Manifest Equipment Ch	
Significant work accomplished today? - Hoeth and Selecty more - Law flew person as	nd sampled 15 wells
raw a sketch showing the location of site activity.	
no skote	·4·
,	
What field personnel and equipment were used today Rob Sonts Shanner Robel	field unhicles
	saying saying saying

	PROJECT NO.: 86335	DATE: 10/7/04
3. What unusual events happened today? Describe:		
1. Was any property damaged? YES Explain:	(NO)	
What were the weather conditions at the site of Observation: 8:30 Precipitation: 134 Circles of Charles of Cha	Ground moisture: mois + Air Temperature: ±50	
. Were there any visitors to the site? YES NAME - COMPANY - PURPOSE OF VI	ISIT	
Were any photographs taken by ERM personlease detail location and description:	nnel? YES NO	
		· · · · · · · · · · · · · · · · · · ·

ERM DAILY FIELD REPORT	DATE: 10/8/09 JOB NO: 86335 TIME: (arrive) 8: 20 (depart) 15:00
LOCATION: Henceck ANG bese FILED BY:	ACTIVITY: GW Semplin, SIGNATURE:
FORMS ATTACHED TO THIS REPORT: Chain of Custody Field Samplin Shipping Manifest Equipment Cl	~ ·
1. Significant work accomplished today? - Hacth & Setoly mant	
- Complete ground ever	har simpling avait
*	*
Draw a sketch showing the location of site activity.	
no ska	rtch
2. What field personnel and equipment were used today Rob Sonts Shonon Potch	Gen sampling equipment Field vokicles
Shennon Potch	tiald vakicles

		DJECT NO.: 86335	DATE: 10/8/04
3. What unusual events happened t Describe:			
4. Was any property damaged? Explain:	YES	NO	
5. What were the weather conditions Frime of Observation: Precipitation: Skies: Refly ((e,)) Wind (direction and speed):	Ground	moisture:	
. Were there any visitors to the site? NAME - COMPANY - PURPO		(NO)	
. Were there any visitors to the site? NAME - COMPANY - PURPO . Were any photographs taken by Elease detail location and description	OSE OF VISIT RM personnel?	YES	

APPENDIX B

SOIL BORING LOGS

5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

GP-123

Project Name	& Location		9	-	A	Project Number	Date & Time Started:		
ANG Drilling Com	Hane	<u>SC</u>	K-	<u> SRI-</u>	pT	0086335	Date & Time Completed:	Sampler Hammer	Drop
						Foreman	Sampler(s)	"_ B	Acta
ECS Drilling Equi						Chuck Alan Method	Macta-Cote Elevation & Datum	Completion Depth	Rock Depth
Drilling Equi	pment #	A		Parent		Mediod A	Lie vanon de Dandite	15'	towns
Ges f	36000	6	610	W.		Direct Rush Core Barrel(s)	Geologist(s)	, 3	
DIE SIZE(S)						Co.e Darreito/			
DEPTH		C A	MPL	FS					
<u>ner i i i</u>		<i>31</i> \	1711 L	············	Ī	SOIL DE	SCRIPTION	RI	EMARKS
(ft below	Sample	Rec	overy	FID/ PID	Blow				
grade)	Number	1	eet)	(ppm)	Counts	Snow			
	LOCATION	i:				SURFACE DESCRIPTION:			
0									
0 ,						mad brown sitt a	and throsound		
	1	3	.9	0.0	NM	mad brown sitt of	rick fragments		
			1		1				
1									
						1			
				0.0		<u> </u>			***************************************
						Derk brown Silt a	and the sound		
 2 ·			1			moist.	It and clay moist		
۷				0.0		Lugish prom si	17- and clay moist		
		L		0.0		redish bound fill, mist,	1-0 5000 00146		
			1			Silt mist	I UK Berlen men . L.d.		
<u> </u>			ļ						
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						30/al /	no send and silf		
	1					1000:57 SECURI 4.	the second related by []		
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	1	200	9	0.0	 				
<u> </u>	 	\vdash				Grayish, brown 5.	It and fine sound		
	1		4	0.0		moist	· ·		
		-		-		Gravish brown	silt and fineson	J	
						with clay we	<i>[</i> -		
- 7		\vdash			1	G and I	sift, with fino		
]]		0.0		Sand Sale	60		
	1								
8						4			
Γĭ				د م		Grevish yearn	fine send and		
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		L							
— 9									
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10			—	<u> </u>	<u> </u>	<u> </u>			
	D	***************************************	÷	c C		. Signature: 矣	7	Date:	2/25/09
	Page		ë	of	7	Tagrana	<u>January 1</u>		<u> </u>

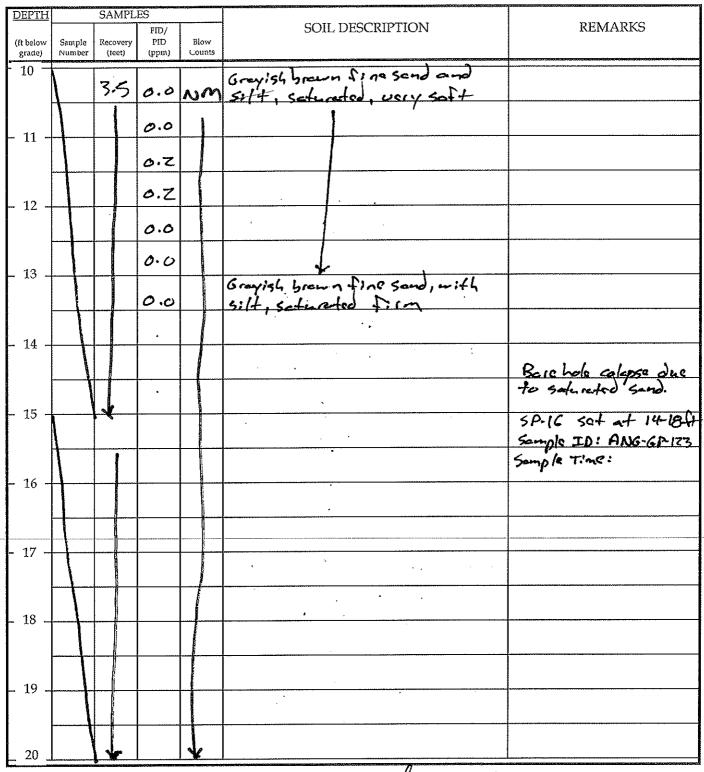


5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

GP-123

BORING LOG



Page 2 of Z Signature:

Date:

EDV

ERM

5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

GP-124

Project Name	& Location	ack -	<0T-	۳۵	Project Number 0086335	Date & Time Started: Date & Time Completed:	
Drilling Com	Hen C	acc.	<u> </u>	<u> </u>	Foreman		Sampler Hammer Drop
ECS Drilling Equi	ipment				Chuck Alan	Macra-Cate Elevation & Datum	Completion Depth Rock Depth
Gras	orobe	6610	or		Direct Rush Core Barrel(s)	Geologist(s)	423
Bit Size(s)					Core Barrei(s)	Geologist(s)	
DEPTH		SAMPL	ES		COT DT	CONTRACAL	DIALADIC
(ft below	Sample	Recovery	FID/ PID	Blow	SOIL DE	SCRIPTION	REMARKS
grade)	Number	(feet)	(ppm)	Counts	SURFACE DESCRIPTION:		<u> </u>
	LOCATION	i .					
→ 0		<i>-</i>		1100	vory derkraddist b	nown silt and	
		3.6	0.0	NM	fine send, mois	14 Sal + 1	primaria metalial
1			00		fine sand, w	sty saft h brown silt and not, saft	mixed in wood chips and courts
			4 00			*	
	-		0.0				
_ 2			0.0		4	c.1+:+6 N.a	
_			0.0		Greyish Grown,	silt, with fine to mad. Sand, with	
					med brown fine	to mad. Sand, with	
3			0.0		9:1+ wot, 1:1	silt and tine sen	
					maist, fica	, , , , , , , , , , , , , , , , , , , ,	
4							
_					_	,	
	1				mad brown 5:1-	t, with fine send	
	1	4.8	0.0		maist 1 tica		
6	1				<u> </u>		
V			00		Grayish brown	s:1t, with clay	
					1		
— 7							
:			0.0			\	3
					Gry184 broken	silt, with Sand	
8					Setucated + ic		
			0.0		*	December 1	
_					Greying Siewy	fine send and	
— 9			7. 2		1		
			0.0		1		
10		<u> </u>		k	<u> </u>		
Barrier Communication	Page	1	of	Z	Signature:	6	Date: Z/Z5/0 5



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

BORING LOG

<u>DEPTH</u>		SAM		1	79 7" X X X X X X X X X X X X X X X X X X	
(ft below grade)	Sample Number	Recove (teet)		Blow Counts	SOIL DESCRIPTION	REMARKS
- 10 -		1.5	0.0	NM	Grayish bourn fino sand and silt saturated, very soft	
- 11 -			0,0		/ /	
			0.0		+	
- 12 -						
-10						
_ 13 _					ţ	
- 14 -					•	
- 15 -		5.0			Grayigh brown fine sand and Silt, saturated, very soft	
16			0.0		Silt, Saturated, Licry Soft T	
- 16 -			0.0			SP-16 Sot 16-20+4699 Sample ID:ANG-GP-124 Sample Time: 12:30
417						Sample Time: 12:30
- 17			0.0			
- 18 -						
			0.0	1		3
_ 19 _			0.0		Mad brown, mad Sand, Seterated	
_ 20 _		•	0.0	¥	<u> </u>	
***	Page	2	of	7	Signature:	Date: 2/25/09

5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

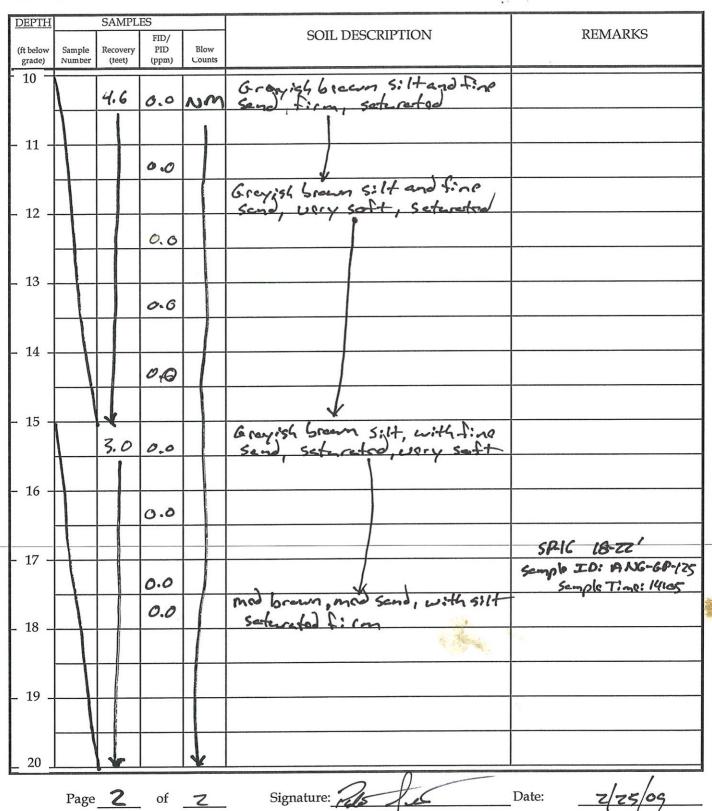
GP-125

ANG	Hene	sck-	SRI-	PT	0086335	Date & Time Completed:	•
Drilling Com	pany				Chuck Alan Method	Macratase	Sampler Hammer Drop Audo Audo
ECS Drilling Equi		0.00	- Commercial Commercia		Method A	Elevation & Datum	Completion Depth Rock Depth
Bit Size(s)	robe	6616	DT		Dirod Rush Core Barrel(s)	Geologist(s)	
DEPTH	****	SAMPL	ES				
			FID/	DI.	SOIL DES	SCRIPTION	REMARKS
(ft below grade)	Sample Number	Recovery (teet)	PID (ppm)	Blow Counts			
	LOCATION	:			SURFACE DESCRIPTION:		
— 0 ₁		,, ,		AIM	vory dark grapist	46 pours	
		4.1	6.0	NM	wat soft	send, w/ grous/	
1 .					5 No. 1	-4.10.411.	
			0.0		Derk grayish bre coarse sand . w/	mad grandland	
					Coarse sand, w/ brick frequents, Derk scavish by and silt, moist	wat, firm	annia muldavia l
— 2 ·					and silt, moist	rewo ding send	in ting send
	-	-	0.0		Radish been	ing send wat	
<u> </u>			0.0		Radish beam ()	ne send and silt	
5			0.0		Dec - make motord		
	100				Grayish brown sill, moist vor	Ytim	
_ 4			0.0	+-	Gravish brown	5:1+, w/ clay	
		4					
— 5 ·	1	5.0	6.0		Greyish brown	silt and fine	
	1	1	0,0		Sand, SETETETO	, Dely and	
— 6 ·	-						
			0,0				
_							
— 7 ·			A. A.				
			6.0		Grayish brown F.	ing send and silt	
8					saturated, fire	η	
			0.0				
— 9			A A				
		H	0.0				
10		14		*	V	. 0	
	Page	1	of	7	Signature:	1.5	Date: 2/25/04



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

GP-126

Project Name ANG Drilling Com	& Location	ack	~ <u>\$</u>	RT-	pT		Project Ni		Date	e & Time Starte e & Time Comp		og	
			***********				Chuck Metho	an Ala		plei(s)	219	Sampler Hammer	Drop Resta
ECS Drilling Equi	pment	P . A	·/a	^			Metho	od D	Elev	<u>)ecso-Ca</u> vation & Datum		Completion Depth	Rock Depth
Gtos (Bit Size(s)	36976	- 60 Co	. (63)	<u>u </u>		<u></u>	Core Bar	rel(s)	Geo	logist(s)			
DEPTH		SAM	iPLE:	S				***********					
(ft below	Sample	Recov	ery	FID/ PID	Blow		,	SOIL 1	DESCR	IPTION]	REMARKS
grade)	Number LOCATION	(feel	t)	(ppm)	Counts		CE DESCRIPT	ION:					OCCUPANTO DE LA CONTRACTOR DE LA CONTRAC
<u> </u>			-)	()		
		3.8	3	0.0	NW) 5:1	y dark t, set Wigh bo	gra	Esa,	soft		organ.	ic metter
. 1				•	1	RN	Wigh 50	سم	Fin	a send,	w;44	بهما بدوم	·'n
_ 1				0.0		5;	1+, Sex	ادردد	(00)				
			-							· · · · · · · · · · · · · · · · · · ·			
— 2 ·		-				Rnd	1:54 50	oung.	5:14	and .	ine		
		-		0.0		بر ہے	nd, sat	e carlo	ז להו	rous I	ica-		nance make the second s
3 .						G C	۵۷,57 (۵۷, ر	wat	,47,	rm -	<i>/</i> / /		
				0.0			I	1					
	Name of the last			.									:
— 4 ·							,						
				• '				•				••••	
— 5 ·		*				(C. c.	مرزع ل		·n 52	14.4	:-44		
		5.0	>	0.0		12:	ayigh b	d, s	atun	edod,	soft.		
6			\perp										,
Ů				0.0									
											. \		
— 7 ·				0.0		60	cy:54 (o rae	7 n	ine so	مده مد		
			1			152	1+15	<u> </u>	<u> </u>	F) +)	<u> </u>		
8 .	1		\perp	0.1								~	
			_	0.0			<u>, ,</u>						
9 -				0.1									
	es mail de la company de la co	ri- eyaminin		0.3				1			\		
10				0.2	1	G-F1	wise b	rong	n fi	ne sene	restood		
	Page	T	1	of	2_		Signat		25			Date:	2/25/05

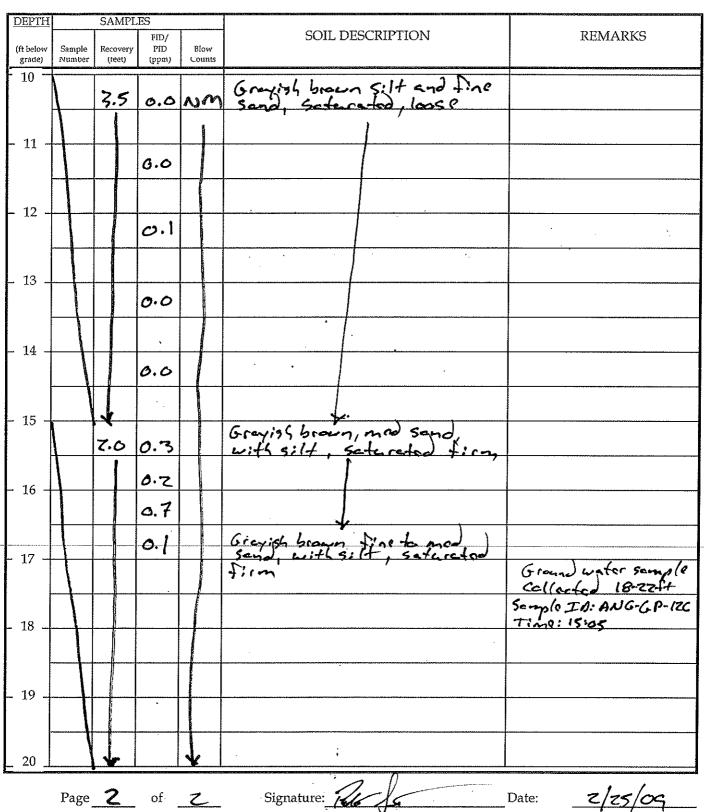


5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

G-P-176

BORING LOG



rev. 10/99 Boring Log.xls

Date:



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number C-P-127

Project Name	& Location	ock-	SRI-	PT	Project Number	Date & Time Completed:	og 8:13-≯9:3	0
					Chuck Alan Method	Sampler(s) Macra-Cara Elevation & Datum	Sampler Hammer	Drop Perk
Drilling Equi		661	000		Dired Rish Core Barrel(s)	Elevation & Datum Geologist(s)	Completion Depth	Rock Depth
DEPTH		SAMP	LES				73.71	F A D.760
(ft below grade)	Sample Number	Recovery (teet)	PID/ PID (ppm)	Blow Counts	SOIL DE	SCRIPTION	KEI	MARKS
	LOCATION	:		4	SURFACE DESCRIPTION:			
O ·		3.8	0.0	NM	noted gark stanish	h brown silt, off, wot, soft	a Ca a si a	ا العامل
1		1	0.0		Grey silt and c	ley wot, soft	nixed t	hruond
Т			0.0		raddish brown silt, wat, fi	Fine send and		
_					2,14, 204, 4			
 2 ·			0.0		roddigh Stown &	ilt and fine sand		
— 3					wet, firm.			
			0.0		Grayish brown send, with clay,	silt and fine		400
4					send, with clay,	wet, sirm		
*								
5 :		\ \\						
	1	3.5	0.0		trace mad sond	It, with slay, solurated, firm	(70,25,5)	
<u> </u>			1		4			
Ü			0.0		Greyish brown Send, geterate	silt and tine	(70/30)	
7 ·					Grayish brown Silt, saturated		(70/30)	
-	-		0.0		Silt, seturated	tirm		
8 .			0.0					
			0.0		*			
— 9 ⋅								
				-				***************************************
10		4		1				
	Page	1	of	2	Signature:	6	Date:z	124/09



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number GP-127

BORING LOG

DEPTH		SAMPI	LES			DTTA & A DIZO			
(ft beiow grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts	SOIL DESCRIPTION	REMARKS			
10 -		5.0	0.0	NM	Gregish been silt and fine sond, Setureted, soft	(70/05)			
- 11 -									
			0.0			(6/40)			
- 12 -					Greyish brown tine send and	(4.4)			
			00	**************************************	5:1+, very saft, saturated	(60/40)			
13			0.0		Grayish bown Fino sand and	(60/35/5)			
- 14 -					silt, trace mad. sand				
			0.0		Dork grayish Spewer Fine to mad				
- 15 -	\ 	4	0.0		sand ul silt saturated firm	1/ \			
		z.2			Derk sreyish brown med sound w/ silt, seturated, firm	Hordspace on begged semple. 0.0ppm			
- 16 -						501/ -aL 1 1 7/54			
						SP-16 SQ+ Q1 17-2194 Semple IO: ANG-CP-127			
- 17 -					+	Semple Time: 9:25			
_ 18 _									
_ 19 _									
					,	<u> </u>			
_ 20 _	D.	2		~	Simulatura 21	Data al-1/2			
	Page	2	of	2-	Signature:	Date: 2/24/09			

rev. 10/99 Boring Log.xls



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

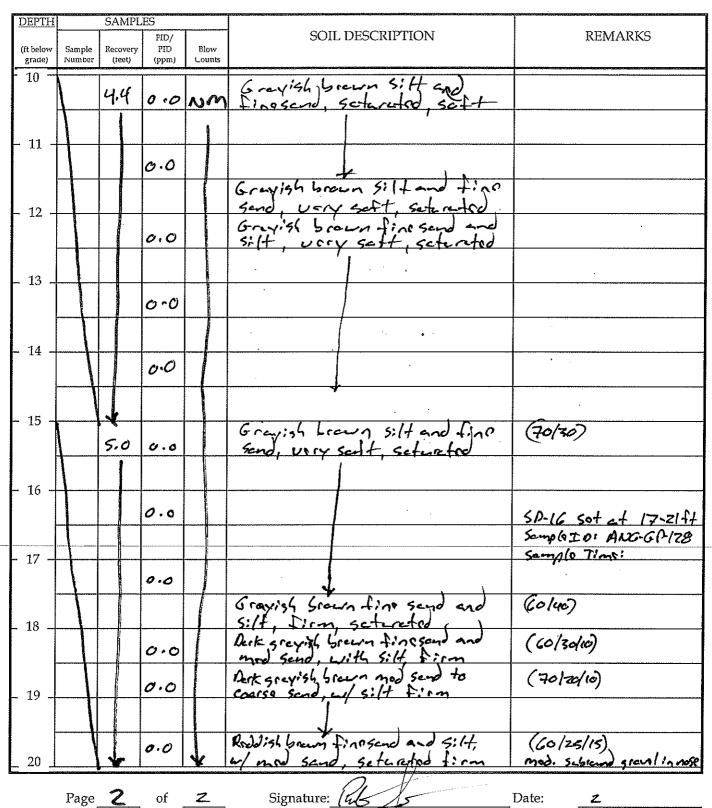
GP-128

Project Name	e & Location	ack-	SPT-	PT	Project Number 008 6335	Date & Time Started: Date & Time Completed: Z/zc/cx	9 4145-7
	Henc		<u> </u>	• •	Foreman	Sampler(s)	Sampler Hammer Drop
ECS Drilling Equ	ipment		<u> </u>		Chuck Alan Method	Elevation & Datum	Completion Depth Rock Depth
	orobe	GGIC	or		Direct Rush Core Barrel(s)	Geologist(s)	20 -
ısıt Sıze(s) ♣					Core patients)	Scorograd(s)	
DEPTH		SAMPL			COIL DEG	5CRIPTION	REMARKS
(ft below	Sample	Recovery	FID/ PID	Blow	SOIL DE	JUNII HOIN	CALITATIVELLE
grade)	Number LOCATION	(teet)	(ppm)	Counts	SURFACE DESCRIPTION:		
0					yorydark gray s	55	
0		4.2	0.0	NM	vorydark gray &	silt, w/ tho send	organic material
		<u> </u>			Wot, from black silt and fir from	no send, moist	
1			0.0		Greyigh brown si	It and clev. moist	
			0.0		Birm Sim	7, 5,71	
						,	
— 2	25				med brown, silt,	with Sine sendi	(80/20)
					Rollish Lower S	fino send, w/silt	(80/20)
3					wot, firm	/ -/ / / / / / / / / / / / / / / / /	
					Radaid Langer	ine send and silt	(20/30)
					Scherded, From	ino send and silt	
<u> </u>					Grayish brewn	silt and finesend	(60/30/10)
					w/ c/c/		
5	1	70			Graysh borns	sitt, w/ clay	(70/20/10)
	1	3.8	0.0		Scale retail, south	+ '	
6						1	
			0.0		Grayigh brewn	s: 1+ and fino 1, seff, seturated	(BS/30/5)
			_				
7	-				Granich house of	ine send and	(20/40)
			00		Grayigh Grown of Silt , Saturated	firm	(6-170)
8					. ∵ ③		
$ ^{\circ}$			00				
			<u> </u>				
9			ļ				
						1	
10		4		₩			
	Page		of		Signature:	5.4	Date:



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number GP-128



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

GP-129

Project Name	e & Location	-ا-	<^^~	ዕተ	Project Number 008 6335	Date & Time Started: Date & Time Completed:	120/09 11:50->	
		ock-	3KI -	P 1	Foreman	Sampler(s)	Sampler Hammer	Drop
ECS Drilling Equ	I				Chuck Alan Method	McCo-Cose Elevation & Datum	Completion Depth	Rock Depth
Drilling Equ	ipment Seala	6610	\AT		Dirot Rush	Elevation & Datum	l9	MOCK Depth
Bit Size(s)	00 C) 21 C		- 12		Core Barrel(s)	Geologist(5)		
DEPTH	<u> </u>	SAMPL	ES	***************************************	i			were and the control of the control
		1	FID/		SOIL DES	SCRIPTION .	RE	MARKS
(ft below grade)	Sample Number	Recovery (teet)	PID (ppm)	Blow Counts				
	LOCATION	₹:			SURFACE DESCRIPTION:			
0	<u> </u>		1	1	Snow/wa	odlend mulch		
	1	3.5	0.0	NM	ucry dark story:	at firm	organic	sich
	1	1		1			,	/
_ 1 .								
	100							
 2 ·					Roddish booun fi	no sendand 5:1-	+ 1 (70/30)	
					vory firm w	at	(85/15)	
					Roddishbrown s	and, w/ silt,	1	
— 3 ·					Greyish brown	time sand and		
					51/t, wary fi	ra, wort		
4								
*								
_ 5	1	\		 				
	1	2.4	0.0		Greyish brown	fight send an	(60/40)	
	1	1			acerish brown	siltand fla	P (60/20	(A)
<u> </u>	1		0,0		send in clay	, saturated for	50	(5)
			0.0		Grayish bren	1 1 1	(70/30	5)
Ì			0.0		and sitt, set	riche Line		
— 7 ·								
			0.0		<u> </u>		-	
8	\				•			
	Ì							
			<u> </u>					
_								
 9 ·								
					*			
10		4		<u> </u>				
	Page	1	of		Signature: Chel		Date: 	124/09



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

DEPTH		SAMPL	ES	******		-
(ft below grade)	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts	SOIL DESCRIPTION	REMARKS
10 =		3.Z	0.0	NM	Grayish brown siltanofine send, saturated, very saft	(70/30)
- 11 -	1				, gentless, or y	
			0.0			
- 12 -					Grayish brown fine sand and silt, very saft	(60/40) (70/30) (80/20) Firm
			0.0			(70/30)
- 13 -			-0-0			(80/20) firm
					. •	
- 14 -		Carameter Carame				
					*	
- 15 -		4.0			Grayish Socray Fine sand and silt, Seterated, very soft	(50/50)
- 16 -						
10						
- 17 -					•	(60/30)
- 18 -						(70/20)
					dork grayigh brawn, mad sand,	(Seko)
_ 19 _					dork grayigh brazin, mad sand, w/ silt refusal at 19th	SP-16 Sot at 21-17-ft
20					W/ Mecro Core	Sample ID: ANG-GP-12G Sample Time: Dille: notes calle 19 baba
E 4º 1	Page	2	of	7	market to the	
_ 20 _	Page	2	of	Z_		Semple Time: Driller notes colble 19 bed Date: 2/2669

5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

GP-130

	e & Location		_	_	Project Number	Date & Time Started:			
ANG	Hanc	ock-	SRT-	PT	0086335 Foreman	Date & Time Completed:			
					Foreman	Sampler(s)	Sampler Hammer	Drop	
ECS Drilling Equ	J_				Chuck Alan Method	Macia-Cose Elevation & Datum	<u>Ando</u>	Auto	
		A.A.	a @		Method	Elevation & Datum	Completion Depth	Rock Depth	
Bit Size(s)	sedence	6616	2UT		Direct Rush Core Barrel(s)	Geologist(s)			
					(man)	deologist(s)			
DEPTH		SAMPL	.ES			<u> </u>	1	Watto and the kinds of the same of the sam	
	· · · · · ·		FID/		SOIL DES	SCRIPTION	REA	//ARKS	
(ft below	Sample	Recovery	PID	Blow			1		
grade)	Number	(teet)	(ppm)	Counts					
	LOCATION	ł:			SURFACE DESCRIPTION:	mulch			
0		I	1						
	1	70	1	NM	with finesand,	, 600m, 5:11—	(90/0) 00	gainic	
	1	3.8	0.0	741.7	with Almosand	40-	~~	ertonic.	
4					1 4 111		(90/6) 06 (75/25)	1	
1	1	- 		 -	dark gravish be	cun silt and	(75/25)	 	
	1		0.0		High send, wat	i		₩	
			-		- 11- 214				
					mad brown silt med sond, wat black silt and f	With City 240	(70/15/15)	١	
2					black siltan f	or some w/ orachic	\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	/	
			0.0		Marterial	1			
					Gray siltand clay	1, with finosome	(70/25/5)		
3					moist, Aira p	lastic	()		
Ŭ		ĺ			way swam to raddit	sh brawn, fine			
			0.0		send and silty wet,	1 - 3 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -			
		ļ			moist, firm p med sown to rodding sond and silt, wet, Roddish brown f silt, wet, firm	no seno, with	(80/80)		
- 4							<u> </u>		
	1	1							
	1	1							
-	N.	J							
5		_			Graviel Locara F	ine te mad some	(80/2a)	***************************************	
	1	5.0	0.0		Grayish brown for with Silt, Sale	reted	(00/00)		
	1								
6	1								
	\	1		1					
			0.0						
		1			}		(70/30		
7	1						(70/30	· · · · · · · · · · · · · · · · · · ·	
	\	1	0.0		*				
	1				Grayish brown Si	It and clay			
8			0.0		Airon	,,,,,,			
ļ					*				
	1		0.0		arayigh brown	Silt, with cley	(70/15/15)		
9			0.0		and tine send	11.			
				1	Grayish brown si	IT and fine soul			
ŀ		1	40		Grayigh brown 5	11 1 C = 2	Carles		
10	į	4	0.0	1	browigh promu s	it and time and	(60/40)	1	
~~ L	3	*							
	Page		of _	7	Signature: Rele	- 1.25	Date: Z	126/09	



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5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

DEPTH		SAMPL	7**************************************	T	COH DECORPTEAN	DIEN 4 A TITAL
(ft below grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts	SOIL DESCRIPTION	REMARKS
10 -		4.2	0.0	NM	mod brown fine sand, with silt, saturated, firm	(85/15)
- 11 -						
			0.0			
- 12 -						• .
			0.0			,
_ 13 _					0	,
			0.0		Cariol boards Pino cand and	(0/40)
- 14 -			0.0		Grayish Scaum fine send and silt, saturated firm	(6)46)
- 15 -		4			C :: 11	(com line)
		5.0	0.0		Greyishbrown finosond, with silt, seturated from	(85/15)
- 16 -						
			0.0			
- 17 -						
			0.0			
_ 18 _					,	SP-16 set at 18-22-ft Sample to: ANG-GP-130 Sample Time:
			0.0	وزورونا	·.	semple time: yory herd 20-22-14
- 19 -			-		Grayish brown finesand and	(60/40)
			0.0		Silt, vary firm, saturated Dark gravish brown, mod sound with sine sand and silt, Saturated	Í
_ 20 _		•			with fine sand and silf, Schurefed firm	. ,
Deta	Page	2	of	7	• • • • • • • • • • • • • • • • • • • •	Date: <u> </u>
	•		•			

5788 Widewaters Parkway, Dewitt, New York 13214

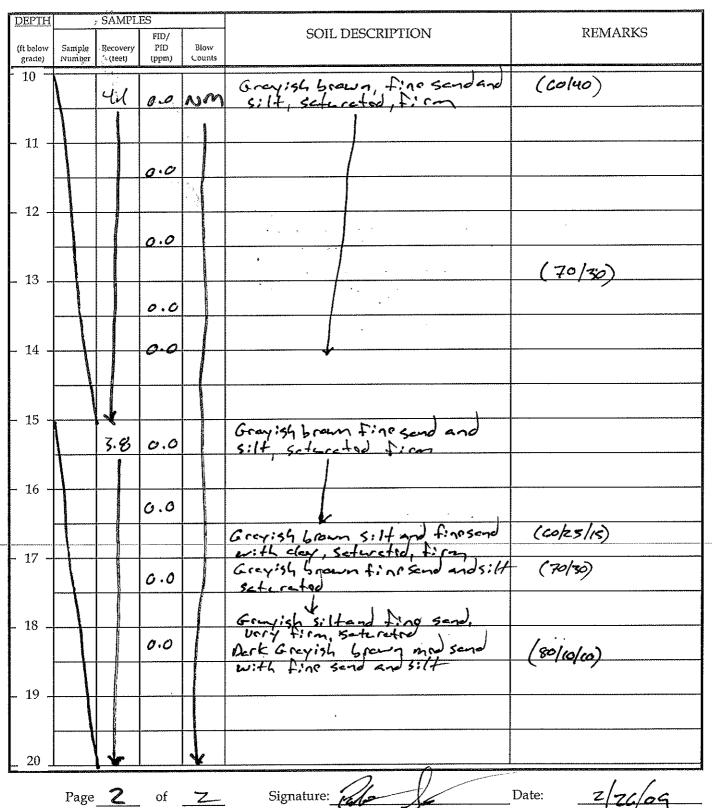
Boring Number

ANG	Hane	sck-	<u>SRT-</u>	PT	0086335 Foreman	Date & Time Completed: Z/Z6/	69 16:20-17:10	
rilling Comp ECS rilling Equip					Check Alan Method	Sampler(s) Macla-Cate Elevation & Datum	Sampler Hammer Drop Act Completion Depth Rock	\$
	pment Soule	6610	OT		Dirod Rish Core Barrel(s)	Elevation & Datum Geologist(s)	Completion Depth Rock	Depth
~×××					Commis			
DEPTH		SAMPL	FID/		SOIL DES	SCRIPTION	REMARKS	
(ft below grade)	Sample Number	Recovery (feet)	PID (ppm)	Blow Counts	SURFACE DESCRIPTION:	**************************************		van samme dan distribution
- 0	LOCATION							
_ 0		Z.7	0.0	NM	way dark gray, and fine sand, mad brawn silt wat firm upry dark draw	ish been silt	ag organic me	doriel
1		1		1	madbraun sil	tend finn sand		
-	1		0.0		upry derk draw	n siltend fine	(20130110) (20130)	
<u>-</u>					Gray siltand c	ley, moist, plastic	t .	
- 2			0.0		Roddish brown 1	incsend, with		
			0.0		silt, wet Fi	(m.		
- 3			, `					
,								
_ 4								
								<u> </u>
- 5 t		•						
Ŭ		3.5	0.0		Grayish brown and silt, sel	fine sand		
		1	***************************************					
- 6			0,0					
			0,0					
- 7			0,0		Grayish brewn	s: It, with clay	(60/25/15)	
	1		0,0		and fine same		• • • • • • • • • • • • • • • • • • • •	
_ 8	-		8.0		46	Ministration of the second of		
					*			P
9								<u> </u>
_ 10]		4		4			*	
***************************************	Page	Î	of		Signature:		Date: 2/26/6	25



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

GR132

Project Name					Project Number				
DALC	Lland	ark.	SRT-	pr	0086335	Date & Time Completed:			
Drilling Con	npany		47 1 3 3 4	• •	Foreman	Sampler(s)	Sampler Hammer	Drop	
					chief Alam	Massacian	Austra	Aucho	
ECS Drilling Equi	inment				Chuck Alan Method	Macla-Core Elevation & Datum	Completion Depth	Rock Depth	
Dinning Equi	ipatent •				A / A . /	periods		nock Deput	
Graf Bit Size(s)	30000	6616	<u> </u>		Dired Rush Core Barrel(s)		<u> 18</u>		
Bit Size(s)					Core Barrel(s)	Geologist(s)			
_									
DEPTH		SAMPL	ES	*** **************					
		Ι	FID/	T	T SOIL DES	SCRIPTION	RE	MARKS	
(ft below	Sample	Recovery	PID	Blow			1	.,	
grade)	Number	(teet)	(ppm)	Counts					
DOWNSON CONTROL OF THE PARTY OF	LOCATION		112.7		surface description: snow/c med brown s; wat, firm Grayish brown fino seno	1			
	la carrior	••			come /	and had my 1.6			
<u></u> 0 ,				·	3-2-70	ale y			
, i	l				med brown si	1+, ~/ +1 no see	e organic	meterial	
	1	3.8	0.0	NM	wat from)		•	
	1	3	<u> </u>		Consel Story	n siltend	(70/30 (60/40	`	
, ,	1	1			Sierin .		(40/50	シ	
1	1				TINO Send				
	 			1	1 1		1		
			0.0		<u> </u>		60/40	>)	
	1				1 1				
<u> </u>	1								
		1	0.0		Gravith brown find sand w/ c Gray silt ar find sand Roddish brown with silt, wot	\	1 4 4 1 4 4	1.5	
			10.0		Creyis 4 5 com	silt and	(70/25	/5)(2/	
	1	1			fine sand w/c	lay	,		
2	1				Grave Silt ar	elev with			
<u></u> 3 ⋅	1		4 4		Fine some	7			
	1		0.0		0.22:01	Name County			
	1-		0.0		1,000,000	Trace Series	(80/20)		
		l I	0.0		WITE 5,17, WAT	_ 4-3 C W			
4						<u> </u>			
	1	•			1		}		
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	\							}	
		5.0	0.0	<u> </u>			Salanata	and the same of th	
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	1				1				
- 6									
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			0,0	 	l				
					1 1				
7					*				
′	 				Send, with s	modernal final	(50/35/15	1	
	\	i			Send, with s	1+ Saturated	(- 1 113	7	
					Beam				
	\				47177				
8				 					
	1	1							
				<u> </u>					
	1	1			clay and fine	silt, with	1 / 1 .		
	1	ł			class and Fine	send sedurated	(70/20/1	(6)	
一 9	1						1	/	
	Į.		,		1 ' <i>1</i>				
	Ì	1			↓				
10		N	l	- *		A			
L		A	,			The second secon	T- :	/ . / .	
	Page	<u> </u>	of		Signature:		Date: z /	Z4/09	
						particular and a second	T	1	



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number GP-13Z

BORING LOG

DEPTH		SAMPI	ES			
(ft below grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts	SOIL DESCRIPTION	REMARKS
10		50	0.0	NM	Grayish Source 5: It and fine send, setemented solt	
- 11 -						
			0.0			(()())
- 12 -					Gravish brown fine sand and Silt. Saturated film	(60/40) (H0/30/10)
			0.0		Perk grayish brown modernd I'm sand, with silt, Dirm Setardad	(#0/30/10)
- 13 -					2010101	
			0.0		,	
- 14 -						
_			0.0			
- 15 -		0.2			Some as above	SP-16 sat 14-18ft
		I			70 K 33 U.Z.	Sample I DIANG-GP-37 Sample Time:
- 16 -						note sample weeken
- 17 -						note sample weshed out of Mecro Care
- 18 -					,	
						. ,
_ 19 _						
_ 20 _		↓		↓		
	Page_	2	of	<u>Z</u>	Signature:	Date: z/zc/cq

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5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number GP-133

Project Name		- 1-	CD=-	07	Project Number	Date & Time Started: Date & Time Completed:		
Drilling Com	pany	BCK-	SRT-	PI	0086335 Foreman	Sampler(s)	Sampler Hammer	Drop
ECS Drilling Equi	I				Chuck Alan	Macka-Cose Elevation & Datum	Completion Depth	Rock Depth
Gos	orale	661	OOT		Dirod Rush Core Barrel(s)	permits	24	AOCK Deput
Bit Size(s)		Shir			Core Barrel(s)	Geologist(s)		
DEPTH		SAMP	LES					1.7240
(ft below	Sample	Recovery	FID/ PID	Blow	SOIL DE	SCRIPTION	REMA	ARKS
grade)	Number LOCATION:	(teet)	(ppm)	Counts	SURFACE DESCRIPTION:			
_ 0 ,	LOCATION							
_ 0 ,		7.8	0.0	NN	mad brown to	sky ighter of fine send ene firm fine send	(anfeed)	
1 .	9. .				silt meist	Firm send en		
			0.0		light grayigh by	reem fine send	1	
_ 2 ·					silt, wit	Fina send, with	(80 fe)	
_		\perp	0.0					
<u> </u>		\perp	0.0					
_ 4		_		$\perp \perp$				
		_						
<u> </u>		+	-		N N N N N N N N N N	Ni a la	(= 1.0	
		3.2	0.0		silt satur	Pine sendend	(70/10)	
_ 6 .		\perp				water at 22 can an analysis and a second		5 %.
h.			0.0		(RS)		(
— 7 ·					to mad. sand	with silt	(80/20)	
·			0,0		Setureted			
8 .			0.0					
<u> </u>		_						
		\perp						
10	Page	1	of.	1	Signatura: V.		Data: 72	



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

BORING LOG

Q-P-133

DEPTH	PTH S		SAMPLES FID/		SOIL DESCRIPTION	REMARKS	
(ft below grade)	Sample Number	Recovery (teet)	PID/ (ppm)	Blow			
10 =		2.5	0.0	NM	Greyish brown fine send, with silf and modernd, seturated	(70/15/15)	
11							
- 11 -			0.0				
					*		
- 12 –			0-0		Clay and fine send	(60/25/5)	
						stone in nese sebround mod ground	
. 13 –						,	
- 14 -							
- 15 -		50			Greyish breen fino send and silt, seit,	(60/40)	
		1			and 5, 17, 5017,		
- 16 -	8				1		
		* **			•	(70/30	
17 –			6				
	+						
- 18 –						(75/25)	
	+					/	
- 19 -					Roddish braun fine send, wisilt	(90/40)	
					DK greyish brown meb sand	(80/zc)	
_ 20 _		14		4	wis:1+	(8018)	



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number GP-133

BORING LOG

DEPTH		SAMPL	ES			
(ft below grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts	SOIL DESCRIPTION	REMARKS
20		5.0	0.0		anerish brein mad sand, with	(70(15/15)
- 21 -			0.0			
- 22 -			0.0			
_ 23 _			0.0			
			4 0			
- 24 -			0.0		w/ small to mod se nound ground work very time	
- 25 -		-			nery nery stran	
- 26 -				***		
~ 27 -						
_ 28						
_ 29 _						
_ 30 _						

Page <u>3</u> of <u>3</u>

Signature: Robf 15

Date:

5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number GP-134

ERM

Project Name	& Location				Project Number	Date & Time Started:		
DAI	LI	-4-	COT-	PT	•	Date & Time Completed:		
Drilling Com	Hance	مدرب	251		0086335 Foreman	Sampler(s)	Sampler Hammer	Drop
					Chuck Alan	Macta-Cate Elevation & Datum	Auto	Auto
ECS Drilling Equi		:			Method	Elevation & Datum	Completion Depth	Rock Depth
Good	adas	6610	OT		Dired Rish	Cooleristo	<u> </u>	
Bit Size(s)					Core Barrel(s)	Geologisl(s)		
DEDWIX	r	SAMPL	ES		i i			
DEPTH	<u> </u>	SAMEL	FID/		SOIL DE	SCRIPTION	REN	MARKS
(ft below	Sample	Recovery	PID	Blow				
grade)	Number	(feet)	(ppm)	Counts				
	LOCATION				SURFACE DESCRIPTION:	mulch/dobris		
0 ,					show wasten	mulch/overis		
	\	7 -		NM	Derk brown 5:17	timith tino	organics	:
	1	<u> 3.5</u>	0.0	14111	send moist,	F) (~	0,3-1,2	
					Rad: 56 5 rawn 15:	illy with clay		
1	 				Rodish snown 15: and shine send; deck grayiel snow line send, wat,	Nery treat	1 calus	
		-	0.0	}	ack server see	47, 51 (4, 6, 14)	(60/46)	
A - 1 - 1	 			 	TING SENA COUNTY	*/~~		
						1 . 1		
— 2 ·					Derk Scoun Sit	tand fine send	Organics	(soliche)
			0.0		wot firm		Organics	(7-112113)
	1				Derk brown site wot firm Greyishbrown si	lf and finasend	(74/36)	٠.
3				<u> </u>	L	N:		
J			. A		Roddish sceny	ing seno, many	(00/00)	
			0.0		Silt, Schareton	d, firm	(80/20)	
	1 1	j		<i> </i>	1	,		
4			<u> </u>	├				
	\	1						
	1		1					· · · · · · · · · · · · · · · · · · ·
₽-	1	J						
5	1							
	1	5,0	0.0					
``````````````````````````````````````	1							***************************************
<u> </u>				<b>  </b>		j		
1.			0.0	] [	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	No. 1	(80/70)	
	<b> -\</b> -	1	10.0	<del>   </del>	Gravish brown with silf	TIME OF THE	(2/10)	
·				<b> </b>	1			
7		1						
			0.0					
					1 k.			
8			ļ	<u>                                   </u>	Derk gravish bromad sand, with	coun fine and		
		1	00	*	mad sand, with	filt, schenedad		
	<del>                                     </del>		<u> </u>	<del>                                     </del>	<del>                                     </del>			
		1			1	, ,		
<del>-</del> 9				<del>      -   -   -   -   -   -   -   -   -</del>	Carried Land	Plan son and		
			0.0		Grayish brown			
						<del></del>		
10		4_	0.0	1			<u> </u>	
Lancon	Page	<u> </u>	of	7	Signature:	1-1-	Date:	2/22/05



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

<u>DEPTH</u>		SAN	1PLI		I	COTT DECORTIVETONI	DEN 4 A DIZO
(ft below grade)	Sample Number	Recov (tee		FID/ PID (ppm)	Blow Counts	SOIL DESCRIPTION	REMARKS
10 -		رح ا	ខ	0.0	NM	Nork gravial brewn Finato mad sand, with 5:14	(@s/zo)
11 -				:			
			e	0.0			
12 -				0.0			
13 –				ن ن			
10 -							
14 -						1	
15 -							
10 -		5,0	<b>)</b>			Greyigh brown Sino send and silt started	(60/40)
16 -				, ,			
						send, with silt, seturated Sim	(8d/zo)
17 –							
18							
	1						
19 -						Grayish brown fine sand and 5:14 with mad sand, Safurated	(50/40/10)
. 20 _			,		*	7570, 7570,	



5788 Widewaters Parkway, Dewitt, New York 13214

**Boring Number** 

GP-135

Project Name					Project Number	Date & Time Started:	2/27/09 7:4	7.5
ANG Drilling Com	Hanc	sck-	SRT-	PT	0086335 Foreman	Date & Time Completed.		77
					Foreman	Sampler(s)	Sampler Hammer	Drop
ECS Drilling Equi	I				Chuck Alan Method	Macto-Core Elevation & Datum	Auto	Auda
Drilling Equi	pment				Method	Elevation & Datum	Completion Depth	Rock Depth
600	mbe	6616	OT		Direct Rush.	Geologist(s)	Zo	
bit Size(s)					Core Darrei(s)	Geologist(3)		
DEPTH		SAMPL	ES	AND THE PROPERTY OF THE				
DELTIT		OI XIII I	FID/	T T	SOIL DES	SCRIPTION	,	REMARKS
(ft below	Sample	Recovery	PID	Blow				
grade)	Number	(teet)	(ppm)	Counts				
	LOCATION	:			SURFACE DESCRIPTION:	1		
_ 0					Snow Woodlen	mulch dobr	<i>is</i>	e madaiale
	<b>\</b>	4.1		NIM	mad scown silt as	444	c onederials	
	1	-(-1		141.1	Some woodlen  mad brown silt an  woot.  Derk grayish brown  silt, wot, firm	a Nico cond o		
		- 1			Derk graying stown	+ + no sens a	(70/30)	- 1110
1 .	1	-			Silt, Wat, firm	***************************************		1,56
	<b>I</b>	- (					(0.0	and colour 1 -
	1	-					Scan	mad sebangaler
1000							,,,,	
— 2 ·		$\neg$				***************************************		
0					4.	1		
					Gray siltand fine	send, very	irm (soles	5
_ 3					moist			
2		1			Roddish brown F:	ne send and	5:11 (30/	(0)
4			ļ		Gray siltand fine moist Roddish brown F: Seturated, Fil	m	5:14 (30/	
	1	1					(70/	
_ 4 .				$\vdash$			(4019	6)
	<b>\</b>	1						
1		-		$\vdash$				
	V		1	.				
<del> 5 •</del>		-	<del>                                     </del>		Deel consid been	tine sens		1.5
		5.0			Perf grayish bre	I sand salare	100 (60/3	0(0)
		1			The state of the s			
<u> </u>					,			
_ 0 .								100 m
				$\vdash \vdash$				
	1							
<u> </u>		_	-					
		1						
		_						
8								
_ 。		_			Greyish breem sile Sirm Enterested Derk greyish bree Silt Schareted,	t and Dianeens	(6/4	1
					Sirn seturation	), 2, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(2)19	7
					Perk everist Sice	on fine send	and	
_ 9 .					5:74 Schrata.	firm		
_ 9 .			. 700		1	•		
					4			
					Greyish brown 5	ilf and fine	Send	
10		*	<u></u>	1 K	Sectionado , fire	n.		
	Page	٨	of	フ	Signature:	-1		7/20/2

5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number GP-135

## **BORING LOG**

DEPTH		SAMPL	ES		SOIL DESCRIPTION	REMARKS
(ft below	Sample	Recovery	FID/ PID	Blow Counts		
grade)	Number	(teet)	(ppm)		Grayish bown fine sendand	(0/40)
	<del>                                     </del>	3.0	0.0	NM	Orayish sirm seterated  S: It firm seterated  Derk srayish brown fine to mad  send, with silt, saturated	(20/40) (70/20)
- 11 -					send, with silt, seterose	
			0.0			
- 12 -					•	• •
			0.6		3	
- 13 -						
			0.0		some as above	
- 14 -	-					
	-		0.0			:
- 15 -		*			· ·	
		5.0	0.0		Some as above	
- 16 -	<b>\</b>				Grayish brown fine sand and siff	((0/40)
			0.0			(D0/40) (D0/36)
- 17 -			0.0		Deste scenish brown fine-to med send, with silt, seturated	(70/36)
			0.0			50-16 sot 16-20-17
- 18 -						Semple ID: ANG-GP-135 Semple Time: 840
			0.0		some as above	
- 19 -						
	1		0.0			· · · · · · · · · · · · · · · · · · ·
_ 20 _	· ·			4		
	Pano	2	Oŧ	7	Signature:	Date: <b>2/27/0</b> 5

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5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

ANG-GP-136

Project Name	& Location		L	COT-	۳۵	_	Project Number <i>00863</i> 35	Date & Time Started: 12:03  Date & Time Completed: /2:5  Sampler(s)	2/27/09	a
ANG Drilling Com	pany	<u>sci</u>	<u></u>	315L	<u> </u>		Foreman			Drop
ECS Drilling Equi	Carper -						Chuck Alan Method	Mella-Late Elevation & Datum	Completion Depth	Aucka Rock Depth
Bit Size(s)	pinent Sala	C	610	or			Dirot Rush Core Barrel(s)	Elevation of Datum	Completion Depth	week Debut
Bit Size(s)		421		7873			Core Barrel(s)	Geologist(s)  Dave Myers		
DEPTH	**************************************	SA	MPLI	ES	-	1		J		
(ft below	Sample		very	FID/ PID	Blo	^~~	SOIL DES	SCRIPTION	RE	MARKS
grade)	Number	(te	et)	(ppm)	Cor	ınts	CIAD DE DESCRIPTION			constitutional and the state of
	LOCATION	:					SURFACE DESCRIPTION:  Asphalt 3"			
0 ·		3.	i	0.0	N	M	Gravel fill -	Asphalt subgrad	e.	
1		1					to ~9"	4		
				0.0			Med brown to	light bonne		
							-1H 1 A		(	
2 ·							silt and fine Light brown to	K LI	rm	· · · · · · · · · · · · · · · · · · ·
				0.0			Light brown to	119ht gray		
<u> </u>							tive sand with	th sift, moist		
		_		0,0			to wet fir	<u>~ ~ · · · · · · · · · · · · · · · · · ·</u>		
4										
_			,							
— 5 ·		2.	2_	0.0					·	
		1					Light how L	and five	-	4402222011114011264 1 20161127201114
<del></del> 6 ·				0.0			Light brown to	-14. +		
							JANE WITH	STIT WELL		
<u> </u>							· · · · · · · · · · · · · · · · · · ·			
				0.0						
8 .				<del></del>						
<b></b> 9										
7				,			Ltgray sift	with fine		
10		J	)				sand, wet	nith fine		• ,
	Page	l		of		2	Signature: O	D. W. Myas	Date:	1/27/09



5788 Widewaters Parkway, Dewitt, New York 13214

#### **Boring Number** ANG-GP-136

#### **BORING LOG**

DEPTH		SAMPI	ÆS	·····		
(ft below	Sample	Recovery	FID/	Blow	SOIL DESCRIPTION	REMARKS
grade)	Number	(teet)	(ppm)	Counts		The second secon
10 -		3.8	0.0	NM	Light gray silt with fine	
- 11 -					Light gray silt with fine.	
~~			0.0			
- 12 -						
			0.0			
_ 13 _						
			0.0			
- 14 -	-				Reddish brown fine to med	
					sand, with sift, scattered	
- 15 -	1	5.0	<b>+</b>		gravel, wet, deuse	* . 1. (- /
	<del>\                                    </del>	5.0			:	* only tip of sample retrieved - barrel
- 16 -	1					packed - had to
www.as.ruma.tus.as.as.ts.						be washed out
- 17 -						of ware om
10						
_ 18 _						
_ 19 _						
- 17 -						
20 _		-	0.0	4	L .	
<del></del>	D	7	C	7	Signature: Dand W. Myers	Date: 1/27/04
	rage	2	or or		Signature: Vand W. Myers	Date

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Boring Log.xls



5788 Widewaters Parkway, Dewitt, New York 13214

**Boring Number** 

ANG-GP-137

Project Name ANG Drilling Com	& Location	ack	<b>.</b> «	SRT-	рT	_	Project Number	Date & Time Started: 3:10  Date & Time Completed: 3:52	2/27/09	•
Drilling Com	pany			<u> </u>	<u>, , , , , , , , , , , , , , , , , , , </u>		Foreman	Sampler(s)	Sampler Hammer	Drop <b>Perk</b>
ECS Drilling Equi	pment						Chuck Alam	Macia-Care Elevation & Datum	Completion Depth	Rock Depth
. Geogram	pelon	66	10	OT			Dirot Rush Core Barrel(s)	Geologist(s)	15	4000733
							Control	David W. IM	yers	
DEPTH		SAM	PLE	S FID/			SOIL DES	SCRIPTION	REMARKS	
(ft below grade)	Sample Number	Recove (teet	' '	PID (ppm)	Ble Cor					
	LOCATION	:			layo ya mare		SURFACE DESCRIPTION:	) N		
<u> </u>							Asphalt - 3	0 110"	· · · · · · · · · · · · · · · · · · ·	
		2.	2	6.0	N	(Y)	Kase Course - C	gravel to 9		
1			$\perp$				Rase Course - ( Fill - Lt gray five sand	, si H with		***************************************
				0,0			five sand	, moist		į.
								/		
— 2 ·			$\dashv$	0.0		-	r:// 1/- /.	•		
		-	$\dashv$	<i>,</i> .			Fill-black, o siH with scattered o to wet	rganic _i		
— з		$\perp$	_				siH w. 4h	gravel +		
							scattered o	debris mist		
4							to wet	′		
4			1							
	-	1	$\dashv$							
— 5 ·		*	$\dashv$							
		4.8	3	0.0		MANAGE -				
<u> </u>							Lt brown sitt	with five	***************************************	
_ 0			T	0.0			Sand none	ic wet		
			$\dashv$	17 7 2			July July	)		
7 ·			$\dashv$				14 . B	1 31/ 31/		
		-	_	0.0			LT gray tive	sand with sitt,		
8 .			_				wet, si	C base		
				0.0			,			
			T							
<u> </u>			1	0,0			Lt brown silt	with fine		
10		1		V	1		sand wet	Lion		
	Page	1		of	7	,	Signature:	ud W. Myers	Date:	2/27/09



5788 Widewaters Parkway, Dewitt, New York 13214

# Boring Number ANG-GP-/37

DEPTH		SAMPL	ES	1	OOT PEGGETTER.	
(ft below grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts	SOIL DESCRIPTION	REMARKS
10 -	\	1.5			14 has to Lit gray	
		7.3	0.0	NM	Lt brown sand with hive sand sitt wet, firm	
- 11 -					sand soft well from	
	<b>-</b>		0.0		It gray silt with time	
- 12 -			l		It gray silt with fine sand, wet, firm	
			0.0		• • •	
_ 13 _						
			0.0			
L 14 -	-	-			Lt brown fine sand, some	
_ 14 -			0.0		silt, wet, dense	
-1 F		,			· ,.	will discreet sample
- 15 -		. *			·	adjacent next
16						event due to
- 16 -						Lydonic pressures
						hydrostatic
- 17 -						0
- 18 -						
_ 19 _					•	
_ 20 _		•		<b>↓</b>		
	Page	2	of	2	Signature: Wand W. Myers	Date: 2/27/09
	0.		•			



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number
ANG-GP-/38

Project Name	LI	-4-	<0T-	07	0086335	Date & Time Completed:	/ <del>.</del>	
Drilling Com	pany	عدري	SRT-	<u> </u>	008/33.5 Foreman	Sampler(s)	Sampler Hammer	Drop
ECS Drilling Equip	<u> </u>			·····	Check Alan Method	Macla-Coto Elevation & Datum	Completion Depth	Rock Depth
Drilling Equi	pment	PPL	a Mer		Dirod Rush Core Barrel(s)	******	15	4macris
Goog Bit Size(s)	16000	Pa (* 1 e			Core Barrel(s)	DAvid W.	Muzz	
DEDELL		SAMPI	EG		***************************************	DAVIA VV.	MYCAS	
DEPTH		SAMEL	FID/		SOIL DES	SCRIPTION	RE	MARKS
(ft below	Sample Number	Recovery (teet)	PID	Blow Counts				
grade)	LOCATION		(ppm)		SURFACE DESCRIPTION:	- B		11,000,000,000,000
0					Asphalt 3	/ t		
—		2.8	00	NM	Asphalt 3 Base Course	411		
	<del>                                     </del>	2,0	0.0	741.7				
1					Fill - Black	silt with		
			0.0				المستديد المسامرة	•
			0.0		MINE SAWA	, scariered	gravel, moist	
			•		·	,		
2			0.0		Gray; silt,	some cond		
	1		0.0		31-1	34,000		
_			,		moist,	firm		
— 3 ·			A 1					٠.
			0.0			.,		
4	ă l				Lt brown s	ilt, some	•	
4					Lt brown s sand, u	net Gam		
					Sur J	THE PARTY OF THE P		
_	V	1						
5	1	3.9						
		۲۰۰۲	0.0				,	
<u> </u>	1							
_ 0 .					Lt. brown si	H come		
	-1		0.0	<del>                                     </del>	LJ. Drow~ SI	Jume		
<del></del> 7 -					sand, we	t, tirm		
/ .			00		•	,		
	<del></del>		0.0					
8 .								
			100					
			0.0	-		·····		
9 ·	1							
7								
			<del>                                     </del>	.				
10		4			$\wedge$			
	Page	ĵ	of	2	Signature:	md W. Mi	ym Date: 2	127 04
	, ugc					VV / / · · · · · · · · · · · · · · · · ·	4	/



5788 Widewaters Parkway, Dewitt, New York 13214

# Boring Number ANG -GP-/38

DEPTH		SAMPL	ES			
(ft belosv grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts	SOIL DESCRIPTION	REMARKS
- 10		4.1	0.0	NM	Lt brium silt. Some sand	
- 11 -					Lt brium silf, some sand wet, firm	
			0.0			
- 12 -					,	
			0.0		•	
_ 13 -			0.0		Lt gray fine sand, some	,
- 14 -					Lt gray fine sand, some silt, wet, dense	
			0.0			1. 1.
- 15 -		*	,			discreet sample to south
- 16 -		İ				
- 10 -						Hydrostatic pressure unable to
- 17 -						gett Sample
	1					Deeper
- 18 -						,
_ 19 _						
: 						
_ 20 ]		4		4	A 9.	
	Page	2	of	2	Signature: Wand W. Myss 1	Date: <u>2/27/09</u>

5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number G-P-139

Project Name	& Location	ack	-SRT-	PT	Project Number	Date &	Time Started: Time Completed: 3/3/97	9:40->		
Drilling Con					Foreman  Chuck Ale  Method	Sample	r(s)	Sampler Hammer  Aucko  Completion Depth	Drop	
Drilling Equi	ipment Sabe	66	IODT		Dired Ro Core Barrel(s)	S4 Geologi	5	Completion Depth	Rock Depth	
DEPTH		SAM	PLES						***************************************	
(ft below grade)	Sample Number	Recove (feet)		Blow Counts	SOIL DESCRIPTION			REMARKS		
	LOCATION	:			SURFACE DESCRIPTION:	14				
<u> </u>		7.4	5 0.0	NM	mad 5 cours, 5m to mad secural and silt to mad frand, setemated,			asplet sub	-base gravel	
1		1	0.0		Grayist brown	Fino sen	d and silt	(60/40)		
⁺ .					Grayish by spanny Seturated	siltano	) Fino send	(70/30)		
_ 2.			0.0							
— 2 ·			0.0							
<b></b> 3 ·										
4 -										
— 5 <b>.</b>		1								
		3, Z	. 0.0		Samo as a	Jacel		(70/30)		
<del></del> 6 -										
			0.0							
— 7 ·		San			Samo as	Show		(60/40)		
_ /			0.0							
8					Grayish bran 5:1+ Setured	ed fic	Send and	(60/40)		
			6.0				,			
— 9 ·	Ì									
フ										
10 ]		1		4			1			
	Page	1	of	Z	Signature:_	A.		Date:	1/3/09	



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

DEPTH		SAMPI	7		COVE TYPE CONTROL Y	
(ft below grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts	SOIL DESCRIPTION	REMARKS
10 =		0.2	0.0	NM	Greyish brown time send and silt, seterated very losse.	
- 11 -					, ,	
- 12 -				4		
_ 13 _						
- 14 -						
- 15 -		1.5	0.0		Roddish brown fing sendand silf- with oderso send to sm. ground Seturated	(cotroko)
- 16 -			0.0	l I	Roddish Grown silt and fine send of coerse send to sm subrand great, vary firm, moist	
· 17			0.0		srual, vary firm, moist	
18						
19					rafisal at 1974	started gatting her around 18.5ft bss. while is whorg
_ 20 _		•		<u> </u>		
	Page_	2_	of _	7	Signature:	Date: 2/3/05



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

GP-140

Project Name			1_	<i>p</i> ps	Ass		Project Number	Date & Time Started:		
ANG Drilling Com	pany	csc	K-	2KI -	<u> </u>		0086335 Foreman	Date & Time Completed: Sampler(s)	Sampler Hammer 1	Drop
ECS Drilling Equi							Chuck Alam	Macla-Core Elevation & Datum		uha
Drilling Equi	pment				***************************************		Chuck Alan  Method  Dirod Rush  Core Barrel(s)	Elevation & Datum		Rock Depth
Geo f	36000	<u> </u>	CIC	DI			<u>ロアで年 ほらり</u> Core Barrel(s)	Geologist(s)	<u> 34</u>	
							General	U ()		
DEPTH		SA	MPL	ES		*******				_
(ft below	Sample	Por	overv	FID/ PID	RI	D\$V	SOIL DES	SCRIPTION	REMARKS	3
grade)	Number		teet)	(ppm)	1	ints				
	LOCATIO	N:					SURFACE DESCRIPTION:			
— o		<del></del>		ı	Γ		a sphelt			, 4
		1	5	0.0	M	M	Grenish SLOWA 3	H to send and	(so/so) Perking	07
		16	<del>&gt;</del>	-	•		Small & recol 12	etureted time	565-6e	.SC
1		<u> </u>		0.0			Grevial Ground	Fine send and	(70HO)	
				0.0			Greyish brown so small ground, so Greyish browns silt, setured on	, firm		
	1	┼	╂	0.0		_		1		
- 2										
3		1						,		
4					-					
	1							,		
— 5 <b>·</b>	1	<b>}</b>	<b>/</b>				Canadal Isanaa	Diagram )	(70/70)	
	1	Z.	9	0.0			Grayist brauns	in diem	(40(43)	
	\									
- 6	1									
	1			0.0		İ				
	1								±	
— 7 l				0.0						
	1									
				0.0						
8	1			_						
ŀ										
				•				×		
- 9										
					-					
10					J					:
~ _	Page		 	of			Signature:		Date:	



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number 6 <u>P- /40</u>

DEPTH				1		
(ft below grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts	SOIL DESCRIPTION	REMARKS
10	Number 1		1		mob bram, sino to mad send, Seturated, Jirm, w/silt	(80/20)
- 11 -						
			0.0			
- 12			0.0			
. 13						
			0.0		Ourk grayish brown fine to made sand, with silt seturated ling	(so/zo)
- 14 -	-					
- 15 -		45	0.0		Serge as about	
- 16 -						
			0.0			
- 17 -			***************************************			
-	+		0.0			
- 18			0.0		semp as above	
. 19			0.0			
_ 20 _		*		<b>V</b>		
	Page	2	of	2	Signature: D	ate: <u>3/3/0</u> 9



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number GP-140

#### **BORING LOG**

DEPTH		SAMPL	.ES				
(ft below grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts	SOIL DESCRIPTION	REMARKS	
20 —		5.0	0.0		Grayish brown time tomand sand	(90/20) (90/20	
- 21 -			0.0		Grayish brown fine to mad sand with silt saturated, I im Grayish brown silt, with clay seturated, I im Grayish brown silt, with line sand, saturated	(90ko	
- 22 -			0.0				
_ 23 _			0.0		creyish brown silt to fine send  w/ small subscend spend  Roddish brown silt to fine send with  with coarse send to mad subscend  green, vory firm, moist	(70/30) T:11	
- 24 -			0.0		green, very firm moist	, · · · · ·	
- 25 -		¥					
- 26 <b>-</b>							
- 27 -							
_ 28							
_ 29 _							
_ 30 _			·				

Page ____ of ____ Signature: ____ Date:

# EDM

#### **ERM**

5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

Project Name	& Location	ساء	_ < 0*-	٥٣	Project Number 0086335	Date & Time Started: Date & Time Completed: 3/3/6	9 13140-> K:26	
Drilling Com	pany	<u>ack</u>	-SRT-	<u> </u>	. Foreman	Sampler(s)	Sampler Hammer Drop  Audic Audic	
ECS Drilling Equi	pment		······		Check Alan Method	Macle-Core Elevation & Datum	Completion Depth Rock I	
Goog	pelone	66	COOT		Method Direct Rush Core Barrel(s)	Geologist(s)	25'	·····
Dit Size(s)					General Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of th		~	
<u>DEPTH</u>		SAM	IPLES		SOIL DES	SCRIPTION	REMARKS	
(ft below	Sample	Recove	· 1	Blow Counts		CAUL LIVIN		
grade)	Number LOCATION	(teet I:	t) (ppm)	1	SURFACE DESCRIPTION:			DESCRIPTION OF THE PERSON OF T
0 ,				<del></del>	0/-1		kn /m	
-	1	45	6.0	NM	send wat s	- + 100	(80/20)	
	1	1			Send wat s med bicum fine maist from Raddishbaun fi	send and 5H	(60/40)	
1	1	┢		<b>  </b>	Raddight own Fi	as send and	(70/30)	
	1		0.0		4114			
2								<u></u>
∠ .			0.0					
— 3 ·		$\vdash \vdash$						
			0.0			Cill and Dia		
4			0.0		send moist	יין ד פרפ די ריי		
4			0.0		very derk from send, moist from fin	f Send and silf		
	<b></b>				maist +1700	\		
5	<u>'</u>	14						
:		4.7	00		Samo as abo	<i>.</i> 9		
		1					_	
— 6	H				areyigh brown	silfandeley Nestic	(70/30)	
	<del></del>		00		wot firm	plestic		······································
— 7	<u> </u>				Gregish brown	7111 / 41/47		
<b>'</b>			0.0		]			
8	-				Grayish brown sand, Seturet	silta with fine		
	<b></b>		0.0		send, Setucet	ad fina		
<u> </u>			0.0					
— y					<b> </b>			
10	<u>L</u>	14		<u>  4</u>		7		
	Page		of	3	Signature:		Date: 3/3/09	

#### **ERM**

5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

#### **BORING LOG**

DEPTH		SAMPL	ES			
(ft below grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts	SOIL DESCRIPTION	REMARKS
10 -	<u> </u>	5.0	6.0	NM	Grayigh brown silt and Lino	(60/40) (60/40)
- 11 -			0.0		Grayigh brown silt and Lino send, seturated, soft Grayigh brown fine send and silt, saturated, soft	(60/40)
			0.0			
- 12 -			0.0			SPIC Sot 13-17ft/gg Sample ID: ANG-GP-14/ Time: 15:20
_ 13 _			0.0			
- 14 -			0.0		Sama as about	(70/30)
- 15 -		•	0.0		Grayigh brown fine send, with silt, seturated, Firm	(ED/20)
10 -		3.5	0.0			
- 16 -			0.0			
- 17 -			0.0		Roddish bear time send and silt with small subrand sent	(90/90/20)
_ 18 _			0.0		,	*, '
_ 19 _						
_ 20 _		<u>  \\                                  </u>		<b>W</b>		

,



5788 Widewaters Parkway, Dewitt, New York 13214

# **Boring Number**

#### **BORING LOG**

DEPTH						DENTAL DECC	
(ft below grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts	SOIL DESCRIPTION	REMARKS	
- 20		5,0	0.0	NM	Roddish brain Fine send and sitt seturated, soft		
- 21 -			0.0	78			
- 22 -			0.0		Raddigh brown fire sand and sill work course send to somell subramed size of		
_ 23 _			0.0	•	Rodish from silt to fing send and	(60/40)	
- 24 -			0.0		Rodish brown wilt to fine send and smell down of in send and silt w/ course send to smell set rune send	(60/30/10)	
- 25 -			0.0		Raddish Green silt the samp, with coarse send to small submend greens		
- 26 -							
- 27							
_ 28 _							
_ 29 _							
_ 30 _							

Page 3 of 3 Signature:

Date:

5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

GP-147

Project Name	Honor		RI-PT	,	Project Number  OOB 6 33 5  Foreman	Date & Time Started: 7	24/09-> 7/24/	109
Drilling Com	pany				Foreman Check Alan	Sampler(s)	Sampler Hammer Auto	Drop
ECS Drilling Equi	ipment			,	Check Alan Method	Macro Core Elevation & Datum	Completion Depth	Rock Depth
Bit Size(s)	probe	6610	DT		Core Barrel(s)	Geologist(s)	25'	Constitution
DEPTH		SAMPL	EC			R. Sents		
DEFIN			FID/		SOIL DES	SCRIPTION	REM	ARKS
(ft below grade)	Sample Number	Recovery (teet)	PID (ppm)	Blow Counts				
	LOCATION	V:			SURFACE DESCRIPTION:			
— 0 ·		Ι	<u> </u>		Grave) Noa	send tosmall	11	
	1	4.0	0.0	NM	light gray fine	gravel, meist	road b	45C
1	1				٠, ١, ١,			
	1		0,0		Und Cook brown	n silt to coars		
					nodish brown s	:17, with clay		***************************************
_ 2				$\vdash$	und cook brown sond; st brown fine send	and silt, moist	(50/50)	
	+	H	0.0		f:cm			
_ 3	1							
			0.0		↓		Czalza	,
			8.0		Strong brown fin	esand and 5:14	40/20) 40+ a+	1.
- 4	1		0.0		tiem, moist		10+ a+	4،6
N:				_				
_ 5		K			206			
		5.0	0.0		Gravish brown f silt, saturades	inesendand		
_	1	1			-3/11/ Sella reside	, 501		
<b>—</b> 6	-			+				
	+		0.0					
- 7				W				
			0.0					
1	$\neg$					3		
_ 8				+-				
-	* 2- 1		0.0	_	· Program	. :4 <: 1+		
_ 9					Sound, Sout	, with silt		
			0.0		1			
10		*		1	+	0		
	Page	1	of	3	Signature:	-les	Date: 7/-	29/09



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

<u>DEPTH</u>		SAMPL	ES		-acrimion	REMARKS
(ft below grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts	SOIL DESCRIPTION	
10 =		1.5	0.0		brown fine sand, with silt saturated, firm	
. 11 -	. 1			i.		,
			0.0		lasit, trace	(col25/5) 3" lonse
12 -			0.6		brown, fint sand and sitt, trace clay firm vory derk grey, mad to coase send, ed sitt saturation	(95/5)
			0.0		send, ed silt, saterated	
13 -			0.0			
14 -			0.1			
14 -			8.0		h day send	(95/5)
15 -	1	4	0.0		Very derk gray fine to und. send whith silt, seture to	
		5.0	0.0			SP-16 used to collect water sample from botomen 14-18 ft bgs
16 -		1	0.0			Semale ID: P-NG-61-143
17 -						sempleTime: 12:00
1/ -			0.0			
. 18 –		Set				
			0.0			
- 19 -			0.0	_		
_ 20 _	1 10	sia.	0.0		Radishbrown fing sand and silt firm, saturated	(70/30) (90/50)



5788 Widewaters Parkway, Dewitt, New York 13214

#### **Boring Number** GP-142

#### **BORING LOG**

<u>DEPTH</u>		SAMPLES				DELCAPAGE	
(ft below grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts	SOIL DESCRIPTION	REMARKS	
- 20 🗔		5.0	0.0	NM	Radish brown fine send and silt, very firm, seturated	(50/50)	
- 21 —			0.0			(60/40	
- 22 -			0.6			(70/30) soult	
_ 23 _			0.0		Rodish bown silt and fine sent true coarse send to small subround sroud, vary firm	(70/50) 50-P1 (60/30/10)	
- 24 -	-		0.0				
- 25 -		1	00	4	Roddish scown silt and ting sond trace small grown and clay	(50/30/10/10) Wory firm	
- 26 -							
- 27 —					• .		
_ 28 _					· · · · · · · · · · · · · · · · · · ·		
_ 29 _				,			
_ 30 _			,				

Page 3 of 3 Signature:

Date:

### **ERM**

5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

GP-143

Project Name	& Location	K-51	RI-PI	-	Date & Time Started: 7/	24/09 -> 7/29/ 12:00 to 13:15 Sampler Hammer	109	
Drilling Com	pany				Foreman		Sampler Hammer	Drop Auto
ECSII Drilling Equipment					Check Alan Method	Macro Core Elevation & Datum	Auto Completion Depth	Rock Depth
Gro Bit Size(s)	probe	66101	DT		Direct Pagh Core Barrel(s)	Geologist(s)	Z0	- Chantering
						R. Sents		
<u>DEPTH</u>		SAMPL	ES FID/		SOIL DES	SCRIPTION	REM	ARKS
(ft below grade)	Sample Number	Recovery (teet)	PID * (ppm)	Blow Counts				
Bruney	LOCATION	THE OWNER WHEN PERSON	41 /		SURFACE DESCRIPTION:	1		
_ 0 ·					Grand No	2 6 ( 0 2 1 )		
	\	3.5	0.0	NM	Gay, silt to my	firm, moist	rose	bese
1	\	1		١		·	191	
	1				vory derk som	n silt to som		
	$\vdash$	-	0.6	+	sulrain gravel,	nery tiem		
_ 2 ·		$\bot$			10.40		140/20/4	a)
			0.0		trees clay,	noist Armi	(60/30/10	
					strong brown sill tree & clay of strong brown silt anoist fi	and fine send	(70/30	
<u> </u>			0.0		7,5			WATER TO SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF THE SERVICE AND
900		-		-	,		(50/50)	,
_ 4 -							(50/50)	)
	ŀ						* •	,
		1						
— 5 (	1	3.8			Brown Fing sand fire	and silt	(70/30)	
	1	1.0	0.0		Saterated tic	<u>~</u>		
<u> </u>	1				C 11 h 2	13.0505.		•
			0.0		Gravish brown	Ticm and	(60/40)	
_	\					•		
一 7 ·			0.0		6.1	,	=	
	-		0,0	-				
_ 8 .				-			soft	
			0.0			****		
9-444			,					
— 9 ·								
	<del>                                     </del>		,	1				
10		1 *		4		<u> </u>		
	Page		of	Z	Signature:	lata	Date: <b>7</b> /	29/09

5788 Widewaters Parkway, Dewitt, New York 13214

Borin	g Number
6	P-143

1	OTH	SAMPLES					
	t below grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts	SOIL DESCRIPTION	REMARKS
	10 -		4.5	0.0	NM	Bown fine sond and silt, trece coarse sond, setemeted soft Rodist from fine send and	(60/90/10)
	11 -	I				Radist from fine send and silt, from small ground	(60/30/10) (60/35/5)
,	11 -	-		0.0			
	12 -	+					
V				0.0			
1	13 -	1				Raddish brown fine sand, with silt, saturated Raddish brown fine to med sand	(84/20)
1	10	1		0.6		height 60/st	(90ke)
	_ 14 -	1				Radish brown fine send, trees silt, very firm Derk gray mod. to fine send,	(45/5)
		-		0.0		with silt	(95/100)
			4				
	- 15 -		5.0	0.6		Same as above	SP-16 set botween
	16 -		1				15-19-ft to collect Water sample Sample ID: ANG-GP-143 Sample Time: 13:10
	10	1		0.6			Semple Time: 13:10
	17 -						
	1"			0.6		sone as above	
	18 -						
	10	_		0.0			
	19 -	_					
		1		0.0		A 11 d 1 a 2 d 1 d 1 d 1	
0	20 _		4		X	Rodish brown silt and fine sond, trace clay	(65/30/5)
4	A .	Page	2	of	2	Signature:	Date: 7/25/05
9.5							



**ERM**5788 Widewaters Parkway, Dewitt, New York 13214

**Boring Number** 

Project Name	& Location	4-0	07 07		Project Number	Date & Time Started: 7 Date & Time Completed:	24/09 -> 3/24/09
Drilling Com	Horac	K-31	KI-PI		OOB 6335 Foreman	Sampler(s)	Sampler Hammer Drop Auto Auto
ECS Drilling Equi	inment			#	Cheek Alen Method	Macro Core Elevation & Datum	Auto Auto Completion Depth Rock Depth
Gro	probe	66101	DT		Core Barrel(s)	Geologist(s)	
Bit Size(s)					Core Barrel(s)	R. Sents	
DEPTH		SAMPL	ES				REMARKS
(ft below	Sample	Recovery	FID/ PID	Blow	SOIL D	ESCRIPTION	
grade)	Number	(teet)	(ppm)	Counts	SURFACE DESCRIPTION:		
0	Locarion				Greval roo	مع	
<b>—</b> 0 ·		3.9	0.2	NM	vory dark gray	silt to small	in road base
1			0.0	1	SURFACE DESCRIPTION:  Grand roo  Vory dark gray  Schenge lar gray  Gray find send to	to mad subangular	
_ '			6.0		,, = 1		
		, al			1		
— 2			0.0		Out gray fine with gravel, fi	send and silt	(50/30/20)
— 3 ·			0.0		Strong brown si	It and finasend	(40/40)
			0.0		1.7.5,		(70/50) (60/40) (50/50) wet at tip
_ 4					1		
		1					
— 5 ₍	1	4.5	0.0		Greyish brown	fine send and	(50/50)
		1			7.0. 55.57	Alexander Company	
— 6			0.0			The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	(66/40)
			,,		V-1		(70/30)
<del>- 7</del>			0.1				
8				6			(50/50)
			0.1				1 .
			0.1				(50/50)
<b>—</b> 9							
10		1		1			/
	Page	·	of		Signature:	10-105	Date: 7/25/09



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

### **BORING LOG**

DEPTH		SAMPL	ES			
(ft below grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts	SOIL DESCRIPTION	REMARKS
10 🤻		5.0	0,0		Radish brown fine send and sitt	(50/50)
- 11 -						
			0.0			(70/30 U9564)
- 12 -			0.0			(50/50)
- 13 -						6.4.
- 14 -			0,0		Roddish be wen fine send w/ silt vory firm Desk gray fine to mode send, with silt, seture to	(70/30) firm
_ 14 _			0.0		Ociks cay tine to made sand, with	(90/10)
- 15 -	1	5.0	0.0			
- 16 -		7.0	0.0		Same as about	
- 10 -			0.6			SP-16 sample
- 17 -			0,6		Same as about	SP-16 semple collected between 7 15-19 ft bes. Semple time: 14:40 Semple ID: ANG-CE-144
- 18 -			0 7		same as esour	Semple In Fixe Bi-147
			0.5			· ·
- 19 -			00			
_ 20 _		4			Radish brown, siltand fine Send, trace clay and singravel	(0/30/5/5)
	Page	_Z	of -	2	Signature:	Date: Herlog

rev. 10/99 Boring Log.xls



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

GP-145

Project Name	Honooc	K-51	RI- P7		Project Number	Date & Time Completeu:	129/09-> 7/29	
Drilling Con	ipany	*			Check Alen  Method	Sampler(s)  Macro Core	Sampler Hammer  Auto	Auto
Drilling Equ Gro Bit Size(s)	-	6610	DT		Direct Red  Core Barrel(s)	Elevation & Datum	Completion Depth	Rock Depth
Bit Size(s)					Core Barrel(s)	Geologist(s) R. Sents		. 1
DEPTH		SAMPL			COIL DI	ESCRIPTION	PEN	IARKS
(ft below grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts		SCRII TION	KISIV	IARRO
0	LOCATION	:			SURFACE DESCRIPTION:			
0		4.8	0.2	NM	Subsequer gr	1, silt to smell	road be	se
_ 1	\		0.0	1	maist	A.	4	4
	$\vdash$			3		, s		148
<b>—</b> 2			0.6		have silt on	delet Pier	(70/30)	1186
					brown silt and		(70/35)	, ,
<b>—</b> 3		1	0.0					**
								1
_ 4		, Jr	0.0		Grayish brown	SITED TING SO	end (colup)	
			*			·		
— 5 <i>.</i>		1					wat at	+: p
- 5 (	1	4.8	0.0		Greyish brown send, trece as	silt and tines	(70/25/	<b>(5)</b>
<b>—</b> 6	\	1			SOLT	8.5	,	/ -
0			0.0		7.8	, )		
7			0.0		Gravish brown	fire send and	(70/30)	y *
<del></del> 7						,	1-	
8			0.0		6	, )		
			0.0		Rodish soun f silt, seturded	fire sand and	(20/30)	
<del>-</del> 9			0.0		med soun madi	en to fine some	(85/15)	
10		*		1			₫ P	#
	Page		of		Signature: Z	21-1	Date: 7	lze lag



5788 Widewaters Parkway, Dewitt, New York 13214

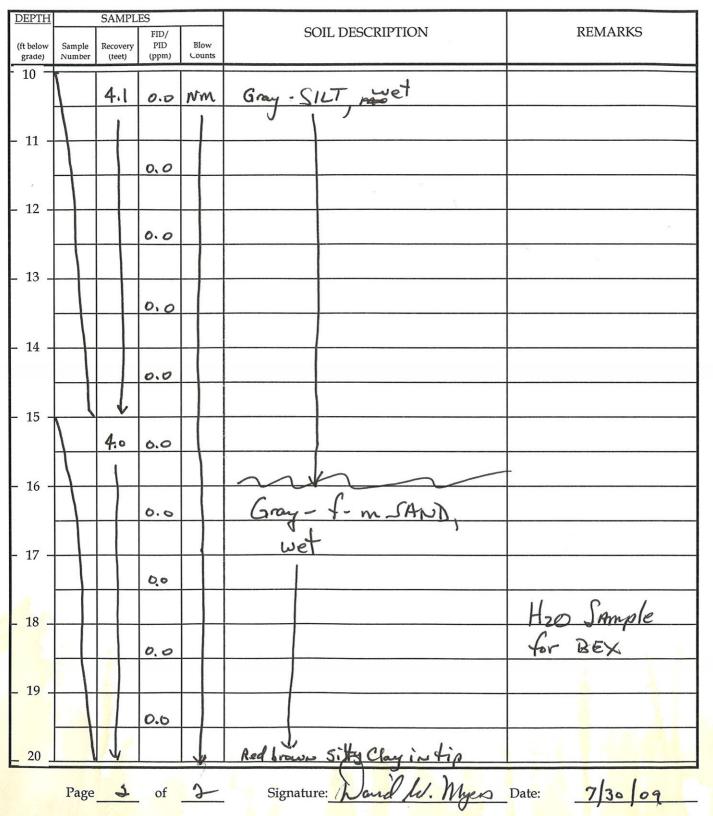
Boring Number

DEPTH	1	SAMP	LES		- THING FOG	
(ft below grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow	SOIL DESCRIPTION	REMARKS
		5.0	00		w/ silt, sale 1 and fire send	(60/30/10)
- 11 -		+	2.1		Grayish brown med. and fire send	(50/40/10)
- 12 -			0.0			
					Samo	100 m
- 13 -					Same as about	
- 14						SP-16 Set at 13-15-145 sample Time: 15:45 Sample Time: 15:45
15	1	1			Samo as about	Semple Time: 15145
16		1.8			Same asabove	4.0-6
17		*		Kar I		
		ne King			Sama as abave	
18			7			
19					Sama as above	
20	1	۷.		R	with small subsected smallend clay	(50/30/10/10)
Pag	ge	<u> </u>	f Z		Signature:	Date: 7/29/05



5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number GP- 146



### EDM

### **ERM**

5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

GP-146

ANG	Honor	K-SI	RI-PT	-	OCB 6335 Foreman	Date & Time Completed:	309 - 413010	7
Orilling Comp	pany				Check Alen Method	Sampler(s)  Macro Core  Elevation & Datum	Sampler Hammer  Audie  Completion Depth	Drop Auto Rock Depth
ECS Orilling Equip	pment	11101			Method A	Elevation & Datum	Completion Depth	Rock Depth
Bit Size(s)	probe	66101	31		Direct Resh Core Barrel(s)	Geologist(s)	2 M	
DEPTH		SAMPLI	ES			R. Sants D.	400 Myers	
(ft below	Sample	Recovery	FID/ PID	Blow	SOIL DES	SCRIPTION	REMA	RKS
grade)	Number	(teet)	(ppm)	Counts	SURFACE DESCRIPTION:			
_ 0	LOCATION	•			Topsoil - Gras Brown - Cl Some SAN	s-Golf Cours	ie .	
_ 0	/	4.2	0.0	NM	Brown - Cl	an silty		
	1	1	0.0	1	12/000	1		
_ 1 .	+	-			Jome SAn	mois !		
		-	0.0	$\vdash$				
<u> </u>								
2	1		0.0					<i>r</i>
<b>—</b> 3 ·	-							
	-		0.0					and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s
_ 4								
	1		5.0		Brown - Sil.	+ truce sand,		
		1			moved	t, truce sand, to met		
<del>-</del> 5 (	1	3.8			110.2			
	+	2	0.0	H-				
<del></del> 6	$\vdash \vdash$			H-				
	$\Box$		0.0	Ц_				
7								
<del>-</del> 7			0.0					
5 4								
8	-			H-	C 11			
	-		0.0	$\vdash$	bray- sitt	trace sand		
_ 9					wet			
			0,0		- 10		7	
10		1 1	,	1		1		
	Page	1	of	2	Signature:	end W. Myes	Date: 7/	30/09
	1 age		- 01	-	Digitature. 10	no. Ilgus		

Project Number: 0050355				Comments													Sample ID: ANG-MW-105 (OFO)		Gallons	
ct Number:					mv	+/-10 mv	٠٤. ا	-7.3	-17.4	-24.2	-37.7	-42.5	-43. [				NG-MO	502)	ged: 1	als: S₽
Proje	Pump Used			Flow	ml/min.	100-400	700			-			≯				Sample ID: P	Sample Time: 1205	Total Vol. Purged: 2	Samplers Initi
				DO	mg/L	+/-10%	2.53	30.2	1.35	בר.ם	0.35	0.30	6.29				G,	,		
MINIG		(feet below top of casing) (feet below top of casing)		Cond.	ms/sn	+/-3%	823	813	218	F18	815	عاد	817							
Project Name:		(feet below t	Time Finished:	μd	ΩS	0.1 unit	7.63	7.54	1.54	24-7	74.6	7.40	-1.39							
Pro		7.55	Tin	Temp.	deg. C	+/-3%	4.78	4.83	9.91	]a-aj	<b>60.</b> 0)	21.0)	10.04							
4.15.09		before lowflow: Bottom of well:	1530	Turb.	NTU	+/-10%	02.9	MM	Y.Y	Nrd	エス	NM	4.63				3.5			
Date: 4		Static water level before lowflow: Bottom of well:		Pump	(JJo/uo)	φ	קט	ļ					<u>,</u> ,				 ۲			
Well ID: <u>الاس- الم ح</u>	itions:	Static wat	Time Started:	DTW	feet	7.54	7.54	7.55	55-L	55.1	22.5	7.55	7.55				 Ferrous Iren			
Well ID:	Weather Conditions:		Ferret	Time		1130	1130	(135	1140	1145	0511	1155	1200				Notes: Fe			

g:geoforms\LowFlow (with variance),XLS rev, 10/99

Project Number: Pump Used Project Name: Aus. Knack 1:eld Date: 4/15/04 Well ID: ML-14 Weather Conditions:

(feet below top of casing) (feet below top of casing) Static water level before lowflow: 6.81 Bottom of well:

Time Finished:	
/4:3/	
Time Started:	

			,				1		ī			1		ī	ı		: <b>!</b>	ì	ı	1
	Comments																Sample ID: Ass Ass. 14 (04/04		Gallons	
	ORP	vm	+/-10 mv	-32	89	-47	go S	4.5	74.0	13.7	(2.8	11.6	•				1NG-06	15:20	rged: ~2. S	ials: <b>RS</b>
	Flow	ml/min.	100-400	200	8	B	8	8	B	o\$)	\\$0  \$0	(29)					Sample ID:	Sample Time: 1 5: 20	Total Vol. Purged: ~2. 5 Gallons	Samplers Initials: <b>&amp;</b>
	DO	mg/L	+/-10%	[43	250	0.40	0.5	0.53	0.55	29.0	6.69									
	Cond.	us/cm	+/-3%	21.0/2531	850/x2h1	23:0/23:11	1538/1.026	1540/1.624	1543/1020	1514/1.018	500-1/±051	1468/6.957								
•	Hd	SU	0.1 unit	15.2		3.38	7.17	<i>h</i> 1⁻±	7.10											
	Temp.	deg. C	+/-3%	10.03		802	7.CZ	7.64	7.01	7.59	7.58	75.5								
	Turb.	NIU	+/-10%	22.60	36.21	4.04	21.2	0.44	87.0	19:0	0.58	6.55								
•	Pump	(on/off)		ho	00	60	60	υ <u>0</u>	uo	00	02	0					1/2 5:1			
	DTW	feet		6.93	78.7	88.9	6.40	15.9	06.7	06.7	6.60	6.90					Force Tran 1.3 mg			
	Time			14:37	14:27	75:4/	14:50	55:27	00:5]	15:05	0):5!	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\					Notes: 5			

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009.033S				Comments										•				104 (0409)	77 (	Callons	g:geoforms\LowFiow {wi
Project Number:	a)			ORP	шv	+/-10 mv	5.1	8.0	-0-8	-2.3	-3.2	-4.8	-4.8	-5.3				ANB-MW-101/(0409)	1640	ged: 7.5	als:
Projec	Pump Used		-	Flow	ml/min.	100-400	TEC							-23				Sample ID: /	Sample Time:	Total Vol. Purged: 2.5	Samplers initials:
*				DO	mg/L	+/-10%	1.43	0.37	0.30	0-25	0.34	0.25	0.24	0.23							
ANG		(feet below top of casing)	0.571	Cond.	ms/cm	+/-3%	1448	1448	1433	1411	1413	14000	1405	1404							
Project Name:		feet below t feet below t	Time Finished: 1650	Hd	SU	0.1 unit	L.87	76.97	29.9	4.90	<i>3</i> 6.₽	10.1	6.48	14.97							
Pro	7.05 F		Tim	Temp.	deg. C	+/-3%	10.40	10.83	16.91	80-11	LE-31	11.36	11.38	11.38							
4.13.09	ary IS	oefore lowflow: 1. b7 Bottom of well: 25.61	1555	Turb.	NTU	+/-10%	57.7	Z Z	Y.	Z Z	Z H	Σ 2	0.95	Z				0.8			
Date:	flear,	Static water level before lowflow: Bottom of well:	•	Pump	(JJo/uo)		ميه											2			
Well ID: NW- lob	itions:	Static wat	Time Started:	DTW	feet		<b>1</b> 90 -i	ය ද	1. 100	ය ද	1.69	09/-1	200.	0,7.				Ferress			
Well ID:	Weather Conditions:			Time			1500	Sanl	۵ <i>۱۹</i>	1615	1620	1625	1630	724	200			Notes:			

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Project Number: $OU  \Im U$	Pump Used .	
Project Name: $A_{\kappa} _{G}$		level before lowflow: 4.22 (feet below top of casing)  Bottom of well: (feet below top of casing)
Date: <u>↑                                     </u>	Alear, dry ± 45°F	ter level before lowflow: 4.2 Bottom of well:
Well ID: المام	Weather Conditions:	Static water

Time Finished: 1550

1414

Time Started:

Comments																
ORP	mv	+/-10 mv	15.4	14.0	11	16.9	18.9	19.5	21.6	23.3	22.7	1.22	21.4	21.4		
Flow	ml/min.	100-400	200						-					- >		
D0	mg/L	+/-10%	4.52	4.73	4.75	4.92	4.95	4.98	5.0G	5.07	4.95	4.92	4.78	4.89		
Cond.	ns/cm	+/-3%	847	832	128	184	181	7-18	715	111	928	844	848	845		
Hd	SU	0.1 unit	7.48	7.43	7.41	7.30	7.24	7.72	7.21	8a·L	6.95	6.91	2 b·9	16.92		
Temp.	deg. C	+/-3%	96.6	4.84	9.BU	4.57	9.4)	9.36	4.52	4.33	9.33	9.51	55.6	4.52		
Turb.	NTO	+/-10%	96.7	レス	MN	84.5	μN	MN	HN	a.pe	٤·Ll	۳Z	7.51	15.4		
Pump	(JJo/uo)		va										•	>	•	
DTW	feet		4.72	4.21	4.22	4.22	4.21	4.22	4-22	4.22	4.22	4.22	4.22	4.22		
Time			1440	1445	1450	1455	1500	5051	1510	1515	1520	1525	1530	1535		

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Sample ID: ANG-MW-107 (0409)
Sample Time: (540
Total Vol. Purged: 3.0 Gallons

0.0

Ferrows Iron -

Notes:

Samplers Initials: 🦙

Date: 4/13/04 Well ID: M∪-(| |

Project Name: AUG- Hercock Field

Project Number:

Weather Conditions:

10,20 Oring +35-F part/

(feet below top of casing) (feet below top of casing) Static water level before lowflow: 2.25 Bottom of well:

Pump Used

Time Started:

10.38

Time Finished: 11,20

Comments	PIO medine	had space of woll	0.00pm											Sample ID: $A \cup G - M \cup U \cup Q \cup G$	-	Gallons		
ORP	mv	+/-10 mv	-8.5	5.0	5.11	14.1	0.01	5.87	7.12	272				1 W6-ML	51:11	rged: ~ ℃	ials: RS	
Flow	ml/min.	100-400	150	150	150	159	051	150	057	150				Sample ID: /	Sample Time: 11: 15	Total Vol. Purged: ~ ℃	Samplers Initials: (25)	
DO	mg/L	+/-10%	5.18	1.81	0.00	0.50	6,43	6.29	6.33	82.0				•	3,			
Cond.	ns/cm	+/-3%	1325/0,535	1384 6.52	1310/0.520	7,5 ( 1265/0.842	(48.0/572)	4580/514	1205/0.849	1201/0.948								
Hd	SU	0.1 unit	7.94	7.74	2.58	15'2	せかさ	2ht	82.5	127	-							
Temp.	deg. C	+/-3%	4.31	9.44	4.45	4.59	this	9h · 5	75'5	4.64								
Turb.	NTU	+/-10%	10.50	3.09	0.04	6.00	00.0	6.00	000	00.0				5/1				
Pump	(JJo/uo)		00	00	(20)	00	100	00	00	100				N 0.0 W				
DTW	feet		2.25	2.24	52.2	82.2	2.28	12.2	12.2	2.7				Forcows IRON 0.0 ms				
Time			(0:40	55:07	10:50	10:55	(1:00	11:05	0):1)	51:17				Notes: For				

g:geoforms\LowFlow (with variance).XLS rev. 10/99

Date: 4/13/09 Well ID: MW-1/12

Project Name: ANC-14 cock Sol

Project Number: 0090335

Static water level before lowflow: 2,07
Bottom of well:

7-04=

Weather Conditions:

(feet below top of casing)

(feet below top of casing)

Pump Used

Time Started:

Time Finished:

11:57

		(1				J								(adpo)			
Comments		+/-10 mv - PIO or hardspace of	moll 42.8ppm	-746 - Pure water has	s slight account	000								Sample ID: A NG- MU-112 (04/6x) ANG- ()い (04/6x)	1 25	Gallons	
ORP	mv	+/-10 mv	6.75-	クトナー	-65.5	-36.0	2:28-	7光-	-7.52	2.ht-				NG-MU-112	121 British	ged: ~1.5	ials: (25
Flow	ml/min.	100-400	200	150	150	(50	(50	(50)	150	150				Sample ID: A	Sample Time: Control	Total Vol. Purged: ~7.5	Samplers Initials: (2)
DO	mg/L	+/-10%	0.38	6.53	21.0	0.10	0.(5	51.0	51.0	0.16				37	0,		
Cond.	ns/cm	+/-3%	11 45/843	1212/.852	1256/0.863	8.23 1235 6.865	1231/0.862	1369221	t58.0/57.21	1225/0.85							
Hd	SU	0.1 unit	8.05	8.27	8.07	8.23	8.97	8.31	8.30	8.30							
Temp.	deg. C	+/-3%	9.50	9.50	9.39	9.30	9.43	4.37	9.33	4.24							
Turb.	NTU	+/-10%	36.21	11.6	3.42	0.46	0.03	0.00	0.00	0.00							
Pump	(JJo/uo)		00	60	00	60	00	00						2.1m3/1			
DTW	feet		2.15	81.2	2.18	2.19	2.18	2.(8						w Irani			
Time			12:00	12:05	12: (0	12:15	02:21	12:25						Notes: Firm In: 2, (m)			

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Date: 8/5/2009 Well ID: mw-(4

Project Name: ANG Hancock Field

Project Number: 86335.32

Weather Conditions:

275. pertly cloudy brown

(feet below top of casing) Static water level before lowflow: 8.73
Bottom of well: 13.68

Pump Used

Time Started:

13:37

Time Finished. 14:76

(feet below top of casing)

13.58

Commonte	THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY O																2004	
ORP Co		+/- 10 my	VIII OX /	73.7	1 200	24.7	2/12	76.5	2001	۲۰۱۲-	- 53.4	_		-1 -1		Sample ID: A 11/2 mrs 16 2020	14:15	Total Vol. Puroed: ~ ( Callons
Flow	ml/min.	100-400	S	72.	155	100	100	17.0	(1)	(5)	52)			•		ample ID: A	Sample Time: 14:15	otal Vol. Puro
DO	mg/L	+/-10%	6.38	27.5	\$ 6	1 6	27.5	277	200	9,10	0.62			<del></del>		S	Š	Ţ
Cond.	us/cm	+/-3%	1475	1770	200	Z.	1046	ושמש	900	2 1	7501							
Hd	SU	0.1 unit	7.46	7.04	7.00	787	74:7	02.7	27.0		6.67							
Temp.	deg. C	+/-3%	13,23	17.97	12.93	12.00	7.97	05.2	7 87	10.0	16:31							
Turb.	NIG	+/-10%	6.50	10.04	10.05	4.93	5.74	2.5%	2.34	2 16	†					7 mg/c	;	
Pump	(on/off)		8	0	00	Lo	00	0	70	5	5					Forcus lan 2.7 mg		
MLQ	reet		8.78	8.74	8.75	25.8	24.8	8.75	8.75	Q.75	7, 7					Ferrer		
Time			13:38	13:43	(3:48	13:53	13:58	20:41	80:41	74:45						Notes:		

g:geoforms/LowFlow (with variance).XLS rev. 10/99

Well ID: MW-105

Project Name: ANG Hancock Field

Project Number: 86335.32

Date: 8/5/2009

75°F 41 clear, dry

Weather Conditions:

Static water level before lowflow:  $\frac{9.21}{34.55}$  (feet below top of casing) Bottom of well: 34.55 (feet below top of casing)

perutatic Pump Used

		Comments												3) 3)	2,000	*		54 - pp.pg	7
			אזונא	+/-10 mv	2.77	133.7	7.70	2.50	105.2	105.5	4.0	76.8	3.76	0.96	86.1				
	Flour	ml/min	100 400	100400	87		3 5	7 200	700	200	007	$\beta$ ,	227	200	7 00			Sample ID: 🕻	
·	Od	mø/I.	700/	الراب الراب	3:3	424	4.02	4.04	4.104	7 7 7	2 3	2 2 2 2	25.2	2:6	2.95				
1430	Cond.	us/cm	7/ 30/	1.014	1.011	1.070	1.01	7.000	2.989	400	0.401	010	2 - 3	0.466	0.956				-
Time Finished: 1430	Hd	SU	0 1 unit	7.77	7.70	7.2h	7. (3	7.18	7.17	7.10	7 10	7.10	ם נ	-	1.2.1				10.11.
Tir	Temp.	deg. C	+/-3%	12.79	(3.77	3.45	(3.3)	13.45	(3.38	13.47	() ()	12.50	2000	CO:01	(3.28				
1315	Turb.	NTU	+/-10%	137	626	ΣZ							36.0	23.0	2.1.2		:		14.4.4
	Pump	(ou/off)																co.	40 40
Time Started:	* DTW	feet		7.54	12.51	16:0	50.0	10.07	٠. (4،	6.55	6.47	6.50	10.105	7 .	0 e			2+= 0.8	of Calcium ( for borne to 'nie, time
	Time			1320	1325	1330	1335	1340	1345	1350	1355	(400	1404	4.5	0,11			Notes: Fe2t =	א נשוניא

9:geoforms\LowFlow (with variance).XLS rev. 10/99

Gallons

Total Vol. Purged: 2 Sample Time: 141\$

* Calcium corbonate injection - observed in H10 i

DTW MEASUREMANTS.

Spening

Well ID: Mw.

Date: 8/5/2009

Project Name: ANG Hancock Field

Project Number: 86335.32

clear dry + 80°F

Weather Conditions:

Static water level before lowflow: 2.67

Bottom of well: 15.54

(feet below top of casing) (feet below top of casing)

Geo purp Pump Used

Time Started:

03

Time Finished: | 7 ( O

Comments																	108-0809		Gallons	Carrollo
ORP	mv	+/- 10 mv	3	2 2	0 0	90.0	ر: ه و	<u>ن</u> :	10.5	1.0)	£						- 22- ZZ	1700		
Flow	ml/min.	100-400	`		Itn	2 5	55	150	281	120		÷					Sample ID: ANG-NW-108-0809	Sample Time:	Total Vol. Purged: 2	3
DO	mg/L	+/-10%	0.77	25.0	0.40	0.27	0.72	300	07:0	٥٠٢٥							0,7	ψ)	[,	
Cond.	ns/cm	+/-3%	0.854	1.UL 0.840 0.56	0.847 0.40	0.844 0.27	780	0.010		0.850			····							
Hd	SU	0.1 unit	1.75 0.854	いいい	1.60		7.44	7 63	1 5	(.55										
Temp.	deg. C	+/-3%	13.41	12.99	13.47	12.49	3.29	12 12 1 47	5	15.44 (.55	•						-			
Turb.	NIN	+/-10%	2.26	とろ					9 -	a										
dmnd	(on/orr)		ğ			,				4										
WIC	זבבו	1	2.74	3.75	3.74	5.13	3.75	3.71	2 7 2	2:13						Æ				
Time		520		1630	1635	1640	1645	0591	11.00							Notes: Fex				

g:geoforms\LowFlow (with variance).XLS rev. 10/99

Well ID: Mw-107 Date: 8/5/2009

Project Name: ANG Hancock Field

Project Number: 86335.32

Weather Conditions:

Clear, dry + 75°F

Static water level before lowflow: 5.53
Bottom of well: 74.15

(feet below top of casing) (feet below top of casing)

Pump Used perutaltic

Time Started:

435

Time Finished:

SU us/cm mg/L mg/L n	Time	DTW	Pump	Turb.	Temp.	Hd	Cond	000		ra C	· ·
45 5.54 by 44.2   17.55   8.24   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27   1.27		feet	(JJo/uo)	NTO	deg. C	ŜŪ	115/cm	7/±m	riow	OKK	Comments
45 5.59 by 40.2 17.55 8.24 1.27 1.27 1.27 1.27 1.27 1.27 1.27 1.27				7007	ì		) min /cm	mg/ L	au/mm.	mv	
7.5 = 5.57 by $44.2$ (1.55 $8.24$ 1.239 1.27 5.0 $5.59$ $10.71$ $1.91$ $1.93$ $1.93$ $1.855.5$ $5.59$ $10.71$ $10.71$ $1.92$ $1.93$ $1.855.5$ $5.59$ $10.71$ $10.71$ $1.72$ $0.994$ $1.3910.5$ $5.59$ $10.71$ $10.71$ $1.93$ $0.919$ $1.9010.5$ $5.59$ $10.71$ $10.71$ $10.91$ $1.9010.5$ $10.71$ $10.71$ $10.91$ $10.91$ $10.9110.71$ $10.71$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$ $10.91$	1	1000		+/-10%	+/-3%	0.1 unit		+/-10%	100-400	+/-10 mv	
5.59 5.59 5.59 5.59 5.59 5.59 5.58 5.58	17	5.57	مہ	44.7	17.55	8.7		1.27	202	-1.20	
5.58 5.59 5.59 5.59 5.58 5.58 5.58 5.58	9	5.59		Σ Σ	15.41	7.98	- 27	2	740	0 117	
5.59 5.58 5.58 5.58 5.58 6.012 7.72 0.984 2.38 5.59 10.12 7.72 0.936 2.59 5.59 10.15 7.08 0.984 2.59 5.59 10.15 7.08 0.984 2.59 5.59 10.15 7.08 0.984 7.50 5.59 5.59 10.15 7.08 0.984 7.50 5.59 5.59 5.59 5.59 5.59 5.50 5.50 5	5	5.58				1.67	120	- 0	207	4.0	
5.58 5.58 5.58 5.58 7.00 0.984 7.58 5.59 7.00 0.934 7.50 5.59 7.50 7.50 7.50 7.50 7.50 7.50 7.50 7.50	5	011				10	500	( S	207	いがい	
10 5.58   16.12 7.72 0.936 2.59 10 5.58   16.15 7.48 0.934 2.56 15 5.59   15.95 7.46 0.919 2.46 25 5.59   \$5.49 16.16 7.62 0.915 2.57  Fett : 5.2	را	5.5			5.2	ן. פרי	0.984	2.38	202	1.7.7.	
15 5.58   16.15 7.48 0.924 2.56  120 5.57   4 15.96 7.42 0.919 2.46  25 5.59   \$5.49 16.16 7.42 0.915 2.57  Fett = 5.2	25	5.58			16.12	71.7	0.934		200	-72.9	
15. 5.59 15.95 7.06 0.919 2.00 25 5.59   \$5.49 10.16 7.02 0.915 2.57  Fett = 5.2	0	5.58			\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	7.68	1200	1	200		
25 5.59   \$5.49 1.63 0.919 2.00 25 5.59   \$5.49 16.16 7.02 0.915 2.57  Fett = 5.2	4	6.49			1000	1	8 9		007	4.4.	
5.59   \$5.49 1.63 0.910 2.06 5.59   \$5.49 16.16 7.02 0.915 2.57 -ett = 5.2	, (	2 . 7			(3.75	3.	0.414	3.6	200	- 22.9	
5.59 1 \$5.49 16.16 7.62 0.915 2.57 eth = 5.2	07	5.57		Þ	1		0.910	2.06	200	-71.0	-
7.5 =	25	5.59		45:40		7.27	216-0	L.	900	-212-	
7.5 =					1		2		))	1:12	
7.5:											
Fett = 5.2											
Fett = 5.2				•							
Fett = 5.2											
Fe2* = 5.2										***********	
Fett = 5.2											
ž	j	,1	7						Sample ID.		6
**									Sample Time:	10 LD	080-101
					Ė				Tetal 177 1 D	200	

g:geoforms\LowFlow (with variance).XLS rev. 10/99

Samplers Initials: SP

Date: 8/5/2009 Well ID: Mw. 111

Project Name: ANG Hancock Field

Project Number: 86335.32

Weather Conditions:

overcast, dry = 10°F

Pump Used

Static water level before lowflow: **2.85** (feet below top of casing)

Bottom of well: **16.68** (feet below top of casing)

perintaltic

Time Started:

000

Time Finished: [[[5]

	***************************************															!			Sample ID: And And And And And And And And And And	E-120-11-020-1120
of menon	Comments																		AN (2020)	יייים אייי
ORP		ΛIIΥ	+/-10 mv	3:8	31.0	200	20.50	20.00	6.17	29.3	28.83	)							1/4 - M1.) - 1	246
Flow	mim/lm	100 100	100-400	00)	9	52	3 2	2007	007	700	200								Sample ID: 🗛	Sample Time: 194
DO	mø/I.	700/	7/- 10%	0.20	0.40	0.57	0.40	2.20	200	0.33	0.33								0,	0.
Cond.	us/cm	+/ 30/	0/0-/-	1.150	ر ا ب	1.192	1.11.04	1011	101.1	1.187	· 18									
Hd	SU	0.1 unit	7.70	1_7.1	7.13	1.24	7.73	7.72	2 0	7.23	7.24						•			
Temp.	deg. C	+/-3%	2001	0/ .51	ં	16.83	(5.13	1514		- S: - I	15.45	•		-						
Turb.	NIU	+/-10%	42.4		56.7	Z	-			4	(8.S	,		,						
Pump	(JJo/uo)		£	-	-						-								7.0	
MLQ	feet		2.89	, 01	7.17	2.93	26.7	5.89	2 02	71.7	2.62			•				 4.	Fe" = 1	
Time			1010	7.4		1020	\$20)	020)	1826	(CCO)	(040)			·					Notes: F	

g:geoforms\LowFlow (with variance).XLS rev. 10/99

Gallons

Total Vol. Purged: 1.5

Samplers Initials: SP

Well ID: MU-112

Weather Conditions:

Date: 8/5/2009

Project Name: ANG Hancock Field

Project Number: 86335.32

+75.f owecest, broozy

Static water level before lowflow: **2.40** (feet below top of casing) Bottom of well: **16.97** (feet below top of casing)

Pump Used

Time Started:

9:55

Time Finished: 10:5

	ts																		0475-0	80.0wi - 50.0
J	L' Comments	2	) mv	2		\$	3	2	<u>ر</u>	1	2		<b>~</b>						Sample ID: ANG PILL 17.0000	
	Š Č	mv	+/- 10 mv	107		24.5 1	-48.3	-48.7	-4/.9	1.1.1	200	1	211.5						NG 191	ë ë
Flows	riow	ml/min.	100-400	952	260	3	052	522	522	776	724	100	25						Sample ID: 🎝	Sample Time: 10:2
00	1/200	T/Sim	+/-10%	48.5	0.75	7 7 7	5 .	9, 0	0.60	0.38	42.0	17.75	ر د د		,				3,	97
Cond.	118 / cm.	and /cm	+/-3%	<b>≥85</b> !	1582	1060	200	02	168	1587	1594	15.96	200							
Hd	ŝu		U.I unit	7.12	6.61	137		5,7	6.54	6.55	6.56	43.7	,							
Temp.	deg. C	700/7	4/-3%	14.81	14.40	(4.34	14.76	16.20	2.20	23.7	14.28	14.76	9						7	
Turb.	NTU	+/-10%	0/01 - /.	66.3	37.2	19.4	4:43	3	<b>L</b> .	292	3.12	262							1.2.7 mg	
Jump	(ou/off)			62	00	. 6	00	6	5	02	00	00		,					forceus Tran: 2.2 mg/L	
DTW	feet			85.2	70.5	3.10	3.05	7.04	7 7	3	304	3.03							100	
Time				55:1	10:00	10:05	10:0	10:15		02:01	52:01	22:01							Notes:	

g:geoforms\LowFlow (with variance).XLS rev. 10/99

Gallons

Total Vol. Purged: ~ 4 Samplers Initials: Rf

Well ID: MC-1(3

Date: 8/5/2009

Project Name: ANG Hancock Field

Project Number: 86335.32

portly cloudy, breezes \$

Weather Conditions:

(feet below top of casing) (feet below top of casing) Static water level before lowflow: 1.86.
Bottom of well: 2.58

Pump Used

Time Started:

Time Finished: 10:30

		Comments				
	200	Ž	in the	77.77	7.7	Alm of -/_
		FIOW	ml/min		100.400	OOT DOT
	000	2	mø/[	0	+/-10%	NOT /:
	Cond	-011d.	ms/cm	,	+/-3%	2,7
	Hu	L	$S\Omega$		0.1 unit	
	Temo.	1	deg. C		+/-3%	
,	Turb.	A 7777 T	NIO		+/- 10%	
	Pump	05-7-27	(on/orr)			
	DTW	1005	זבבו			,
	Time					•

	Comments								t the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the								
aao		anv	+/-10 mv	- 26-1	00/	7.7.2	933	α 3 ()	707	10.	22.5	0.75-					
Flow	m1/mim	uu/ mun.	100-400	282	3 5	25.05.05.05.05.05.05.05.05.05.05.05.05.05	201	150	Ş	S	2	(%)					
DO	1/2m	77 /Shi	+/-10%	20.2	7.06	72.7	0.0	22.0	0.32	X 27	j	0.30					
Cond.	118/cm	Cm / Cm	+/-3%	1749	242	h281	722/	1231				1349	,				
Hd	511	}	0.1 unit	7.32	72.4	7.18	7.12	7.1	7.08	7.05		7.06					
Temp.	deg. C		+/-3%	14.04	13.18	7.58	55.21	12.21	12.44	72.21		25.21					
Turb.	NTU	1000	+/- 10%	73.4	348	35.5	522	14.0	12.4	11.7	1	^: <u>:</u>	•				
Pump	(JJo/uo)			0	ره	an	00	VO	70	70		60	•				
DTW	feet			2.6.5	2.65	2.6.5	6.32	[2.5]	6.07	25.5	600	7:16					
Time				02:3)	16:35	05:2)	10:45	(6:8	16:55	17:00	7, 0	14:07					

Forces iron: 1.7 male

Notes:

Sample ID: ANG- PKJ-113-0809 Sample Time: 15:05

Gallons

Total Vol. Purged: ~3 Samplers Initials: **&**\$ static aw about اعنائدا . φ

g:geoforms\LowFlow (with variance).XLS rev. 10/99

Date: **8/5/0**5 Well ID: MW-114

Project Name: ANG Hancock Field

Project Number: 0086535.02

Weather Conditions:

+75-f. antly cloudy, brover

(feet below top of casing) Static water level before lowflow: 72c.
Bottom of well: 18.24

(feet below top of casing)

Pump Used

Time Started:

Time Finished:

Time	DTW	Pump	Turb.	Temp.	Ηd	Cond.	DO	Flow	ORP	Comments
	teet	(JJo/uo)	NTU	deg. C	ΩS	ns/cm	mg/L	ml/min.	ΔW	
			+/-10%	+/-3%	0.1 unit	+/-3%	+/-10%	100-400	+/-10 mv	
3:15	0.48	00	64.8	13.87	7.15	1105	4.20	22/2	-47.7	
3:50	0.45	00	7:72	13.15	6.48	54.01	22.0	20,7	-727-	
\$2:5	0.45	5	16.2	13.0(	26.2	0201	6.17	400	12/2	
5:50	0.45	60	13.5	12.96	6.94	870)	0.16	400	744	
3:35	0.45	00	11.0	12.91	5.5	120)	0.6	705	-787	
oh: <b>\$</b>	0.45	41	10.57	28.51	24.9	107	0.6	287	2000	
\$:45	0.45	しの	48.3	18.21	6.83	1075	0.14	202	1000	
3:50	24.0	00	7.67	8£21	643	opel	0.17	707	22.	
3:55	0.45	00	55.2	2271	6.50	[85.4	57.0	don	7.27	
			<del></del>			,				
00	Once I place was	1	, Some	Later Stert	fertal a	75.80		Sample ID: As 1C; see	2	2003
7	المدامد صدر		رهديمو			,		Sample Time: 17:00	00.)	Sagn. 1.11
	`							Total Vol. Purged: ~/	<b>⊘/~</b> : paā	Gallons
	الماري	Former ( Lan 1.9	1/200 01					Co111	8	

g:geoforms\LowFlow (with variance),XLS rev. 10/99

Well ID: MW-19 Date: 10/7/09

Project Name: ANG Hancock

Project Number: 86335

Weather Conditions: Overcast Cool, windy, light rain

Static water level before lowflow: 8.80 (feet below top of casing)

Bottom of well: 14.04 (feet below top of casing)

Pump Used
Bannart

	Flow ORP Comments	1/8  -176.4			c.741 - co/,	(A) - (S/)	1/8 -124.8			136.6					Sample ID: 1910 G- Mul-19 -10/00	Sample Time: 10:15	Total Vol. Purged: * 15 Gallons	Samplers Initials: Dww.
	DO	2.10	0.59	6,39	0.30	0.26	0.23	0.22	160	Ĩ					Š	S	<u></u>	S
2:01	Cond.	1503	1489	1459	1441	147	[443	1448	1450	200		***************************************						
Time Finished: 10:20	$^{ m hd}$	8.69	8.60	8.46	8.34	8:28	8.24	8.21	8.20								7	7
Tim	Temp.	12.80	12.98	13.06	13.04	13.09	13.11	13.14	13.17									1.9 ma/
9:40	Turb.	4	1.1	10	13	10	૭	7	1.5				**		201		1	1000
•	Pump (on/off)	00											•		NO odor			Smans
Time Started:	DTW	8.80	8.95	9.01	30.6	20%	9.02	7.02	9.02						, ,			+
Time	Time	9:49	9:45	9:50	9:55	00:01	10:02	10:16	\$1:01						Notes: clear			

g:geoforms\LowFlow (Updated).XLS rev. 10/99

Well ID: MW- 105 Date: 10/6/09

Project Name: ANG Hancek

Project Number: 86335

-89.9 | Took awhile to start flow Sample ID: ANG-MW-105 -10/09 ORP Comments Sample Time: 15:25 Total Vol. Purged: ~ 4 Gallons Samplers Initials: DW M. - 62.0 -107.6 93.9 ~ <del>|</del> | 88.2 -107.4 -107. Barrant Pump Used Flow 1/2 7/2 3.15 (5) 0.36 6.4S 6.37 0.36 6.38 00 (feet below top of casing) (feet below top of casing) Time Finished: 15:2ス 1335 1128 Cond. 1132 1245 1133 1319 1164 Weather Conditions: Party Cloudy to Ginny - Wind - colm 7:26 7.75 7.76 8.1 7.77 7.77 7.93 pΗ 12.48 Temp. 1223 11.60 9.30 10.01 11.85 7.74 1.52 Bottom of well: 34.20 Notes: V. Shahly clouby - No adors ma Static water level before lowflow: 14:50 Turb. 177 34 138 28 39 110 **₩** 3.9 (gyo/uo) Pump frances i con 3 MIG Time Started: 9.38 9:38 9.33 \$\$ 9.38 9.38 4.38 9.38 Time 14.55 15:00 15,25 20.21 01:53 15,28 51:31

g:geoforms/LowFlow (Updated).XLS rev. 10/99

Project Numbe
Project Name: ANG Hancock
Date: 10.6.09
well ID: DC

er: 86335

Weather Conditions: Clear dry t work

Static water level before lowflow: 2.13 (feet below top of casing)

Bottom of well: 25.43 (feet below top of casing)

Pine- quopump Pump Used

> 1200 Time Started:

Time Finished: 1700

Temp. Turb. DTW Pump (on/off)

Time

Cond.

þΉ

ORP Comments

Flow

00

							-	mi/mip.	*****
0171	16.10 2.74	d d	5.03	14.00 J.C.	1.61	878	7.00	* 7 DD	a c
20	1615 2.73	<u> </u>	ΣZ	13.55	13.55 7.48	870			-0.1
1620	2.74			13.53 7.45	7.45	a1-8	0.18		-2.5
1225	7:12			13.46 1.30	1.30	854	Si-a		-4.C
1630	2.74			13.32	1.35	258	0.14		-4.0
1635	2.75		<b>-</b>	(3.30	7.36	158	21.0		-5.1
1240		*	3.74	13.22	7.38	854	5.64		· <b>6.</b> 0
-									
Notes:	Fe2t =	0.0						Sample ID: F	Sample ID: 1710 G-MW-106-10/09
								Sample Time: 1045	これなっ
						, , , , , , , , , ,	Assertant destruction	Total Vol. Purged: ~ 3	ged: - 3 Gailons
								Samplers Initials: SP	

g:geoforms\LowFlow (Updated).XLS rev. 10/99

Well ID: [07]

Date: (D.G.O) Project Na

Project Name: ANG Hancek

Project Number: 8635

Weather Conditions: Clear, dry + 40°F

Static water level before lowflow: 5.54 (feet below top of casing)
Bottom of well: 24.14 (feet below top of casing)

Pump Used
Pine - Jeo purp

Time Started:

1455

Time Finished: 1000

Time DTW Pump (on/off)

Temp. pH

Turb.

DO

Cond.

How ORP Comments

						,		ا الله الله الله الله الله الله الله ال		
Sasi	5.58	لميا	54.5	5 (4.82	7.99	8701	3.33	2222	15.0	
210	85.5		34.5	14.44 7.73	7.13	[20]	7.09		0-3	
1515	5.59	_	MM	14.31	aL.L	1202	2.13		4.0	
1520	5.29		•	14.12	٦٠ ٢٠	Saz)			73.7	
1525	5.58		9.59	14.26	14.26 7.54	(211	2.26		7.7.	
1530	5.59		Z	14.43	7.54	(223	2.21		-14.3	
1535	5.59		->	(4-SD	(4.50 7.58		2.24		- 15.x	
1540	5.30	>	2.93	14.38 7.49	7.49	1238	2.24	Ð	-[1.7]	
							**********			
Notes: F	Fe# = 3.5	3.5				VARIATE AND THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PA	AWWARNES	Sample ID: 6	Sample ID: 17106-1101-101-10/09	1-10/09
								Sample Time: 154¢	154¢	
								Total Vol. Pur	Total Vol. Purged: ~ 3. 5 Gallons	ns
								Samplers Initials: < > >	als: <p< td=""><td></td></p<>	
								Ž		

g:geoforms\LowFlow (Updated).XLS rev. 10/99

Date: 10. 16. D9 Well ID: // /

Project Name: ANG Hancock

Project Number: 86335

+ SSOF Clear, dry Weather Conditions:

Static water level before lowflow:  $\frac{2.92}{|\mathbf{b} \cdot \mathbf{b}|}$  (feet below top of casing) Bottom of well:  $\frac{1.92}{|\mathbf{b} \cdot \mathbf{b}|}$  (feet below top of casing)

Fine - 400 pump Pump Used

> Sall Time Started:

Time Finished: |220

ORP Comments Flow

00 Cond. pΉ Temp. Turb. (JJo/uo) Pump DIW Time

38.7 #\/min 150 0.38 1742 7.35 14.78 26.8 ξ 2.9% 4

511

										\$
40.0	38.7	37.5	35.9	32.7	24.5	28.9	24.8	27.9		
	200							•	TOTAL TANKS	
0.28	0.20	87.0	27.0	6.27	0.22	12.0	81.0	51.0		
1311	2561	1153	1754	8511	771)	992)	(153	<i>a</i> \$L)		
7.32	14.97 7.26	(4.77 7.26	14.90 7.25	1.24	7.23	7.24	7.70	12.1		
15.14 7.32	14.97	(4.11	(4.90	15.02 1.29	15-14 7.23	(5.09	14.97	14.89		
ΣZ				•	20.07	MN	-\$	1.57		
				,				<b></b>		
2.45	2.46	26.2	2.9%	2.96	2.91	2.95	2.96	2-40		 
1120	1125	(130	1135	140	1145	1150	1155	1200		

Sample ID: AUG- HW - 111-10/09 Sample Time: 12 D S Total Vol. Purged: * 3 0.0 t

Notes:

g:geoforms\LowFlow (Updated).XLS rev. 10/99

Gallons

Samplers Initials: 🛠

Project Name: ANG Hancock Date: 10.0.09 Well ID: 112

Project Number: 86355

Sample ID: AUG-MW-112-10/04 ORP Comments Pine - geopum 36.2 75.52 27.2 47.2 200 94.9 80.1 18:1 Sp. 1 Pump Used mt/min Flow 007 0.BL 6.73 0.24 22.0 D. 22 0.22 3.13 0.0 0.25 0.21 00 (feet below top of casing) (feet below top of casing) 1488 1497 1484 1520 (500 1504 Cond. 1497 125/Em 1503 Time Finished: 1055 1481 1951 7.30 7.32 7.32 7.33 1.37 7.39 7.35 μď 7.31 1.3 t soof 5.37 15.40 15.32 12:4 15.40 15.3 15.29 Temp. 15.39 **LZS** 7.88 Bottom of well: [].D [5.3] Static water level before lowflow: 48.4 (5.0 87.0 20.4 0430 Weather Conditions: Clear, dru Turb. 7 エス 35.2 Σ エフ ZZ Q A (JJo/uo) Pump ā F& 27 = 2.98 DTW 2.98 2.18 2.99 2.99 2.49 Time Started: 2.48 2.48 1.49 Time 1020 0360 Saal 2560 Siai 1030 1000 520 2121 1035 Notes:

g:geoforms/LowFlow (Updated).XLS rev. 10/39

Gallons

Total Vol. Purged: +3
Samplers Initials: SP

Slight odtr

Sample Time: 1040

ルション 113 MW-操 Date: 10/6/09

Project Name: ANG Hancek

Project Number: 86355

Sample ID: ANG-My 1/3 -10/09 ORP Comments Total Vol. Purged: ~ 4 Gallons Samplers Initials: Dwm Sample Time: 13:45 43.0 - 42.7 -47.7 -43.6 -43.2 -4.4 -80. BARNANT Pump Used Flow <u>_</u>0 500) <u>~</u> <u>.</u>@ (feet below top of casing) - aboue (feet below top of casing) 4.82 0.32 6.39 6.32 1.69 00 0.31 10,20 de 5-10 mph ė 119] Time Finished: 13:52 Cond. **C89**[ (481 1858 1862 1864 1863 7.34 7.18 7 19 2.25 7.21 7.34 12% ÞΗ SSOF 12.68 Static water level before lowflow: 1.68 Bottom of well: 26.82 Temp. 2.5 /3./8 12.74 17.68 13.78 12.97 1.5 mg Cool 7.89 Turb. ە ق 4.0 13:15 32 8 Weather Conditions: Clerdy Clear - No odors terrous iron (JJo/uo) Pump Ş DIW 3.44 Time Started: 89:/ Š 3.40 295 3.08 3:32 12:45 Time 3:50 3:4 13:25 13:30 13:35 13:16 Notes:

g:geoforms/LowFlow (Updated).XLS rev. 10/99

Well ID: 10/6/04

Project Name: ANG Hercock

Project Number: 86335

Weather Conditions: * 10° I pertly cleady, 0-5-pl

(feet below top of casing) (feet below top of casing) Static water level before lowflow: Toc Bottom of well:

Time Finished:

94:14

Time Started:

His 2-27 Geographs Pump Used

asa/sm ORP Comments -102 -78 125 120 -10% -84 18 111-450 9 450 055 950 Flow 450 \$ 3 3 9.00 0.00 0.00 0.00 -. 88 0.00 0.00 0.00 0.00 00 . S 1.42 Cond. .38 1.42 1.45 7.40 1.38 16. -34 6.67 6.97 6.98 7.04 7.06 7.12 6.94  $\mathbf{p}\mathbf{H}$ 14.05 १५. १० 14.18 14.10 वि.एप Temp. 4.14 14.15 14.14 74.4 2:1% 74.4 68.2 7.7 7.57 2:17 Turb. 61.9 6.3 Notes: Permas len: 1.4 3/ (JJo/uo) 0 Pump 5 0 0 0 0 70 Ç 0 82.0 9.0 90 6.28 82:0 82.0 0.29 DIW 82.0 6.28 55:h:0 02:50 04:50 >2:h0 94:30 4:35 S4:45 Time 21:50 94:40

g:geoformstLowFlow (Updated).XLS rev. 10/99

Sample ID: ANG-MU-1/4 - 10/09

Gallons

Total Vol. Purged.-10 Samplers Initials: **£**5

Sample Time: 17:00

Date: 10.7.09 Well ID: 109

Project Name: ANG Hancock

Project Number: 86335

Weather Conditions: DVCr Leaf, rain, I SS'F

Static water level before lowflow:  $10 \cdot 89$  (feet below top of casing) Bottom of well: 14.48 (feet below top of casing)

pine - geopump Pump Used

> Time Finished: 05-5 999 Time Started:

ORP Comments Flow

00

Cond.

 $_{
m pH}$ 

Temp.

Turb.

Pump

DTW

Time

			,								_			
ORP Comments		62.2	60 Ca	40.4	60.7	54.8	<4.2		***************************************				Sample ID: 1910 (2- 1910-109 - 10/00	
Flow	F / F / F	201 2											Sample ID:	
2		Ln.a	٥. د	0.63	797	I	į.	87.0						
Cond		1419	1443	1456	(45.2	15.42 7.50 1454	1457	1458						
пd		7.45	15.51 7.50 1443	15.41 7.46	7.49	7.50	7.49	7.49						
· Čura r		100.6 15.51 J.45 1419	15.51	15.41	15.40	15.47	15.45 7.49	0.48 15.48 7.49						
, del D.		100 la	MM			•	24.3	10.48				***************************************		
(tho/no)		d)	·										5.5	
		11.0g	Q] ::	11.04	%: <u>:</u>	±.08	11.02	11.01					# # # # # # # # # # # # # # # # # # #	
		1005 11.09	alai	1015	1010	1025	ga-111 oza1	1035					Notes: $\xi e^{2t} = 0.1$	

g:geoforms\LowFlow (Updated) XLS rev. 10/59

Total Vol. Purged: 1. Samplers Initials: Sample Time: 1540

W^

Well ID: <u>nw.108</u> Date: 10/4/04

Project Name: ANG HenceK

Project Number: 86335

			Comments					Water and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same	Valencia de la constanta de la	***************************************	TAXABLE IN THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STREET, THE STR				Sample ID: ANG- MU-108-10/09		Gallons	
***************************************	7,5,5,0,0,0,0,0,0		ORP	W	-34	-43	-588	55-	3	02-	19-	10			NG-1	14:05	ged: * 3	als: RS
Pump Used			Flow	220	175	175	沃	17	13	17	7.	175			Sample ID: A	Sample Time: 14:05	Total Vol. Purged: • 3	Samplers Initials:
			00	0.53	60.0	000	0.00	0.00	0,0	0.00	0.00	0.00						
overcest, wind o-somph out of west	(feet below top of casing) (feet below top of casing)		Cond.	2.10	7.17	2,18	218	2.19	2.19	2,18	41.2	21.2		-			***************************************	
suph on	(feet below i	Time Finished:	Ħď	7.00	6.95	6.94	6.43	6.43	693	6.93	6.43	6.43					-	
×-0 کمند		Tim	Temp.	14.75	14.72	14.69	14.00	14.51	14.49	14.41	14.42	14.38			1/2			
1. +532.	Static water level before lowflow: 10.87. Bottom of well:	(3:15	Turb.	453.0	0.68	46.3	34.4	222	54.4	28.4	28.4	b.52			1.2 mg/c			
1 1	er level befo Bott	•	Pump (on/off)	67	00	67	00	OA	00	3	00	97			Forever low 12			
litions:	atic wat	Time Started:	WIG	11.23	11.06	1:07	は言	1:07	13.52 1100	13.50 11.08	13:55 11.06	14:00 11.07			Social			
Weather Conditions: 160	₹5	Time 5	Time	02:21	52:51	(3:2)	58:5]	oh:51	2.51	13:53	13:55	14:20			Notes:			

g:geoforms/LowFlow (Updated):XLS

Well ID: ML17 Date: 10/8/64

Project Name: ANS Harcock

Project Number: 0086335

Weather Conditions: \$ 654, pertly clauby brace>

Static water level before lowflow: 12.92 (feet below top of casing)

Bottom of well: 17.25 (feet below top of casing)

Pump Used Geoporto Horiba W.ZZ

Sample ID: ANG-MU-17 10/05 ORP Comments Gallons Sample Time: 14:16
Total Vol. Purged: ~2
Samplers Initials: Æ\$ .00 44 5 -105 -79 18 -113 -115 Flow 00 8 200 125 007 (00 00/ 100 0.00 0.00 0.00 9.8 0.00 0.68 1.38 0.00 00 1.25 Cond. 52.1 72.1 92. 72.1 1.25 1.29 Time Finished: 553 6.68 6.69 600 しょ 6.64 pH でい 3.83 17.30 13.45 13.80 13.73 13.68 13.80 Temp. 37.7 75.3 40.7 39.9 38.3 0.27 (3:23 Turb. 51.3 73.5 34.1 Notes: Proces 100 1.4 (JJo/uo) てら Pump 7 くつ 70 0 0 2 70 78.21 12 67 14:05 13.96 13:45 13.69 DIW 13:50 13.75 12:55 13.84 100 Time Started: 14:00 13:41 14:00 52:51 12:40 Time

g:geoforms\LowFiow (Updated),XLS rev. 10/99

Project Number: $008(555)$	Pump Used	Pine - Scopump		Flow ORP Comments	min him	1	140	13.2	3.		*	12.8				Sample ID: 4NH- HW-8-10   04	Sample Time: 1425	Total Vol. Purged: 🗸 🕻 Gallons	Samplers Initials: SP
1904				DO		0.44	17.0	0.50	0-28	0.32	25.0	25.0							
ANG		(feet below top of casing) (feet below top of casing)	1445	Cond.		840	178	Blolo	867	871	873	813						***************************************	
Project Name:	L.	(feet below (feet below	Time Finished: 144	μd		11.1	7.13	7.74	7.73	7.71	7.10	7.70							
Pro	7 55°F	10.01	Tim	Temp.		13.32	13.20	13.20	(3-17	13.14	13.12	13.10							
Date: 10.8.04	dru	Static water level before lowflow:_ Bottom of well:	1340	Turb.		41.0	2			6.93	5.39	3.90							
Date:	Clear	r level befo	₹.	Pump (on/off)		٤						_	,			1,			
8	ditions:	tatic wate	Time Started:	DTW		£.€	10.3k	85:0	10.31	35.01	85-0	8£-01				Fezt =			
Well ID: 8	Weather Conditions:	Ġ	Time	Time		1350	1355	¥8	1405	1410	1415	1420				Notes: F			

g:geoforms\LowFlow (Updated).XLS rev. 10/99

0080335		<b>A</b> -		Comments									100000000000000000000000000000000000000		***************************************	7	1 0 0 0 0	Gallons	
Project Number:		Pike - Jeopump		ORP Com	4.0)	a	12.5	11.9	101	8.8	8.0	7.8					Sample ID: ANG-TIP-15-19 9	,	ials: 🛠
Projec	Pump Used	Pike 1		Flow	4150							•	•				Sample Time: 1225	Total Vol. Purged:	Samplers Initials:
		23		DQ	6.33	0.40	0.25	0.21	6.19	51.0	0.14	5.13							
ANG		(feet below top of casing) (feet below top of casing)	1245	Cond.	403	280	562	2.2.5	543	531	226	525							
Project Name:		(feet below (feet below	Time Finished:	Ħď	52.5	7.64	1.58	T-5-T	1.56	55·L	55·L	7.55							
	55°F	13.91	Tu	Temp.	12.73	15.21	12.31	12.25	12.20	51 -21	12.14	12.14							
Date: 10.8.09	41.0	Static water level before lowflow: 13.41  Bottom of well: 17.65	1135	Turb.	9.15	r N				2.06	0.59	0.27							
Date:	Clear	ter level befo Bot		Pump (on/off)	3							-,				2.4	745	i.ke odor	
5/ 1/5/	ıdifions:	static wa	Time Started:	DTW	13.94	13.94	1596	13.9%	1397	13.9%	1392	13.9				# # L			
Well ID: 15	Weather Conditions:	O)	Time	Time	1145	asıı	1155	1200	1205	1210	2121	1220				Notes:		petroleum	·

g:geoforms\LowFiow (Updaled),XLS rev. 10!99

50																94	4		
2680B00		4		Comments												Sample ID: AN6-MW-116-10/84	1	Gallons	
Project Number:		£0pres		ORP	***************************************	21.3	(4.8	19.8	19.3	8.8	18.5	18.9				4 N 6 - M	1110	als: 4	
Project	Pump Used	Pine - geopus		Flow	m / min.	212						•	•			Sample ID:	Sample Time: 1110	Samplers Initials: \$\$	
The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s				00		1.10	5.83	58.0	o.Ut	15.0	0.43	0.42							
ANH		(feet below top of casing) (feet below top of casing)	1125	Cond.	•	182	27.6	831	855	873	tas	841							
Project Name:	الما	(feet below (	Time Finished: 1125	hф	***************************************	1.60	7-12	727	7.07	7.02	7.62	7.60							
	± 55°F	13.72	Tim	Temp.		13.96	13.81	13.80	13.7d	13-7B	13-80	13.81							
Date: 10.8.09	44.4	Static water level before lowflow: Bottom of well:	ं वरवा	Turb.		88.1	Σį.			•	13.1	12.2							
Date:	Clear	er level befo Bott		Pump (on/off)		٦.										0.7			
2	nditions:	Static wate	Time Started:	DTW		2.3	14.75	1.8.	. 88 88	4.84	21 21	ارن ارن				「たなる」			
Well ID: <u>ا لە</u>	Weather Conditions:	3,	Time	Time		1035	1040	1045	1050	١٥٤٤	1100	1105				Notes:			

g:geoforms/LowFlow (Updated),XLS rev. 10/99

Project Number: 008
Project Name: ANS
Date: 10.8.09
Well ID: 14

piner geopump Pump Used (feet below top of casing) (feet below top of casing) Weather Conditions: Clear dry I SSOF Static water level before lowflow: 4.45

Bottom of well: 17.55 ORP Comments

Flow

00

Cond.

Ħď

Temp.

Turb.

Pump

DIW

Time

Time Finished: 1005

0845

Time Started:

Sample ID: ANG - MW-14 - 10 09 Gallons Total Vol. Purged: 12 Sample Time: 0955 16.6 5.3 15.9 14.8 18.4 16.8 16.7 14.7 | ml/mis 2512 27.0 0.24 0.15 0.18 0.11 51.0 24.0 0.17 466 458 401 478 468 468 457 410 486 7.68 7 1.70 7.70 7.70 75. ドナ F 3.5 12.25 17.25 12.24 87.2 12.20 12.25 12.32 12.21 62.3 g. 9 5.5 4 7 7 (on/off) 9.0 ٤ GW W Dink 4.Se Fe 27 = 4.56 14.56 4.SG 14.55 4.5 14.S. 4公4 0440 0925 0945 0430 02 60 0435 0950 0918 Notes:

g:geoforms\LcwFlow (Updated):XLS rev, 10/99

Date: 10/8/09 Well ID: **??.**-1

Project Name: ANG Hacock

Project Number: 86335

Weather Conditions: \$ 600f. partly fleedy breeze 0-10-00

Ecopump Pump Used

Sample ID: ANG. mu-11 16/05 ORP Comments Sample Time: 11:50
Total Vol. Purged: ~55 Gallons 751-Hor. Sa 4-22 271-Samplers Initials: KC -159 -163 -163 121. 291-200 202 002 200 200 88 002 Flow 000 0.00 800 0.8 0.00 237 0.19 00 (feet below top of casing) (feet below top of casing) 30 1.33 1.46 1.38 l. 28 Cond. 1.35 1.45 Time Finished: 4.09 704 7.00 7.01 7.01 401  $^{\text{hd}}$ 7.05 45.51 15.54 12.52 85:21 85.2 45.2 12.59 Temp. Static water level before lowflow: 11.41

Bottom of well: 16.75 "Peter-like ade 0%0 63.8 クット Turb. 487 11:13 forms lead: 2.2 mg/ (JJo/uo) Pump 5 0 0 0 د 0 6 5 11:15 11:48 = 20 20 20 20 DIW 11.42 11.48 200 1.48 Time Started: Strong 05:11 **5h:11** 1:35 11:25 2,2 11:20 Time Notes:

g:gcoforms\LowFlow (Updated),XLS rev. 10/99

Date: 10/8/09 Well ID: **Ç**-

Project Name: ANG Hencack

Project Number: 8683

Weather Conditions: \$60\$ pertly cloudy, baczy

(feet below top of casing) (feet below top of casing) Static water level before lowflow: Bottom of well:

Fish 4.22 Goopumps Pump Used

Sample ID: AMG-RU-1 10/05 ORP Comments Gallons -137 Sample Time: 4:25 Total Vol. Purged: ~ 3 -143 251-せカト 211-250 50 Flow 150 150 50 150 0.00 0.00 0.00 0.00 3.50 25:1 00 Time Finished: 4:30 Cond. 7]] 1:00 1.12 1.14 6.83 887 6.85 183 58.9 6.83 þΗ 13.24 52.2 13.20 15.37 13.19 1233 Temp. Formus Iren: 7.5 ms/1 8:53 12.0 54.6 Turb. 12.2 5.21 12.3 (JJo/uo) Pump 20 10.62 DIW 11.92 Time Started: 1.7. 11.84 10-21 12:1 Time 8:5% 9:00 92:5 9:10 4:0 9:15 Notes:

g:geoforms\LowFiow (Updated),XLS rev. 10/99

Samplers Initials: RS

Date: 10.7.09 Well ID: |B

Project Name: ANG Hancock

Project Number: 86335

Weather Conditions: DVCvCaSt, rain, ± 50°F

(feet below top of casing) (feet below top of casing) Static water level before lowflow: 8.67 Bottom of well: 15.21

pine- qeopump Pump Used

Time Started:

Time Finished: 155D

Turb. (mo/no). Pump DTW

Time

Cond. Ηď

Temp.

00

ORP Comments Flow

		- POTTANNA PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PRO												27/05	340		
	6. Y	41.2	47.0	0.61	441	44.0	77.0	21.5					Sample ID. 0416 - 111. 10 166.	7. C 2. TIWE . I	roed: 1. C Gallons		
7. X. X.	0012							1					Cample ID.	Sample Time 1 C2	Total Vol. Purged: 1.	Samplers Initials: < D	
	4.99	4.47	5.5	1.81,	711.7	3.	2 =	-									
·	245	01.51	494	587	1		217	000									
	14.14 7.57 54C	7.56	7.51	1.5.1		1	7.44					~~~					
	14.14	4.05	14.73	14.19	4.03	13.90	13.84	)									
	J.70	NM					10.01										
	ערש							,					D-0				
	6.03	9.13	9.50	9.59	4.64	9:10	9.76						はし				
	1500	5051	1510	15 15	1520	1525	1530						Notes: Ltt=				

g:geoforms/LcwFlow (Updated),XLS rev. 10/99

Project Name: ANG Honce K Date: 10.7.09 Well ID 2

Project Number: 86355

Weather Conditions: **DVercast** ± SS°F

Static water level before lowflow: 1886 (feet below top of casing)

Bottom of well: 22. 40 (feet below top of casing)

Pump Used pint - geopump

ORP Comments ۳. ر<del>د</del> Flow -150 9. U. 0.15 00 Cond. 14 05 Time Finished: 1435 [48] 7.50 μď 1454 Temp. 1324 Turb. (JJo/uo) Pump 4 5 DIW 0-68 0.88 Time Started: Time 1340 7.50

58.0 53.7 So.B S1.3 48.9 475 4,80 501 0.30 0.23 0.20 31.0 0.22 200 0 1532 (532 1534 1535 1533 1535 1211 J: #0 1.50 7-43 7.42 7.4 7.47 14.07 14.38 13.95 13.88 4.07 3.99 1387 38.6 41.4 から 4.7 ggo 10.58 1089 10.89 10.89 10.88 10.97 1400 1344 1350 1410 1355 45% 145

Notes: Fet = 1.9

Sample ID: ANG-MW-102-10/09

Sample Time: (ヤル

Total Vol. Purged: 1.5 Gallons Samplers Initials: Sp g:geoforms/LowFlow (Updated) XLS rev. 10/99

Date: 10-7.09 Well ID: 4

Project Name: ANG Hancock

Project Number: 8633

Weather Conditions: Dvercast rain t 50°F

Static water level before lowflow:  $D \cdot 93$  (feet below top of casing) (feet below top of casing) Bottom of well: 7-5

pine - geopump Pump Used

Time Started:

Time Finished: 165< 1555

Temp. Turb.

Pump

DIW

Time

Cond. pH

D0

ORP Comments Flow

ORP Comments		(3.6)	4.4	48.0	41,0	44.9	45.0	4.0	3	The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon			Sample ID: ANG-MW-4-10/00	
Flow	( I	0512						1	*				Sample ID: A	i i
2		0.44	0.00	0.51	0.56	0.49	254	6.49						
Cond.	,	435	436	437	434	I	433	4						
ud		7-27	7.39	7.42	7.43		7.44	7.43						
· Canta		S.1B 12.85 7.27	12.93 7.39	(3.00	13.00	12.95	2.70 12.67	58.71 50.						
		SIB	MM				2.70	2.05						
(JJo/uo)		ממ						Δ					1.0	
- - - - -		12:14	JZ-71	3.3	3.63	13.29	12.A	13.58					古古	
		(PDD)	UDDS 12.76	10.10	1615 18.63	1620 1329	11025	11,30					Notes: Let =	

g:geoforms)LowFlow (Updated).XLS rev. 10/99

Gallons

Samplers Initials: 4

ORP Comments Project Name: ANG Hancack Project Number: 86735  $\varphi$ 1 12 1. 1. 17 8 5 14 40 トナー Pump Used Flow 002 100 001 CCO00 00 (000) 3 - Si 3 **14**10 2.0 0.17 50.0 20,0 000 000 000 0.10 <u>-</u> つ 00 0-30 not out of Cart (feet below top of casing) (feet below top of casing) 0.748 0.82V 418.0 5.782 304.0 htt's 0,1% C.817 23.0 からっとなる Cond. Time Finished: 6.69 757 5.40 1. 1. (X) 6.35 6.37 6.33 レカン 6.34  $^{\mathrm{pH}}$ 2.3'21 12 03 13.0 13.42 26.71 127 13.66 12.54 Temp. 5 Static water level before lowflow: [ [ ]. [ ~ Date: 16/7/05 Bottom of well: 4. 780 32.C T K 77 などと アンスゲ 56.4 Turb. 33 (Jyo/uo) 70 3 Pump てい 5 Weather Conditions: まらひゃり  $\langle \rangle$ ر ت  $\ddot{\mathcal{O}}$  $\mathcal{C}$ 50 C Well ID: m_3 27.21 12.69 DIW 12.62 12.62 29721 59.21 12.62 13:5 Time Started: 12,40 23'21 16:20 16:35 0:10 £ 6.15 35.31 15:55 10:05 15:40 15.45 15:50 Time

g:geoforms\LowFlow (Updated).XLS rev. 10/89

Sample ID: A.ベー・ハン・ス・/c/c/

7740

Dorous 1000 2.1

Notes:

Gallons

Sample Time: 「し、そこ Total Vol. Purged: 〜こ

Samplers Initials: 💸

Project Number: ANG H2200CK
Project Name: &CG335
Date: $10/7/00$
Well ID: MW-5

	22		ORP Comments			2	000		2			5				- M. + 10/08	()	
Pump Used	Horling 4-22		Flow	27 St2	-X-	25- 521	125   -78	T.		101- 521	751- 251	201- 221				Sample ID: A v/6- パル・マーロ/03	Sample Time: 15:10	
			DO	1.26	£5'0	0.15	0.00	0.00	30	8	0.00	0,00						- I
	(feet below top of casing) (feet below top of casing)	15:20	Cond.	0.59[	0,584	0.58	0.590	0.53.1	0.540	0,540	6.543	6,545						
	feet below t feet below t	Time Finished: 15:20	ЬН	7.20	407	7.05	7.12	713	に 立	7.15	7.15	カバナ	-					
12002		Tim	Temp.	14.62	£9.61	14.63	14.55	25.41	35.57	14.48	14.47	14.45						
5000 - Juge 2	Static water level before lowflow: 4,35	14:20	Turb.	42.4	46.4	43.3	34.8	1.5 y	tts	Zi, ď	36.0	31. [				7 ms/1	1,	
	r level befo Bott		Pump (on/off)	00	00	70	70	ÇÕ.	70	70	67	07						
litions:	atic wate	Time Started:	DTW	10.1	72:01	10.58	10.82	11.10	777	11.37	, i.v.	11.82				ا ا ا		
Weather Conditions: 1 554	ζ	Time !	Time	52;h!	14:30	-14:35	14:40	ンジン	14:50	14:53	15:00	15:05		77777		Notes: Lerrais		

Well ID: 2 Date: 10.7.09

Project Name: ANG Hancock

Project Number: 86355

Weather Conditions: OVERLEAT, Some rain I SS'F

Static water level before lowflow: 11.20 (feet below top of casing)

Bottom of well: 13.32 (feet below top of casing)

Pump Used pine ~ geopump

Time Started:

0840

Time Finished: 0950

DTW Pump (on/off)

Time

Temp. pH

Turb.

Cond.

DO Flow

ORP Comments

						The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s			***************************************	Sample ID: 1910 6-1910 - 1 -10/00		Gallons	
29.4	38.8	43.7	44.5	45.2	45.3	44.4				7.50K	2635	rged: 1 1.	ials: 🔇
4 50						<b>D</b>				Sample ID: /	Sample Time: 5435	Total Vol. Purged: 1   C Gallons	Samplers Initials: 🔇
-04	0.39	0.29	0.24	07.0	0.70	21.0							
(LL)	1510	1500	1495	1481	1477	14-71							
7.72			7.VI		7.56	7.54							
11,79	6-49	S5.•1	10.25	110-11	16.15	5 10.22				<b>Y</b>			
20.4	NM					2.75							
<u>ه</u>										4.2			
11.93	11.19	11.83	11.98	11.4	11.84	11-87				Fer = 42			
0960	5060	200	BIS	0420	2260	0430				Notes:			

g:geoforms\LovrFlow (Updated).XLS rev. 10/99

Well ID: MW-20 Date: 10/7/09

Project Name: ANG Hencek

Project Number: 8633

Sunds - checked me out! Sample ID: ANG - MW-70 -10/09 ORP Comments Total Vol. Purged: *7.5 Gallons Samplers Initials: Dum 14.7 -42.3 -35.5 ~ 46.0 - 497 -7.2 - 58.1 Sample Time: 8:00 Barrent Weather Conditions: Partly Cloudy - rain earlier winds light/ien Pump Used Flow 1/20 <u>,</u> ×20 Q, % 0.23 3.01 0.24 0.34 0.56 0.41 00 (feet below top of casing) (feet below top of casing) 42 8:08 Cond. 200 817 828 807 \$39 808 Time Finished: 7.47 7.43 7.45 7.48 7.18 7.38 malle Temp. 12.54 Static water level before lowflow: 10.07

Bottom of well: |4.65 12.63 12.13 12.25 12.38 12.31 12.15 7:30 Turb. o Bors 2,9 7,7 4. 0.0 ار در 00 Leprous iros (gu/uo) 5 Pump Ş 10.01 DIW 10.65 12.96 clear Time Started: =:08 <u>=</u> 11.10 7:30 7:35 3.5 7:45 7.50 7:55 8500 Time Notes:

g:geoforms\LowF.tow (Updated).XLS rev, 10/99

Date: 10/7/09 Well ID: Mw.-9

Project Name: ANG Hancock

Project Number: 8633

Weather Conditions: Party chady - 1:ght + variable

(feet below top of casing) Bottom of well: 13,55 (feet below top of casing) Static water level before lowflow: 8.7b

BArnant Pump Used

ORP Comments Flow Od Cond. Time Finished: Hď Temp. Turb. 8:15 (JJo/uo) Pump DIW Time Started: Time

- 80.8 -(31.3 - (52.3 1.727-147.0 1/8 20/20 8 3.83 1.48 3.18 1004 1012 1003 1019 4301 7.76 % 34 7. 4 86.37 13.04 13.50 13.38 12.98 13.17 34  $\overline{\lambda}$ 2 7 20 20.01 11.02 11.43 11.75 00 8:15 8:30 8:28 8:30 8:35

1605 8.32 13.12 Ĉφ.

11.85

11.90

8.45 8.40

145.3

1447

3.02

3.07

Sample ID: AUG Sample Time: OLOR No recharge -Door Clear Notes:

- 2.0 mg

ferrous your

Gallons Total Vol. Purged:

Samplers Initials:

-10/09

g:geoforms/LowFlow (Updated).XLS rev, 10/99

Date: 10/2/04 Well ID: Me. 10 (

Project Name: ANG Hancock

Project Number: 86335

Weather Conditions: \$ 300 avec cest, light 1211

(feet below top of casing) (feet below top of casing) Static water level before lowflow: 11.52

Bottom of well:

18 16 a-27 Goopenpz Pump Used

9:00 Time Started:

Time Finished: [0:03

Turb. Pump DTW

20

		ı i	<b>.</b>	ı i	1 1	l	ı	1		l	1	ſ	1	ŀ	
ORP Comments															Sample ID: 1916-101-101 -10/09
ORP	4	25-	25-	26-	-183	101-	101-	201-	201-						70G-1
Flow	200	202	200	2002	2002	200	200	200	200						Sample ID: f
DO	0.28	0.04	0.00	0.00	0.00	0.00	00.00	0000	0.00						
Cond.	1.44	1.43	1.34	.3	1.75	1.24	130	52.1	82:1						
Ħď	7.00	78	6.53	6-94	7.01	7.01	200	85.7	85.7						
Temp.	14,13	14.10	14. 17	14.19	14.00	14.04	14.67	14.04	14:05						7
Turb.	1940	1.221	24.3	) : 0	56.9	2.24	23.7	32.5	33.1	*					2 3/2
DTW Pump (on/off)	o Z	6	70	6	S	60	00	ફ	60						Goons lean 12
DIW	11.55	11.57	11.54	9:25 11.5D	4:30 11.58	4:35 11.52	4:40 11:52	G:45 11.58	4:50 11.58						C C C WS
Time	21:15	9:15 11.57	5:20 11.58	52:5	9:30	4:35	4:40	4:45	è.						Notes:

Gallons Total Vol. Purged: ~ 5 Samplers Initials: & 5 Sample Time: 4:55

g:geoforms/LowFlow (Updated).XLS rev, 10/99

Well ID: MJ-27 Date: 10/7/04

Project Name: ANG Harcock

Project Number: 86355

			Comments							T. Avertheire					Sample ID: ANG-MU-22 - 10/09		Gallons	
	72-7		ORP	Ñ	W	V	-13	-28	-34	-24	52-				NG-0	55:01	ged: <b>~</b> ₹.<	ıls: R¢
Pump Used	Horle 4-22		Flow	, X	32	250	052	2 20	200	82	202				ample ID: A	Sample Time: 10:55	Total Vol. Purged: ~7.5	Samplers Initials: <b>R</b>
L			DO	2:30	22.0	0.00	0.00	0.00	8.6	0.00	<b>⊘.</b> ∞				G	S	je	ທ
	(feet below top of casing)		Cond.	1.50	÷.	1.44	22:	1.45	53-7	24.1	1.46							
	feet below to	Time Finished:	Ь́Н	7.11	157	6.87	6.83	78.5	6.85	6.85	28.5							
منعء	) 2.72	Time	Temp.	13.22	13.23	13.62	13.63	13.61	13.41	13.34	13.31							
ownest rein	Static water level before lowflow: 12.42 (feet below top of casing)  Bottom of well: (feet below top of casing)	h:01	Turb.	5.2t	8.8	53.[	t24	48.8	46.9	45.7	46.1				ms/c			
7	r level befor Bottc		Pump (on/off)	0	0	00	0 2	60	00	0	9	_			Forces Ican: 0.8			
litions: ‡	atic water	Time Started:	WIG	17.62	h5'21	12.48	12:52	12.55	12.52	8.21	84.21				Cous			
Weather Conditions: \$ \$50£	St.	Time 5	Time	10:15	02:01	10:20	15:01	10:38	10:40	10:45	10:50				Notes: Ter			

g.gecforms/LowFlow (Updated),XLS rev. 10/99

Well ID: Nい-104 Date:

Project Name: ANG Hancek

Project Number: 86335

Sample ID: AN G-MW-10 t-10/09 ORP Comments Total Vol. Purged: 173 & Gallons Samplers Initials:  $\mathcal{P}_{\mathcal{U}_{\mathcal{M}}}$ 1225 -72.3 - 71.8 1-75 - 70.5 -70.6 -76.7 Barrant Sample Time: Pump Used Flow 4 <u>-</u>4 ~ 4: 60°F - winds light her. 0.67 0.28 0.29 2. 0.35 0.46 0.34 00 (feet below top of casing) Bottom of well: 34.41 (feet below top of casing) 14.665 1670 Time Finished: 16:35 1674 1587 Cond. 3670 1668 8291 7.94 7.56 7.56 7.55 7.57 265 7.58 μd 14.22 14.02 14.07 14.07 15.24 14.50 Temp. 7.42 14.33 Weather Conditions: Clear / Twoy Static water level before lowflow: 2,1 mg/L 16:00 9 Turb. و ان % odors ~ 3 7 (JJo/uo) Pump0 o S Forceds (ren 7.42 MLC 16:15 9.52 16:25 7.52 16:10 7.52 16:20 7.52 16.30 7.52 Time Started: 15:05 25:01 clear 16:00 Time Notes:

grgeoforms/LowFlow (Updated).XLS rev. 10/99

SEE 38 325

Weather Conditions: Clear, dry tssoF

Static water level before lowflow: 4.03 (feet below top of casing)

Bottom of well: 2.75 (feet below top of casing)

pine - geopump Pump Used

> 1325 Time Started:

Time Finished: 1420

D0 Cond.

ħď

Temp.

Turb.

Pump (on/off)

DTW

Time

ORP Comments

Flow

											***	1/0¢	-	
	8.27	37.0	38.6	39.0	38.0	53.2	31.9	30.7				Sample ID: AUG-MW-110-10/09	至べ	
ml/min.	202 2							•				Sample ID: A	Sample Time: 1415	
	28.0	0.24	0.19	L1-0	0.19	81.0	81.0	0.17						
	1335	1323	1315	3081	1308	1314	1305	118						
<b></b>	1.50	1.56	7.55	1.53	7.53	7.54	1.54	1.54						
	14.23	13.79	13.78	13.50	13.87	13.85	13.90	L8-51						
	4=	MM		>	62.3	57.3	M	1.17				0		
	r u			<del></del>								0.0		
	∯.0⊤	4.09	4.09	4.10	4.10	4.10	4.09	8.4				F 2 2 4		
	1335	1340	1345	1350	1355	1400	1405	1410				Notes:		

g:geoforms\LowFlow (Updated).XLS rev. 10/99

Samplers Initials: 🛠

Project Name: ANG HanceK

Project Number: 86355

Weather Conditions: \$ 700f Po. 41/4 cloudy process 6-10-ph

Pump Used

George Control

Heribe Cezz

ORP Comments 02/-150 921--125 821. · 133 -13/ Flow ... 200 802 2002 500 2002 200 002 200 8 0.00 9000 9.8 9.0 0.00 9.8 8.0 0.0 20 (feet below top of casing) (feet below top of casing) 42. アカリ Cond. 1.38 1.58 1.36 1.44 2. 1.4 Time Finished: 28.2 ナナウ 6.69 6.74 みもつ 18.7 pH2.21 51.2 12:18 50.2 12.15 Temp. 12.23 1221 [12.1] Static water level before lowflow: 16.41

Bottom of well: 24.48 <u>| 780</u> 36.7 0.0 7.45 Turb. 222 11.4 7:11 1:0 Pump (go/uo) 0 0 0 0 0 9 5 9 5 15:35 10.44 10.43 DIW 10.44 54.01 10.43 15:30 0.43 2:40 05:5 Time Started: 15:25 6:43 系が 15:20 15:15 5:00 !<! !<! ! Time 15:05

Sample Time: 15:45
Total Vol. Purged: ~3 (
Samplers Initials: R\$ 1200 torrows Iran: 2.9

Notes:

Sample ID: ANG-mu-103-10/04

Gallons

g:geoforms\LcwFlow (Updated).XLS rev. 10/99

### APPENDIX C

LABORATORY RESULTS (See Attached CD)

### APPENDIX D

QA/QC EVALUATION RESULTS

### DATA USABILITY SUMMARY REPORT (DUSR) ANG-HANCOCK FACILITY SYRACUSE, NEW YORK GROUND WATER SAMPLE ANALYSES ENVIRONMENTAL RESOURCES MANAGEMENT (ERM) PROJECT NUMBER 0086335 LIFE SCIENCE LABORATORIES, INC. SAMPLE DELIVERY GROUP (SDG) NUMBER 0902920

Environmental Resources Management

5788 Widewaters Parkway Dewitt, NY 13214 (315) 445-2554 (315) 445-2543 (fax)



### Deliverables:

The above referenced data package for nineteen (19) ground water samples, one (1) blind field duplicate sample, one (1) trip blank, one (1) equipment blank, and one (1) set of matrix spike/matrix spike duplicate (MS/MSD) samples contains all required deliverables as stipulated under the 2005 New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) for Category B deliverables. The sample specific analysis included the following volatile organic compounds (VOCs): Benzene, Ethylbenzene and Xylene (BEX) analyzed by United States Environmental Protection Agency (USEPA) Method 8260B. The samples were analyzed following "Test Methods for Evaluating Solid Wastes, SW-846 Third Edition, Final Update III, December 1996".

The data have been validated according to the protocols and quality control (QC) requirements of the ASP; the National Functional Guidelines for Organic Data Review (October 1999); the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-24, Revision 2, October 2006: Validating Volatile Organic Compounds by SW-846 Method 8260B; and the reviewer's professional judgment.

The validation report pertains to the following ground water samples collected from 25 February to 3 March 2009:

<u>Samples</u>	QC Samples	<u>SDG</u> *
ANG-GP-139		0903183
ANG-GP-140		
ANG-GP-141		
ANG-GP-123	ANG-EB	0902920
ANG-GP-124		
ANG-GP-125		
ANG-GP-126		
ANG-GP-127		0902998
ANG-GP-128		
ANG-GP-129		
ANG-GP-130		
ANG-GP-132		
ANG-GP-131	Trip Blank	0903034
ANG-GP-133	ANG-GP-Dupe - Blind Field Duplicate of sample ANG-GP-133	
ANG-GP-134	ANG- GP-134 MS/MSD	
ANG-GP-135		
ANG-GP-136		
ANG-GP-137		
ANG-GP-138		

^{*} Note that lab generated SDGs each day upon receipt of samples, and later combined these SDGs into one report (SDG 0902920).

### **Volatiles**

The following items/criteria were reviewed for this report:

- Case narrative and deliverables compliance
- Holding times and sample preservation (including pH and temperature)
- Surrogate Compound recoveries, summary and data
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) results, recoveries, summary and data
- Laboratory Check Sample (LCS), recoveries, summary and data
- Method blank summary and data
- Gas Chromatography (GC)/Mass Spectroscopy (MS) tuning and performance
- Initial and continuing calibration summaries and data
- Internal standard areas, retention times, summary and data
- Trip Blank sample results
- Equipment Blank sample results

Environmental Resources Management

- Blind Field Duplicate sample results
- Organic analysis data sheets (Form I)
- GC/MS chromatograms, mass spectra and quantitation reports
- Quantitation/detection limits
- Qualitative and quantitative compound identification

The items listed above were technically and contractually in compliance with SW-846 protocols with the exceptions discussed in the text below. The data have been validated according to the procedures outlined above and qualified accordingly.

- The pH was reported to be high in several samples upon receipt at the laboratory. Due to the fact that the samples were analyzed within seven days of receipt, it is ERM's professional opinion that no qualification of the sample data is required.
- The surrogate recovery for the Trip Blank is high (1,2-DCA-d4 is 133%; QC limit 70-130%), indicating that the sample results are possibly biased high. However, due to the fact that all parameters analyzed for the Trip Blank are non-detect, no qualification of the sample data is required.
- During the Bromofluorobenzene (BFB) tune, the % relative abundance for was slightly high for m/e 75. This affected the samples associated with SDG 0902998 and SDG 0903034. Based on a review of the associated chromatograms, in addition to the fact that all samples from the aforementioned SDGs were non-detect for the analyzed parameters, it is ERM's professional opinion that no qualification of the sample data is required.

### Package Summary:

All data are valid and usable with qualifications as noted in this review.

Signed:

Melissa A. McGinnis

Project Scientist

SDG0902920.doc

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Dated: 18 December 2009

### 1 A VOLATILE ORGANIC

1 A	EPA SAMPLE, NO.
VOLATILE ORGANICS ANALYSIS DATA SHEET	EB
Lab Name: Life Science Laboratories, Inc. Contract:	

Lab Code: 10248	Case No.:	SAS No.:	SDG No.:	0902920
Matrix: (soil/water)	WATER	•	Lab Sample ID:	0902920-001

Lab File ID: C11670S Sample wt/vol: 10 (g/ml) ML

Date Received: 2/25/2009 Level: (low/med) LOW

% Moisture: not dec. NA Date Analyzed: 2/25/2009

GC Columi DB-624 ID 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	Ú
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xvlene	1	U

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

### 1 A EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET GP-124 Lab Name: Life Science Laboratories, Inc. Contract: 0902920 Matrix: (soil/water) WATER Lab Sample ID: 0902920-003 Sample wt/vol: 10 (g/ml) ML Lab File ID: C11672S Level: (low/med) LOW Date Received: 2/25/2009 % Moisture: not dec. NA Date Analyzed: 2/25/2009 GC Columi DB-624 ID 0.53 (mm) Dilution Factor: 1.0 Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL) CONCENTRATION UNITS: CAS NO. COMPOUND UG/L Benzene 71-43-2 100-41-4 Ethylbenzene

m/p-Xylene

o-Xylene

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108-38-3

95-47-6

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1 A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE, NO.
GP-125

Lab Name: Life Science	ce Laborato	ries, Inc.	Contract:		020
_ab Code: <u>10248</u>	Case No.:		SAS No.:	SDG No.:	0902920
Matrix: (soil/water)	WATER	_		Lab Sample ID	: 0902920-004
Sample wt/vol:	10	(g/ml)	ML	Lab File ID:	C11673S
_evel: (low/med)	LOW	_		Date Received	: 2/25/2009
% Moisture: not dec.	NA			Date Analyzed	; 2/25/2009
GC Columi DB-624	al	0.53	(mm)	Dilution Factor	: 1.0
Soil Extract Volume:	NA	(uL)	- Soil Aliquot Volume:	NA (uL	)

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

### 1 A EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET GP-126 Lab Name: Life Science Laboratories, Inc. Contract: Matrix: (soil/water) WATER Lab Sample ID: 0902920-005 Sample wt/vol: 10 (g/ml) ML C11674S Lab File ID: Level: (low/med) LOW Date Received: 2/25/2009 % Moisture: not dec. NA Date Analyzed: 2/25/2009 GC Columi DB-624 ID ______0.53 ____(mm) ______ Dilution Factor: ______1.0 Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL) CONCENTRATION UNITS: CAS NO. COMPOUND UG/L 71-43-2 Benzene 100-41-4 Ethylbenzene 1

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m/p-Xylene

o-Xylene

108-38-3

95-47-6

1 A EPA SAMPLE, NO, VOLATILE ORGANICS ANALYSIS DATA SHEET GP-127 Lab Name: Life Science Laboratories, Inc. Contract: 0902920 Lab Sample ID: 0902998-001 Matrix: (soil/water) WATER 10 Lab File ID: C11691S Sample wt/vol: (g/ml) ML Date Received: 2/26/2009 (low/med) LOW Level: Date Analyzed: 2/26/2009 % Moisture: not dec. NA GC Columi DB-624 ID 0.53 Dilution Factor: 1.0 (mm) Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL) CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

### 1 A EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET GP-128 Lab Name: Life Science Laboratories, Inc. Contract: Matrix: (soil/water) WATER Lab Sample ID: 0902998-002 Sample wt/vol: 10 (g/ml) Lab File ID: ML C11692S Date Received: 2/26/2009 Level: (low/med) LOW % Moisture: not dec. NA Date Analyzed: 2/26/2009 0.53 ____ (mm) GC Columi DB-624 ID Dilution Factor: 1.0 Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL) CONCENTRATION UNITS:

COMPOUND

Benzene

Ethylbenzene

m/p-Xylene

o-Xylene

CAS NO.

71-43-2

100-41-4

108-38-3

95-47-6

UG/L Q U 1 U U

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1 A EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET GP-129 Lab Name: Life Science Laboratories, Inc. Contract: Lab Code: 10248 Case No.: SAS No.: SDG No.: 0902920 Matrix: (soil/water) WATER Lab Sample ID: 0902998-003 C11693S Sample wt/vol: ___10 (g/ml) Lab File ID: ML Date Received: 2/26/2009 Level: (low/med) LOW % Moisture: not dec. NA Date Analyzed: 2/26/2009 GC Columi DB-624 ID 0.53 (mm) Dilution Factor: 1.0 Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

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### VOLATILE ORGANICS ANALYSIS DATA SHEET

102,11,22 01.0,11.001.11.1.21.0	
Lab Name: Life Science Laboratories, Inc.	Contract:

Lab Code: 10248 Case No.: SAS No.:

EPA SAMPLE. NO.

G	P	-1	3	0	 	 	 	 •	_	_

0902920

	-		***************************************	······································	
Matrix: (soil/water)	WATER	_		Lab Sample (D:	0902998-004
Sample wt/vol:	10	(g/ml)	ML.	Lab File ID:	C11694S

Level: (low/med) LOW Date Received: 2/26/2009

% Moisture: not dec. NA Date Analyzed: / 2/26/2009

GC Columi DB-624 ID 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

### CONCENTRATION UNITS:

SDG No.:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

### 1 A VOLATILE ORGANICS ANALYSIS DATA SHEET

	EPA	4 SA	MPL.	E. N	).
ſ	GΡ	-13	32		

_ab Name: Life Science Laboratories, Inc.	Contract:		
.ab Code: 10248 Case No.:	SAS No.:	SDG No.:	0902920
Matrix: (soil/water) WATER		Lab Sample ID	: 0902998-005
Sample wt/vol: 10 (g/ml)	ML	Lab File ID:	C11695S
.evel: (low/med) LOW		Date Received	: 2/26/2009
% Moisture: not dec. NA		Date Analyzed	: 2/26/2009
GC Columi DB-624 ID 0.53	(mm)	Dilution Factor	; 1.0
Soil Extract Volume: NA (uL)	Soil Aliquot Volume:		)

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

1 A

108-38-3

95-47-6

EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET GP-131 Lab Name: Life Science Laboratories, Inc. ___ Contract: ____ 0902920 Matrix: (soil/water) WATER Lab Sample ID: 0903034-001 Sample wt/vol: ML 10 (g/ml) Lab File ID: C11700S Level: (low/med) LOW Date Received: 2/27/2009 % Moisture: not dec. NA Date Analyzed: 2/27/2009 Dilution Factor: 1.0 GC Columi DB-624 ID 0.53____(mm) Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL) CONCENTRATION UNITS: CAS NO. COMPOUND UG/L 71-43-2 Benzene Ū 100-41-4 Ethylbenzene U

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m/p-Xylene

o-Xylene

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### 1 A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE, NO.
GP-133
OL -100

Lab Name: <u>Life Scien</u>	ce Laborato	ories, Inc.	Contract;		
Lab Code: 10248	_ Case No.	-	SAS No.:	SDG No.:	0902920
Matrix: (soil/water)	WATER			Lab Sample ID:	0903034-002
Sample wt/vol:	10	_ (g/ml)	ML	Lab File ID:	<u>C11701S</u>
.evel: (low/med)	LOW	_		Date Received:	2/27/2009
% Moisture: not dec.	NA	••		Date Analyzed:	2/27/2009
GC Columi DB-624	ID	0.53	_(mm) _	Dilution Factor:	1.0
Soil Extract Volume:	NA	(uL)	Soil Aliquot Volume:	NA (uL)	

CAS NO.	COMPOUND	UG/L	0
71-43-2	Benzene	1 1	
100-41-4	Ethylbenzene	1	11
108-38-3	m/p-Xylene	1	
95-47-6	o-Xylene	1	

### 1 A EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET GP-134 Lab Name: Life Science Laboratories, Inc. Contract: 0902920 Matrix: (soil/water) WATER Lab Sample ID: 0903034-003 Sample wt/vol: (g/ml) ML 10 Lab File ID: C11702S Level: (low/med) LOW Date Received: 2/27/2009 % Moisture: not dec. NA Date Analyzed: 2/27/2009 ID _____0.53 ___(mm) _____ Difution Factor:______1.0 GC Columi DB-624 Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	Ü
108-38-3	m/p-Xylene	1	11
95-47-6	o-Xylene	1	Ū

1 A EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET GP-135 Lab Name: Life Science Laboratories, Inc. Contract: 0902920 Matrix: (soil/water) WATER Lab Sample ID: 0903034-004 Sample wt/vol: 10 (g/ml) ML Lab File ID: C11703S

 % Moisture: not dec.
 NA
 Date Analyzed:
 2/27/2009

 GC Columi DB-624
 ID
 0.53 (mm)
 Dilution Factor:
 4.0

GC Columi DB-624 ID 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

Level:

(low/med) LOW

### CONCENTRATION UNITS:

Date Received: 2/27/2009

CAS NO.	COMPOUND	UG/L	0
71-43-2	Benzene	1	
100-41-4	Ethylbenzene	1	11
108-38-3	m/p-Xylene	1	<u> </u>
95-47-6	Jo-Xylene	1	

1 A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Life Science			Contract:		GP-136
Lab Code: 10248	Case No.:		SAS No.:	SDG No.:	0902920
Matrix: (soil/water)	WATER	•		Lab Sample ID	: 0903034-005
Sample wt/vol:	10	(g/ml)	ML	Lab File ID:	C11704S
Level: (low/med)	LOW			Date Received	2/27/2009
% Moisture: not dec.	NA			Date Analyzed	2/27/2009
GC Columi_DB-624	ID	0.53	_(mm)	Dilution Factor:	1.0
Soil Extract Volume:	NA	(uL)	Soil Aliquot Volume:	NA (uL)	

CONCENTRATION UNITS:

EPA SAMPLE, NO.

	CONCENTRATION UNITS:	
COMPOUND	UG/L	O
Benzene	1	U
Ethylbenzene	1	TI TI
m/p-Xylene	1	11
o-Xylene	1	- U
	Benzene Ethylbenzene m/p-Xylene	COMPOUND         UG/L           Benzene         1           Ethylbenzene         1           m/p-Xylene         1           o-Xylene         1

### 1 A VC

1 A		EPA SAMPLE. NO.
VOLATILE ORGANICS ANALYSIS	DATA SHEET	GP-137
Lab Name: Life Science Laboratories, Inc.	Contract:	

Matrix: (soil/water)	WATER	Lab Sample ID:	0903034-006

Lab File ID: Sample wt/vol: 10 (g/ml) ML C11705S

Date Received: _____2/27/2009 (low/med) LOW Level:

% Moisture: not dec. NA Date Analyzed: 2/27/2009

GC Columi DB-624 ID 0.53 (mm) Dilution Factor: 1.0

Soil Aliquot Volume: NA (uL) Soil Extract Volume: NA (uL)

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

1 A EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET GP-138 Lab Name: Life Science Laboratories, Inc. Contract: 
 Lab Code:
 10248
 Case No.;
 SAS No.;
 SDG No.;
 0902920 Matrix: (soil/water) WATER Lab Sample ID: 0903034-007 Sample wt/vol: 10 (g/ml) ML Lab File ID: C11706S Level: (low/med) LOW Date Received: 2/27/2009 % Moisture: not dec. NA Date Analyzed: 2/27/2009 GC Columi DB-624 0.53 (mm) ID . Dilution Factor: 1.0

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	T
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	Ū

## 1 A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE, NO,
GP-DUPE

Lab Name: Life Science	ce Laborato	ries, Inc.	Contract:			
Lab Code: <u>10248</u>	Case No.	•	SAS No.:	SDG No.:	0902920	
Matrix: (soil/water)	WATER	_		Lab Sample ID:	0903034-010	
Sample wt/vol:	10	_ (g/ml)	ML	Lab File ID:	C11709S	
Level: (low/med)	LOW	••		Date Received:	2/27/2009	
% Moisture: not dec.	NA	_		Date Analyzed:	2/27/2009	
GC Columi DB-624	ID	0.53	(mm)	Dilution Factor:	1.0	
Soil Extract Volume:	NA	_(uL)	Soil Aliquot Volume	: <u>NA</u> (uL)		

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U U
100-41-4	Ethylbenzene	1	Ú
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

1 A VOLATILE ORGANICS ANALYSIS DATA SHEET Lab Name: Life Science Laboratories, Inc. Contract:

EPA SAMPLE, NO. TRIP BLANK

Lab Name: Life Science Laboratories, Inc.	Contract:		
Lab Code: 10248 Case No.:	SAS No.:	SDG No.:	0902920

Matrix: (soil/water) WATER

Lab Sample ID: 0903034-011

Sample wt/vol:

Level:

10 (low/med) LOW

(g/ml) ____ML

Lab File ID:

____C11710S

% Moisture: not dec. NA

Date Received: 2/27/2009 Date Analyzed: 2/28/2009

GC Columi DB-624

ID

____0.53____(mm)

Dilution Factor: 1.0

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	11
95-47-6	o-Xylene	1	Ü
	······································	<u> </u>	

	1 A		_	EPA SAMPLE, NO.
VOLATILE Lab Name: <u>Life Science La</u>	ORGANICS ANAL aboratories, Inc.		ET	GP-139
Lab Code: 10248 Ca	se No.:	SAS No.: _	SDG No.:	0902920
Matrix: (soil/water) W	ATER_		Lab Sample ID:	0903183-001
Sample wt/vol:	10 (g/ml)	ML	Lab File ID:	C11726S
Level: (low/med)L	.ow_		Date Received:	3/3/2009
% Moisture: not dec.	NA		Date Analyzed:	3/4/2009
GC Columi_DB-624	ID <u>0.53</u>	_(mm)	Dilution Factor:	1.0
Soil Extract Volume:	NA (uL)	Soil Aliquot Vol	ume: <u>NA</u> (uL)	
			CONCENTRATION UNITS:	
CAS NO.	COMP	DUND	UG/L	Q
71-43-2	Benzene		1	U
100-41-4	Ethylbenzer	ne	1	U
108-38-3	m/p-Xylene		1	U
95-47-6	o-Xylene		1	U

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EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET GP-140 Lab Name: Life Science Laboratories, Inc. Contract: Matrix: (soil/water) WATER Lab Sample ID: 0903183-002 Sample wt/vol: 10 (g/ml) ML Lab File ID: C11727S Level: (low/med) LOW Date Received: 3/3/2009 Date Analyzed: 3/4/2009 % Moisture: not dec. NA GC Columi DB-624 ID 0.53 (mm) Dilution Factor: 1.0 Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL) CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	Ü
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

## 1 A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE, NO.
GP-141
0. 141

Lab Name: Life Science	ce Laborato	ries, Inc.	Contract:	<del></del>	
Lab Code: 10248	Case No.:		SAS No.:	SDG No.:	0902920
Matrix: (soil/water)	WATER			Lab Sample ID	: 0903183-003
Sample wt/vol:	10	. (g/ml)	ML	Lab File ID:	C11728S
_evel: (low/med)	LOW			Date Received:	3/3/2009
% Moisture: not dec.	<u>NA</u>			Date Analyzed:	3/4/2009
GC Columi DB-624	ID .	0.53	_(mm) _	Dilution Factor:	1.0
Soit Extract Volume:	NA	(uL)	Soil Aliquot Volume:	NA (uL)	

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	O
71-43-2	Benzene	1	
100-41-4	Ethylbenzene	1	11
108-38-3	m/p-Xylene	1	<del>                                     </del>
95-47-6	o-Xylene	1	<del></del>
	····		1 0 1

# DATA USABILITY SUMMARY REPORT (DUSR) ANG-HANCOCK FACILITY SYRACUSE, NEW YORK GROUND WATER SAMPLE ANALYSES ENVIRONMENTAL RESOURCES MANAGEMENT (ERM) PROJECT NUMBER 0086335 LIFE SCIENCE LABORATORIES, INC. SAMPLE DELIVERY GROUP (SDG) NUMBER 0905549

Environmental Resources Management

5788 Widewaters Parkway Dewitt, NY 13214 (315) 445-2554 (315) 445-2543 (fax)



#### Deliverables:

The above referenced data package for six (6) ground water samples, one (1) blind field duplicate sample, one (1) trip blanks, one (1) equipment blank, and one (1) set of matrix spike/matrix spike duplicate (MS/MSD) samples contains all required deliverables as stipulated under the 2005 New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) for Category B deliverables.

The sample specific analyses included Benzene, Ethylbenzene and Xylene (BEX) analyzed by United States Environmental Protection Agency (USEPA) SW-846 Method 8260B and Methane analyzed by USEPA SW-846 Method 8015 in accordance with "Test Methods for Evaluating Solid Wastes, SW-846 Third Edition, Final Update III, December 1996". The samples were also analyzed for Total Hardness by calculation/metals by USEPA SW-846 Method 200.7 in accordance with "40 CFR 136, Category A and B Parameters in Water and Wastewater". In addition, the samples were analyzed for Nitrate and Sulfate by USEPA Method 300.0; Alkalinity by SM 18 2320B; and Ammonia by USEPA Method 350.2.

The data have been validated according to the protocols and quality control (QC) requirements of the ASP; the National Functional Guidelines for Organic Data Review (October 1999); the National Functional Guidelines for Inorganic Data Review (July 2002); the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-24, Revision 2, October 2006: Validating Volatile Organic Compounds by SW-846 Method 8260B; and the reviewer's professional judgment.

The validation report pertains to the following ground water samples collected on 13 April 2009:

<u>Samples</u>	QC Samples	<u>SDG</u>
ANG-MW-19 (04/09) ANG-MW-105 (04/09) ANG-MW-106 (04/09) ANG-MW-107 (04/09) ANG-MW-111 (04/09)	ANG-Trip Blank (04/09) ANG- MW-105 (04/09) MS/MSD ANG-EB (04/09)	0905549
ANG-MW-112 (04/09)	ANG-Dup (04/09) - Blind Field Duplicate of ANG-MW-112 (04/09)	

## **Organics**

The following items/criteria were reviewed for this report:

- Case narrative and deliverables compliance
- Holding times and sample preservation (including pH and temperature)
- Surrogate Compound recoveries, summary and data
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) results, recoveries, summary and data
- · Laboratory Check Sample (LCS), recoveries, summary and data
- Method blank summary and data
- Gas Chromatography (GC)/Mass Spectroscopy (MS) tuning and performance
- Initial and continuing calibration summaries and data
- Internal standard areas, retention times, summary and data
- Trip Blank sample results
- Blind Field Duplicate sample results
- Organic analysis data sheets (Form I)
- GC/MS and GC chromatograms, mass spectra and quantitation reports
- Quantitation/detection limits
- Qualitative and quantitative compound identification

The items listed above were technically and contractually in compliance with SW-846 protocols with the exceptions discussed in the text below. The data have been validated according to the procedures outlined above and qualified accordingly.

#### **Volatiles**

 Numerous samples were run at dilutions due to high levels of target and/or non-target compounds, causing elevated reporting limits. The laboratory has reported the final result

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only on the Form I. No qualification of the sample data is required; however, the data user should be aware of the elevated detection limits.

- The pH was reported to be high in one sample upon receipt at the laboratory. Due to the fact that the sample was analyzed for VOCs within seven days of receipt, it is ERM's professional opinion that no qualification of the sample data is required.
- The results for sample ANG-MW-112 and its associated blind duplicate (ANG-Dup) vary for VOCs. The results for both the sample and the duplicate have been reported on the data tables. Results from both samples are considered estimated and are qualified "J"/"UJ".
- The percent recovery (%R) for Ethylbenzene was above QC limits in the MS analysis of sample ANG-MW-105 (139%; QC limit 70-130%). Also, the %R for m/p-Xylene was above QC limits in the MS analysis of sample ANG-SC-32 (150%; QC limit 70-130%). This indicates a potential high bias for Ethylbenzene and m/p-Xylene in sample ANG-MW-105 only. Therefore, positive results for Ethylbenzene and m/p-Xylene in this sample are considered estimated and qualified "J".

#### Methane

• The following table includes samples that were analyzed at dilutions due to the sample matrix (in addition to elevated Methane levels in some samples), and the associated dilution factor. No qualification of the sample data is required.

Sample	Dilution Factor
ANG-MW-19 (04/09)	20x
ANG-MW-105 (04/09)	20x
ANG-MW-112 (04/09)	50x
ANG-Dup (04/09)	50X

The percent recovery (%R) for Methane was below the QC limits in the MS/MSD analysis of sample ANG-MW-105 (both 0%; QC limit 30-130%). This can be attributed to the elevated concentration of Methane in the unspiked sample. Since the Methane recoveries met QC criteria in the LCS samples associated with this sample set, it is the reviewer's professional

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opinion that qualification of the sample data is not required.

#### Inorganics

The following items/criteria were reviewed:

- Case narrative and deliverable requirements
- Holding times and sample preservation
- Detection limits
- Inorganic analysis data sheets (Form I)
- Initial and continuing calibration verifications
- Low and High Calibration Check standard analysis
- Lab Blank results
- Blind Field Duplicate sample results
- ICP interference check sample analysis
- Matrix Spike analysis
- Duplicate Analysis (metals)
- Matrix Spike Duplicate analysis
- Laboratory Control Sample (LCS) results

The items listed above were technically and contractually in compliance with SW-846 protocols with the exceptions discussed in the text below. The data have been validated according to the procedures outlined above and qualified accordingly.

#### Metals

• No qualification of the sample data is required.

## General Chemistry

• No qualification of the sample data is required.

## Package Summary:

All data are valid and usable with qualifications as noted in this review.

Signed: McGr Dated: 18 December 2009

Project Scientist

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1 A EPA SAMPLE, NO. **VOLATILE ORGANICS ANALYSIS DATA SHEET** MW-111 Lab Name: Life Science Laboratories, Inc. Contract: Lab Code: 10248 Case No.: SAS No.: SDG No.: 0905549 Matrix: (soil/water) WATER Lab Sample ID: 0905549-001A Sample wt/vol: 10 (g/ml) ML. Lab File ID: N16039S Level: (low/med) LOW Date Received: 4/14/2009 % Moisture: not dec. NA Date Analyzed: 4/16/2009 GC Columi Rtx-VMS ID 0.25 (mm) Dilution Factor: 2.0 Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL) **CONCENTRATION UNITS:** CAS NO. COMPOUND UG/L 71-43-2 Benzene

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U

Ethylbenzene

m/p-Xylene

o-Xylene

100-41-4

108-38-3

95-47-6

	1 A		EPA SAMPLE, NO.
VOLATILE ORGA Lab Name: Life Science Laborate	ANICS ANALYSIS DATA SPories, Inc. Contract		ТВ
Lab Code: 10248 Case No.	: SAS No.:	SDG No.:	0905549
Matrix: (soil/water) WATER	_	Lab Sample ID:	0905549-002A
Sample wt/vol: 10	(g/ml) ML	_ Lab File ID:	N16040S
Level: (low/med) LOW	_	Date Received:	4/14/2009
% Moisture: not dec. NA	······································	Date Analyzed	4/16/2009
GC Columi Rtx-VMS ID	0.25 (mm)	Dilution Factor:	2.0
Soil Extract Volume: NA	_(uL) Soil Aliquot \	/olume: <u>NA</u> (uL)	)
		CONCENTRATION UNITS:	<b>:</b>
CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	. 1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

1 A EPA SAMPLE, NO. **VOLATILE ORGANICS ANALYSIS DATA SHEET** Lab Name: Life Science Laboratories, Inc. Contract: SAS No.: SDG No.: Lab Code: 10248 Case No.: 0905549 Matrix: (soil/water) WATER Lab Sample ID: 0905549-003A Sample wt/vol: 10 (g/ml) ML Lab File ID: N16041S Date Received: 4/14/2009 Level: (low/med) LOW % Moisture: not dec. NA Date Analyzed: 4/16/2009 GC Columi Rtx-VMS ID 0.25 (mm) Dilution Factor: 2.0 Soil Aliquot Volume: NA (uL) Soil Extract Volume: NA (uL) CONCENTRATION UNITS: CAS NO. COMPOUND UG/L 71-43-2 Benzene

Ethylbenzene

m/p-Xylene

o-Xylene

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100-41-4

108-38-3

95-47-6

VOL	ATILE ORGA	1 A NICS ANA	LYSIS DATA SI	HEET		EPA SAMPLE, NO.
Lab Name: Life Scie						100
Lab Code: 10248	Case No.:		SAS No.:		SDG No.:	0905549
Matrix: (soil/water)	WATER	_			Lab Sample ID	: 0905549-004A
Sample wt/vol:	10	_ (g/ml)	ML		Lab File ID	:N16042S
Level: (low/med	l) LOW	-			Date Received	4/14/2009
% Moisture: not de	c. <u>NA</u>	_			Date Analyzed	:4/16/2009
GC Columi_Rtx-VM	S ID	0.25	(mm)		Dilution Factor:	5.0
Soil Extract Volume:	NA	(uL)	Soil Aliquot \	/olume:	NA (uL)	)
				CC	DINCENTRATION UNITS:	;
CAS	NO.	COMP	POUND		UG/L	Q
71-43-2		Benzene			6.2	
100-41-4		Ethylbenze	ne		119	J
108-38-3		m/p-Xylene	9		259	<b>フ</b>
95-47-6		o-Xylene			1.8	J

1 A EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET MW-112 Lab Name: Life Science Laboratories, Inc. Contract: SAS No.: SDG No.: 0905549 Lab Code: 10248 Case No.: Lab Sample ID: 0905549-007A WATER Matrix: (soil/water) N16045S Lab File ID: (g/ml) Sample wt/vol: 10 ML Date Received: 4/14/2009 (low/med) LOW Level: Date Analyzed: 4/17/2009 % Moisture: not dec. NA Dilution Factor: 5.0 0.25 (mm) GC Columi Rtx-VMS ID

CONCENTRATION UNITS:

NA (uL)

Soil Extract Volume:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	13.0	<b>5</b>
100-41-4	Ethylbenzene	250	J
108-38-3	m/p-Xylene	480	J
95-47-6	o-Xylene	1.2	J

Soil Aliquot Volume: NA (uL)

VOLAT	TILE ORGA	1 A NICS ANAL	YSIS DATA SH	HEET	<del>,</del>	EPA SAMPLE, NO.
Lab Name: Life Science						
Lab Code: <u>10248</u>	Case No.:		_ SAS No.:		SDG No.:	0905549
Matrix: (soil/water)	WATER	-			Lab Sample ID:	0905549-008A
Sample wt/vol:	10	(g/ml)	ML	<del>-</del>	Lab File ID:	N16046S
Level: (low/med)	LOW	-			Date Received:	4/14/2009
% Moisture: not dec.	NA				Date Analyzed:	4/17/2009
GC Columi_Rtx-VMS_	ID	0.25	_(mm)	,	Dilution Factor:	5.0
Soil Extract Volume:	NA	(uL)	Soil Aliquot V	olume:	NA (uL)	
				со	NCENTRATION UNITS:	
CAS N	Ο.	COMPO	DUND		UG/L	Q
71-43-2		Benzene			16.0	J
100-41-4		Ethylbenzer	ne		310	ず
108-38-3		m/p-Xylene			590	<b>J</b>
95-47-6		o-Xylene		, ,	1.6	J

EPA SAMPLE, NO. 1 A **VOLATILE ORGANICS ANALYSIS DATA SHEET** MW-19 Lab Name: Life Science Laboratories, Inc. Contract: SDG No.: 0905549 SAS No.: Lab Code: 10248 Case No.: Matrix: (soil/water) WATER Lab Sample ID: 0905549-009A Sample wt/vol: 10 (g/ml) Lab File ID: N16047S MLDate Received: 4/14/2009 (low/med) LOW Level: % Moisture: not dec. NA Date Analyzed: ____ 4/17/2009 GC Columi Rtx-VMS ID 0.25 (mm) Dilution Factor: 2.0 NA (uL) Soil Aliquot Volume: NA (uL) Soil Extract Volume: **CONCENTRATION UNITS:** CAS NO. COMPOUND 71-43-2 Benzene 0.71 100-41-4 17 Ethylbenzene

5

m/p-Xylene

o-Xylene

108-38-3

95-47-6

			1 A				EPA SAMPLE. NO.
Lab Name			NICS ANAL	YSIS DATA SH Contract:			MW-107
Lab Code:	10248	Case No.:		_ SAS No.:		SDG No.:	0905549
Matrix: (so	oil/water)	WATER	_			Lab Sample ID	: 0905549-010A
Sample wt	/vol:	10	(g/ml)	ML		Lab File ID	: N16048S
Level:	(iow/med)	LOW	-			Date Received	:4/14/2009
% Moisture	: not dec.	NA				Date Analyzed	: 4/17/2009
GC Columi	Rtx-VMS	ID	0.25	_(mm)		Dilution Factor	2.0
Soil Extrac	t Volume:	NA	(uL)	Soil Aliquot V	olume:	NA (uL)	)
					CC	NCENTRATION UNITS	:
	CAS N	0.	COMPO	DUND		UG/L	Q
	71-43-2		Benzene			1	U
	100-41-4		Ethylbenzer	ne		1	U
	108-38-3		m/p-Xylene			0.27	J
	95-47-6		o-Xylene			1	U

EPA SAMPLE. NO. 1 A VOLATILE ORGANICS ANALYSIS DATA SHEET MW-106 Lab Name: Life Science Laboratories, Inc. Contract: SAS No.: SDG No.: 0905549 Lab Code: 10248 Case No.: Lab Sample ID: 0905549-011A Matrix: (soil/water) WATER Lab File ID: N16049S Sample wt/vol: 10 (g/ml) ML Date Received: 4/14/2009 (low/med) LOW Level: Date Analyzed: 4/17/2009 % Moisture: not dec. NA Dilution Factor: 2.0 0.25 (mm) GC Columi Rtx-VMS ID Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL) CONCENTRATION UNITS: COMPOUND UG/L CAS NO. 71-43-2 Benzene 100-41-4 U Ethylbenzene

> m/p-Xylene o-Xylene

108-38-3

95-47-6

# 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANG-MW-1	1	1
(04/09)		

U

U

0.1

45

W

ı

Lab Name:	LIFE SCIE	NCE LABORATORIES, INC.	Contract:		L		
Lab Code:	10248	Case No.:	NRAS No.:		SDG	No.: 0905549	}
Matrix: (soi	il/water) <u>V</u>	VATER		Lab Sam	ple ID:	0905549-001	
Level:	MED			Date Red	eived:	04/1-	4/2009
% Solids:							
c	AS NO.	Concentration Units: (r		eight) MG/L	С		M
	NH3-N	Ammonia as N	1	0.03	U	<del></del>	W
	************************************	Bicarbonate Alkalinity a	CaCO3	360			W
		Carbonate Alkalinity as	CaCO3	3	U		W

Hydroxide Alkalinity as CaCO3

Nitrate as N

Sulfate

NO3-N

14808-79-8

Color Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:		
	247	

FORM IB-IN

**ILM05.3** 

# 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMP	LE NO.
ANG-EB	(04/09)

ab Code: 10248	Case No.: NRAS No.	•	SDG	No.: <u>0905549</u>	)
latrix: (soil/water)	WATER	Lab Sam	ple ID:	0905549-003	
evel: <u>MED</u>	<del>-</del>	Date Rec	eived:	04/14	4/2009
% Solids:	<del></del>				
	Concentration Units: (mg/L or mg/K	g dry weight) MG-	11		
CAS NO.	Concentration Units: (mg/L or mg/K Analyte	g dry weight)	<u>/L</u>	Q	M
CAS NO. NH3-N	·			 	M W
	Analyte	Concentration	С	Q	,
	Analyte Ammonia as N	Concentration 0.03	С	Q	W
	Analyte Ammonia as N Bicarbonate Alkalinity as CaCO3	Concentration   0.03   16	C U	Q	w
	Analyte  Ammonia as N  Bicarbonate Alkalinity as CaCO3  Carbonate Alkalinity as CaCO3	Concentration 0.03 16 3	C U	Q	w w

Color Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:		
	248	

FORM IB-IN

ILM05.3

#### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANG-MW-105 (04/09)

			1 .	(0.000	,
	CELO NO.	Contract: NRAS No.:		No.: 090554	9
Lab Code: 10248	Case No.:			-	
Matrix: (soil/water)	WATER	Lab S	ample ID:	0905549-004	<u> </u>
Level: MED		Date I	Received:	04/1	4/2009
% Solids:					
CAS NO.	Concentration Units: Analyte	(mg/L or mg/Kg dry weight) MG/ Concentration	c	Q	М
CAS NO. NH3-N		Concentration		Q	M
	Analyte	Concentration 0.03	С	Q	
	Analyte Ammonia as Bicarbonate Alkalinity	Concentration	С	Q	W
	Analyte Ammonia as	Concentration  N 0.03  as CaCO3 380  as CaCO3 3	C	Q	W
	Analyte Ammonia as Bicarbonate Alkalinity Carbonate Alkalinity	Concentration  N 0.03  as CaCO3 380  as CaCO3 3  as CaCO3 3	C U	Q	W W W

Color Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:		
-	249	
<del></del>	FORM IB-IN	ILM05.3

#### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANG-MW-112 (04/09)

					l	(000	1
Lab Name:	LIFES	CIENCE LABORATO	ORIES, INC. Contrac	:t:			
Lab Code:	10248	Case No.:	NRAS No.		SDG	No.: 0905549	)
Matrix: (so	il/water)	WATER		Lab San	rple ID:	0905549-007	
Level:	MED			Date Re	ceived:	04/14	1/2009
% Solids:						A A C C C C C C C C C C C C C C C C C C	ACHT TARREST TO THE
		Concent	ration Units: (mg/L or mg/K	g dry weight) MG/L			
C	AS NO.		Analyte	Concentration	С	Q	M
	NH3-N	/	mmonia as N	0.03	U		W
		Bicarbona	ite Alkalinity as CaCO3	360			W
		Carbonat	e Alkalinity as CaCO3	3	U		W
<del> </del>		Hydroxid	e Alkalinity as CaCO3	3	U		W
	NO2 N		Mitroto oc Ni	0.1	11		1

Sulfate

14808-79-8

olor Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:		
	252	A
<del></del>	FORM IB-IN	ILM05.3

# 1B - IN INORGANIC ANALYSIS DATA SHEE

EPA	SAMPL	E NO.
ANG	-Dup	(04/09)

Lab Name:	LIFE SCI		tract:	-		
Lab Code:	10248	Case No.:NRAS	No.:	SDG No	.: 0905549	)
Matrix: (so	l/water)	WATER	Lab San	nple ID: <u>09</u>	05549-008	
Level:	MED	_	Date Re	ceived:	04/14	1/2009
% Solids:			· · · · · · · · · · · · · · · · · · ·			****
				1.		
C	AS NO	Concentration Units: (mg/i or n			 Q	ı
<del></del>	AS NO. IH3-N	Analyte	ng/Kg dry weight)	G-/L C	_ Q_	
<del></del>	AS NO. IH3-N		Concentration 0.03	С	Q	١
<del></del>		Analyte Ammonia as N	Concentration 0.03	С	Q	V
<del></del>		Analyte Ammonia as N Bicarbonate Alkalinity as CaCO3	Concentration 0.03 410	C U	Q	1
•		Analyte Ammonia as N Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3	Concentration 0.03 410 3	C U	Q	V V

or Before:	Texture:
olor After:	Artifacts:
omments:	

FORM IB-IN

ILM05.3

#### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANG-MW-19
(04/09)

Lab Name: LIFE S	CIENCE LABORATORIES, INC.	Contract:			
ab Code: 10248	Case No.:	NRAS No.:	SDG	No.: <u>0905549</u>	)
Matrix: (soil/water)	WATER		Lab Sample ID:	0905549-009	
Level: MED			Date Received:	04/14	4/2009
% Solids:					w <b>-</b>
	Concentration Units:	mg/L or mg/Kg dry v	reight) MG/L		
CAS NO.	Analyte	Co	ncentration C	Q	M
			0.00	1	1 18/

	CAS NO.	Analyte	Concentration	С	Q	M
Г	NH3-N	Ammonia as N	0.03	U	Ī	W
H		Bicarbonate Alkalinity as CaCO3	330			W
ŀ		Carbonate Alkalinity as CaCO3	3	U		W
H		Hydroxide Alkalinity as CaCO3	3	U		W
H	NO3-N	Nitrate as N	0.45			T
H	14808-79-8	Sulfate	20			

Color Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:		
••••••		
	254	

FORM IB-IN

1LM05.3

# 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANG-MW-107
(04/09)

Lab Name: LIFE S	CIENCE LABORATORIES, INC.	Contract:		,		······································
Lab Code: 10248	Case No.:	NRAS No.:	SI	OG No.	: 0905549	)
Matrix: (soil/water)	WATER		Lab Sample I	D: <u>09</u> 0	05549-010	
Level: MED			Date Receive	ed:	04/14	1/2009
% Solids:						w
CAS NO.	Concentration Units: (n		<del></del>	C	_ Q	M
NH3-N	Ammonia as N		0.03	U		W
	Bicarbonate Alkalinity as	CaCO3	200			W
	Carbonate Alkalinity as	CaCO3	3	Ü		W
	Hydroxide Alkalinity as		3 1	Ū		W
						**
NO3-N	Nitrate as N		2.1			1

Color Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:		
	255	

FORM IB-IN

ILM05.3

### 18 - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANG-MW-106 (04/09)

Lab Name:	LIFE SCIENCE LABORATORIES, INC.	Contract:			
Lab Code:	10248 Case No.:	NRAS No.:	SDG No.:	0905549	-
Matrix: (soi	l/water) WATER		Lab Sample ID: 0905	549-011	
Level:	MED		Date Received:	04/14/2009	
% Solids:					A COLUMN TO SERVICE PROPERTY

Concentration Units: (mg/L or mg/Kg dry weight) MG/L

CAS NO.	Analyte	Concentration	С	Q	M
NH3-N	Ammonia as N	0.03	U		W
	Bicarbonate Alkalinity as CaCO3	390			W
	Carbonate Alkalinity as CaCO3	3	U		W
	Hydroxide Alkalinity as CaCO3	3	U		W
NO3-N	Nitrate as N	0.1	U		Ī
14808-79-8	Sulfate	49			ı

Color Before:	Clarity Before:	Texture:	
Color After:	Color After:	Artifacts:	
Comments:			
	256		
<u> </u>	FORM IB-IN	11	_M05.3

## Life Science Laboratories, Inc.

**Analytical Results** 

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155 0904087-001A

Life Science Laboratories, Inc.

Project: ILT090414CL

0904087

W Order: Matrix:

WATER

Inst. ID:

GCOS 17E

ColumnID: Alumina

04/21/09 10:37

Sample Size: 32 mL %Moisture:

8015W RSK175 FileID: TestCode:

Collèction Date:

Lab ID:

Date Received: PrepDate:

BatchNo:

Client Sample ID: 0905549-001C,D

04/19/09 10:04 9278/R17046

04/13/09 11:15

04/14/09 15:50

1-SAMP-E:\Osiapr09\E041905.r

Revision: Col Type:

Date Analyzed Units DF MDL Result Qual PQL Analyte 8015M/RSK175M (RSK 175) **DISSOLVED GASES BY GC/FID** 04/19/09 12:59 mg/L 0.0020 0.0014 0.040 Methane

Qualifiers:

Value exceeds Maximum Contaminant Level

E Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

441027

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

Project Supervisor: Anthony Crescenzi

## Life Science Laboratories, Inc. 5000 Brittonfield Parkway, Suite 200

## **Analytical Results**

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

Life Science Laboratories, Inc.

Project:

Lab ID:

0904087-002A

ILT090414CL

Collection Date:

Client Sample ID: 0905549-003C,D

W Order:

0904087

Date Received:

04/13/09 11:20 04/14/09 15:50

Matrix: Inst. ID: WATER

Sample Size: 32 mL

PrepDate:

04/19/09 10:04

GCOS 17E ColumnID: Alumina

04/21/09 10:37

%Moisture:

BatchNo:

9278/R17046

Revision: Col Type: TestCode: 8015W RSK175 FileID:

1-SAMP-E:\Osiapr09\E041906.r

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M	RSK175M	(RSK 175)
těcíhane	ND	0.0020	0.0014	mg/L	1	04/19/09 13:37

Qualifiers:

Value exceeds Maximum Contaminant Level

E Value exceeds the instrument calibration range

P Prim./Conf. column %D or RPD exceeds limit

Analyte detected below the PQL

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

## Life Science Laboratories, Inc.

**Analytical Results** 

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

0904087-003A

04/13/09 12:05

04/14/09 15:50

Client Sample ID: 0905549-004C,D

Life Science Laboratories, Inc.

Project:

ILT090414CL

W Order:

0904087 WATER

Matrix: Inst. ID:

GCOS 17E

ColumnID: Alumina

04/21/09 10:37

Sample Size: 32 mL %Moisture:

TestCode: 8015W RSK175 FileID:

PrepDate:

Lab ID:

BatchNo:

**Collection Date:** 

Date Received:

04/19/09 10:04 9278/R17046

1-SAMP-E:\Osiapr09\E041908.r

Revision: Col Type:

Analyte	Result Qua	l PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175N	1 (RSK 175)
Methane	2.8	0.040	0.028	mg/L	,20	04/19/09 13:57

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

Prim./Conf. column %D or RPD exceeds limit

Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

Spike Recovery outside accepted recovery limits

Project Supervisor: Anthony Crescenzi

## Life Science Laboratories, Inc.

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

**Analytical Results** 

StateCertNo: 10155

Life Science Laboratories, Inc.

Project:

ILT090414CL

W Order:

0904087

Matrix:

WATER

Inst. ID:

GCOS 17E

ColumnID: Alumina

04/21/09 10:37

Sample Size: 32 mL %Moisture:

TestCode:

8015W RSK175 FileID:

Lab ID:

Collection Date:

Date Received:

PrepDate: BatchNo:

0904087-004A

Client Sample ID: 0905549-007C,D

04/13/09 12:37

04/14/09 15:50

04/19/09 10:04

9278/R17046

1-SAMP-E:\Osiapr09\E041914.r

Revision: Col Type:

Analyte	Result Qual PQL		MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID	<u></u>			8015M/	RSK175	M (RSK 175)
Methane	3.0	0.10	0.070	mg/L	50	04/19/09 15:51

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

Spike Recovery outside accepted recovery limits

441034

Project Supervisor: Anthony Crescenzi

## Life Science Laboratories, Inc. 5000 Brittonfield Parkway, Suite 200

**Analytical Results** 

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

Project:

Life Science Laboratories, Inc.

ILT090414CL

W Order: 0904087

Matrix: Inst. ID:

WATER GCOS 17E

ColumnID: Alumina Revision:

04/21/09 10:37

TestCode: 8015W RSK175 FileID:

Sample Size: 31 mL

BatchNo: %Moisture:

0904087-005A Lab ID:

Client Sample ID: 0905549-008C,D

04/13/09 0:00 Collection Date: Date Received:

PrepDate:

04/14/09 15:50

04/19/09 10:04 9278/R17046

1-SAMP-E:\Osiapr09\E041916.r

Col Type:

Analyte	Result Qua	l PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID	······			8015M/	RSK175#	(RSK 175)
Methane	4.4	0.10	0.072	mg/L	50	04/19/09 16:12

Qualifiers:

Value exceeds Maximum Contaminant Level

E Value exceeds the instrument calibration range

Analyte detected below the POL

Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

Spike Recovery outside accepted recovery limits

384
Project Supervisor: Anthony Crescenzi

14

## Life Science Laboratories, Inc.

**Analytical Results** 

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

Life Science Laboratories, Inc.

0904087-006A

Project:

ILT090414CL

Client Sample ID: 0905549-009C,D

W Order:

04/21/09 10:37

Collection Date:

04/13/09 15:20

Matrix:

0904087

Date Received:

04/14/09 15:50

Inst. ID:

WATER GCOS 17E

Sample Size: 32 mL

PrepDate: BatchNo:

Lab ID:

04/19/09 10:04 9278/R17046

ColumnID: Alumina

%Moisture: TestCode:

8015W RSK175 FileID:

1-SAMP-E:\Osiapr09\E041918.r

Revision: Col Type:

Analyte	Result Qı	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID		7		8015M/	RSK175	VI (RSK 175)
Methane	0.61	0.040	0.028	mg/L	20	04/19/09 16:34

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

Spike Recovery outside accepted recovery limits

Project Supervisor: Anthony Crescenzi

## Life Science Laboratories, Inc.

**Analytical Results** 

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

Life Science Laboratories, Inc.

Project:

ILT090414CL

W Order:

0904087

Matrix:

Revision: Col Type: WATER GCOS 17E

Inst. ID:

ColumnID: Alumina

04/21/09 10:37

%Moisture:

Sample Size: 33 mL

TestCode: 8015W RSK175 FileID:

0904087-007A

Client Sample ID: 0905549-010C,D

Collection Date:

04/13/09 15:40

Date Received: PrepDate:

Lab ID:

04/14/09 15:50 04/19/09 10:04

BatchNo;

9278/R17046

1-SAMP-E:\Osiapr09\E041919.r

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175M	(RSK 175)
Methane	0.0049	0.0019	0.0014	mg/L	1	04/19/09 16:44

Qualifiers:

Value exceeds Maximum Contaminant Level

E Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

## Life Science Laboratories, Inc. 5000 Brittonfield Parkway, Suite 200

**Analytical Results** 

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

Life Science Laboratories, Inc.

Lab ID:

0904087-008A

Project:

ILT090414CL

Client Sample ID: 0905549-011C,D

W Order:

Collection Date:

04/13/09 16:40

Matrix:

0904087 WATER

Date Received:

04/14/09 15:50

Inst. ID:

GCOS 17E

Sample Size: 33 mL

PrepDate: BatchNo:

04/19/09 10:04 9278/R17046

ColumnID: Alumina Revision:

04/21/09 10:37

%Moisture:

TestCode: 8015W RSK175 FileID:

1-SAMP-E:\Osiapr09\E041920.r

Col Type:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID			,,,,,,,	8015M/	RSK175M	(RSK 175)
Methane	0.051	0.0019	0.0014	mg/L	1	04/19/09 16:55

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim/Conf. column %D or RPD exceeds limit

441038

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

Project Supervisor: Anthony Crescenzi

## -- LABORATORY ANALYSIS REPORT --

ERM, Inc. - DeWitt Dewitt, NY

ERM, Inc. - Den

LSL Sample ID:

0905549-001

Sample ID: Location:

Sampled:

04/13/09 11:15

ANG-MW-111 (04/09)

Sampled By: RS

Sample Matrix: NPW

Analytical Method  Analyte		Result	Units	Prep Date	Analysis Date & Tim	Analyst ie Initials
(6)	Dissolved Gases	Acourt	Onto			
(4)	Methane	0.040	mg/l		4/19/09 13	2:59 BL
(1)	EPA 200.7 Total Hardness as CaCO3			·	** ****	
	Hardness, Total	490	mg/l	4/15/09	4/27/09	DP
(1)	EPA 350.1, Rev 2.0 Ammonia					
	Ammonia as N	< 0.03	mg/l		4/27/09	DRB
<i>(1)</i>	EPA 8260 BTEX					
	Benzene	<1	ug/l		4/16/09	CRT
	Ethyl benzene	<1	ug/l		4/16/09	CRT
	Xylenes (Total)	<1	ug/i		4/16/09	CRT
	Surrogate (1,2-DCA-d4)	108	%R		4/16/09	CRT
	Surrogate (Tol-d8)	90	%R		4/16/09	CRT
	Surrogate (4-BFB)	94	%R		4/16/09	CRT
(1)	EPA Method 300.0 A					
	Nitrate as N	<0.1	mg/l		4/14/09 19	9:37 RAF
	Sulfate	45	mg/l		4/14/09 19	):37 RAF
(1)	SM 18 2320B, Alkalinity as CaCO3					
	Bicarbonate Alkalinity as CaCO3	360	mg/l		4/16/09	EM
	Carbonate Alkalinity as CaCO3	<3	mg/l		4/16/09	EM
	Hydroxide Alkalinity as CaCO3	<3	mg/l		4/16/09	EM

## -- LABORATORY ANALYSIS REPORT --

ERM, Inc. - DeWitt Dewitt, NY

Sample ID: ANG-Tri

ANG-Trip Blank (04/09)

LSL Sample ID:

0905549-002

Location:

Sampled:

04/13/09 0:00

Sampled By:

Sample Matrix: TB

Analytical Method Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 8260 BTEX					
Benzene	<1	ug/l		4/16/09	CRT
Ethyl benzene		ug/l		4/16/09	······································
Xylenes (Total)	<1	ug/l		4/16/09	CRT
Surrogate (1,2-DCA-d4)	109 -	%R		4/16/09	CRT
Surrogate (Tol-d8)	93	%R		4/16/09	CRT
Surrogate (4-BFB)	94	%R		4/16/09	CRT

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-EB (04/09)

LSL Sample ID:

0905549-003

Location:

Sampled:

04/13/09 11:20

Sampled By: RS

Sample Matrix: QC, DI

Analytical Method				Prep	Analysis		Analyst	
	Analyte	Result	Units	Date	Date & T	<u>'ime</u>	Initials	
(6)	Dissolved Gases							
	Methane	< 0.002	mg/l		4/19/09	13:37	BL	
(1)	EPA 200.7 Total Hardness as CaCO3							
	Hardness, Total	<7	mg/l	4/15/09	4/27/09		DP	
(1)	EPA 350.1, Rev 2.0 Ammonia				•			
	Ammonia as N	< 0.03	mg/l		4/27/09		DRB	
<i>(1)</i>	EPA 8260 BTEX							
	Benzene	<1	ug/l		4/16/09		CRT	
	Ethyl benzene	<1	ug/l		4/16/09		CRT	
	Xylenes (Total)	<1	ug/l		4/16/09		CRT	
	Surrogate (1,2-DCA-d4)	107	%R		4/16/09		CRT	
	Surrogate (Tol-d8)	90	%R		4/16/09		CRT	
	Surrogate (4-BFB)	92	%R		4/16/09		CRT	
(1)	EPA Method 300.0 A							
	Nitrate as N	<0.1	mg/l		4/14/09	19:55	RAF	
	Sulfate	<1	mg/l		4/14/09	19:55	RAF	
(1)	SM 18 2320B, Alkalinity as CaCO3							
	Bicarbonate Alkalinity as CaCO3	16	mg/l		4/16/09		EM	
	Carbonate Alkalinity as CaCO3	<3	mg/l		4/16/09		EM	
	Hydroxide Alkalinity as CaCO3	<3	mg/I		4/16/09		EM	

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ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-105 (04/09)

LSL Sample ID:

0905549-004

Location:

Sampled:

04/13/09 12:05

Sampled By: RS

Sample Matrix: NPW

Ā	nalytical Method Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(6)	Dissolved Gases Methane	2.8	mg/l		4/19/09 13:57	BL
Ä)	EPA 200.7 Total Hardness as CaCO3					
	Hardness, Total	370	mg/l	4/15/09	4/27/09	DP
(1)	EPA 350.1, Rev 2.0 Ammonia				,	
	Ammonia as N	<0.03	mg/I		4/27/09	DRB
(1)	EPA 8260 BTEX					
	Benzene	6.2	ug/l		4/16/09	CRT
	Ethyl benzene	120	ug/l J		4/16/09	CRT
	Xylenes (Total)	260	ug/i		4/16/09	CRT
	Surrogate (1,2-DCA-d4)	103	%R		4/16/09	CRT
	Surrogate (Tol-d8)	90	%R		4/16/09	CRT
	Surrogate (4-BFB)	92	%R		4/16/09	CRT
1)	EPA Method 300.0 A					
	Nitrate as N	0.21	mg/I		4/14/09 20:12	RAF
	Sulfate	1.8	mg/l		4/14/09 20:12	RAF
7)	SM 18 2320B, Alkalinity as CaCO3					
	Bicarbonate Alkalinity as CaCO3	380	mg/l		4/16/09	EM
	Carbonate Alkalinity as CaCO3	<3	mg/l		4/16/09	EM
	Hydroxide Alkalinity as CaCO3	<3	mg/l		4/16/09	EM

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ERM, Inc. - DeWitt Dewitt, NY

Sample ID: ANG-MW-

ANG-MW-112 (04/09)

LSL Sample ID:

0905549-007

Location:

Sampled:

04/13/09 12:37

Sampled By: RS

Sample Matrix: NPW

Analytical Method					Prep	Analysis		Analyst	
	Analyte	Result	Unit	ts	Date	Date & T	lime -	Initials	
(6)	Dissolved Gases								
	Methane	3.0	mg/l			4/19/09	15:51	BL	
(I)	EPA 200.7 Total Hardness as CaCO3				***				
	Hardness, Total	570	mg/l		4/15/09	4/27/09		DP	
(1)	EPA 350.1, Rev 2.0 Ammonia								
	Ammonia as N	<0.03	mg/l			4/27/09		DRB	
<i>(I)</i>	EPA 8260 BTEX								
	Benzene	13	- E	<u> </u>		4/17/09		CRT	
	Ethyl benzene	250	ъд.	J		4/17/09		CRT	
	Xylenes (Total)	480	ug/l	ゴ		4/17/09		CRT	
	Surrogate (1,2-DCA-d4)	103	%R			4/17/09		CRT	
	Surrogate (Tol-d8)	91	%R			4/17/09		CRT	
	Surrogate (4-BFB)	89	%R			4/17/09		CRT	
(1)	EPA Method 300.0 A								
	Nitrate as N	<0.1	mg/l			4/14/09	21:05	RAF	
	Sulfate	11	mg/l			4/14/09	21:05	RAF	
(1)	SM 18 2320B, Alkalinity as CaCO3								
	Bicarbonate Alkalinity as CaCO3	360	mg/l			4/16/09		EM	
	Carbonate Alkalinity as CaCO3	<3	mg/l			4/16/09		EM	
	Hydroxide Alkalinity as CaCO3	<3	mg/l			4/16/09		EM	

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ERM, Inc. - DeWitt

Dewitt, NY

Sample ID:

ANG-Dup (04/09)

LSL Sample ID:

0905549-008

Location:

Sampled:

04/13/09 0:00

Sampled By: RS

Sample Matrix: QC, NPW

Analytical Method				Prep	Analysis		Analyst
	Analyte	Result	Units	Date	Date & T	ime	Initials
(6)	Dissolved Gases Methane	4.4	mg/l		4/19/09	16:12	BL
(1)	EPA 200.7 Total Hardness as CaCO3 Hardness, Total	580	mg/l	4/15/09	4/27/09	-	DP
(1)	EPA 350.1, Rev 2.0 Ammonia Ammonia as N	<0.03	mg/l		4/27/09		DRB
(1)	EPA 8260 BTEX  Benzene Ethyl benzene Xylenes (Total) Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB)	16 310 590 104 93 91	ug/l J ug/l J ug/l J %R %R %R		4/17/09 4/17/09 4/17/09 4/17/09 4/17/09		CRT CRT CRT CRT CRT CRT
(1)	EPA Method 300.0 A  Nitrate as N  Sulfate	<0.1 12	mg/l mg/l		4/14/09 4/14/09	21:23 21:23	RAF RAF
(1)	SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Hydroxide Alkalinity as CaCO3	410 <3 <3	mg/l mg/l mg/l		4/16/09 4/16/09 4/16/09		EM EM EM

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-19 (04/09)

LSL Sample ID:

0905549-009

Location:

Sampled:

04/13/09 15:20

Sampled By: RS

Sample Matrix: NPW

Analytical Method				Analysis		Analyst
Analyte	Result	Units	Date	Date & T	ime	Initials
Dissolved Gases					•	<del></del>
Methane	0.61	mg/l		4/19/09	16:34	BL
EPA 200.7 Total Hardness as CaCO3			The Park Marin Three		**	
Hardness, Total	400	mg/l	4/15/09	4/27/09		DP
EPA 350.1, Rev 2.0 Ammonia						
Ammonia as N	< 0.03	mg/l		4/27/09		DRB
EPA 8260 BTEX						
Benzene	0.71 J	ug/l		4/17/09		CRT
J = estimated value.						
Ethyl benzene	17	ug/l		4/17/09		CRT
Xylenes (Total)	20	ug/l		4/17/09		CRT
Surrogate (1,2-DCA-d4)	106	%R		4/17/09		CRT
Surrogate (Tol-d8)	94	%R		4/17/09		CRT
Surrogate (4-BFB)	92	%R		4/17/09		CRT
EPA Method 300.0 A						
Nitrate as N	0.45	mg/l		4/14/09	21:40	RAF
Sulfate	20	mg/l		4/14/09	21:40	RAF
SM 18 2320B, Alkalinity as CaCO3						
Bicarbonate Alkalinity as CaCO3	330	mg/l		4/16/09		EM
Carbonate Alkalinity as CaCO3	<3	mg/l		4/16/09		EM
Hydroxide Alkalinity as CaCO3	. <3	mg/l		4/16/09		EM
	Analyte  Dissolved Gases Methane  EPA 200.7 Total Hardness as CaCO3 Hardness, Total  EPA 350.1, Rev 2.0 Ammonia Ammonia as N  EPA 8260 BTEX Benzene J = estimated value.  Ethyl benzene Xylenes (Total) Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB)  EPA Method 300.0 A Nitrate as N Sulfate  SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3	Analyte         Result           Dissolved Gases         0.61           EPA 200.7 Total Hardness as CaCO3         400           EPA 350.1, Rev 2.0 Ammonia         400           EPA 8260 BTEX         0.71 J           Benzene         0.71 J           J = estimated value.         17           Xylenes (Total)         20           Surrogate (1,2-DCA-d4)         106           Surrogate (Tol-d8)         94           Surrogate (4-BFB)         92           EPA Method 300.0 A         0.45           Nitrate as N         0.45           Sulfate         20           SM 18 2320B, Alkalinity as CaCO3         330           Carbonate Alkalinity as CaCO3         330           Carbonate Alkalinity as CaCO3         <3	Analyte         Result         Units           Dissolved Gases         0.61         mg/l           Methane         0.61         mg/l           EPA 200.7 Total Hardness as CaCO3         400         mg/l           Hardness, Total         400         mg/l           EPA 350.1, Rev 2.0 Ammonia         300         mg/l           Ammonia as N         <0.03	Name	Name	Analyte         Result         Units         Date         Time           Dissolved Gases         Methane         0.61         mg/l         4/19/09         16.34           EPA 200.7 Total Hardness as CaCO3         Hardness, Total         400         mg/l         4/15/09         4/27/09           EPA 350.1, Rev 2.0 Ammonia         3mg/l         4/27/09         4/27/09           EPA 8260 BTEX         5mg/l         4/17/09         4/17/09           Benzene         0.71 J         ug/l         4/17/09         4/17/09           Xylenes (Total)         20         ug/l         4/17/09         4/17/09           Surrogate (1,2-DCA-d4)         106         %R         4/17/09         4/17/09           Surrogate (70-d8)         94         %R         4/17/09         5           Surrogate (4-BFB)         92         %R         4/17/09         1           EPA Method 300.0 A         Nitrate as N         0.45         mg/l         4/14/09         21:40           Sulfate         20         mg/l         4/14/09         21:40           Sulfate         330         mg/l         4/16/09         1:40           Sulfate         330         mg/l         4/16/09         1:40     <

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ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-107 (04/09)

LSL Sample ID:

0905549-010

Location:

Sampled:

04/13/09 15:40

Sampled By: RS

Sample Matrix: NPW

Analytical Method Analyte			Prep Date	Analysis Date & Time		Analyst Initials	
Dissolved Gases  Methane	0.0049	mg/l		4/19/09	6:44	BL	
EPA 200.7 Total Hardness as CaCO3  Hardness, Total	200	mg/l	4/15/09	4/27/09	-	DP	
EPA 350.1, Rev 2.0 Ammonia  Ammonia as N	<0.03	mg/l		4/27/09		DRB	
BPA 8260 BTEX  Benzene Ethyl benzene Xylenes (Total)  J = estimated value.  Surrogate (1,2-DCA-d4)  Surrogate (Tol-d8)  Surrogate (4-BFB)	<1 <1 0.27 J 105 91 94	ug/l ug/l ug/l %R %R %R		4/17/09 4/17/09 4/17/09 4/17/09 4/17/09 4/17/09		CRT CRT CRT CRT CRT CRT	
EPA Method 300.0 A  Nitrate as N  Sulfate	2.1 15	mg/l mg/l			1:58 1:58	RAF RAF	
SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Hydroxide Alkalinity as CaCO3	200 <3 <3	mg/l mg/l mg/l		4/16/09 4/16/09 4/16/09		EM EM EM	

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ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-106 (04/09)

LSL Sample ID:

0905549-011

Location:

Sampled:

04/13/09 16:40

Sampled By: RS

Sample Matrix: NPW

-	<b>33</b>	Y334 T.T\$4.		•		Analyst
Analyte	Result	Units	Date	Date & 1	ime	<u>Initials</u>
Dissolved Gases						
Methane	0.051	mg/l		4/19/09	16:55	BL
EPA 200.7 Total Hardness as CaCO3						
Hardness, Total	450	mg/l	4/15/09	4/27/09		DP
EPA 350.1, Rev 2.0 Ammonia						
Ammonia as N	<0.03	mg/l		4/27/09		DRB
EPA 8260 BTEX						
Benzene	<1	ug/l		4/17/09		CRT
Ethyl benzene	<1	ug/l		4/17/09		CRT
Xylenes (Total)	<1	ug/l		4/17/09		CRT
Surrogate (1,2-DCA-d4)	107	%R		4/17/09		CRT
Surrogate (Tol-d8)	93	%R		4/17/09		CRT
Surrogate (4-BFB)	95	%R		4/17/09		CRT
EPA Method 300.0 A						
Nitrate as N	< 0.1	mg/l		4/14/09	22:15	RAF
Sulfate	49	mg/l		4/14/09	22:15	RAF
SM 18 2320B, Alkalinity as CaCO3						
Bicarbonate Alkalinity as CaCO3	390	mg/l		4/16/09		EM
Carbonate Alkalinity as CaCO3	<3	mg/l		4/16/09		EM
Hydroxide Alkalinity as CaCO3	<3	mg/l		4/16/09		EM
	Methane  EPA 200.7 Total Hardness as CaCO3 Hardness, Total  EPA 350.1, Rev 2.0 Ammonia Ammonia as N  EPA 8260 BTEX Benzene Ethyl benzene Xylenes (Total) Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB)  EPA Method 300.0 A Nitrate as N Sulfate  SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3	Analyte         Result           Dissolved Gases         0.051           EPA 200.7 Total Hardness as CaCO3         450           Hardness, Total         450           EPA 350.1, Rev 2.0 Ammonia         <0.03	Analyte         Result         Units           Dissolved Gases         0.051         mg/l           EPA 200.7 Total Hardness as CaCO3         mg/l           Hardness, Total         450         mg/l           EPA 350.1, Rev 2.0 Ammonia         o.03         mg/l           Ammonia as N         o.03         mg/l           EPA 8260 BTEX         ug/l         ug/l           Benzene         o.1         ug/l           Ethyl benzene         o.1         ug/l           Xylenes (Total)         o.1         ug/l           Surrogate (1,2-DCA-d4)         107         %R           Surrogate (4-BFB)         93         %R           EPA Method 300.0 A         mg/l         mg/l           Nitrate as N         o.1         mg/l           Sulfate         49         mg/l           SM 18 2320B, Alkalinity as CaCO3         390         mg/l           Bicarbonate Alkalinity as CaCO3         390         mg/l           Carbonate Alkalinity as CaCO3         390         mg/l	Analyte         Result         Units         Date           Dissolved Gases         0.051         mg/l         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888         4888 </td <td>  Name</td> <td>Analyte         Result         Units         Date         Date &amp; Time           Dissolved Gases         Methane         0.051         mg/l         4/19/09         16.55           EPA 200.7 Total Hardness as CaCO3         mg/l         4/15/09         4/27/09         4/27/09           EPA 350.1, Rev 2.0 Ammonia         smg/l         4/15/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4</td>	Name	Analyte         Result         Units         Date         Date & Time           Dissolved Gases         Methane         0.051         mg/l         4/19/09         16.55           EPA 200.7 Total Hardness as CaCO3         mg/l         4/15/09         4/27/09         4/27/09           EPA 350.1, Rev 2.0 Ammonia         smg/l         4/15/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4/27/09         4

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# APPENDIX D

QA/QC EVALUATION RESULTS

# DATA USABILITY SUMMARY REPORT (DUSR) ANG-HANCOCK FACILITY SYRACUSE, NEW YORK GROUND WATER SAMPLE ANALYSES ENVIRONMENTAL RESOURCES MANAGEMENT (ERM) PROJECT NUMBER 0086335 LIFE SCIENCE LABORATORIES, INC. SAMPLE DELIVERY GROUP (SDG) NUMBER 0913409

Environmental Resources Management

5788 Widewaters Parkway Dewitt, NY 13214 (315) 445-2554 (315) 445-2543 (fax)



#### Deliverables:

The above referenced data package for thirteen (13) ground water samples, two (2) blind field duplicate samples, two (2) trip blanks, and two (2) sets of matrix spike/matrix spike duplicate (MS/MSD) samples contains all required deliverables as stipulated under the 2005 New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) for Category B deliverables.

The sample specific analyses included Benzene, Ethylbenzene and Xylene (BEX) analyzed by United States Environmental Protection Agency (USEPA) SW-846 Method 8260B and Methane analyzed by USEPA SW-846 Method 8015 in accordance with "Test Methods for Evaluating Solid Wastes, SW-846 Third Edition, Final Update III, December 1996". The samples were also analyzed for Total Hardness by calculation/metals by USEPA SW-846 Method 200.7 in accordance with "40 CFR 136, Category A and B Parameters in Water and Wastewater". In addition, the samples were analyzed for Nitrate and Sulfate by USEPA Method 300.0; Alkalinity by SM 18 2320B; and Ammonia by USEPA Method 350.2.

The data have been validated according to the protocols and quality control (QC) requirements of the ASP; the National Functional Guidelines for Organic Data Review (October 1999); the National Functional Guidelines for Inorganic Data Review (July 2002); the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-24, Revision 2, October 2006: Validating Volatile Organic Compounds by SW-846 Method 8260B; and the reviewer's professional judgment.

The validation report pertains to the following ground water samples collected from 29 July to 5 August 2009:

<u>Samples</u>	QC Samples	<u>SDG</u> *
ANG-GP-142	ANG-GP-Dupe - Blind Field Duplicate of ANG-GP-142	0913409
ANG-GP-143	ANG- GP-143 MS/MSD	
ANG-GP-144	ANG-Trip Blank	
ANG-GP-145		
ANG-GP-146		
ANG-MW-19-0809	ANG-TB-0809	0913995
ANG-MW-105-0809		
ANG-MW-106-0809		
ANG-MW-107-0809		
ANG-MW-111-0809	ANG-MW-111-0809 MS/MSD	
ANG-MW-112-0809	ANG-DUP-0809 - Blind Field Duplicate of ANG-MW-112-0809	
ANG-MW-113-0809		
ANG-MW-114-0809		

^{*} Note that lab generated SDGs each day upon receipt of samples, and later combined these SDGs into one report (SDG 0913409).

### Organics

The following items/criteria were reviewed for this report:

- Case narrative and deliverables compliance
- Holding times and sample preservation (including pH and temperature)
- Surrogate Compound recoveries, summary and data
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) results, recoveries, summary and data
- · Laboratory Check Sample (LCS), recoveries, summary and data
- Method blank summary and data
- Gas Chromatography (GC)/Mass Spectroscopy (MS) tuning and performance
- · Initial and continuing calibration summaries and data
- · Internal standard areas, retention times, summary and data
- Trip Blank sample results
- Blind Field Duplicate sample results
- Organic analysis data sheets (Form I)
- GC/MS and GC chromatograms, mass spectra and quantitation reports
- Quantitation/detection limits
- Qualitative and quantitative compound identification

The items listed above were technically and contractually in compliance with SW-846 protocols with the exceptions discussed in the text below. The data have been validated according to the procedures outlined above and qualified accordingly.

#### **Volatiles**

- Numerous samples were run at dilutions due to high levels of target and/or non-target compounds, causing elevated reporting limits. The laboratory has reported the final result only on the Form I. No qualification of the sample data is required; however, the data user should be aware of the elevated detection limits.
- Samples ANG-MW-19-0809, ANG-MW-DUP-0809, and ANG-MW-112-0809 were rerun at a 5x dilution due to high levels of target compounds. The rerun samples are denoted by the laboratory as ANG-MW-19RE, ANG-MW-DUPRE, and ANG-MW-112RE, respectively. For these samples, all values should be used from the original analysis except those compounds which were above the linear range of the instrument in the original analysis (i.e., flagged with an "E").
- Sample ANG-MW-105-0809 was rerun by the laboratory due to the suspected carryover of Ethylbenzene. The rerun sample is denoted by the laboratory as ANG-MW-105RE. For this sample, all values should be used from the original analysis except the Ethylbenzene value for which carryover was suspected in the original run.
- The surrogate recovery for ANG-MW-112RE is high (1,2-DCA-d4 is 132%; QC limit 70-130%), indicating that the sample results are possibly biased high. Therefore, the sample results for ANG-MW-112RE with positive detections are considered estimated and are qualified "J".

#### Methane

 The following table includes samples that were analyzed at dilutions due to the sample matrix (in addition to elevated Methane levels in some samples), and the associated dilution factor. No qualification of the sample data is required.

Sample	Dilution Factor
ANG-MW-19-0809	50x
ANG-DUP-0809	50x
ANG-MW-105-0809	50x
ANG-MW-112-0809	50x

The MS/MSD for Methane is reported as "not determined".
 Due to the fact that the recovery for the LCS was within the QC limits, it is the reviewer's professional opinion that qualification of the sample data is not required.

### Inorganics

The following items/criteria were reviewed:

- Case narrative and deliverable requirements
- Holding times and sample preservation
- Detection limits
- Inorganic analysis data sheets (Form I)
- Initial and continuing calibration verifications
- Low and High Calibration Check standard analysis
- · Lab Blank results
- Blind Field Duplicate sample results
- ICP interference check sample analysis
- Matrix Spike analysis
- Duplicate Analysis (metals)
- Matrix Spike Duplicate analysis
- Laboratory Control Sample (LCS) results

The items listed above were technically and contractually in compliance with SW-846 protocols with the exceptions discussed in the text below. The data have been validated according to the procedures outlined above and qualified accordingly.

#### Metals

 The Calcium value used to calculate the Total Hardness for sample ANG-MW-113-0809 was slightly higher than the linear range of the instrument. Therefore, the Total Hardness result for ANG-MW-113-0809 is possibly biased and has been qualified with a "I".

• The first continuing calibration verification (CCV) sample was slightly above the QC limit for Magnesium (110.32%; QC limit is 110%). All other CCVs associated with the sample analysis were within the QC limits. It is the reviewer's professional opinion that no qualification of the sample data is required.

## General Chemistry

• No qualification of the sample data is required.

## Package Summary:

All data are valid and usable with qualifications as noted in this review.

Signed:

Dated: 18 December 2009

Melissa A. McGi Project Scientist

EPA SAMPLE, NO. 1 A GP-142 **VOLATILE ORGANICS ANALYSIS DATA SHEET** Lab Name: Life Science Laboratories, Inc. Contract: Case No.: _____ SDG No.: _____ SDG No.: 0913409 Lab Code: 10248 Lab Sample ID: 0913409-002 Matrix: (soil/water) WATER Lab File ID: K01696S ML Sample wt/vol: 25 (g/ml) Date Received: 7/30/2009 (low/med) LOW Level: Date Analyzed: 8/5/2009 % Moisture: not dec. NA Dilution Factor: 2.0 GC Column: Rtx-VMS ID 0.25 (mm) Soil Aliquot Volume: NA ____ (uL) NA (uL) Soil Extract Volume: CONCENTRATION UNITS: CAS NO. COMPOUND UG/L 1 71-43-2 Benzene

Ethylbenzene

m/p-Xylene

o-Xylene

100-41-4

108-38-3

95-47-6

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Lab Name:				YSIS DATA SHE			EPA SAMPLE. NO.  GP-143
Lab Code:	10248	Case No.:	····	SAS No.: _		SDG No.:	0913409
Matrix: (soil/w	ater)	WATER				Lab Sample ID:	0913409-003
Sample wt/vol:	;	25	(g/ml)	ML		Lab File ID:	K01697S
Level:	(low/med)	LOW				Date Received:	7/30/2009
% Moisture: r	not dec.	NA				Date Analyzed:	8/5/2009
GC Column:	Rtx-VMS	ID	0.25	(mm) _		Dilution Factor:	2.0
Soil Extract Vo	olume:	NA	(uL)	Soil Aliquot Vo	lume:	NA (uL)	
					co	NCENTRATION UNITS:	
	CAS N	10.	COMP	OUND		UG/L	Q
	71-43-2		Benzene			1	U
	100-41-4		Ethylbenze	ne		1	U
	108-38-3		m/p-Xylene			1	U
	95-47-6		o-Xylene			1	U

VOLATILE ORGANICS ANALYSIS DATA SHEET GP-144 Lab Name: Life Science Laboratories, Inc. Contract: Case No.: SAS No.: SDG No.: 0913409 10248 Lab Code: Lab Sample ID: 0913409-006 Matrix: (soil/water) WATER Lab File ID: K01698S 25 (g/ml) ML Sample wt/vol: Date Received: 7/30/2009 (low/med) LOW Level: Date Analyzed: 8/5/2009 % Moisture: not dec. NA Dilution Factor: 2.0 GC Column: Rtx-VMS 0.25 ___ (mm) ID Soil Aliquot Volume: NA (uL) NA (uL) Soil Extract Volume: **CONCENTRATION UNITS:** COMPOUND UG/L CAS NO. Benzene 71-43-2 1 100-41-4 Ethylbenzene 1 108-38-3 m/p-Xylene 95-47-6 o-Xylene

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**VOLATILE ORGANICS ANALYSIS DATA SHEET** GP-145 Life Science Laboratories, Inc. Contract: Lab Name: Case No.: SAS No.: SDG No.: 0913409 10248 Lab Code: Lab Sample ID: 0913409-007 Matrix: (soil/water) WATER Lab File ID: K01699S Sample wt/vol: 25 (g/ml) ML Date Received: 7/30/2009 (low/med) LOW Level: Date Analyzed: 8/5/2009 % Moisture: not dec. NA 0.25 (mm) Dilution Factor: 2.0 GC Column: Rtx-VMS ID NA (uL) Soil Aliquot Volume: NA (uL) Soil Extract Volume: CONCENTRATION UNITS: COMPOUND CAS NO. UG/L 71-43-2 Benzene 100-41-4 Ethylbenzene 1 1 108-38-3 m/p-Xylene 95-47-6 o-Xylene

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GP-146 **VOLATILE ORGANICS ANALYSIS DATA SHEET** Lab Name: Life Science Laboratories, Inc. Contract: 0913409 Lab Code: Lab Sample ID: 0913409-008 Matrix: (soil/water) WATER Lab File ID: K01700S Sample wt/vol: 25 (g/ml) ML Date Received: 7/30/2009 (low/med) _ LOW Level: Date Analyzed: 8/5/2009 % Moisture: not dec. NA Dilution Factor: 2.0 GC Column: Rtx-VMS ID 0.25 (mm) NA (uL) Soil Aliquot Volume: NA (uL) Soil Extract Volume: CONCENTRATION UNITS: COMPOUND UG/L CAS NO. 71-43-2 Benzene 100-41-4 Ethylbenzene 1 108-38-3 m/p-Xylene 95-47-6 o-Xylene

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 EPA SAMPLE. NO.

 VOLATILE ORGANICS ANALYSIS DATA SHEET
 GP-DUPE

 Lab Name:
 Life Science Laboratories, Inc.
 Contract:
 SDG No.:
 0913409

 Lab Code:
 10248
 Case No.:
 SAS No.:
 SDG No.:
 0913409

 Matrix:
 (soil/water)
 WATER
 Lab Sample ID:
 0913409-00°

Lab Sample ID: 0913409-001

Lab File ID: K01701S

Level: (low/med) LOW Date Received: 7/30/2009

% Moisture: not dec. NA Date Analyzed: 8/5/2009

ML

GC Column: Rtx-VMS ID 0.25 (mm) Dilution Factor: 2.0

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

(g/ml)

25

Sample wt/vol:

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

EPA SAMPLE. NO. 1 A VOLATILE ORGANICS ANALYSIS DATA SHEET TRIP BLANK Life Science Laboratories, Inc. Contract: Lab Name: 0913409 Lab Code: Lab Sample ID: 0913409-009 Matrix: (soil/water) WATER Lab File ID: K01702S 25 (g/ml) ML Sample wt/vol: Date Received: 7/30/2009 (low/med) LOW Level: Date Analyzed: 8/5/2009 NA % Moisture: not dec. 0.25 (mm) Dilution Factor: 1.0 GC Column: Rtx-VMS ID Soil Aliquot Volume: NA (uL) Soil Extract Volume: NA (uL) CONCENTRATION UNITS: COMPOUND Q UG/L CAS NO. 71-43-2 Benzene 100-41-4 Ethylbenzene U

m/p-Xylene

o-Xylene

108-38-3

95-47-6

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VOLATILE ORGANICS ANALYSIS DATA SHEET

For Science Laboratories, Inc.

Contract:

EPA SAMPLE, NO.
MW-114

Lab Name:	Life Scienc	e Laborator	ies, Inc.	Contract:			
Lab Code:	10248	Case No.:		SAS No.:	SDG No.:	0913409	
Matrix: (soil/w	rater)	WATER			Lab Sample ID:	0913995-001	
•	·		· (a/m1)	ML	Lab File ID:	C11896S	
Sample wt/vol:		10	(g/ml)	IVIL	Lastile ib.	0110000	
Level:	(low/med)	LOW			Date Received:	8/6/2009	_
% Moisture: r	not dec.	NA			Date Analyzed:	8/11/2009	
GC Column:	DB-624	ID	0.53	(mm)	Dilution Factor:	1.0	
GC Column.	DD-024	שו	0.00	(11111)			_
Soil Extract Vo	olume:	NA	(uL)	Soil Aliquot Volume:	NA (uL)		

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

1 A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE. NO.
MW-113

Lab Name:	Life Science	e Laboratori	ies, Inc.	_ Contract:		
Lab Code:	10248	Case No.:	<u></u>	SAS No.:	SDG No.:	0913409
Matrix: (soil/w	ater)	WATER			Lab Sample ID:	0913995-002
Sample wt/vol:	•	10	(g/ml)	<u>ML</u>	Lab File ID:	C11897S
Level:	(low/med)	LOW			Date Received:	8/6/2009
% Moisture: r	not dec.	NA	,		Date Analyzed:	8/11/2009
GC Column:	DB-624	ID .	0.53	_(mm)	Dilution Factor:	1.0
Soil Extract Vo	olume:	NA	(uL)	Soil Aliquot Volume:	NA (uL)	

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	Ų
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

			1 A				EPA SAMPLE, NO.
				YSIS DATA SHE	ET		MW-19
Lab Name:	Life Science	e Laborator	ies, Inc.	_ Contract:			
Lab Code:	10248	Case No.:		_ SAS No.: _	· · · · · · · · · · · · · · · · · · ·	SDG No.:	0913409
Matrix: (soil/w	vater)	WATER				Lab Sample ID:	0913995-003 2X
Sample wt/vol	:	10	(g/ml)	<u>ML</u>		Lab File ID:	:C11898S
Level:	(low/med)	LOW				Date Received:	: 8/6/2009
% Moisture:	not dec.	<u>NA</u>				Date Analyzed	:8/11/2009
GC Column:	DB-624	. ID	0.53	_(mm) .		Dilution Factor	2.0
Soil Extract V	olume:	<u>NA</u>	(uL)	Soil Aliquot Vol	ume:	NA (uL)	)
					CO	NCENTRATION UNITS	:
	CASIN	10.	COMP	OUND		UG/L	Q
	71-43-2		Benzene			6.0	
	100-41-4		Ethylhonzo	ne l		4500	
	108-38-3		m/p Yylone			<b>←</b> 000	
	95-47-6		o-Xylene			10	

1 A VOLATILE ORGANICS ANALYSIS DATA SHEET MW-19RE Life Science Laboratories, Inc. Contract: Lab Name: SDG No.: 0913409 10248 SAS No.: Case No.: Lab Code: Lab Sample ID: 0913995-003 5X Matrix: (soil/water) WATER Lab File ID: C11931S 10 (g/ml) ML Sample wt/voi: 8/6/2009 (low/med) LOW Date Received: Level: Date Analyzed: 8/12/2009 % Moisture: not dec. NA Dilution Factor: 5.0 ID 0.53 GC Column: DB-624 (mm) Soil Aliquot Volume: NA _____ (uL) Soil Extract Volume: NA (uL) CONCENTRATION UNITS: COMPOUND CAS NO. UG/L 71-43-2 410 100-41-4 Ethylbenzene 760 m/p-Xylene 108-38-3 95-47**-**6

			1 A			_	EPA SAMPLE, NO.
Lab Name:				YSIS DATA SHE Contract:	ET	· .	DUP
Lab Code:	10248	Case No.:		_ SAS No.: _		SDG No.:	0913409
Matrix: (soil/v	vater)	WATER				Lab Sample ID:	0913995-004
Sample wt/vo	l:	10	(g/ml)	ML		Lab File ID:	: C11899S
Level:	(low/med)	LOW	-			Date Received	: 8/6/2009
% Moisture:	not dec.	NA				Date Analyzed	: 8/11/2009
GC Column:	DB-624	DI	0.53	(mm) _		Dilution Factor	: 1.0
Soil Extract V	olume:	NA	_(uL)	Soil Aliquot Vol	ume:	NA (uL)	)
					co	NCENTRATION UNITS	:
	CASI	10.	COMP	OUND		UG/L	Q
	71-43-2		Benzene			6.5	
	100-41-4		Ethylocrize	ħe		<del>200</del>	
	108-38-3		m/p-Xylene	<del></del>		170	
	05 47 6		a Vulana			28	

EPA SAMPLE, NO. 1 A MW-DUPRE VOLATILE ORGANICS ANALYSIS DATA SHEET Contract: Life Science Laboratories, Inc. Lab Name: SDG No.: 0913409 SAS No.: Lab Code: 10248 Case No.: Lab Sample ID: 0913995-004 5X WATER Matrix: (soil/water) Lab File ID: C11932S  $\mathsf{ML}$ Sample wt/vol: 10 (g/ml) 8/6/2009 Date Received: LOW Level: (low/med) Date Analyzed: 8/12/2009 % Moisture: not dec. NA Dilution Factor: 5.0 0.53 ID (mm) GC Column: DB-624 Soil Aliquot Volume: NA (uL) NA (uL) Soil Extract Volume: CONCENTRATION UNITS: CAS NO. COMPOUND UG/L 71-43-2 300 Ethylbenzene 100-41-4 108-38-3 95-47-6

			1 A		<del></del>	EPA SAMPLE, NO,
Lab Name:				YSIS DATA SHEET Contract:	. N	/IW-105
Lab Code:	10248	Case No.:		SAS No.:	SDG No.:	0913409
Matrix: (soil/v	vater)	WATER			Lab Sample ID:	0913995-005
Sample wt/vo	l:	10	(g/ml)	ML	Lab File ID:	C11900S
Level:	(low/med)	LOW	•		Date Received:	8/6/2009
% Moisture:	not dec.	NA			Date Analyzed:	8/11/2009
GC Column:	DB-624	ID	0.53	(mm)	Dilution Factor:	1.0
Soil Extract V	olume:	<u>NA</u>	(uL)	Soil Aliquot Volume:	NA (uL)	
					ONCENTRATION UNITS:	
	CASI	10.	COMP	POUND	UG/L	Q
	71-43-2		Benzene		3.3	
	100-41-4		Ethyll Wiles	<b>m</b> e	40	حيثه
	108-38-3		m/p-Xylene		1	U
	95-47-6		o-Xvlene		1	Ų

^{*} Suspect carryover, reanalyzed.

	الم المراد		1 A	.YSIS DATA SHI	FET .	[	EPA SAMPLE, NO.  MW-105RE
Lab Name:	Life Scienc		•	Contract:	·		
Lab Code:	10248	Case No.:		SAS No.:		SDG No.:	0913409
Matrix: (soil/w	ater)	WATER			•	Lab Sample ID:	0913995-005
Sample wt/vol:		10	(g/mi)	ML		Lab File ID:	C11933S
Level:	(low/med)	LOW				Date Received:	8/6/2009
% Moisture: r	not dec.	NA				Date Analyzed	: 8/12/2009
GC Column:	DB-624	ID	0.53	(mm) (	,	Dilution Factor:	1.0
Soil Extract Vo	lume:	NA	(uL)	Soil Aliquot Vo	olume:	NA (uL)	)
					co	NCENTRATION UNITS	:
	CASIN	10.	COMP	OUND		UG/L	Q
	71-43-2					<del>2.7&gt;</del>	
	100-41-4		Ethylbenze	ne		1	U
	108-38-3			)		<b>—</b>	<b>4</b>
	95-47-6		O-Maylores			4	

1 A EPA SAMPLE. NO. VOLATILE ORGANICS ANALYSIS DATA SHEET Life Science Laboratories, Inc. Contract: Lab Name: 0913409 Lab Code: Lab Sample ID: 0913995-006 Matrix: (soil/water) WATER ___ 10 Lab File ID: C11901S Sample wt/vol: (g/ml) ML. Date Received: 8/6/2009 (low/med) LOW Level: Date Analyzed: 8/11/2009 % Moisture: not dec. NA Dilution Factor: 1.0 0.53 GC Column: DB-624 ID (mm) Soil Aliquot Volume: NA (uL) NA (uL) Soil Extract Volume: CONCENTRATION UNITS: CAS NO. COMPOUND UG/L 71-43-2 Benzene

U

Ethylbenzene

m/p-Xylene o-Xylene

100-41-4

108-38-3

95-47-6

		1 A				EPA SAMPLE, NO.
		•	YSIS DATA SHE Contract:	ET	<u> </u>	VIVV-106
10248	Case No.:		SAS No.: _		SDG No.:	0913409
ater)	WATER				Lab Sample ID:	0913995-009
	10	(g/ml)	ML		Lab File ID:	C11904S
(low/med)	LOW				Date Received:	8/6/2009
not dec.	NA	,			Date Analyzed:	8/11/2009
DB-624	. D	0.53	(mm)		Dilution Factor:	1.0
olume:	NA	(uL)	Soil Aliquot Vo	lume:	NA (uL)	
				CC	NCENTRATION UNITS:	
CASIN	10.	COMP	POUND	~~	UG/L	Q
71-43-2	· · · · · · · · · · · · · · · · · · ·	Benzene			1	U
100-41-4	<del></del>	Ethylbenze	ene		1	U
108-38-3		m/p-Xylene	Э		1	U
	Life Science 10248 ater) (low/med) not dec. DB-624 blume: CAS N 71-43-2 100-41-4	Life Science Laborator           10248         Case No.:           ater)         WATER           10           (low/med)         LOW           not dec.         NA           DB-624         ID           olume:         NA           CAS NO.           71-43-2         100-41-4	VOLATILE ORGANICS ANAL Life Science Laboratories, Inc.           10248         Case No.:           ater)         WATER           10         (g/ml)           (low/med)         LOW           not dec.         NA           DB-624         ID         0.53           olume:         NA         (uL)           CAS NO.         COMF           71-43-2         Benzene           100-41-4         Ethylbenze	VOLATILE ORGANICS ANALYSIS DATA SHE           Life Science Laboratories, Inc.         Contract:           10248         Case No.:         SAS No.:           ater)         WATER           10         (g/ml)         ML           (low/med)         LOW           not dec.         NA           DB-624         ID         0.53         (mm)           clume:         NA         (uL)         Soil Aliquot Volume           CAS NO.         COMPOUND           71-43-2         Benzene           100-41-4         Ethylbenzene	VOLATILE ORGANICS ANALYSIS DATA SHEET           Life Science Laboratories, Inc.         Contract:           10248         Case No.:         SAS No.:           ater)         WATER         ML           10         (g/ml)         ML           (low/med)         LOW         ML           not dec.         NA         M           DB-624         ID         0.53         (mm)           olume:         NA         (uL)         Soil Aliquot Volume:           CAS NO.         COMPOUND           71-43-2         Benzene         100-41-4           100-41-4         Ethylbenzene         100-41-4	VOLATILE ORGANICS ANALYSIS DATA SHEET           Life Science Laboratories, Inc.         Contract:           10248         Case No.:         SAS No.:         SDG No.:           ater)         WATER         Lab Sample ID:           10         (g/ml)         ML         Lab File ID:           (low/med)         LOW         Date Received:           not dec.         NA         Date Analyzed:           DB-624         ID         0.53         (mm)         Dilution Factor:           Diume:         NA         (uL)         Soil Aliquot Volume:         NA         (uL)           CAS NO.         COMPOUND         UG/L           71-43-2         Benzene         1           100-41-4         Ethylbenzene         1

VOLATILE ORGANICS ANALYSIS DATA SHEET MW-107 Life Science Laboratories, Inc. Contract: Lab Name: SDG No.: 0913409 10248 SAS No.: Lab Code: Case No.: Lab Sample ID: 0913995-010 Matrix: (soil/water) WATER Lab File ID: C11905S 10 (g/ml) ML. Sample wt/vol: Date Received: 8/6/2009 LOW (low/med) Level: Date Analyzed: 8/11/2009 NA % Moisture: not dec. Dilution Factor: 1.0 0.53 (mm) ID GC Column: DB-624 Soil Aliquot Volume: NA (uL) NA (uL) Soil Extract Volume: CONCENTRATION UNITS: COMPOUND CAS NO. UG/L Benzene 71-43-2 100-41-4 Ethylbenzene 108-38-3 m/p-Xylene o-Xylene 95-47-6

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EPA SAMPLE, NO. 1 A VOLATILE ORGANICS ANALYSIS DATA SHEET MW-112 Life Science Laboratories, Inc. Contract: Lab Name: 0913409 SDG No.: SAS No.: 10248 Case No.: Lab Code: Lab Sample ID: 0913995-011 2X WATER Matrix: (soil/water) C11906S Lab File ID: ML Sample wt/vol: 10 (g/ml) Date Received: 8/6/2009 (low/med) LOW Level: Date Analyzed: 8/11/2009 NA % Moisture: not dec. Dilution Factor: 2.0 0.53 (mm) GC Column: DB-624 ID Soil Aliquot Volume: NA (uL) NA (uL) Soil Extract Volume: CONCENTRATION UNITS: COMPOUND UG/L CAS NO. 6.9 Benzene 71-43-2

m/p-Xylene

o-Xylene

160

2.5

100-41-4

108-38-3

95-47-6

l -6 <b>N</b> lama.	•		-	YSIS DATA SHI Contract:	EET	· · · ·	EPA SAMPLE, NO.  MW-112RE
Lab Name:	Life Scienc	e Laborator	les, iiic.	Contract.			
Lab Code:	10248	Case No.:		SAS No.:		SDG No.:	0913409
Matrix: (soil/w	ater)	WATER	,			Lab Sample ID:	0913995-011 5X
Sample wt/vol:		10	(g/ml)	ML		Lab File ID:	C11934S
Level:	(low/med)	LOW	,			Date Received:	8/6/2009
% Moisture: r	not dec.	NA		,		Date Analyzed:	8/12/2009
GC Column:	DB-624	ID	0.53	(mm) ;		Dilution Factor:	5.0
Soil Extract Vo	lume;	NA	(u <b>L</b> .)	Soil Aliquot Vo	olume:	NA (uL)	į.
					CO	NCENTRATION UNITS:	<u>.</u>
	CASIN	IO.	COMP	OUND	00	UG/L	Q
	71-43-2		Demonstration of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of t			6.0	
	100-41-4		Ethylbenze	ene		300	<b></b>
	108-38-3		mile Mylone	€		170	
	95-47-6		o_Xviene			₩	طله

EPA SAMPLE, NO. 1 A TRIP BLANK **VOLATILE ORGANICS ANALYSIS DATA SHEET** Life Science Laboratories, Inc. Contract: Lab Name: 0913409 SDG No.: SAS No.: 10248 Lab Code: Case No.: Lab Sample ID: 0913995-012 WATER Matrix: (soil/water) Lab File ID: C11907S ML Sample wt/vol: 10 (g/ml) 8/6/2009 Date Received: (low/med) LOW Level: 8/11/2009 Date Analyzed: % Moisture: not dec. NA Dilution Factor: 1.0 ID 0.53 (mm) GC Column: DB-624 Soil Aliquot Volume: NA (uL) NA (uL) Soil Extract Volume: CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	Ų
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xvlene	1	U

#### USEPA - CLP

# 1B - IN

EPA SAMPLE NO.

ILM05.3

Lab Name: LIFE SCIE	Conti				- 1	
	NCE LABORATORIES, INC. Conti	s, INC. Contract:				
_ab Code: 10248	Case No.: NRAS N	No.:	SDG No.	)		
/latrix: (soil/water) <u>V</u>	VATER	Lab Samı	Lab Sample ID: <u>0913995-001</u> Date Received: 08/06/2009			
_evel: _MED		Date Rec				
% Solids:	<u></u>					
	Concentration Units: (mg/L or me	g/Kg dry weight) MG/L				
		Concentration	С	- Q	M	
CAS NO.	Analyte Ammonia as N	0.03	Ü		T w ]	
NH3-N	Bicarbonate Alkalinity as CaCO3	340			w	
	Carbonate Alkalinity as CaCO3	3	U		W	
	Hydroxide Alkalinity as CaCO3	3	U		w	
NO3-N	Nitrate as N	0.1	U		ı	
14808-79-8	Sulfate	62			1	
		W				

....

#### USEPA - CLP

# 1B - IN

EPA SAMPLE NO. ANG MINI 413

% Solids:  Concentration Units: (mg/L or mg/Kg dry weight) MG/L  CAS NO. Analyte Concentration C Q	/2009
Matrix: (soil/water)   WATER	
Level: MED Date Received: 08/06 % Solids:  Concentration Units: (mg/L or mg/Kg dry weight) MG/L  CAS NO. Analyte Concentration C Q	/2009
Level:         MED         Date Received:         08/06           % Solids:	/2009
% Solids:  Concentration Units: (mg/L or mg/Kg dry weight) MG/L  CAS NO. Analyte Concentration C Q	
Concentration Units: (mg/L or mg/Kg dry weight) MG/L  CAS NO. Analyte Concentration C Q	
CAS NO. Analyte Concentration C Q	
CAS NO. Analyte Concentration C Q	
CAS NO.	
	W
NH3-N Ammonia as N 0.03 U	W
Bicarbonate Alkalinity as CaCO3 310	W
Carbonate Alkalinity as CaCO3 3 U	
Hydroxide Alkalinity as CaCO3 3 U	W
NO3-N Nitrate as N 0.1 U	<u> </u>
14808-79-8 Sulfate 52	1

Color Before:	Clarity Before:	Texture:	<del></del>
Color After:	Color After:	Artifacts:	<del></del>
Comments:			
	FOR! OO	ILM:	05.3

### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO. ANG MW-19-0809

							0000	
Name:	LIFE SC	IENCE LABORATORIES, II	NC. Contract	•				
Code:	10248	Case No.:	NRAS No.:		_ sdg	No.:	0913409	
rix: (soi	i/water)	WATER	<u></u>	Lab Sa	mple ID:	0913	995-003	
el:	MED			Date R	eceived:		08/06	5/2009
olids:								
				The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s				
			inits: (mg/L or mg/K	<del></del>		<del></del>	0	M
C.	AS NO.	Concentration U		Concentration	С		Q	M
	AS NO.		yte	<del></del>			Q	W
		Anal Ammoni	yte ia as N	Concentration			Q	W
		Analy Ammoni Bicarbonate Alka	yte ia as N linity as CaCO3	Concentration 0.077			Q	W
		Anal Ammoni Bicarbonate Alka Carbonate Alkali	yte ia as N linity as CaCO3 inity as CaCO3	Concentration   0.077   330	С		Q	W
		Analy Ammoni Bicarbonate Alka	yte ia as N linity as CaCO3 inity as CaCO3 inity as CaCO3	Concentration   0.077   330   3	C		Q	M W W

olor Before:	Clarity Before:		 Texture:	
Color After:	Color After:		 Artifacts: _	
Comments:			 	
	FORM	00		1LM05.3

### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.				
ANG	DUP-0809			

Code:	10248	Case No.: NRAS	No.:		SDG	No.: <u>0913</u>	409
rix: (soll/	water)			Lab San	npie ID:	0913995-0	04
el:	MED	•		Date Re	celved:	08	3/06/2009
iolids:							
CA	S NO.	Concentration Units: (mg/L or n Analyte		centration	С	Q	N
	S NO. H3-N				C U	Q	٧
		Analyte	Con	centration		Q	V
		Analyte Ammonia as N	Con	centration 0.03		Q	٧
		Analyte Ammonia as N Bicarbonate Alkalinity as CaCO3	Con	centration 0.03 330	U	Q	V
N		Analyte Ammonia as N Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3	Con	0.03 330 3	U	q	v v

Color Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:		

### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANG MW-105-

		31.4	OKOMNIC ANALIC	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		0809	
,		IENCE LABORATORIES, INC.			CDC 1		
o Code:	10248	Case No.:	NRAS No.: _		SDG	No.: <u>0913409</u>	
trix: (soil/	/water)	WATER		Lab Sam	ple ID:	0913995-005	
vel:	MED			Date Red	ceived:	08/06	/2009
Solids:							
3011üS.							
,		Concentration Units	s: (mg/L or mg/Kg	dry weight) MG/L Concentration	С	Q	M
CA	\S NO. IH3-N				C U	Q	W
CA		Analyte	s N	Concentration		Q	
CA		Analyte Ammonia as Bicarbonate Alkalinit	s N ty as CaCO3	Concentration 0.03		Q Q	W
CA		Analyte Ammonia as Bicarbonate Alkalinit Carbonate Alkalinity	s N ty as CaCO3 y as CaCO3	Concentration 0.03 320	U	Q	w
CA N		Analyte Ammonia as Bicarbonate Alkalinit	s N ty as CaCO3 y as CaCO3 y as CaCO3	Concentration	U	Q	W W

Color Before:	Clarity Before:	Texture:
Color After:	Color Ailer.	
	FORM 404	ILM05.3

FORM 101

### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.				
ANG	MW-111-			
	0000			

					-	0809	
Lab Name:	LIFE SC	IENCE LABORATORIES,	INC. Contract:		1		
Lab Code:	10248	Case No.:	NRAS No.:	<u></u>	SDG N	o.: <u>0913409</u>	
Matrix: (soi	l/water)	WATER		Lab Sam	pie ID: 0	913995-006	
Level:	MED			Date Rec	elved: _	08/06	/2009
% Solids:							
		Concentration	Units: (mg/L or mg/Kg	dry weight) MG/L			
c	AS NO			dry weight) MG/L Concentration	C		M
	AS NO.	Ana	Units: (mg/L or mg/Kg nlyte nia as N		C U	 Q	M W
	AS NO. NH3-N	Ana Ammor	ılyte nia as N	Concentration		Q	
		Ana Ammor Bicarbonate Alk	ilyte nia as N alinity as CaCO3	Concentration 0.03		Q	w
		Ana Ammor Bicarbonate Alk Carbonate Alka	nlyte nia as N alinity as CaCO3 Ilinity as CaCO3	Concentration 0.03 330	U	Q	W W
		Ana Ammor Bicarbonate Alk Carbonate Alka Hydroxide Alka	ilyte nia as N alinity as CaCO3	Concentration	U U	Q	W W W

Color Before:	Clarity Before: Te	kture:
Color After:	Color After: Artif	acts:
Comments:		

ILM05.3

## 1B - IN

EPA SAMPLE NO.

		INORG	GANIC ANALYS	SIS DATA SHEET	A	NG MW- 0809	106-
Lab Name:	LIFE SCI	ENCE LABORATORIES, INC.	Contract:		-		
Lab Code:	10248	Case No.:	_ NRAS No.: _		SDGN	lo.: <u>0913409</u>	
Matrix: (soil	/water)	WATER		Lab San	nple ID: 🤇	913995-009	
Level:	MED			Date Re	ceived: _	08/06	/2009
% Solids:							
		Concentration Units: (m	g/L or mg/Kg	dry weight) MG/L		····	
C/	AS NO.	Analyte		Concentration	C	Q	M
	1H3-N	Ammonia as N		0.03	U		W
	<u>********************************</u>	Bicarbonate Alkalinity as	CaCO3	340			W
		Carbonate Alkalinity as	CaCO3	3	U		W
		Hydroxide Alkalinity as	CaCO3	3	U		W
N	IO3-N	Nitrate as N		0.1	U		ı
148	308-79-8	Sulfate		48			1
140	00-13-0	Junac	<u>1</u>				3
			•				

Color Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:		
		II 5402.0

### 1B - IN **INORGANIC ANALYSIS DATA SHEET**

EPA SAMPLE NO. ANG MW-107-

					1	0808	,
Name:	LIFE SC	IENCE LABORATORIES, IN			- 606	No. 001240	α.
Code:	10248	Case No.:	NRAS No.:		. SDG	No.: 091340	9
rix: (soil	l/water)	WATER	_	Lab San	nple ID:	0913995-01	0
rel:	MED			Date Re	ceived:	08/0	6/2009
olids:							
		Concentration U	nits: (mg/L or mg/Kg	dry weight) MG/L		<del></del>	
C	AS NO.	Concentration ปร		dry weight) MG/L Concentration	c	Q	M
	AS NO.		te		c	Q	M
	AS NO. NH3-N	Analy Ammonia	te a as N	Concentration	С	Q Q	
		Analy Ammonia Bicarbonate Alkal	te a as N inity as CaCO3	Concentration 0.079	C	Q	W
		Analy Ammonia Bicarbonate Alkal Carbonate Alkalii	ite a as N inity as CaCO3 nity as CaCO3	Concentration 0.079 190		Q	W
1		Analy Ammonia Bicarbonate Alkal	ite a as N inity as CaCO3 nity as CaCO3 nity as CaCO3	Concentration 0.079 190 3	U	Q	W W

Color Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:		
		11 MOS 3

# 1B - IN

EPA SAMPLE NO.

			INORGANIC ANALYS	SIS DATA SHEET	A	NG MW- 0809	112-
.ab Name:	LIFE SC	CIENCE LABORATORIE	· · · · · · · · · · · · · · · · · · ·		0001	0042400	
ab Code:	10248	Case No.:	NRAS No.:			o.: <u>0913409</u>	
latrix: (soi	l/water)	WATER		Lab Sam	iple ID: 🤇	913995-011	
evel:	MED			Date Re	ceived: _	08/06	/2009
Solids:							
oonas.							
		Concentration	n Units: (mg/L or mg/Kg	dry weight) MG/L		<del></del>	
С	AS NO.		nalyte	Concentration	С	Q	М
	NH3-N	Amn	nonia as N	0.03	U		W
	· · · · · · · · · · · · · · · · · · ·	Bicarbonate /	Ikalinity as CaCO3	330			W
-		Carbonate A	kalinity as CaCO3	3	U		W
		Hydroxide A	kalinity as CaCO3	3	U		W
	NO3-N		rate as N	0.1	U		
14	808-79-8		Sulfate	11		ļ	1
	808-79-8		Sulfate	11			<u> </u>

Color Before:	Clarity Before:	Texture:	
Color After:	Color After:	Artifacts:	
Comments:			

# LSL 5000 Brittenfield Parkway, Suite 200

**Analytical Results** 

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155 0908021-001A

CLIENT: Project:

Life Science Laboratories, Inc.

ILT090806CL

0908021

W Order: Matrix:

WATER

GCOS 17E Inst. ID:

ColumnID: Alumina

08/13/09 14:46

Sample Size: 32 mL %Moisture:

TestCode: 8015W RSK175 FileID:

Date Received:

PrepDate:

Collection Date:

Lab ID:

BatchNo:

08/12/09 11:25 9856/R18098

08/05/09 16:00

08/07/09 14:52

Client Sample ID: 0913995-001C,D

1-SAMP-E:\Osiaug09\E081205.r

Revision: Col Type:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175M	(RSK 175)
Methane	0.0050	0.0020	0.0014	mg/L	1	08/12/09 13:56

Qualifiers:

Value exceeds Maximum Contaminant Level

E Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

Spike Recovery outside accepted recovery limits

: Anthony Crescenzi

### Life Science Laboratories, Inc.

**Analytical Results** 

SL 5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT: Life Science Laboratories, Inc.

Project: ILT090806CL

W Order: 0908021 WATER Matrix:

Inst. ID: GCOS 17E ColumnID: Alumina

08/13/09 14:46 Revision:

Sample Size: 32 mL

%Moisture:

TestCode: 8015W RSK175 FileID:

0908021-002A

Client Sample ID: 0913995-002C,D

**Collection Date:** 08/05/09 17:05 08/07/09 14:52 Date Received:

08/12/09 11:25 9856/R18098

1-SAMP-E:\Osiaug09\E081206.r

Col Type:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175	W (RSK 175)
Methane	0.020	0.0020	0.0014	mg/L	1	08/12/09 14:12

Lab ID:

PrepDate:

BatchNo:

- Value exceeds Maximum Contaminant Level
- B Value exceeds the instrument calibration range
- Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
  - S Spike Recovery outside accepted recovery limits

Project:

# Life Science Laboratories, Inc. 5000 Brittonfield Parkway, Suite 200

**Analytical Results** 

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

Life Science Laboratories, Inc.

ILT090806CL

W Order: 0908021 Matrix: WATER

GCOS 17E Inst. ID: ColumnID: Alumina

Revision: 08/13/09 14:46

Sample Size: 31 mL

%Moisture:

TestCode: 8015W RSK175 FileID:

0908021-003A

Client Sample ID: 0913995-003C,D Collection Date: 08/05/09 14:15

> 08/07/09 14:52 08/12/09 11:25 9856/R18098

1-SAMP-E:\Osiaug09\E081208.r

Col Type:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175M	(RSK 175)
Methane	0.98	0.10	0.072	mg/L	50	08/12/09 14:34

Lab ID:

Date Received:

PrepDate:

BatchNo:

- Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
  - S Spike Recovery outside accepted recovery limits

12

Print Date: 08/13/09 14:46

465757

Project S

538

Anthony Crescenzi

### Life Science Laboratories, Inc. 5000 Brittonfield Parkway, Suite 200

**Analytical Results** 

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT: Life Science Laboratories, Inc.

ILT090806CL

W Order: 0908021 Matrix: WATER

Inst. ID: GCOS 17E

ColumnID: Alumina

08/13/09 14:46 Revision:

Sample Size: 31 mL

%Moisture:

BatchNo: TestCode: 8015W RSK175 FileID:

Collection Date:

Date Received:

PrepDate:

0908021-004A

Lab ID: Client Sample 1D: 0913995-004C,D

08/05/09 0:00

08/07/09 14:52 08/12/09 11:25 9856/R18098

1-SAMP-E:\Osiaug09\E081210.r

Col Type:

Project:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed	
DISSOLVED GASES BY GC/FID				8015M/		VI (RSK 175)	
Methane	1.2	0.10	0.072	mg/L	50	08/12/09 14:58	

Qualifiers:

- Value exceeds Maximum Contaminant Level
- Value exceeds the instrument calibration range
- Analyte detected below the PQL
- P Prim,/Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

13

### Life Science Laboratories, Inc.

**Analytical Results** 

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

Life Science Laboratories, Inc.

0908021 W Order: Matrix:

WATER GCOS 17E Inst. ID:

ColumnID: Alumina

08/13/09 14:46 Revision:

1LT090806CL

Sample Size: 32 mL

%Moisture:

Date Received: PrepDate:

BatchNo: TestCode: 8015W RSK175 FileID:

Lab ID:

Collection Date:

0908021-005A Client Sample ID: 0913995-005C,D

08/05/09 14:15

08/07/09 14:52 08/12/09 11:25

9856/R18098

1-SAMP-E:\Osiaug09\E081213.r

Col	Type:

Project:

Analyte	Result Qu	al PQL	MDL	Units ,	DF	Date Analyzed
DISSOLVED GASES BY GC/FID		· · · · · · · · · · · · · · · · · ·		8015M/		M (RSK 175)
Methane	1.5	0.10	0.070	mg/L	50	08/12/09 15:30

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim/Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

### Life Science Laboratories, Inc. LSL 5000 Brittonfield Parkway, Suite 200

**Analytical Results** 

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155 0908021-006A

Life Science Laboratories, Inc.

Project:

ILT090806CL

W Order:

0908021

Matrix:

WATER

Inst. ID:

Analyte.

GCOS 17E

ColumnID: Alumina

08/13/09 14:46

%Moisture:

Sample Size: 31 mL

TestCode: 8015W RSK175 FileID:

Collection Date:

Date Received: PrepDate:

BatchNo:

MDL

Lab ID:

08/12/09 11:25 9856/R18098

08/05/09 10:45

08/07/09 14:52

1-SAMP-E:\Osiaug09\E081214.r

Revision:

Col Type:

Result Qual PQL

8015M/RSK175M (RSK 175)

Units

Client Sample ID: 0913995-006C,D

DF

Date Analyzed

**DISSOLVED GASES BY GC/FID** 

08/12/09 15:40 mg/L Methane 0.051 0.0021 0.0014

Qualifiers:

- Value exceeds Maximum Contaminant Level
- Value exceeds the instrument calibration range
- Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
  - S Spike Recovery outside accepted recovery limits

15

Print Date: 08/13/09 14:46

465761

Project S

: Anthony Crescenzi

### Life Science Laboratories, Inc.

**Analytical Results** 

LSL 5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT:

Life Science Laboratories, Inc.

ILT090806CL

Project: W Order:

0908021

Matrix:

WATER GCOS 17E

Inst. ID:

ColumnID: Alumina

08/13/09 14:46

Sample Size: 31 mL %Moisture:

TestCode: 8015W RSK175 FileID:

Lab ID:

0908021-007A

Client Sample ID: 0913995-007C,D Collection Date:

08/05/09 10:45 08/07/09 14:52

Date Received: PrepDate:

BatchNo:

08/12/09 11:25 9856/R18098

1-SAMP-E:\Osiaug09\E081215.r

Revision: Col Type:

71	<del></del>					
Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175M	(RSK 175)
Methane	0.054	0.0021	0.0014	mg/L	1	08/12/09 16:43

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

16

# LSL

Project:

### Life Science Laboratories, Inc.

**Analytical Results** 

LSL 5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT: Life Science Laboratories, Inc.

ILT090806CL

W Order: 0908021

Matrix: WATER Inst. ID: GCOS 17E

ColumnID: Alumina

Revision: 08/13/09 14:46

Lab ID:

0908021-008A

Client Sample ID: 0913995-008C,D

Collection Date: Date Received:

08/05/09 10:45 08/07/09 14:52 08/12/09 11:25

PrepDate: BatchNo:

9856/R18098

Col Type: 08/13/09 14:46

%Moisture: TestCode:

Sample Size; 31 mL

8015W RSK175 FileID:

1-SAMP-E:\Osiaug09\E081216.r

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175M	(RSK 175)
Methane	0.042	0.0021	0.0014	mg/L	1	08/12/09 16:56

Qualifiers:

Value exceeds Maximum Contaminant Level

E Value exceeds the instrument calibration range

J Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

17

# LSL 5000 Brittonfield Parkway, Suite 200

**Analytical Results** 

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT: Life Science Laboratories, Inc. Project:

ILT090806CL

W Order: 0908021 Matrix: WATER

GCOS 17E Inst. ID:

ColumnID: Alumina Revision:

08/13/09 14:46

Sample Size: 31 mL

%Moisture:

TestCode: 8015W RSK175 FileID:

0908021-009A Lab ID:

Client Sample ID: 0913995-009C,D Collection Date: 08/05/09 17:00

PrepDate:

BatchNo:

Date Received: 08/07/09 14:52 08/12/09 11:25

> 9856/R18098 1-SAMP-E:\Osiaug09\E081217.r

Col Type:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175	VI (RSK 175)
Methane	0.028	0.0021	0.0014	mg/L	1	08/12/09 17:08

Value exceeds Maximum Contaminant Level Qualifiers:

Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

### Life Science Laboratories, Inc.

**Analytical Results** 

LSL 5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Sample Size: 32 mL

StateCertNo: 10155

CLIENT: Project:

Life Science Laboratories, Inc.

ILT090806CL

W Order:

0908021

Matrix:

WATER

Inst. ID:

GCOS 17E

ColumnID: Alumina

08/13/09 14:46

%Moisture:

TestCode: 8015W RSK175 FileID:

Lab ID:

PrepDate:

BatchNo:

0908021-010A

Client Sample ID: 0913995-010C,D

Collection Date:

08/05/09 0:00 08/07/09 14:52

Date Received:

08/12/09 11:25

9856/R18098 1-SAMP-E:\Osiaug09\E081218.r

Revision: Col Type:

Сог 1 уро.						
Analyte	Result Qu	ial PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175M	(RSK 175)
Methane	0.033	0.0020	0.0014	mg/L	1	08/12/09 17:19

- Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
  - S Spike Recovery outside accepted recovery limits

19

### Life Science Laboratories, Inc. LSL 5000 Brittonfield Parkway, Suite 200

**Analytical Results** 

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT: Life Science Laboratories, Inc.

ILT090806CL Project:

W Order: 0908021 Matrix: WATER

GCOS 17E Inst. ID:

ColumnID: Alumina 08/13/09 14:46 Revision:

Sample Size: 31 mL

%Moisture:

TestCode: 8015W RSK175 FileID:

0908021-011A

Client Sample ID: 0913995-011C,D

Collection Date: 08/05/09 10:35 08/07/09 14:52 Date Received:

Lab ID:

PrepDate:

BatchNo:

08/12/09 11:25 9856/R18098

1-SAMP-E:\Osiaug09\E081219.r

Col Type:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175	M (RSK 175)
Methane	1.6	0.10	0.072	mg/L	50	08/12/09 17:35

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

20

### Life Science Laboratories, Inc. LSL 5000 Brittonfield Parkway, Suite 200

**Analytical Results** 

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

Life Science Laboratories, Inc.

Lab ID:

0908021-012A

Project: ILT090806CL Client Sample ID: 0913995-012C,D

W Order: 0908021 Matrix: WATER Collection Date: Date Received:

08/05/09 10:35 08/07/09 14:52

GCOS 17E Inst. ID:

Sample Size: 32 mL %Moisture:

PrepDate: BatchNo:

08/12/09 11:25 9856/R18098

ColumnID: Alumina Revision: 08/13/09 14:46

TestCode: 8015W RSK175 FileID:

1-SAMP-E:\Osiaug09\E081220.r

Col Type:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK1751	M (RSK 175)
Methane	0.0025	0.0020	0.0014	mg/L	1	08/12/09 17:49

Qualifiers:

Value exceeds Maximum Contaminant Level

E Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

Print Date: 08/13/09 14:46

465767

Project!

547 : Anthony Crescenzi

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-GP-Dupe

LSL Sample ID:

0913409-001

Location:

Sampled:

07/29/09 0:00

Sampled By: RS/DM

Sample Matrix: QC, NPW

Analytical Method Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(I) EPA 8260 BTEX					
Венгене	<1	ug/l		8/5/09	BD
Ethyl benzene	</td <td>ug/]</td> <td></td> <td>8/5/09</td> <td>BD</td>	ug/]		8/5/09	BD
Xylenes (Total)	<2	aã\]		8/5/09	BD
Surrogate (1,2-DCA-d4)	113	%R		8/5/09	BD
Surrogate (Tol-d8)	94	%R		8/5/09	BD
Surrogate (4-BFB)	119	%R		8/5/09	BD

, (4) LSL Southern Tier, (5) LSL MidLakes, (6) LSL Brittonfield

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-GP-142

LSL Sample ID:

0913409-002

Location:

Sampled:

07/29/09 12:00

Sampled By: RS/DM

Analytical Method	The case like	Y7_24_	Prep Date	Analysis Date & Time	Analyst
Analyte	Result	Units	Date	Date & Time	Initials
(1) EPA 8260 BTEX		,			
Benzenc	<1	ug/l		8/5/09	BD
Ethyl benzene	<1	ug/l		8/5/09	BD
Xylenes (Total)	<2	u <b>g/</b> 1		8/5/09	BD
Surrogate (1,2-DCA-d4)	102	%R		8/5/09	BD
Surrogate (Tol-d8)	102	%R		8/5/09	BD
Surrogate (4-BFB)	108	%R		8/5/09	BD

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-GP-143

LSL Sample ID:

0913409-003

Location:

Sampled:

07/29/09 13:10

Sampled By: RS/DM

Analytical Method Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(I) EPA 8260 BTEX			······		
Benzene	<1	ug/l		8/5/09	8D
Ethyl benzene	<1	ug/I		8/5/09	BD
Xylenes (Total)	<2	ug/i		8/5/09	BD
Surrogate (1,2-DCA-d4)	105	%R		8/5/09	ВD
Surrogate (Tol-d8)	101	%R ·		8/5/09	BD
Surrogate (4-BFB)	109	%R		8/5/09	BD

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-GP-144

LSL Sample ID:

0913409-006

Location:

Sampled:

07/29/09 14:40

Sampled By: RS/DM

Sample Matrix: NPW

Analytical Method Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(7) EPA 8260 BTEX					
Benzene	<1	ug/l		8/5/09	gp
Ethyl benzene	<1	ug/I		8/5/09	BD
Xylenes (Total)	<2	ug/l		8/5/09	BD
Surrogate (1,2-DCA-d4)	104	%R		8/5/09	BD
Surrogate (Tol-d8)	101	%R		8/5/09	BD
Surrogate (4-BFB)	110	%R	•	8/5/09	BD

s, (4) LSL Southern Tier, (5) LSL MidLakes, (6) LSL Brittonfield

LSL Sample ID:

ERM, Inc. - DeWitt

Dewitt, NY

0913409-007

Sample ID: Location:

Sampled:

07/29/09 15:45

ANG-GP-145

Sampled By: RS/DM

Analytical Method Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 8260 BTEX					
Benzene	ব	ug/i		8/5/09	BD
Ethyl benzene	<1	ug/l		8/5/09	BD
Xylenes (Total)	<2	ug/l		8/5/09	BD
Surrogate (1,2-DCA-d4)	104	%R		8/5/09	BD
Surrogate (Tol-d8)	102	%R		8/5/09	BD
Surrogate (4-BFB)	111	%R		8/5/09	BD

ERM, Inc. - DeWitt

Dewitt, NY

Sample ID:

ANG-GP-146

LSL Sample ID:

0913409-008

Location:

Sampled:

07/30/09 9:00

Sampled By: RS/DM

Analytical Method Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(I) EPA 8260 BTEX					
Benzene	<1	цg/l		8/5/09	BD
Ethyl benzene	< {	ug/l		8/5/09	BD
Xylenes (Total)	<2	ug/l		8/5/09	BD
Surrogate (1,2-DCA-d4)	110	%R		8/5/09	BD
Surrogate (Tol-d8)	99	%R		8/5/09	ВÐ
Surrogate (4-BFB)	113	%R		8/5/09	RD

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-Trip Blank

LSL Sample ID:

0913409-009

Location:

Sampled:

07/30/09 0:00

Sampled By:

Sample Matrix: TB

Analytical Method Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 8260 BTEX					
Benzene	<1	ug/l		8/5/09	BD
Ethyl benzene	<1	ug/l		8/5/09	BD
Xylenes (Total)	<2	ug/l		8/5/09	BD
Surrogate (1,2-BCA-d4)	105	%R		8/5/09	BD
Surrogate (Tol-d8)	100	%R		8/5/09	BD
Surrogate (4-BFB)	115	%R		8/5/09	BD

s, (4) LSL Southern Tier, (5) LSL MidLakes, (6) LSL Brittonfield

ERM, Inc. - DeWitt

Dewitt, NY

Sample ID:

ANG MW-114-0809

LSL Sample ID:

0913995-001

Location:

Sampled:

08/05/09 16:00 .

Sampled By: Client

Ar	alytical Method Analyte	Result	Units	Prep Date	Analys Date & T		Analyst Initials
(6)	Dissolved Gases				0/10/00	12.56	
	Methane	0,0050	mg/L		8/12/09	13:56	
(1)	EPA 200.7 Total Hardness as CaCO3					•	
	Hardness, Total	520	mg/l	8/11/09	8/19/09		DP
<i>(1)</i>	EPA 350.1, Rev 2.0 Ammonia						
	Ammonia as N	<0.03	mg/l		8/18/09		DRB
<i>(1)</i>	EPA 8260 BTEX						
	Benzene	<1	ug/i		8/11/09		CRT
	Ethyl benzene	<1	ug/l		8/11/09		CRT
	Xylenes (Total)	<2	ug/l		8/11/09		CRT
	Surrogate (1,2-DCA-d4)	101	%R		8/11/09		CRT
	Surrogate (Tol-d8)	106	%R		8/11/09		CRT
	Surrogate (4-BFB)	103	%R		8/11/09		CRT
(Ï)	EPA Method 300.0 A		tood to	,		•	
	Nitrate as N	<0.1	mg/l		8/7/09	12:39	RAF
	Sulfate	62	mg/l		8/7/09	12:39	RAF
(1)	SM 18 2320B, Alkalinity as CaCO3						
	Bicarbonate Alkalinity as CaCO3	340	mg/l		8/11/09		TER
	Carbonate Atkalinity as CaCO3	<3	mg/l		8/11/09		TER
	Hydroxide Alkalinity as CaCO3	<3	mg/1		8/11/09		TER
	-						

Dewitt, NY

ERM, Inc. - DeWitt

Sample ID:

ANG MW-113-0809

LSL Sample ID:

0913995-002

Location:

Sampled:

08/05/09 17:05

Sampled By: Client

Sample Matrix: NPW

Analytical Method Analyte		Result	Result Units		Prep Date	Analysis Date & Time		Analyst Initials
(6)	Dissolved Gases Methane	0.020	mg/L		47	8/12/09	14:12	
(1)	EPA 200.7 Total Hardness as CaCO3  Hardness, Total  The Calcium value used in the hardness cale	390 culation was slightly	mg/l higher ti	<b>J</b> hen the instru	8/11/09 ments linear range	8/19/09		DP
<i>(1)</i>	EPA 350.1, Rev 2.0 Ammonia Ammonia as N	<0.03	mg/l			8/18/09		DRB
(1)	EPA 8260 BTEX  Benzene Ethyl benzene Xylenes (Total) Surrogate (1,2-DCA-d4)	<1 <1 <2 104 104	ug/l ug/l ug/l %R %R			8/11/09 8/11/09 8/11/09 8/11/09		CRT CRT CRT CRT CRT
	Surrogate (Tol-d8) Surrogate (4-BFB)	100	%R			8/11/09	,	CRT
<i>(1)</i>	EPA Method 300.0 A  Nitrate as N  Sulfate	<0.1 52	mg/l mg/l			8/7/09 8/7/09	12:56 12:56	RAF RAF
(1)	SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Hydroxide Alkalinity as CaCO3	310 <3 <3	mg/l mg/l mg/l			8/11/09 8/11/09 8/11/09		TER TER TER

Date Printed:

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG MW-19-0809

LSL Sample ID:

0913995-003

Location:

Sampled:

08/05/09 14:15

Sampled By: Client

Analytical Method		70 74	YY *4	Prep	Analysis Date & Time		Analyst
	Analyte	Result	Units	Date	Date & I	ше	Initials
(6)	Dissolved Gases						
	Methane	0.98	mg/L		8/12/09	14:34	
(1)	EPA 200.7 Total Hardness as CaCO3						
	Hardness, Total	560	mg/l	8/11/09	8/19/09		DP
(1)	EPA 350.1, Rev 2.0 Ammonia						
	Ammonia as N	0.077	mg/l		8/18/09		DRB
(1)	EPA 8260 BTEX						
	Benzene	6.0	ug/l		8/11/09		CRT
	Ethyl benzene	410	ug/l		8/12/09		CRT
	Xylenes (Total)	760	ug/l		8/12/09		CRT
	Surrogate (1,2-DCA-d4)	103	%R		8/11/09		CRT
	Surrogate (Tol-d8)	103	%R		8/11/09		CRT
	Surrogate (4-BFB)	101	%R		8/11/09		CRT
(I)	EPA Method 300.0 A	•	•				
	Nitrate as N	< 0.1	mg/l		8/7/09	11:46	RAF
	Sulfate	6.7	mg/l		8/7/09	11:46	RAF
(1)	SM 18 2320B, Alkalinity as CaCO3						
	Bicarbonate Alkalinity as CaCO3	330	mg/l		8/11/09		TER
	Carbonate Alkalinity as CaCO3	<3	mg/l		8/11/09		TER
	Hydroxide Alkalinity as CaCO3	<3	mg/l		8/11/09		TER

ERM, Inc. - DeWitt Dew

Dewitt, NY

Sample ID:

ANG DUP-0809

LSL Sample ID:

0913995-004

Location:

Sampled:

08/05/09 0:00

Sampled By: Client

Sample Matrix: QC, NPW

		Prep	Analysis		Analyst
Result Units		Date	Date & Time		Initials
1.2	mg/L		8/12/09	14:58	
520	mg/l	8/11/09	8/19/09		DP
< 0.03	mg/ <b>i</b>		8/18/09		DRB
			•		
6.5	ug/i		8/11/09		CRT
300	ug/l		8/12/09		CRT
170	ug/l		8/11/09		CRT
116	%R		8/11/09		CRT
105	%R		8/11/09		CRT
95	%R		8/11/09		CRT
<0.1	mg/l		8/7/09	12:04	RAF
10	mg/l		8/7/09	12:04	RAF
			•		
330	mg/l		8/11/09		TER
<3	mg/l		8/11/09		TER
<3	mg/l		8/11/09		TER
	520 <0.03 6.5 300 170 116 105 95 <0.1 10 330 <3	1.2 mg/L 520 mg/l <0.03 mg/l 6.5 ug/l 300 ug/l 170 ug/l 116 %R 105 %R 95 %R <0.1 mg/l 10 mg/l 330 mg/l <3 mg/l	Result Units   Date	Result         Units         Date         Date & T           1.2         mg/L         8/12/09           520         mg/l         8/11/09         8/19/09           <0.03	Result         Units         Date         Date & Time           1.2         mg/L         8/12/09         14:58           520         mg/l         8/11/09         8/19/09           <0.03

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG MW-105-0809

LSL Sample ID:

0913995-005

Location:

Sampled:

08/05/09 14:15

Sampled By: Client

Analytical Method Analyte			Prep Date	Analysis Date & Time		Analyst Initials
6 Dissolved Gases	Result	Ontis	Date	Date & Time		Miliais
Methaue	1.5	mg/L		8/12/09	15:30	
7) EPA 200.7 Total Hardness as CaCO3						
Harduess, Total	370	mg/l	8/11/09	8/19/09		DP
7) EPA 350.1, Rev 2.0 Ammonia						
Ammonia as N	< 0.03	mg/l		8/18/09		DRB
7) EPA 8260 BTEX						
Benzene	3.3	ug/i		8/11/09		CRT
Ethyl benzene	<l< td=""><td>ug/l</td><td></td><td>8/12/09</td><td></td><td>CRT</td></l<>	ug/l		8/12/09		CRT
Xylenes (Total)	<2	ug/l		8/11/09		CRT
Surrogate (1,2-DCA-d4)	111	%R		8/11/09		CRT
Surrogate (Tol-d8)	103	%R		8/11/09		CRT
Surrogate (4-BFB)	96	%R		8/11/09		CRT
(1) EPA Method 300.0 A						
Nitrate as N	<0.1	mg/l		8/7/09	12:21	RAF
Sulfate	25	mg/l		8/7/09	12:21	RAF
(1) SM 18 2320B, Alkalinity as CaCO3						
Bicarbonate Alkalinity as CaCO3	320	mg/l		8/11/09		TER
Carbonate Alkalinity as CaCO3	<3	mg/l		8/11/09		TER
Hydroxide Alkalinity as CaCO3	<3	mg/l		8/11/09		TER

ERM, Inc. - DeWitt

Dewitt, NY

Sample ID:

ANG MW-111-0809

LSL Sample ID:

0913995-006

Location:

Sampled:

08/05/09 10:45

Sampled By: Client

Analytical Method					Analysis		Analyst
	Analyte	Result	Result Units		Date & Time		Initials
(6)	Dissolved Gases Methane	0.051	mg/L		8/12/09	15:40	
(1)	EPA 200.7 Total Hardness as CaCO3 Hardness, Total	600	mg/l	8/11/09	8/19/09		DÞ
(1)	EPA 350.1, Rev 2.0 Ammonia Ammonia as N	<0.03	mg/l		8/18/09		DRB
(1)	EPA 8260 BTEX  Benzene Ethyl benzene Xylenes (Total) Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB)	<1 <1 <2 112 103 98	ug/I ug/I ug/I %R %R %R	,	8/11/09 8/11/09 8/11/09 8/11/09 8/11/09		CRT CRT CRT CRT CRT CRT
(I)	EPA Method 300.0 A Nitrate as N Sulfate	<0.1 48	mg/l mg/l		8/7/09 8/7/09	10:36 10:36	RAF RAF
(1)	SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Hydroxide Alkalinity as CaCO3	330 <3 <3	mg/i mg/i mg/i		8/11/09 8/11/09 8/11/09		TER TER TER

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG MW-106-0809

LSL Sample ID:

0913995-009

Location:

Sampled:

08/05/09 17:00

Sampled By: Client

Sample Matrix: NPW

Result Units		Prep Date	Analysis Date & Time		Analyst Initials
0.028	mg/L		8/12/09	17:08	
		·			
550	mg/l	8/11/09	8/19/09		DP
< 0.03	mg/l		8/18/09		DRB
<1	ug/l		8/11/09		CRT
<1	ug/l		8/11/09		CRT
<2	ug/l		8/11/09		CRT
111	%R		8/11/09		CRT
104	%R		8/11/09		CRT
98	%R		8/11/09		CRT
					•
<0.1	mg/l		8/7/09	14:07	RAF
48	mg/l		8/7/09	14:07	RAF
340	mg/l		8/11/09		TER
<3	mg/l		8/11/09		TER
<3	mg/l		8/11/09		TER
	550 <0.03 <1 <1 <2 111 104 98 <0.1 48 340 <3	0.028 mg/L  550 mg/l  <0.03 mg/l  <1 ug/l <1 ug/l <2 ug/l 111 %R 104 %R 98 %R  <0.1 mg/l 48 mg/l  340 mg/l <3 mg/l	Result Units   Date	Result         Units         Date         Date & T           0.028         mg/L         8/12/09           550         mg/l         8/11/09         8/19/09           <0.03	Result         Units         Date         Date & Time           0.028         mg/L         8/12/09         17:08           550         mg/l         8/11/09         8/19/09           <0.03

ERM, Inc. - DeWitt

Dewitt, NY

Sample ID:

ANG MW-107-0809

LSL Sample ID:

0913995-010

Location:

Sampled:

08/05/09 0:00

Sampled By: Client

Analytical Method Analyte		Result	Result Units		Analysis Date & Time		Analyst Initials
(6)	Dissolved Gases Methane	0.033	mg/L		8/12/09	17:19	
(1)	EPA 200.7 Total Hardness as CaCO3  Hardness, Total	510	mg/l	8/11/09	8/19/09		DP
(I)	EPA 350.1, Rev 2.0 Ammonia Ammonia as N	0.079	mg/l		8/18/09		DRB
(1)	EPA 8260 BTEX  Benzene Ethyl benzene  Xylenes (Total) Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB)	<1 <1 <2 117 103 100	ug/I ug/I ug/I %R %R %R		8/11/09 8/11/09 8/11/09 8/11/09 8/11/09		CRT CRT CRT CRT CRT CRT
(I)	EPA Method 300.0 A Nitrate as N Sulfate	0.41 45	mg/l mg/l		8/7/09 8/7/09	14:24 14:24	RAF RAF
(1)	SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Hydroxide Alkalinity as CaCO3	190 <3 <3	mg/i mg/i mg/l		8/11/09 8/11/09 8/11/09		TER TER TER

ERM, Inc. - DeWitt De

Dewitt, NY

Sample ID:

ANG MW-112-0809

LSL Sample ID:

0913995-011

Location:

Sampled:

08/05/09 10:35

Sampled By: Client

Analytical Method			Y2 . 14 YY-14-		Analysis Date & Time		Analyst Initials
	Analyte	Result	Units	Date	Date & Time		Intrats
(6)	Dissolved Gases Methane	1.6	mg/L		8/12/09	17:35	
(1)	EPA 200.7 Total Hardness as CaCO3 Hardness, Total	530	mg/i	8/11/09	8/19/09		DP
(1)	EPA 350.1, Rev 2.0 Ammonia Ammonia as N	<0.03	mg/l		8/18/09		DRB
<i>(1)</i>	EPA 8260 BTEX  Benzene Ethyl benzene Xylenes (Total) Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB)	6.9 300 170 116 103 102	ug/l ug/l ug/l %R %R %R		8/11/09 8/12/09 8/11/09 8/11/09 8/11/09		CRT CRT CRT CRT CRT CRT
(1)	EPA Method 300.0 A  Nitrate as N  Sulfate	<0.1 11	mg/l mg/l		8/7/09 8/7/09	11:28 11:28	RAF RAF
<i>(1)</i>	SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Hydroxide Alkalinity as CaCO3	330 <3 <3	mg/l mg/l mg/l		8/11/09 8/11/09 8/11/09		TER TER TER

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG TB-0809

LSL Sample ID:

0913995-012

Location:

Sampled:

08/05/09 0:00

Sampled By:

Sample Matrix: TB

Analytical Method Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 8260 BTEX					
Benzene	<1	ug/l		8/11/09	CRT
Ethyl beuzene	<1	ug/l		8/11/09	CRT
Xylenes (Total)	<2	ug/l		8/11/09	CRT
Surrogate (1,2-DCA-d4)	108	%R		8/11/09	CRT
Surrogate (Tol-d8)	105	%R		8/11/09	CRT
Surrogate (4-BFB)	103	%R		8/11/09	CRT

# DATA USABILITY SUMMARY REPORT (DUSR) ANG-HANCOCK FACILITY SYRACUSE, NEW YORK GROUND WATER SAMPLE ANALYSES ENVIRONMENTAL RESOURCES MANAGEMENT (ERM) PROJECT NUMBER 0086335 LIFE SCIENCE LABORATORIES, INC. SAMPLE DELIVERY GROUP (SDG) NUMBER 0918965

Environmental Resources Management

5788 Widewaters Parkway Dewitt, NY 13214 (315) 445-2554 (315) 445-2543 (fax)



### Deliverables:

The above referenced data package for thirty-one (31) ground water samples, two (2) blind field duplicate samples, two (2) trip blanks, two (2) equipment blanks, and three (3) sets of matrix spike/matrix spike duplicate (MS/MSD) samples contains all required deliverables as stipulated under the 2005 New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) for Category B deliverables.

The sample specific analyses included Benzene, Ethylbenzene and Xylene (BEX) analyzed by United States Environmental Protection Agency (USEPA) SW-846 Method 8260B and Methane analyzed by USEPA SW-846 Method 8015 in accordance with "Test Methods for Evaluating Solid Wastes, SW-846 Third Edition, Final Update III, December 1996". The samples were also analyzed for Total Hardness by calculation/metals by USEPA SW-846 Method 200.7 in accordance with "40 CFR 136, Category A and B Parameters in Water and Wastewater". In addition, the samples were analyzed for Nitrate and Sulfate by USEPA Method 300.0; Alkalinity by SM 18 2320B; and Ammonia by USEPA Method 350.2.

The data have been validated according to the protocols and quality control (QC) requirements of the ASP; the National Functional Guidelines for Organic Data Review (October 1999); the National Functional Guidelines for Inorganic Data Review (July 2002); the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-24, Revision 2, October 2006: Validating Volatile Organic Compounds by SW-846 Method 8260B; and the reviewer's professional judgment.

The validation report pertains to the following ground water samples collected from 6 October to 12 October 2009:

<u>Samples</u>	QC Samples	SDG *
ANG-RW-1-10/09	ANG-TB-01-10/09	0918965
ANG-MW-11-10/09	ANG-TB-2-10/09	
ANG-MW-13-10/09	ANG-EB-01-10/09	
ANG-MW-14-10/09	ANG-EB-02-10/09	
ANG-MW-15-10/09	ANG-MW-15-10/09 MS/MSD	
ANG-MW-16-10/09		
ANG-MW-17-10/09		
ANG-MW-18-10/09		
ANG-MW-19-10/09	ANG-DUPE-2-10/09 - Blind Field Duplicate of ANG-MW-19-10/09	
ANG-MW-20-10/09		
ANG-MW-22-10/09		
ANG-MW-101-10/09		
ANG-MW-102-10/09		
ANG-MW-103-10/09		
ANG-MW-104-10/09		
ANG-MW-105-10/09		
ANG-MW-106-10/09		
ANG-MW-107-10/09		
ANG-MW-108-10/09		
ANG-MW-109-10/09		
ANG-MW-110-10/09		
ANG-MW-111-10/09		
ANG-MW-112-10/09	ANG-DUPE-01-10/09 - Blind Field Duplicate of ANG-MW-112-10/09	
ANG-MW-113-10/09		
ANG-MW-114-10/09	ANG-MW-114-10/09 MS/MSD	
ANG-MW-2-10/09		0918960
ANG-MW-3-10/09		
ANG-MW-4-10/09		
ANG-MW-5-10/09		
ANG-MW-8-10/09		
ANG-MW-9-10/09		

^{*} Note that lab generated SDGs each day upon receipt of samples, and later combined these SDGs into one report (SDG 0918965).

## Organics

The following items/criteria were reviewed for this report:

- Case narrative and deliverables compliance
- Holding times and sample preservation (including pH and

- temperature)
- Surrogate Compound recoveries, summary and data
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) results, recoveries, summary and data
- · Laboratory Check Sample (LCS), recoveries, summary and data
- Method blank summary and data
- Gas Chromatography (GC)/Mass Spectroscopy (MS) tuning and performance
- Initial and continuing calibration summaries and data
- Internal standard areas, retention times, summary and data
- Trip Blank sample results
- Blind Field Duplicate sample results
- Organic analysis data sheets (Form I)
- GC/MS and GC chromatograms, mass spectra and quantitation reports
- Quantitation/detection limits
- Qualitative and quantitative compound identification

The items listed above were technically and contractually in compliance with SW-846 protocols with the exceptions discussed in the text below. The data have been validated according to the procedures outlined above and qualified accordingly.

### **Volatiles**

- Numerous samples were run at dilutions due to high levels of target and/or non-target compounds, causing elevated reporting limits. The laboratory has reported the final result only on the Form I. No qualification of the sample data is required; however, the data user should be aware of the elevated detection limits.
- The Ethylbenzene result for sample MW-2-10/09 was qualified with an "E" value by the laboratory (sample result is 200 ug/L), and this sample was not rerun by the laboratory. Since the upper limit for Ethylbenzene is 200 ug/L, it appears that a software error cause the sample to be incorrectly flagged. Therefore, the "E" qualifier has been removed from the sample. No qualification of the sample data is required.
- Sample ANG-MW-11-10/09 was rerun at a 2x dilution due to high levels of non-target compounds. The rerun sample is denoted by the laboratory as ANG-MW-11RE. For this sample,

the results from the rerun should be used.

- Sample ANG-DUPE-2-10/09 was rerun at a 10x dilution due to high levels of target compounds. The rerun sample is denoted by the laboratory as ANG-DUPE-2RE. For this sample, all values should be used from the original analysis except those compounds which were above the linear range of the instrument in the original analysis (i.e., flagged with an "E").
- The surrogate recovery for ANG-DUPE-2-10/09 is high (Tol-d8 is 182%; QC limit 70-130%) and the surrogate recovery for ANG-DUPE-2RE is high (1,2-DCA-d4 is 140%; QC limit 70-130%), indicating that the sample results are possibly biased high. Therefore, positive sample results for these two samples are considered estimated and are qualified "J".
- The surrogate recovery for ANG-EB-02-10/09 is high (1,2-DCA-d4 is 137%; QC limit 70-130%), indicating that the sample results are possibly biased high. However, due to the fact that all parameters analyzed for this sample are non-detect, no qualification of the sample data is required.

### Methane

• The following table includes samples that were analyzed at dilutions due to the sample matrix (in addition to elevated Methane levels in some samples), and the associated dilution factor. No qualification of the sample data is required.

Sample	Dilution Factor
ANG-MW-105-10/09	50x
ANG-MW-112-10/09	10x
ANG-DUP-01-10/09	5x
ANG-MW-11-10/09	50×
ANG-MW-17-10/09	50x
ANG-MW-19-10/09	50x
ANG-RW-1-10/09	50x

 The percent recovery (%R) for Methane was above QC limits in the MS/MSD analysis of sample ANG-MW-15-10/09 (453% and 706% respectively; QC limit 30-130%). This can be attributed to the elevated concentration of Methane in the unspiked sample. Since the Methane recoveries met QC criteria in the LCS

samples associated with this sample set, it is the reviewer's professional opinion that qualification of the sample data is not required.

### Inorganics

The following items/criteria were reviewed:

- Case narrative and deliverable requirements
- Holding times and sample preservation
- Detection limits
- Inorganic analysis data sheets (Form I)
- Initial and continuing calibration verifications
- · Low and High Calibration Check standard analysis
- Lab Blank results
- Blind Field Duplicate sample results
- ICP interference check sample analysis
- Matrix Spike analysis
- Duplicate Analysis (metals)
- Matrix Spike Duplicate analysis
- Laboratory Control Sample (LCS) results

The items listed above were technically and contractually in compliance with SW-846 protocols with the exceptions discussed in the text below. The data have been validated according to the procedures outlined above and qualified accordingly.

### Metals

- The Calcium value used to calculate the Total Hardness for sample ANG-DUP-01-10/09 was slightly higher than the linear range of the instrument. Therefore, the Total Hardness result for ANG-DUP-01-10/09 is possibly biased and has been qualified with a "J".
- The percent recovery (%R) associated with Total Hardness was below QC limits in the MS analysis of sample ANG-MW-15-10/09 (0%; QC limit 60-140%). This can be attributed to the elevated concentration in the unspiked sample. Since the recoveries met QC criteria in the LCS samples associated with this sample set, it is the reviewer's professional opinion that qualification of the sample data is not required.

### General Chemistry

 Sample ANG-EB-01-10/09 was run outside of the holding time limit for Nitrate. No additional equipment blank sample was available for analysis. It is the reviewer's professional opinion that no qualification of the sample data is required.

# Package Summary:

All data are valid and usable with qualifications as noted in this review.

Signed:

Dated: 18 December 2009

Melissa A. McGi Project Scientist

1 A EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET MW-9 Life Science Laboratories, Inc. Lab Name: Contract: SDG No.: Lab Code: 10248 Case No.: SAS No.: 0918695 Lab Sample ID: Matrix: (soil/water) 0918960-006 WATER Sample wt/vol: 10 (g/ml) MLLab File ID: C12456S Level: (low/med) LOW Date Received: 10/8/2009 % Moisture: not dec. 10/22/2009 NA Date Analyzed: 0.53 GC Column: DB-624 ID Dilution Factor: 1.0 (mm) Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL) CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

1 A EPA SAMPLE. NO. VOLATILE ORGANICS ANALYSIS DATA SHEET DUP-01 Lab Name: Life Science Laboratories, Inc. Contract: SAS No.: SDG No.: 0918695 10248 Case No.: Lab Code: Lab Sample ID: 0918695-013 Matrix: (soil/water) WATER Lab File ID: K03525S Sample wt/vol: 25 (g/ml) ML Date Received: 10/7/2009 Level: (low/med) LOW Date Analyzed: 10/7/2009 % Moisture: not dec. NA 0.25 (mm) Dilution Factor: 2.0 GC Column: Rtx-VMS ID Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL) CONCENTRATION UNITS: CAS NO. COMPOUND Q UG/L 71-43-2 Benzene 100-41-4 Ethylbenzene 46 m/p-Xylene 108-38-3 8.3

0.1

o-Xylene

95-47-6

o-Xylene

95-47-6

VOLATILE ORGANICS ANALYSIS DATA SHEET MW-8 Life Science Laboratories, Inc. Lab Name: Contract: Lab Code: 10248 Case No.: SAS No.: SDG No.: 0918695 Matrix: (soil/water) WATER Lab Sample ID: 0918960-005 Sample wt/vol: 10 ML. Lab File ID: C12455S (g/ml) Date Received: Level: (low/med) LOW 10/8/2009 % Moisture: not dec. NA Date Analyzed: 10/21/2009 ID 0.53Dilution Factor: GC Column: DB-624 1.0 (mm) Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL) CONCENTRATION UNITS: COMPOUND CAS NO. UG/L Q 71-43-2 Benzene U 100-41-4 Ethylbenzene Ū 108-38-3 U m/p-Xylene

EPA SAMPLE, NO.

1 A						_	EPA SAMPLE. NO.		
Lab Name:		FILE ORGA e Laborator		YSIS DATA SH Contract:		·	ИW-5		
Lab Code:	10248	Case No.:		SAS No.:		SDG No.:	0918695		
Matrix: (soil/w	rater)	WATER		•		Lab Sample ID:	0918960-004		
Sample wt/vol	:	10	(g/ml)	ML		Lab File ID:	C12454S		
Level:		LOW				Date Received:	10/8/2009		
% Moisture:	,		•			Date Analyzed:	10/21/2009		
GC Column:			0.53	(mm)		Dilution Factor:			
Soil Extract V		•	(uL)		olume:	<u>NA</u> (uL)			
			_	,	CC	NCENTRATION UNITS:			
	CASIN	10.	CÓMF	POUND		UG/L	Q		
	71-43-2	······································	Benzene			1	U		
	100-41-4		Ethylbenze	ene		1	U		
	108-38-3		m/p-Xylene	·······		1	U		
	95-47-6		o-Xylene	······································		1	U		

EPA SAMPLE. NO. **VOLATILE ORGANICS ANALYSIS DATA SHEET** MW-4 Lab Name: Life Science Laboratories, Inc. Contract: 10248 Case No.: SAS No.: SDG No.: Lab Code: Lab Sample ID: 0918960-003 Matrix: (soil/water) WATER Sample wt/vol: Lab File ID: C12453S 10 (g/ml) ML Date Received: 10/8/2009 Level: (low/med) LOW % Moisture: not dec. NA Date Analyzed: 10/21/2009 0.53 GC Column: DB-624 ID Dilution Factor: 1.0 (mm)

CONCENTRATION UNITS:

NA (uL)

Soil Extract Volume:

CAS NO.	COMPOUND	. UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

Soil Aliquot Volume: NA (uL)

EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET MW-3 Lab Name: Life Science Laboratories, Inc. Contract: 10248 Case No.: SAS No.: SDG No.: 0918695 Lab Code: Lab Sample ID: 0918960-002 Matrix: (soil/water) WATER Lab File ID: C12452S Sample wt/vol: 10 (g/ml) ML Date Received: 10/8/2009 ·Level: (low/med) LOW % Moisture: not dec. NA Date Analyzed: 10/21/2009 ID 0.53 Dilution Factor: 1.0 GC Column: DB-624 (mm)

NA (uL)

Soil Extract Volume:

CONCENTRATION UNITS:

Soil Aliquot Volume: NA (uL)

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

EPA SAMPLE. NO. 1 A VOLATILE ORGANICS ANALYSIS DATA SHEET MW-2 Lab Name: Life Science Laboratories, Inc. Contract: SDG No.: Lab Code: 10248 Case No.: SAS No.: 0918695 Matrix: (soil/water) Lab Sample ID: 0918960-001 WATER Sample wt/vol: 10 (g/ml) ML Lab File ID: C12451S Level: (low/med) LOW Date Received: 10/8/2009 % Moisture: not dec. NA Date Analyzed: 10/21/2009 GC Column: DB-624 ID 0.53 Dilution Factor: 1.0 (mm) Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL) CONCENTRATION UNITS: CAS NO. COMPOUND UG/L 71-43-2 Benzene 100-41-4 Ethylbenzene 200 108-38-3 m/p-Xylene 348 95-47-6 o-Xylene 17

o-Xylene

95-47-6

**VOLATILE ORGANICS ANALYSIS DATA SHEET** TB-01 Lab Name: Life Science Laboratories, Inc. Contract: ___ Case No.: _____ SAS No.: ____ SDG No.: Lab Code: 10248 0918695 Matrix: (soil/water) WATER Lab Sample ID: 0918695-015 Sample wt/vol: 25 (g/ml) ML. Lab File ID: K03524S Level: Date Received: 10/7/2009 (low/med) LOW % Moisture: not dec. Date Analyzed: 10/7/2009 NA GC Column: Rtx-VMS ID 0.25 Dilution Factor: 1.0 (mm) Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL) CONCENTRATION UNITS: CAS NO. COMPOUND Q UG/L 71-43-2 Benzene U 100-41-4 Ethylbenzene U 108-38-3 m/p-Xylene U

EPA SAMPLE, NO.

U

m/p-Xylene

o-Xylene

108-38-3

95-47-6

VOLATILE ORGANICS ANALYSIS DATA SHEET EB-01 Lab Name: Life Science Laboratories, Inc. Contract: Lab Code: 0918695 Lab Sample ID: 0918695-014 Matrix: (soil/water) WATER Sample wt/vol: Lab File ID: K03523S 25 (g/ml) ML Date Received: 10/7/2009 Level: (low/med) LOW Date Analyzed: 10/7/2009 % Moisture: not dec. NA GC Column: Rtx-VMS ID 0.25 Dilution Factor: 1.0 (mm) Soil Aliquot Volume: NA (uL) Soil Extract Volume: NA (uL) CONCENTRATION UNITS: CAS NO. COMPOUND Q 71-43-2 Benzene 100-41-4 Ethylbenzene U

EPA SAMPLE, NO.

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VOLATILE	OR	GAN	ICS A	NALYSIS	DATA	SHEET
					_	

EPA SAMPLE, NO.	
MW-114	

Lab Name:	Life Science	e Laborator	ries, Inc.	_ Contract:		
Lab Code:	10248	Case No.:		SAS No.:	SDG No.:	0918695
Matrix: (soil/w	rater)	WATER			Lab Sample ID: _	0918695-010
Sample wt/vol:	;	25	(g/ml)	<u>ML</u>	Lab File ID:	K03522S
Level:	(low/med)	LOW	_		Date Received:	10/7/2009
% Moisture: r	not dec.	NA			Date Analyzed:	10/7/2009
GC Column:	Rtx-VMS	D	0.25	_(mm) _	Dilution Factor:	2.0
Soil Extract Vo	olume:	NA	(uL)	Soil Aliquot Volume:	NA (uL)	

### CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	Ú

VOLATILE ORGANICS ANALYSIS DATA SHEET MW-113 Lab Name: Life Science Laboratories, Inc. Contract: Lab Code: 0918695 Lab Sample ID: 0918695-009 Matrix: (soil/water) WATER Lab File ID: K03521S Sample wt/vol: 25 (g/ml) ML Date Received: 10/7/2009 Level: (low/med) LOW % Moisture: not dec. Date Analyzed: 10/7/2009 NA GC Column: Rtx-VMS ΙĎ 0.25 (mm) Dilution Factor: 2.0 Soil Aliquot Volume: NA (uL) Soil Extract Volume: NA (uL) CONCENTRATION UNITS: CAS NO. COMPOUND Q UG/L 71-43-2 Benzene 100-41-4 Ethylbenzene 108-38-3 m/p-Xylene 95-47-6 o-Xylene

EPA SAMPLE. NO.

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1 A EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET MW-112 DL Life Science Laboratories, Inc. Contract: Lab Name: SDG No.: 0918695 10248 Case No.: SAS No.: Lab Code: Lab Sample ID: 0918695-008 20X Matrix: (soil/water) WATER Sample wt/vol: 25 (g/ml) ML. Lab File ID: K03539S Level: (low/med) LOW Date Received: 10/7/2009 Date Analyzed: 10/8/2009 % Moisture: not dec. NA 0.25 Dilution Factor: 20 ID GC Column: Rtx-VMS (mm)

NA (uL)

o-Xylene

Soil Extract Volume:

95-47-6

CAS NO. COMPOUND UG/L Q

71-43-2 Benzene 10 U

100-41-4 Ethylbenzene 48

108-38-3 m/p-Xylene 10 U

Soil Aliquot Volume: NA (uL)

10

1 A EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET MW-111 Lab Name: Life Science Laboratories, Inc. Contract: ___ 10248 Case No.: _____ SAS No.: SDG No.: Lab Code: 0918695 Matrix: (soil/water) WATER Lab Sample ID: 0918695-007 Sample wt/vol: 25 (g/ml) ML Lab File ID: K03520S Level: Date Received: 10/7/2009 (low/med) LOW Date Analyzed: 10/7/2009 % Moisture: not dec. NA GC Column: Rtx-VMS ID 0.25 Dilution Factor: 2.0

(mm)

NA (uL)

Soil Extract Volume:

### CONCENTRATION UNITS:

Soil Aliquot Volume: NA (uL)

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

1 A EPA SAMPLE. NO. VOLATILE ORGANICS ANALYSIS DATA SHEET MW-110 Lab Name: Life Science Laboratories, Inc. Contract: SDG No.: 0918695 SAS No.: Lab Code: 10248 Case No.: Lab Sample ID: 0918695-006 Matrix: (soil/water) WATER Lab File ID: K03519S Sample wt/vol: 25 (g/ml) ML Date Received: __ 10/7/2009 Level: (low/med) LOW Date Analyzed: 10/7/2009 % Moisture: not dec. NA Dilution Factor: 2.0 GC Column: Rtx-VMS ID 0.25 (mm) Soil Aliquot Volume: NA (uL) NA (uL) Soil Extract Volume: CONCENTRATION UNITS: Q CAS NO. COMPOUND UG/L 71-43-2 Benzene 100-41-4 Ethylbenzene 108-38-3 Ü m/p-Xylene 1 U 95-47-6 o-Xylene

_ab Name:				_YSIS DATA SH Contract:			MW-107
_ab Code:	10248	Case No.:		SAS No.:		SDG No.:	0918695
Matrix: (soil/	water)	WATER				Lab Sample ID:	0918695-005
Sample wt/vo	ol:	25	g/ml)	ML		Lab File ID:	K03518S
_evel:	(low/med)	LOW				Date Received:	10/7/2009
% Moisture:	not dec.	NA	•			Date Analyzed:	: 10/7/2009
GC Column:	Rtx-VMS	ID	0.25	(mm)		Dilution Factor:	
Soil Extract V	olume:	NA	(uL)	<del></del> · · ·	olume:	NA (uL)	
			• •	·		NCENTRATION UNITS	
	CASIN	10.	COMF	POUND		UG/L	Q
	71-43-2		Benzene			1	U
	100-41-4		Ethylbenze	ene		1	U.
	108-38-3		m/p-Xylene	)		1	U
	95-47-6		o-Xylene			1	U

EPA SAMPLE. NO.

1 A EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET MW-106 Lab Name: Life Science Laboratories, Inc. Contract: SAS No.: ____ SDG No.: 0918695 Lab Code: 10248 Case No.: Lab Sample ID: 0918695-004 Matrix: (soil/water) WATER Lab File ID: K03517S Sample wt/vol: 25 (g/ml) ML Date Received: 10/7/2009 Level: (low/med) LOW Date Analyzed: 10/7/2009 % Moisture: not dec. NA GC Column: Rtx-VMS 0.25 Dilution Factor: 2.0 ID (mm) Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL) **CONCENTRATION UNITS:** CAS NO. COMPOUND Q UG/L 71-43-2 Benzene 100-41-4 Ethylbenzene U 108-38-3 m/p-Xylene

o-Xylene

95-47-6

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EPA SAMPLE. NO. VOLATILE ORGANICS ANALYSIS DATA SHEET MW-105 Lab Name: Life Science Laboratories, Inc. Contract: 10248 Case No.: SAS No.: SDG No.: 0918695 Lab Code: Lab Sample ID: 0918695-003 Matrix: (soil/water) WATER Lab File ID: K03516S Sample wt/vol: 25 ML (g/ml) Date Received: 10/7/2009 Level: (low/med) LOW Date Analyzed: 10/7/2009 NA % Moisture: not dec. Dilution Factor: 2.0 GC Column: Rtx-VMS ID 0.25 (mm) (uL) ` Soil Aliquot Volume: NA (uL) Soil Extract Volume: NA CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	16	
100-41-4	Ethylbenzene	8.6	
108-38-3	m/p-Xylene	14	
95-47-6	o-Xylene	1	U

EPA SAMPLE. NO. VOLATILE ORGANICS ANALYSIS DATA SHEET MW-104 Life Science Laboratories, Inc. Contract: SAS No.: SDG No.: 10248 Case No.: Lab Sample ID: 0918695-002 Matrix: (soil/water) WATER

Lab Name:

Lab Code:

Soil Extract Volume:

Lab File ID: K03515S Sample wt/vol: 25 (g/ml)  $\mathsf{ML}$ Date Received: 10/7/2009 Level: (low/med) LOW Date Analyzed: 10/7/2009 % Moisture: not dec. NA

2.0 ID 0.25 (mm) Dilution Factor: GC Column: Rtx-VMS NA (uL) Soil Aliquot Volume: NA_____ (uL)

CONCENTRATION UNITS:

0918695

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xvlene	1	U

1 A EPA SAMPLE, NO. **VOLATILE ORGANICS ANALYSIS DATA SHEET** MW-103 Lab Name: Life Science Laboratories, Inc. Contract: 10248 ___ Case No.: _____ SAS No.: _____SDG No.: 0918695 Lab Code: Lab Sample ID: 0918695-001 Matrix: (soil/water) WATER Lab File ID: K03514S Sample wt/vol: 25 ML (g/ml) Date Received: 10/7/2009 Level: (low/med) LOW Date Analyzed: _____10/7/2009 % Moisture: not dec. NA GC Column: Rtx-VMS ID 0.25 Dilution Factor: 2.0 (mm) Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL) CONCENTRATION UNITS: Q CAS NO. COMPOUND UG/L 71-43-2 Benzene 1.3

Ethylbenzene

m/p-Xylene

o-Xylene

100-41-4

108-38-3

95-47-6

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# 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
ANG-MW-103-
10/09

					10/09	
Lab Name:	LIFE SCI	ENCE LABORATORIES, INC. Co	ntract:	·		<del></del>
Lab Code:	10248	Case No.:NRA	S No.:	SDG No	.: 0918695	
Matrix: (so	il/water)	WATER	Lab San	ple ID: <u>09</u>	18695-001	
Level:	MED		Date Re	ceived:	10/07	/2009
% Solids:						
c	AS NO.	Concentration Units: (mg/L or Analyte	mg/Kg dry weight) MG/L  Concentration	С	_ Q	M
	NH3-N	Ammonia as N	0.03	U		W
		Bicarbonate Alkalinity as CaCO	3 330			W
		Carbonate Alkalinity as CaCO3	3	U		W
НА	RDNESS	Hardness, Total	510			W
		Hydroxide Alkalinity as CaCO3	3	U		W
	NO3-N	Nitrate as N	0.1	U		
4.4	900 70 0	Culfata	22			

Color Before:	Clarity Before:		Textur Artifacts	
Comments:				
	FORM	101		ILM05.3

# 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANG-MW-104-

						10/09	'
	Name: <u>LIFE SC</u> Code: 10248	CIENCE LABORAT	ORIES, INC. Contrac		SDG	No.: 0918695	
	ix: (soil/water)	WATER		***************************************			· · · ·
Matr	ix. (Sullwater)	TAILI		Lab Sair	ibie in:	0918695-002	
Leve	I: MED			Date Re	ceived:	10/07	7/2009
% Sc	olids:						
	CAS NO.	Concer	ntration Units: (mg/L or mg/h Analyte	(g dry weight) MG/L Concentration	С	Q	M
	NH3-N		Ammonia as N	0.03	U		W
		Bicarbo	nate Alkalinity as CaCO3	370			W
		Carbon	ate Alkalinity as CaCO3	3	U		W
	HARDNESS		Hardness, Total	500			W
		Hydrox	ide Alkalinity as CaCO3	3	U		W
	NO3-N	1	Nitrate as N	0.1	U		1
	14808-79-8		Sulfate	41			1

Color Before:	Clarity Before:		Texture:	
Color After:	Color After:		Artifacts:	
Comments:				
		400		<u> </u>
	FORM	102		ILM05.3

# 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANG-MW-105-

		11101	COMMO MIMELLO			10/09	)
_ab Name:	LIFE SC	IENCE LABORATORIES, INC.	Contract:			, ·	
.ab Code:	10248	Case No.:	NRAS No.:		SDG N	ło.: <u>0918695</u>	5
Matrix: (soi	il/water)	WATER		Lab San	ple ID:	0918695-003	
_evel:	MED	<del></del>		Date Re	ceived:	10/0	7/2009
% Solids:							
c	AS NO.	Concentration Units: ( Analyte	mg/L or mg/Kg o	Iry weight) MG/L Concentration	C	Q	М
	NH3-N	Ammonia as N		0.03	U		W
	<del>1</del>	Bicarbonate Alkalinity a	s CaCO3	360			
						_	W
НΔ		Carbonate Alkalinity a	s CaCO3	3	U		W
1 1171	RDNESS	Carbonate Alkalinity a	,	3 460	U		
	RDNESS		1		U		w
	RDNESS NO3-N	Hardness, Tota	1	460			W

Color Before:	Clarity Before:		 Texture:	
Color After:	Color After:		 Artifacts:	
Comments:				
	FORM	103		ILM05.3

### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANG-MW-106-

		INC	ORGANIC ANALYS	SIS DATA SHEET		10/09	9
ab Name:	LIFE SC	IENCE LABORATORIES, INC.	Contract:	<del></del>	\		
b Code:	10248	Case No.:	NRAS No.:	· · · · · · · · · · · · · · · · · · ·	SDG	No.: <u>091869</u>	5
atrix: (soi	l/water)	WATER		Lab Sam	ple ID:	0918695-004	ļ
evel:	MED	<del></del>		Date Red	eived:	10/0	7/2009
Solids:							
C	AS NO.	Concentration Units: Апаlyte	(mg/L or mg/Kg	dry weight) MG/L Concentration	С	Q	M
	AS NO. 1H3-N				C U	Q	M W
		Analyte	N	Concentration		Q	
		Analyte Ammonia as	N as CaCO3	Concentration 0.03		Q	W
1		Analyte Ammonia as Bicarbonate Alkalinity	N as CaCO3	Concentration 0.03 340	U	Q	W
1	1H3-N	Analyte Ammonia as Bicarbonate Alkalinity Carbonate Alkalinity	N as CaCO3 as CaCO3	0.03 340 3	U	Q	W W
HAI	1H3-N	Analyte Ammonia as Bicarbonate Alkalinity Carbonate Alkalinity Hardness, To	N ras CaCO3 as CaCO3 tal as CaCO3	Concentration 0.03 340 3 380	U	Q	W W W

Color Before:	Clarity Before:		 Texture:	
Color After:	Color After:		 Artifacts:	
Comments:				
	FORM	104		ILM05.3

### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO. ANG-MW-107-

				OIO DATA OTILLE		10/09	)
b Name:	LIFE SC	IENCE LABORATORIES, IN	C. Contract:				
b Code:	10248	Case No.:	NRAS No.:		SDG N	o.: <u>0918695</u>	<u> </u>
atrix: (soil	l/water)	WATER	<b></b>	Lab Sam	iple ID: 🧐	918695-005	·····
evel:	MED	<del></del>		Date Re	ceived:	10/07	7/2009
Solids:					<del></del>		
C/	AS NO.	Concentration Ur Analy	iits: (mg/L or mg/Kg te	dry weight) MG/L Concentration	С	Q	M
	AS NO. 1H3-N		te		C	Q	M W
		Analy	te as N	Concentration		_ a_	
		Analy Ammonia	te as N nity as CaCO3	Concentration 0.03		Q Q	W
N		Analy Ammonia Bicarbonate Alkali	te as N nity as CaCO3 nity as CaCO3	Concentration 0.03 180	U	Q	w
N	IH3-N	Analy Ammonia Bicarbonate Alkali Carbonate Alkalir	te as N nity as CaCO3 nity as CaCO3 Total	Concentration  0.03  180  3	U	Q	W W
A HAH	IH3-N	Analy Ammonia Bicarbonate Alkali Carbonate Alkalir Hardness	te as N nity as CaCO3 nity as CaCO3 Total nity as CaCO3	Concentration  0.03  180  3  330	U	Q	W W W

Color Before:	Clarity Before:		 Texture:	
Color After:	Color After:		 Artifacts: _	
Comments:			 	
·	FORI	105	 	ILM05.3

ILM05.3

# 1B - IN

EPA SAMPLE NO. ANG-MW-110-

		INOF	RGANIC ANALYS	SIS DATA SHEET	1		0/09	
b Name:	LIFE SC	IENCE LABORATORIES, INC.	Contract:					
b Code:	10248	Case No.:	NRAS No.:		SDG	No.: <u>09</u>	18695	
trix: (soil	/water)	WATER		Lab Sam	ple ID:	091869	5-006	
vel:	MED			Date Re			10/07	/2009
Solids:								
		O		day watabt) BAC/I				
	AS NO.	Concentration Units: (i		Concentration	C		Q	M
	AS NO. IH3-N	Analyte Ammonia as N		Concentration 0.03	C U		Q	M W
		Analyte Ammonia as N Bicarbonate Alkalinity a	es CaCO3	Concentration			Q	W
N	IH3-N	Analyte Ammonia as N	is CaCO3	Concentration 0.03 380	U		Q	W
N		Analyte Ammonia as N Bicarbonate Alkalinity a	is CaCO3	Concentration 0.03 380 3	U		Q	W W
HAF	IH3-N	Analyte Ammonia as N Bicarbonate Alkalinity as Carbonate Alkalinity as Hardness, Tota	is CaCO3	Concentration  0.03  380  3  570	U		Q	W W W

Color Before:	Clarity Before:		 Texture:	***************************************
Color After:	Color After:		 Artifacts:	
Comments:				
	FORM	106		ILM05.3

# 1B - IN

EPA SAMPLE NO.

	INOR	RGANIC ANALYS	SIS DATA SHEET	A	NG-MW- 10/09	
b Name: LIFE SCIE	NCE LABORATORIES, INC.	Contract:		I		
b Code: 10248	Case No.:	NRAS No.:		SDG N	lo.: <u>0918695</u>	
trix: (soil/water)	VATER		Lab Sam	ple ID: (	918695-007	
vel: <u>MED</u>			Date Rec	eived:	10/07	/2009
Solids:						
OAS NO	Concentration Units: (r	ng/L or mg/Kg				N
CAS NO.	Analyte		Concentration	C	Q	·
CAS NO.	Analyte Ammonia as N		Concentration 0.03	C	Q	M W
	Analyte Ammonia as N Bicarbonate Alkalinity a	s CaCO3	Concentration		Q	W W
NH3-N	Analyte Ammonia as N Bicarbonate Alkalinity a Carbonate Alkalinity as	s CaCO3	Concentration 0.03 360	U	Q	N N
	Analyte Ammonia as N Bicarbonate Alkalinity a	s CaCO3	Concentration  0.03  360  3	U	Q	W
NH3-N	Analyte Ammonia as N Bicarbonate Alkalinity a Carbonate Alkalinity as Hardness, Tota	s CaCO3	Concentration 0.03 360 3 540	U	Q	W W

Color Before:	Clarity Before:			Texture:	,
Color After:	Color After:		<del></del> -	Artifacts:	
Comments:			.,		
	FORM	107			ILM05.3

# 1B - IN

EPA SAMPLE NO. ANG-MW-112-

ah Name	LIFE SC	INUI	Contract:	IS DATA SHEET	_	10/09	
Lab Code:	10248	Case No.:	NRAS No.:		SDG	No.: 0918695	
Vlatrix: (soi	l/water)	WATER		Lab San	pie ID:	0918695-008	
Level:	MED			Date Re	ceived:	10/07	/2009
% Solids:							
c.	AS NO.	Concentration Units:	mg/L or mg/Kg d	lry weight) MG/L. Concentration	С	Q	M
ı	NH3-N	Ammonia as 1	l	0.051			W
		Bicarbonate Alkalinity	as CaCO3	340			W
		Carbonate Alkalinity a	s CaCO3	3	U		W
HAI	RDNESS	Hardness, Tota	al	510			W
		Hydroxide Alkalinity a	s CaCO3	3	U		W
	NO3-N	Nitrate as N		1.4			1
141	808-79-8	Sulfate		8.4			1

Color Before:	Clarity Before:			Texture:	
Color After:	Color After:		<u></u>	Artifacts:	
Comments:			• • • • • • • • • • • • • • • • • • •		
		108			11.350.0
	FOR*				1LM05.3

### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANG-MW-113-10/09

						10/09	9
ab Name:	LIFE SC	IENCE LABORATORIES, II	NC. Contract		_	<del></del>	
ab Code:	10248	Case No.:	NRAS No.:		SDG	No.: 091869	5
atrix: (soil	/water)	WATER		Lab Sar	nple ID:	0918695-009	9
evel:	MED	·····•		Date Re	eceived:	10/0	7/2009
Solids:							
		Concentration U	nits: (mg/L or mg/K	g dry weight) MG/L			
CA	AS NO.	Concentration U		g dry weight) MG/L Concentration	c		M
	AS NO. IH3-N		rte		C		M W
		Analy	rte a as N	Concentration	,	Q	
		Analy Ammoni	yte a as N linity as CaCO3	Concentration 0.03	,	Q	W
N		Analy Ammonia Bicarbonate Alkal	yte a as N linity as CaCO3 nity as CaCO3	Concentration 0.03 340	U	Q	W
N	H3-N	Analy Ammoni Bicarbonate Alkal Carbonate Alkali	yte a as N linity as CaCO3 nity as CaCO3 s, Total	Concentration 0.03 340 3	U	Q	W W W
HAF	H3-N	Analy Ammoni Bicarbonate Alkali Carbonate Alkali Hardness	yte a as N linity as CaCO3 nity as CaCO3 s, Total nity as CaCO3	Concentration 0.03 340 3 540	U	Q	W W W

Color Before:		Clarity Before:			Texture:	
Color After:	***************************************	Color After:	· · · · · · · · · · · · · · · · · · ·		Artifacts:	
Comments:						
		······		-		
		FORM	109			ILM05.3

### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANG-MW-114-

		a. 101	KGANIC ANALYS	SIO DAIA GILLET		10/09	•
Name:	LIFE SC	IENCE LABORATORIES, INC.	Contract:		. —		
Code:	10248	Case No.:	NRAS No.:		SDG	No.: 091869	5
rix: (soil	/water)	WATER		Lab San	nple ID:	0918695-010	)
el:	MED			Date Re	ceived:	10/0	7/2009
olids:							
		Concentration Units: //	ma/L or ma/Ka	dry weight) MG/L			
	AS NO.	Concentration Units: (r		Concentration	C	Q	M
	\S NO. IH3-N	•			C U	<b>Q</b>	W
		Analyte		Concentration		Q	W
		Analyte Ammonia as N	is CaCO3	Concentration 0.03		Q	W
N		Analyte Ammonia as N Bicarbonate Alkalinity a	s CaCO3	Concentration 0.03 350	U	Q	W
N	IH3-N	Analyte Ammonia as N Bicarbonate Alkalinity a Carbonate Alkalinity as	is CaCO3	Concentration  0.03  350  3	U	Q	W W
HAF	IH3-N	Analyte Ammonia as N Bicarbonate Alkalinity a Carbonate Alkalinity as Hardness, Tota	is CaCO3	Concentration  0.03  350  3  400	U U	Q	W W W

Color Before:	Clarity Before:		Texture:
Color After:	Color After:		Artifacts:
Comments:			
	FOR	110	ILM05.3

### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
ANG-DUP-01-
10/09

							10/09	)
_ab I	Name: LIF	E SCIEN	CE LABORATORIES, INC. Cont	ract:	· · · · · · · · · · · · · · · · · · ·			1
_ab (	Code: <u>10</u> 2	248	Case No.: NRAS	No.:		SDG No.: 0918695		
Matrix: (soil/water)		ter)			Lab Sample ID:		0918695-013	
_evel: <u>MED</u>		ED			Date Received: 10/07/20		7/2009	
% Sa	lids:							
			Concentration Units: (mg/L or m	g/Kg dry v	weight)		<u>_</u>	
	CAS N	ю.	Concentration Units: (mg/L or m Analyte		weight)	С	q	M
ſ	CAS N		. •			C	q	M W
			Analyte		oncentration		Q	
			Analyte Ammonia as N		oncentration 0.03		Q	W
		N	Analyte Ammonia as N Bicarbonate Alkalinity as CaCO3		oncentration 0.03 360	U	Q	W
	NH3-I	N	Analyte Ammonia as N Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3		0.03 360 3	U	Q	W W W
	NH3-I	ESS	Analyte Ammonia as N Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Hardness, Total		0.03 360 3 500	U	Q	W W W

Color Before:	Clarity Before:			Texture:	
Color After:	Color After:		<del></del>	Artifacts:	
Comments:					
-	FORN	113			ILM05.3

## 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.	
ANG-EB-01-	
10/09	

						10/09	
Lab Nar	ne: <u>LIFE SCI</u>	ENCE LABORATORIES, INC.	Contract:		<del> </del>		
Lab Co	de: <u>10248</u>	Case No.:	NRAS No.:		SDG No.	: 0918695	
Matrix:	(soil/water)			Lab Sam	ple ID: <u>09</u>	18695-014	
Level:	MED	-		Date Red	eived:	10/07/	/2009
% Solid	s:						
		Concentration Units: (	mg/L or mg/Kg	dry weight)			
	CAS NO.	Analyte		Concentration	С	Q	M
	NH3-N	Ammonia as N		0.03	U		W
		Bicarbonate Alkalinity a	s CaCO3	7.0			W
		Carbonate Alkalinity as	s CaCO3	3	U		W
	HARDNESS	Hardness, Tota	ıl	7	U		W
		Hydroxide Alkalinity as	CaCO3	3	U		W
	NO3-N	Nitrate as N		0.1	U	***************************************	l
	14808-79-8	Sulfate		1	U		

Color Before:	Clarity Before:		Texture	e:
Color After:	Color After:		Artifacts	
Comments:				
	SOD!	114		U MADS 3

ILM05.3

## 1B - IN

EPA SAMPLE NO.

ANG-MW-2-

		ANALTSIS DATA SHEET		10/09	
ab Name: <u>LIFE SC</u>	IENCE LABORATORIES, INC. Co	ntract:			
ab Code: <u>10248</u>	Case No.: NRAS	3 No.:	. SDG	No.: <u>0918695</u>	
latrix: (soil/water)	WATER	Lab San	nple ID:	0918960-001	
evel: <u>M</u> ED	<del></del>	Date Re	ceived:	10/08	/2009
Solids:					
CAS NO.	Concentration Units: (mg/L or a	mg/Kg dry weight) MG/L Concentration	c		M
CAS NO.	, •		c	Q	M W
	Analyte	Concentration 0.20	С	Q Q	,
	Analyte Ammonia as N	Concentration   0.20     3   400	C	Q	W
	Analyte Ammonia as N Bicarbonate Alkalinity as CaCO	Concentration   0.20     3   400		Q	w w
NH3-N	Analyte Ammonia as N Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3	Concentration  0.20 3 400 3 590		Q	W W

Color Before:	Clarity Before:		 Texture:	
Color After:	Color After:		 Artifacts:	***************************************
Comments:			 	
	FORN	115	 	ILM05.3

#### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
ANG-MW-3-
10/09

		INOF	RGANIC ANALYS	SIS DATA SHEET		10/09	)
ab Name:	LIFE SCI	ENCE LABORATORIES, INC.	Contract:				
ab Code:	10248	Case No.:	NRAS No.:		SDG	No.: <u>091869</u>	5
latrix: (soil	/water)	WATER		Lab Sam	ple ID:	0918960-002	!
evel:	MED	<del></del>		Date Rec	eived:	10/0	8/2009
0-15-1							
6 Solids:							
	AS NO.	Concentration Units: (	mg/L. or mg/Kg e	dry weight) MG/L Concentration	С		M
C/	AS NO. 1H3-N				С	Q	M W
C/		Analyte		Concentration	С	Q	
C/		Analyte Ammonia as N	is CaCO3	Concentration 0.75	C	Q	W
C.A N		Analyte Ammonia as N Bicarbonate Alkalinity a	is CaCO3	Concentration 0.75 360		Q	W
C.A N	(H3-N	Analyte Ammonia as N Bicarbonate Alkalinity a	is CaCO3 s CaCO3	Concentration 0.75 360 3		Q	W W
CA N HAF	(H3-N	Analyte Ammonia as N Bicarbonate Alkalinity as Carbonate Alkalinity as Hardness, Tota	is CaCO3 s CaCO3	Concentration 0.75 360 3 500	U	Q	W W W

Color Before:	Clarity Before:		 Texture:	
Color After:	Color After:		 Artifacts:	
Comments:			 	
	FOR!	116		ILM05.3

## 1B - IN

EFA SAMFLE NO.
ANG-MW-4-
40/00

		INOF	RGANIC ANALYS	SIS DATA SHEET		10/09		
Lab !	Name: LIFE SC	ENCE LABORATORIES, INC.	Contract:	_,	<u>.                                    </u>			l
Lab ⁽	Code: 10248	Case No.:	NRAS No.:		SDG	No.: <u>0918695</u>		
Matr	ix: (soil/water)	WATER		Lab Sam	ple ID:	0918960-003		
Leve	i: MED	<u></u>		Date Red	eived:	10/08	/2009	
% Sc	olids:							
	CAS NO.	Concentration Units: (i Analyte	mg/L or mg/Kg	dry weight) MG/L Concentration	C	Q	M	
	NH3-N	Ammonia as N		0.11			W	
ı		Bicarbonate Alkalinity a	s CaCO3	290			W	
- 1		Carbonate Alkalinity as	CaCO3	3	IJ		W	
	HARDNESS	Hardness, Tota	İ	350			W	
		Hydroxide Alkalinity as	CaCO3	3	U		W	
	NO3-N	Nitrate as N		0.21			ı	
	14808-79-8	Sulfate		37			1	

Color Before:	Clarity Before:		 Texture:	
Color After:	Color After:		 Artifacts:	
Comments:				
	FOR	117		ILM05.3

## 1B - IN

EPA SAMPLE NO. ANG MW-5-

	INOF	RGANIC ANALY	SIS DATA SHEET	-	10/09	
b Name: LIFE SCIE	NCE LABORATORIES, INC.	Contract:		l	· ·	
b Code: 10248	Case No.:	NRAS No.:		SDG	No.: 0918695	5
atrix: (soil/water) <u>V</u>	VATER		Lab Sam	ple ID:	0918960-004	
vel: MED			Date Red	ceived:	10/08	3/2009
Solids:	Concentration Units: (	ma/L or ma/Ka	drv weight) MG/L			
Solids:CAS NO.	Concentration Units: (		Concentration	C	Q	M
	•		· · · · · · · · · · · · · · · · · · ·	C U	Q	W
CAS NO.	Analyte		Concentration		Q	
CAS NO.	Analyte Ammonia as N	s CaCO3	Concentration 0.03		Q	W
CAS NO.	Analyte Ammonia as N Bicarbonate Alkalinity a	es CaCO3	Concentration 0.03 280	U	Q	W
CAS NO. NH3-N	Analyte Ammonia as N Bicarbonate Alkalinity a Carbonate Alkalinity as	es CaCO3 es CaCO3	Concentration  0.03  280  3	U	Q	W W

Color Before:	Clarity Before:		 Texture:	
Color After:	Color After:		 Artifacts:	, <u>.</u>
Comments:				
	FORM	118		ILM05,3

## 1B - IN INORGANIC ANALYSIS DATA SHEET

ᆫ	PA	SA	MP	t	NO.	
	41	1G	-N	W	<b>-8</b> -	

			INORGANIC ANALTS	313 DATA SHEET		10/09	)
.ab Name:	LIFE SC	IENCE LABORATORIES, IN	C. Contract:		•		
ab Code:	10248	Case No.:	NRAS No.:		SDG	No.: <u>091869</u>	5
fatrix: (soil	/water)	WATER	•	Lab San	ple ID:	0918960-005	
.evel:	MED			Date Re	ceived:	10/0	8/2009
6 Solids:							
	AS NO.	Analyte		Concentration	С	Q	M
	AS NO. IH3-N	Analyte Ammonia	e as N	Concentration 0.03	C U	Q	W
		Analyte	e as N	Concentration		Q	
		Analyte Ammonia	e as N nity as CaCO3	Concentration 0.03		Q	W
N		Analyte Ammonia Bicarbonate Alkalir	e as N hity as CaCO3 ity as CaCO3	Concentration 0.03 400	U	Q	W
N	H3-N	Analyte Ammonia Bicarbonate Alkalir Carbonate Alkalini	e as N nity as CaCO3 ity as CaCO3	Concentration  0.03  400  3	U	Q	W W W
HAR	H3-N	Analyte Ammonia Bicarbonate Alkalini Carbonate Alkalini Hardness,	e as N hity as CaCO3 ty as CaCO3 Total ty as CaCO3	Concentration 0.03 400 3 650	U	Q	W W W

Color Before:	Clarity Before:		 Texture:	
Color After:	Color After:		 Artifacts:	
Comments:				
	FORN	119		ILM05.3

## 1R IN

EPA	SAMPLE	NO.	

		INO		SIS DATA SHEET		ANG 1	-MV 0/09	
ab Name:	LIFE SCIE	NCE LABORATORIES, INC.	_ Contract:		•			
ab Code:	10248	Case No.:	NRAS No.:		SDG	No.: 09	18695	
atrix: (soil	/water) <u>V</u>	VATER		Lab San	nple ID:	091896	80-006	
evel:	MED			Date Re	ceived:		10/08	/2009
Solids:								
ÇA	AS NO.	Concentration Units: ( Analyte	(mg/L or mg/Kg	dry weight) MG/L Concentration	С		Q	M
	AS NO. IH3-N	`		· - · · · · · · · · · · · · · · · · · ·	С		Q	M W
		Analyte	1	Concentration	С		Q	
		Analyte Ammonia as N	l as CaCO3	Concentration 0.33	C		Q	W
N		Analyte Ammonia as N Bicarbonate Alkalinity a	as CaCO3	Concentration 0.33 260			Q	W
N	IH3-N	Analyte Ammonia as N Bicarbonate Alkalinity a Carbonate Alkalinity a	as CaCO3 s CaCO3	Concentration 0.33 260 3			Q	w w

Color Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:		
	120	

FORM 120

ILM05.3

EPA SAMPLE NO.

				1B - IN		·	C BASA	10
			INOR	GANIC ANALY	SIS DATA SHEET	AP	IG-MW 10/09	-2-
f ah Name:	LIEE S	CIENCE LABORA	TORIES INC	Contract:			10/03	
Lab Code:	10248		TORILO, INO.	NRAS No.:		- SDG No.:	0918695	
Matrix: (soi		WATER		<u></u> ``	Lab San	- nple ID: <u>091</u>		
Level:	MED	**************************************				ceived:		/2009
% Solids:		<del></del>						
		***************************************						
		Conce	ntration Units: (n	ng/L or mg/Kg	dry weight) MG/L			
C	AS NO.		Analyte		Concentration	С	Q	M
	103-N		Nitrate as N		0.1	U		1
						_		
				ore:				·
Color Afte	er:		Color A	fter:		Artifacts:		······································
0								
Comment	s:		<u> </u>					

FORM 121

1LM05.3

## 1B - IN

EPA SAMPLE NO.

	INOR	GANIC ANALYSIS	DATA SHEET		G-MW-5- 10/09	
Lab Name: LIFE S	CIENCE LABORATORIES, INC.	Contract:		<u> </u>		
Lab Code: 10248	Case No.:	NRAS No.:		SDG No.:	0918695	
Matrix: (soil/water)	WATER		Lab Sampl	e ID: <u>0918</u>	960-008	
Level: MED			Date Recei	ved:	10/08/200	<u> </u>
% Solids:						
	Concentration Units: (π	odl or malKa da	(weight) MG/I			
040.110				С	^	N.A
CAS NO. NO3-N	Analyte Nitrate as N		Oncentration 0.1	U	Q	M I
Color Before:	Clarity Bef	ore:	<u>.</u>	Texture:		
Color After:	Color A	fter:		Artifacts: _		
Comments:						<del></del>

FORI 122

ILM05.3

EPA SAMPLE NO.

		1B - IN			C BELAL O	
	INORG	GANIC ANALYS	SIS DATA SHEET	AN	IG-MW-9-	
					10/09	
Lab Name: LIFE SC	IENCE LABORATORIES, INC.	Contract:	•			
Lab Code: 10248	Case No.:	NRAS No.: _		SDG No.:	0918695	
Matrix: (soil/water)	WATER		Lab Sam	ple ID: <u>0918</u>	8960-009	
Level: MED	*******		Date Re	ceived:	10/08/200	3
% Solids:						
	Concentration Units: (m	ng/L or mg/Kg	dry weight) MG/L			
CAS NO.	Analyte		Concentration	С	Q	M
NO3-N	Nitrate as N		0.1	U		T
				•		
Color Before:	Clarity Befo	ore:		Texture:		
		fter:				
Color After:	COIOT AI			Armaoto,		
Comments:						
_						

FORM 123

ILM05.3

#### Life Science Laboratories, Inc. 5000 Brittonfield Parkway, Suite 200

#### **Analytical Results**

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT:

Life Science Laboratories, Inc.

0910025-001A

Project:

1LT091007CL2

Client Sample ID: 0918695-001C,D

W Order:

0910025

Collection Date:

10/06/09 15:45

Matrix:

Date Received:

10/07/09 15:35

Inst. ID:

WATER GCOS 17E

PrepDate: Sample Size: 31 mL

10/13/09 10:13 10128/R18530

ColumnID: Alumina Revision:

10/15/09 11:07

%Moisture: TestCode: 8015W RSK175 FileID:

BatchNo:

Lab ID:

1-SAMP-E:\Osioct09\E101305.r

Col Type:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID	· · · · · · · · · · · · · · · · · · ·			8015M/	RSK175	M (RSK 175)
Methane	0.097	0.0021	0.0014	mg/L	1	10/13/09 11:34

Qualifiers:

- Value exceeds Maximum Contaminant Level
- Value exceeds the instrument calibration range
- Analyte detected below the PQL
- Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

**Analytical Results** 

Lab ID:

Date Received:

PrepDate:

BatchNo:

StateCertNo: 10155 0910025-002A

CLIENT: Project:

Life Science Laboratories, Inc.

ILT091007CL2

W Order:

0910025

Matrix: Inst. ID:

WATER GCOS 17E

ColumnID: Alumina

10/15/09 11:07

%Moisture: TestCode:

Sample Size: 31 mL

8015W RSK175 FileID:

Client Sample ID: 0918695-002C,D

10/06/09 16:30

Collection Date: 10/07/09 15:35 10/13/09 10:13

10128/R18530

1-SAMP-E:\Osioct09\E101306.r

Rev	ision:
Col	Type:

Analyte	Result Qu	Result Qual PQL MDL			DF	Date Analyzed
DISSOLVED GASES BY GC/FID					RSK175M	(RSK 175) 10/13/09 11:45
Methane	0.033	0.0021	0.0014	mg/L	1	10/13/09 11/45

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

Prim/Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

**Analytical Results** 

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Sample Size: 32 mL

StateCortNo: 10155

CLIENT: Life Science Laboratories, Inc. Lab ID: Client Sample ID: 0918695-003C,D

0910025-003A

ILT091007CL2 Project:

10/06/09 15:25 **Collection Date:** 

W Order: 0910025 WATER Matrix:

10/07/09 15:35 Date Received: 10/13/09 10:13

Inst. ID: GCOS 17E PrepDate: BatchNo:

10128/R18530

ColumnID: Alumina 10/15/09 11:07 %Moisture: TestCode: 8015W RSK175 FileID:

1-SAMP-E:\Osioct09\E101308.r

Revision: Col Type:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID						(RSK 175) 10/13/09 12:08
Methane	0.51	0.10	0.070	mg/L	50	10/13/09 12.00

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

### Life Science Laboratories, Inc. 5000 Brittonfield Parkway, Suite 200

## **Analytical Results**

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT: Life Science Laboratories, Inc. Lab ID:

0910025-004A

1LT091007CL2 Project:

Client Sample ID: 0918695-004C,D

W Order: 0910025 WATER Matrix:

Collection Date: Date Received:

10/06/09 16:45 10/07/09 15:35

Inst. ID: GCOS 17E

Sample Size: 32 mL %Moisture:

PrepDate: BatchNo:

10/13/09 10:13 10128/R18530

ColumnID: Alumina 10/15/09 11:07 Revision:

TestCode: 8015W RSK175 FileID:

1-SAMP-E:\Osioct09\E101309.r

Col Type:

Col 13pt.			<u> </u>			
Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175N	(RSK 175)
Methane	0.045	0.0020	0.0014	mg/L	1	10/13/09 12:19

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

## Life Science Laboratories, Inc. 5000 Brittonfield Parkway, Suite 200

### **Analytical Results**

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT: Project:

W Order:

Life Science Laboratories, Inc.

0910025

WATER Matrix: Inst. ID:

GCOS 17E ColumnID: Alumina

10/15/09 11:07 Revision:

ILT091007CL2

Sample Size: 32 mL

%Moisture:

PrepDate:

Lab ID:

Collection Date:

Date Received:

BatchNo:

TestCode: 8015W RSK175 FileID:

0910025-005A

Client Sample ID: 0918695-005C,D

10/06/09 15:45

10/07/09 15:35 10/13/09 10:13

10128/R18530

1-SAMP-E:\Osioct09\E101310.r

Col Type:						
Analyte	Result Qual PQL		MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID	<u></u>				RSK175N	1 (RSK 175) 10/13/09 12:29
Methane	0.057	0.0020	0.0014	mg/L	1	10/13/05 12.25

Qualifiers:

Value exceeds Maximum Contaminant Level

E Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)



5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

**Analytical Results** 

Lab ID:

Collection Date:

StateCertNo: 10155 0910025-006A

CLIENT: Project:

Col Type:

Life Science Laboratories, Inc.

ILT091007CL2

W Order: 0910025 Matrix: WATER

WATER GCOS 17E

Inst. ID: GCOS 17 ColumnID: Alumina

Revision: 10/15/09 11:07

Sample Size: 31 mL

%Moisture: TestCode:

Date Received:
ml. PrepDate:

BatchNo: 8015W RSK175 FileID:

eceived: 10/07/09 15:35 ate: 10/13/09 10:13

Client Sample ID: 0918695-006C,D

10128/R18530

10/06/09 14:15

1-SAMP-E:\Osioct09\E101311.r

Analyte	Result Qual PQL		MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID	······································			8015M/	RSK175M	(RSK 175)
Methane	0.061	0.0021	0.0014	mg/L	1	10/13/09 12:44

Qualifiers:

Value exceeds Maximum Contaminant Level

E Value exceeds the instrument calibration range

J Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

**Analytical Results** 

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT:

Life Science Laboratories, Inc.

Lab ID:

0910025-007A

Project:

ILT091007CL2

Client Sample ID: 0918695-007C,D

**Collection Date:** 

10/06/09 12:05

W Order: Matrix:

0910025

Date Received:

10/07/09 15:35

Inst. ID:

WATER

PrepDate:

10/13/09 10:13

GCOS 17E

10/15/09 11:07

Sample Size: 31 mL %Moisture:

BatchNo:

10128/R18530

ColumnID: Alumina

TestCode:

8015W RSK175 FileID:

1-SAMP-E:\Osioct09\E101313.r

Revision: Col Type:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK1751	W (RSK 175)
Methane	0.039	0.0021	0.0014	mg/L	1	10/13/09 13:06

Qualifiers:

- Value exceeds Maximum Contaminant Level
- Value exceeds the instrument calibration range
- Analyte detected below the PQL J
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

909

# LSL

#### Life Science Laboratories, Inc.

**Analytical Results** 

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Sample Size: 31 mL

%Moisture:

TestCode:

StateCertNo: 10155

CLIENT: Life Science Laboratories, Inc.

Project: ILT091007CL2

W Order: 0910025 Matrix: WATER

Inst. ID: GCOS 17E ColumnID: Alumina

Revision: 10/15/09 11:07

Lab ID:

0910025-008A

Client Sample ID: 0918695-008C,D

Collection Date:

10/06/09 10:40 10/07/09 15:35

Date Received: PrepDate:

10/13/09 10:13

BatchNo: 10128/R18530 8015W RSK175 FileID: 1-SAMP-E:\Osioct09\E101315.r

Col Type:

 Analyte
 Result Qual PQL
 MDL
 Units
 DF
 Date Analyzed

 DISSOLVED GASES BY GC/FID
 8015M/RSK175M
 (RSK 175)

 Methane
 1.4
 0.021
 0.014
 mg/L
 10
 10/13/09 14:08

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

910

: Anthony Crescenzi

Print Date: 10/15/09 11:10

475644

Project S

17

**Analytical Results** 

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

Life Science Laboratories, Inc.

Project:

ILT091007CL2

W Order:

0910025

Matrix:

WATER

Inst. ID:

GCO\$ 17E

ColumnID: Alumina

10/15/09 11:07

%Moisture:

Sample Size: 31 mL

TestCode: 8015W RSK175 FileID:

0910025-009A Lab ID:

Client Sample ID: 0918695-009C,D

Collection Date: Date Received:

PrepDate:

BatchNo:

10/06/09 13:45

10/07/09 15:35 10/13/09 10:13

10128/R18530

1-SAMP-E:\Osioct09\E101316.r

Revision: Col Type:

Analyte	Result Qual PQL		MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID					RSK175M	(RSK 175) 10/13/09 14:22
Methane	0.021	0.0021	0.0014	mg/L	1	10/13/09 14:22

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

Prim./Conf. column %D or RPD exceeds limit

Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

### **Analytical Results**

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

Life Science Laboratories, Inc.

0910025-010A

Project:

ILT091007CL2

Client Sample ID: 0918695-010C,D

W Order:

CLIENT:

0910025

Collection Date:

10/06/09 17:00

Matrix:

WATER

Date Received:

10/07/09 15:35 10/13/09 10:13

Inst. ID:

GCOS 17E

Sample Size: 31 mL %Moisture:

PrepDate: BatchNo:

Lab ID:

10128/R18530

ColumnID: Alumina 10/15/09 11:07 Revision:

TestCode:

8015W RSK175 FileID:

I-SAMP-E:\Osioct09\E101317.r

Col Type:

Analyte	Result Qual PQL		MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID					RSK175N	(RSK 175) 10/13/09 14:41
Methane	0.0044	0.0021	0.0014	mg/L	1	10/13/08 14:41

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

**Analytical Results** 

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT:

Life Science Laboratories, Inc.

Project:

ILT091007CL2

W Order:

0910025

Matrix:

WATER

Inst. ID:

GCOS 17E

ColumnID: Alumina

10/15/09 11:07

%Moisture:

Sample Size: 31 mL

BatchNo: TestCode: 8015W RSK175 FileID:

Lab ID:

PrepDate:

0910025-011A

Client Sample ID: 0918695-013C,D

10/06/09 0:00

Collection Date: Date Received:

10/07/09 15:35

10/13/09 10:13

10128/R18530

1-SAMP-E:\Osioct09\E101321.r

Revision: Col Type:

Analyte	Result Qu	al PQL	MDL	Units	D₽	Date Analyzed
DISSOLVED GASES BY GC/FID					RSK175M	(RSK 175)
Methane	0.64	0.010	0.0072	mg/L	5	10/13/09 15:37

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

#### Life Science Laboratories, Inc. LSL 5000 Brittonfield Parkway, Suite 200

**Analytical Results** 

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155 0910025-012A

CLIENT:

Life Science Laboratories, Inc.

Project:

ILT091007CL2

W Order: Matrix:

0910025 WATER

Inst. ID:

GCOS 17E

ColumnID: Alumina

10/15/09 11:07

Sample Size: 31 mL

%Moisture:

TestCode: 8015W RSK175 FileID:

BatchNo:

Lab ID:

Collection Date:

Date Received:

PrepDate:

Client Sample ID: 0918695-014C,D 10/06/09 17:20

10/07/09 15:35

10/13/09 10:13 10128/R18530

I-SAMP-E:\Osioct09\E101322.r

Revision: Col Type:

Analyte	Result Ou	Result Qual PQL MDL			DF	Date Analyzed
DISSOLVED GASES BY GC/FID				_	RSK175M	(RSK 175) 10/13/09 15:49
Methane	ND	0.0021	0.0014	mg/L	1	10/13/09 13.49

- Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
  - Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
  - S Spike Recovery outside accepted recovery limits

**Analytical Results** 

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT:

Life Science Laboratories, Inc.

Lab ID:

0910056-001A

Project:

ILT091013CL3

Client Sample ID: 0918960-001C,D

W Order:

0910056

Collection Date:

10/07/09 9:35

Matrix:

WATER

Date Received:

10/15/09 8:58

Inst. ID:

GCOS 17E Sample Size: 32 mL PrepDate: BatchNo:

10/18/09 8:51 10154/R18594

ColumnID: Alumina 10/22/09 15:20 Revision:

%Moisture:

TestCode: 8015W RSK175 FileID:

1-SAMP-E:\Osioct09\E101903.r

Col Type:

Analyte	Result Qual PQL		MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/I	RSK1758	# (RSK 175)
Methane	4.4	0.20	0.14	mg/L	100	10/19/09 13:52

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

Print Date: 10/22/09 15:25

477577

Project

1081

**Analytical Results** 

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT:

Life Science Laboratories, Inc.

0910056-002A

Project:

ILT091013CL3

Lab ID:

Client Sample ID: 0918960-002C,D

W Order:

0910056

**Collection Date:** 

10/07/09 16:30

Matrix:

WATER

Date Received:

10/15/09 8:58

Inst. ID:

GCOS 17E

Sample Size: 32 mL

PrepDate: BatchNo:

10/18/09 8:51 10154/R18594

ColumnID: Alumina Revision:

10/22/09 15:20

%Moisture:

TestCode: 8015W RSK175 FileID:

1-SAMP-E:\Osioct09\E101905.r

Col Type:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175M	(RSK 175)
Methane	0.28	0.010	0.0070	mg/L	5	10/19/09 14:14

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

Print Date: 10/22/09 15:25

477578

Project ?

## Life Science Laboratories, Inc. LSL 5000 Brittonfield Parkway, Suite 200

**Analytical Results** 

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT: Life Science Laboratories, Inc. JLT091013CL3

10/22/09 15:20

Lab ID:

0910056-003A

Project:

Client Sample ID: 0918960-003C,D

W Order: 0910056 WATER Matrix:

Collection Date: Date Received:

10/07/09 16:35 10/15/09 8:58 10/18/09 8:51

GCOS 17E Inst. ID: ColumnID: Alumina

Sample Size: 31 mL %Moisture:

PrepDate: BatchNo:

10154/R18594 1-SAMP-E:\Osioct09\E101906.r

Revision: Col Type:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed	
DISSOLVED GASES BY GC/FID				8015M/	RSK1751	W (RSK 175)	
Methane	0.012	0.0021	0.0014	mg/L	1	10/19/09 14:25	

TestCode: 8015W RSK175 FileID:

Qualiflers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

Print Date: 10/22/09 15:25

477579

Project 1083

#### Life Science Laboratories, Inc. LSL 5000 Brittonfield Parkway, Suite 200

**Analytical Results** 

East Syracuse, NY 13057

(315) 437-0200

Sample Size: 31 mL

StateCertNo: 10155

CLIENT: Life Science Laboratories, Inc.

1LT091013CL3

W Order: 0910056 Matrix: WATER

GCOS 17E Inst. ID: ColumnID: Alumina

10/22/09 15:20 Revision:

Lab ID:

0910056-004A

Client Sample ID: 0918960-004C,D

Collection Date: Date Received:

PrepDate:

BatchNo:

10/07/09 15:10

10/15/09 8:58 10/18/09 8:51 10154/R18594

%Moisture: 1-SAMP-E:\Osioct09\E101907.r TestCode: 8015W RSK175 FileID:

Col Type:

Project:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID		· · · · · · · · · · · · · · · · · · ·		8015M/	RSK175	M (RSK 175)
Methane	0.021	0.0021	0.0014	mg/L	1	10/19/09 14:38

Qualifiers:

Value exceeds Maximum Contaminant Level

E Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

Print Date: 10/22/09 15:25

477580

Project

1084

Project:

#### Life Science Laboratories, Inc.

**Analytical Results** 

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Sample Size: 32 mL

%Moisture:

TestCode:

StateCertNo: 10155

CLIENT: Life Science Laboratories, Inc.

ILT091013CL3

W Order: 0910056 Matrix: WATER

GCOS 17E Inst. ID:

ColumnID: Alumina Revision: 10/22/09 15:20

Lab ID:

0910056-005A Client Sample ID: 0918960-005C,D

Collection Date: Date Received:

10/08/09 14:25 10/15/09 8:58 10/18/09 8:51

PrepDate: 10154/R18594 BatchNo: 8015W RSK175 FileID: 1-SAMP-E:\Osioct09\E101908.r

Col Type:

DF Date Analyzed MDL Units Analyte Result Quai PQL 8015M/RSK175M (RSK 175) **DISSOLVED GASES BY GC/FID** 10/19/09 14:52 mg/L Methane 0.011 0.0020 0.0014

Qualifiers:

- Value exceeds Maximum Contaminant Level
- Value exceeds the instrument calibration range
- Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
  - S Spike Recovery outside accepted recovery limits

Print Date: 10/22/09 15:25

477581

Project 1085



**Analytical Results** 

LSL 5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT: Life Science Laboratories, Inc. Project:

ILT091013CL3

W Order: 0910056 Matrix: WATER

GCOS 17E Inst. ID: ColumnID: Alumina

Sample Size: 31 mL

%Moisture:

0910056-006A

Client Sample ID: 0918960-006C,D

10/07/09 8:45 Collection Date: Date Received:

10/15/09 8:58 10/18/09 8:51

10154/R18594

1-SAMP-E:\Osioct09\E101909.r TestCode: 8015W RSK175 FileID: Revision: 10/22/09 15:20

Lab ID:

PrepDate:

BatchNo:

Col Type:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175M	(RSK 175)
Methane	0.037	0.0021	0.0014	mg/L	1	10/19/09 15:04

Qualifiers:

- Value exceeds Maximum Contaminant Level
- Value exceeds the instrument calibration range
- Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/22/09 15:25

477582

Project 1086

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-103-10/09

LSL Sample ID:

0918695-001

Location:

Sampled:

10/06/09 15:45

Sampled By: Client

Sample Matrix: NPW

Aı	nalytical Method			Prep	Prep Analysis		
	Analyte	Result	Units	Date	Date & T	`ime	Initials
(6)	Dissolved Gases						
	Methane	0.097	mg/l		10/13/09	11:34	BL
(6)	EPA 200.7 Total Hardness as CaCO3						
	Hardness, Total	510	m <b>g/</b> l	10/8/09	10/22/09		DP
(1)	EPA 350.1, Rev 2.0 Ammonia						
	Ammonia as N	< 0.03	mg/l		10/22/09		DRB
(1)	EPA 8260 BTEX						
	Benzene	1.3	ug/l		10/7/09		BD
	Ethyl benzene	<1	ug/l		10/7/09		BD
	Xylenes (Total)	<2	ug/l		10/7/09		BD
	Surrogate (1,2-DCA-d4)	. 95	%R		10/7/09		BD
	Surrogate (Tol-d8)	101	%R		10/7/09		BD
	Surrogate (4-BFB)	98	%R		10/7/09		BD
(1)	EPA Method 300.0 A						
	Nitrate as N	<0.1	mg/l		10/7/09	23:11	RAF
	Sulfate	33	mg/l		10/7/09	23:11	RAF
<i>(1)</i>	SM 18 2320B, Alkalinity as CaCO3						
	Bicarbonate Alkalinity as CaCO3	330	mg/l		10/14/09		TER
	Carbonate Alkalinity as CaCO3	<3	mg/l		10/14/09		TER
	Hydroxide Alkalinity as CaCO3	<3	mg/l		10/14/09		TER

14

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-104-10/09

LSL Sample ID:

0918695-002

Location:

Sampled:

10/06/09 16:30

Sampled By: Client

Sample Matrix: NPW

		Prep	•		
Result	Units	Date	Date & T	ime	Initials
0.033	mg/l		10/13/09	11:45	BL
500	mg/l	10/8/09	10/22/09		₽P
< 0.03	mg/l		10/22/09		DRB
<1	ug/l		10/7/09		BD
<1	ug/I		10/7/09		BD
<2	ug/I		10/7/09		BD
94	%R		10/7/09		BD
99	%R		10/7/09		BD
99	%R		10/7/09		BD
< 0.1	mg/l		10/8/09	00:03	RAF
41	mg/l		10/8/09	00:03	RAF
370	mg/l		10/14/09		TER
<3	mg/l		10/14/09		TER
<3	mg/l		10/14/09		TER
	0.033 500 <0.03 <1 <1 <1 <2 94 99 99 <0.1 41 370 <3	0.033 mg/l  500 mg/l  <0.03 mg/l  <1 ug/l <1 ug/l <2 ug/l 94 %R 99 %R 99 %R 99 %R  <0.1 mg/l 41 mg/l  370 mg/l <3 mg/l	Result Units   Date	Result Units         Date         Date & T           0.033 mg/l         10/13/09           500 mg/l         10/8/09         10/22/09           <0.03 mg/l	Result Units         Date         Date & Time           0.033 mg/l         10/13/09 11:45           500 mg/l         10/8/09 10/22/09           <0.03 mg/l

Date Printed:

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-105-10/09

LSL Sample ID:

0918695-003

Location:

Sampled:

10/06/09 15:25

Sampled By: Client

Sample Matrix: NPW

Ar	alytical Method			Prep	Analys	is	Analyst
	Analyte	Result	Units	Date	Date & T	'ime	Initials
(6)	Dissolved Gases						
	Methane	0.51	mg/l		10/13/09	12:08	BL
(6)	EPA 200.7 Total Hardness as CaCO3						
	Hardness, Total	460	mg/l	10/8/09	10/22/09		DP
(1)	EPA 350.1, Rev 2.0 Ammonia						
	Ammonia as N	<0.03	mg/l		10/22/09		DRB
(1)	EPA 8260 BTEX						
	Benzene	16	ug/l		10/7/09		BD
	Ethyl benzene	8.6	ug/l		10/7/09		BD
	Xylenes (Total)	14	ug/l		10/7/09		BD
	Surrogate (1,2-DCA-d4)	93	%R		10/7/09		BD
	Surrogate (Tol-d8)	102	%R		10/7/09		BD
	Surrogate (4-BFB)	98	%R		10/7/09		BD
(1)	EPA Method 300.0 A						
	Nitrate as N	<0.1	mg/l		10/8/09	00:21	RAF
	Sulfate	14	mg/l		10/8/09	00:21	RAF
(1)	SM 18 2320B, Alkalinity as CaCO3						
	Bicarbonate Alkalinity as CaCO3	360	mg/l		10/14/09		TER
	Carbonate Alkalinity as CaCO3	<3	mg/l		10/14/09		TER
	Hydroxide Alkalinity as CaCO3	⋖	mg/I		10/14/09		TER

Date Printed:

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-106-10/09

LSL Sample ID:

0918695-004

Location:

Sampled:

10/06/09 16:45

Sampled By: Client

Sample Matrix: NPW

Recult	Mnits	Prep Date			
xusun	Omts				Initials
0.045	mg/l		10/13/09	12:19	BL
380	mg/l	10/8/09	10/21/09		DP
<0.03	mg/l		10/22/09		DRB
<1	ug/l		10/7/09		BD
<1	ug/l		10/7/09		BD
<2	ug/l		10/7/09		BD
96	%R		10/7/09		BD
98	%R		10/7/09		BD
99	%R		10/7/09		BD
<0.1	mg/l		10/8/09	00:39	RAF
36	mg/l		10/8/09	00:39	RAF
340	mg/l		10/14/09		TER
<3	mg/l		10/14/09		TER
<3	mg/i		10/14/09		TER
	380 <0.03 <1 <1 <2 96 98 99 <0.1 36 340 <3	0.045 mg/l  380 mg/l  <0.03 mg/l  <1 ug/l <1 ug/l <2 ug/l 96 %lR 98 %R 99 %R  <0.1 mg/l 36 mg/l  340 mg/l <3 mg/l	Result Units   Date	Result         Units         Date         Date & T           0.045         mg/l         10/13/09           380         mg/l         10/8/09         10/21/09           <0.03	Result Units         Date         Date & Time           0.045 mg/l         10/13/09         12:19           380 mg/l         10/8/09         10/21/09           <0.03 mg/l

Date Printed:

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-107-10/09

LSL Sample ID:

0918695-005

Location:

Sampled:

10/06/09 15:45

Sampled By: Client

Sample Matrix: NPW

Analy	tical Method Analyte	Result	Units	Prep Date	Analys Date & T		Analyst Initials
(6) Dis	ssolved Gases						BL
	Methane	0.057	mg/l		10/13/09	12:29	BE
(6) EP	A 200.7 Total Hardness as CaCO3						
	Hardness, Total	330	mg/l	10/8/09	10/21/09		DP
(1) EP	A 350.1, Rev 2.0 Ammonia						
	Ammonia as N	<0.03	mg/l		10/22/09		DRB
(1) EP	A 8260 BTEX						
	Benzene	<]	ug/l		10/7/09		BD
	Ethyl benzene	<1	ug/l		10/7/09		BD
	Xylenes (Total)	. <2	ug/l		10/7/09		BD
	Surrogate (1,2-DCA-d4)	96	%R		10/7/09		BD
	Surrogate (Tol-d8)	100	%R		10/7/09		BD
	Surrogate (4-BFB)	101	%R		10/7/09		BD
(I) EP	PA Method 300.0 A						
	Nitrate as N	0.54	mg/l		10/8/09	00:56	RAF
	Sulfate	42	mg/l		10/8/09	00:56	RAF
(1) SM	1 18 2320B, Alkalinity as CaCO3						
	Bicarbonate Alkalinity as CaCO3	180	mg/l		10/14/09		TER
	Carbonate Alkalinity as CaCO3	<3	mg/i		10/14/09		TER
	Hydroxide Alkalinity as CaCO3	<3	mg/l		10/14/09		TER

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ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-110-10/09

LSL Sample ID:

0918695-006

Location:

Sampled:

10/06/09 14:15

Sampled By: Client

Sample Matrix: NPW

Ar	alytical Method	Result	Units	Prep Date	Analys Date & T		Analyst Initials
	Analyte	Acsuit	Chics				
(6)	Dissolved Gases	2061			10/13/09	12:44	BL
	Methane	0.061	mg/l		10/15/05	12,57	52
(6)	EPA 200.7 Total Hardness as CaCO3						D.D.
	Hardness, Total	570	mg/l	10/8/09	10/22/09		DP
(1)	EPA 350.1, Rev 2.0 Ammonia						
	Ammonia as N	<0.03	mg/i		10/22/09		DRB
(1)	EPA 8260 BTEX				2017/00		BD
	Benzene	<1	ug/l		10/7/09		BD
	Ethyl benzene	<1	ug/l		10/7/09		BD
	Xylenes (Total)	<2	ug/l		10/7/09		BD
	Surrogate (1,2-DCA-d4)	95	%R		10/7/09		BD
	Surrogate (Tol-d8)	99	%R		10/7/09		
	Surrogate (4-BFB)	100	%R		10/7/09		BD
(1)	EPA Method 300.0 A						D 4 27
	Nitrate as N	<0.1	mg/l		1,0/8/09	01:14	RAF
	Sulfate	57	mg/l		10/8/09	01:14	RAF
(1)	SM 18 2320B, Alkalinity as CaCO3						nitrin
	Bicarbonate Alkalinity as CaCO3	380	mg/l		10/14/09		TER
	Carbonate Alkalinity as CaCO3	<3	mg/i		10/14/09		TER
	Hydroxide Alkalinity as CaCO3	<3	mg/l		10/14/09		TER

Page 7 of 15

Dewitt, NY ERM, Inc. - DeWitt

Sample ID:

ANG-MW-111-10/09

LSL Sample ID:

0918695-007

Location:

Sampled:

10/06/09 12:05

Sampled By: Client

Sample Matrix: NPW

•	Result	Units	Prep Date	•		Analyst Initials
Methane	0.039	mg/i		10/13/09	13:06	BL
EPA 200.7 Total Hardness as CaCO3						
Hardness, Total	540	mg/l	10/8/09	10/22/09		DP
EPA 350.1, Rev 2.0 Ammonia						
Ammonia as N	< 0.03	mg/l		10/22/09		DRB
EPA 8260 BTEX						
Benzene	<1	ug/l		10/7/09		BD
Ethyl benzene	1>	ug/l		10/7/09		BD
Xylenes (Total)	<2	ug/l		10/7/09		BD
Surrogate (1,2-DCA-d4)	103	%R		10/7/09		BD
Surrogate (Tol-d8)	99	%R		10/7/09		BD
Surrogate (4-BFB)	97	%R		10/7/09		BD
EPA Method 300.0 A						
Nitrate as N	<0.1	mg/l		10/8/09	01:31	RAF
Sulfate	49	mg/li		10/8/09	01:31	RAF
SM 18 2320B, Alkalinity as CaCO3						
Bicarbonate Alkalinity as CaCO3	360	mg/l		10/14/09		TER
Carbonate Alkalinity as CaCO3	<3	mg/l		10/14/09		TER
Hydroxide Alkalinity as CaCO3	<3	mg/I		10/14/09		TER
	EPA 200.7 Total Hardness as CaCO3 Hardness, Total  EPA 350.1, Rev 2.0 Ammonia Ammonia as N  EPA 8260 BTEX Benzene Ethyl benzene Xylenes (Total) Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB)  EPA Method 300.0 A Nitrate as N Sulfate  SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3	Analyte         Result           Dissolved Gases         0.039           EPA 200.7 Total Hardness as CaCO3         540           Hardness, Total         540           EPA 350.1, Rev 2.0 Ammonia         360           Ammonia as N         <0.03	Analyte         Result Units           Dissolved Gases         Methane         0.039 mg/l           EPA 200.7 Total Hardness as CaCO3         Hardness, Total         540 mg/l           EPA 350.1, Rev 2.0 Ammonia         Ammonia as N         <0.03 mg/l           EPA 8260 BTEX         Benzene         <1 ug/l           Ethyl benzene         <1 ug/l           Ethyl benzene         <1 ug/l           Surrogate (Total)         <2 ug/l           Surrogate (1,2-DCA-d4)         103 %R           Surrogate (4-BFB)         99 %R           Surrogate (4-BFB)         99 %R           EPA Method 300.0 A         Nitrate as N         <0.1 mg/l           Sulfate         49 mg/l           SM 18 2320B, Alkalinity as CaCO3         Bicarbonate Alkalinity as CaCO3         360 mg/l           Carbonate Alkalinity as CaCO3         360 mg/l	Analyte         Result         Units         Date           Dissolved Gases         0.039         mg/l         10/8/09           EPA 200.7 Total Hardness as CaCO3         340         mg/l         10/8/09           EPA 350.1, Rev 2.0 Ammonia         340         mg/l         10/8/09           EPA 8260 BTEX         340         mg/l         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340         340	Analyte         Result         Units         Date         Date & T           Dissolved Gases         0.039         mg/l         10/13/09           EPA 200.7 Total Hardness as CaCO3         Hardness, Total         540         mg/l         10/8/09         10/22/09           EPA 350.1, Rev 2.0 Ammonia         Ammonia as N         <0.03	Analyte         Result         Units         Date         Date & Time           Dissolved Gases         Methane         0.039         mg/l         10/13/09         13.06           EPA 200.7 Total Hardness as CaCO3         Hardness, Total         540         mg/l         10/8/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09

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ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-112-10/09

LSL Sample ID:

0918695-008

Location:

Sampled:

10/06/09 10:40

Sampled By: Client

Sample Matrix: NPW

Áı	alytical Method Analyte	Result	Units	Prep Date	Analys Date & T		Analyst Initials
(6)	Dissolved Gases Methane	1.4	mg/l		10/13/09	14:08	BL
(6)	EPA 200.7 Total Hardness as CaCO3 Hardness, Total	510	mg/l	10/8/09	10/22/09		DP
(1)	EPA 350.1, Rev 2.0 Ammonia Ammonia as N	0.051	mg/l		10/22/09		DRB
(1)	EPA 8260 BTEX  Benzene Ethyl benzene Xylenes (Total) Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB)	<10 48 <20 111 98 95	ug/I ug/I ug/I %R %R %R		10/8/09 10/8/09 10/8/09 10/8/09 10/8/09		BD BD BD BD BD BD
(1)	EPA Method 300.0 A Nitrate as N Sulfate	1.4 8.4	mg/l mg/l		10/8/09 10/8/09	01:49 01:49	RAF RAF
(1)	SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Hydroxide Alkalinity as CaCO3	340 <3 <3	mg/l mg/l mg/l		10/14/09 10/14/09 10/14/09		TER TER TER

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-113-10/09

LSL Sample ID:

0918695-009

Location:

Sampled:

10/06/09 13:45

Sampled By: Client

nalytical Method			Prep	Analysis		Analyst
Analyte	Result	Units	Date	Date & T	'ime	Initials
Dissolved Gases						
Methane	0.021	mg/l		10/13/09	14:22	BL
EPA 200.7 Total Hardness as CaCO3						
Hardness, Total	540	mg/l	10/8/09	10/22/09		DP
EPA 350.1, Rev 2.0 Ammonia						
Ammonia as N	< 0.03	mg/l		10/22/09		DRB
EPA 8260 BTEX						
Benzene	<1	ug/l		10/7/09		BD
Ethyl benzene	<1	ug/l		10/7/09		BD
Xylenes (Total)	<2	ug/l		10/7/09		BD
Surrogate (1,2-DCA-d4)	103	%R		10/7/09		BD
Surrogate (Tol-d8)	99	%R		10/7/09		BD
Surrogate (4-BFB)	100	%R		10/7/09		BD
EPA Method 300.0 A						
Nitrate as N	<0.1	mg/l		10/8/09	02:07	RAF
Sulfate	62	mg/l		10/8/09	02:07	RAF
SM 18 2320B, Alkalinity as CaCO3						
Bicarbonate Alkalinity as CaCO3	340	mg/l		10/14/09		TER
Carbonate Alkalinity as CaCO3	<3	mg/l		10/14/09		TER
Hydroxide Alkalinity as CaCO3	<3	mg/l		10/14/09		TER
	Dissolved Gases Methane  EPA 200.7 Total Hardness as CaCO3 Hardness, Total  EPA 350.1, Rev 2.0 Ammonia Ammonia as N  EPA 8260 BTEX Benzene Ethyl benzene Xylenes (Total) Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB)  EPA Method 300.0 A Nitrate as N Sulfate  SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3	Analyte         Result           Dissolved Gases         0.021           EPA 200.7 Total Hardness as CaCO3         30.02           Hardness, Total         540           EPA 350.1, Rev 2.0 Ammonia         30.03           EPA 8260 BTEX         30.03           Benzene         41           Ethyl benzene         41           Xylenes (Total)         42           Surrogate (1,2-DCA-d4)         103           Surrogate (Tol-d8)         99           Surrogate (4-BFB)         100           EPA Method 300.0 A         40.1           Nitrate as N         40.1           Sulfate         62           SM 18 2320B, Alkalinity as CaCO3         340           Carbonate Alkalinity as CaCO3         340           Carbonate Alkalinity as CaCO3         43	Analyte         Result         Units           Dissolved Gases         Methane         0.021         mg/l           EPA 200.7 Total Hardness as CaCO3 Hardness, Total         540         mg/l           EPA 350.1, Rev 2.0 Ammonia Ammonia as N         <0.03	Analyte         Result         Units         Date           Dissolved Gases         Methane         0.021         mg/l         FRA           EPA 200.7 Total Hardness as CaCO3         Hardness, Total         540         mg/l         10/8/09           EPA 350.1, Rev 2.0 Ammonia         40.03         mg/l         10/8/09           EPA 8260 BTEX         540         mg/l         40.03         10.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03         40.03 <td>Analyte         Result         Units         Date         Date &amp; T           Dissolved Gases         0.021         mg/l         10/13/09           EPA 200.7 Total Hardness as CaCO3         sq/l         10/8/09         10/22/09           EPA 350.1, Rev 2.0 Ammonia         sq/l         10/8/09         10/22/09           EPA 8260 BTEX         sq/l         10/7/09           Ethyl benzene         sq/l         10/7/09         10/7/09           Xylenes (Total)         sq/l         10/7/09         10/7/09           Surrogate (1,2-DCA-d4)         103         %R         10/7/09           Surrogate (Tol-d8)         99         %R         10/7/09           Surrogate (4-BFB)         100         %R         10/7/09           EPA Method 300.0 A         sq/l         10/8/09           Nitrate as N         sq/l         10/8/09           Sulfate         sq/l         10/8/09           SM 18 2320B, Alkalinity as CaCO3         340         mg/l         10/14/09           Carbonate Alkalinity as CaCO3         340         mg/l         10/14/09</td> <td>Analyte         Result         Units         Date         Date &amp; Time           Dissolved Gases         Methane         0.021         mg/l         10/13/09         14/22           EPA 200.7 Total Hardness as CaCO3         mg/l         10/8/09         10/22/09         10/22/09           EPA 350.1, Rev 2.0 Ammonia         40.03         mg/l         10/8/09         10/22/09         10/22/09           EPA 8260 BTEX         80 mg/l         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         <td< td=""></td<></td>	Analyte         Result         Units         Date         Date & T           Dissolved Gases         0.021         mg/l         10/13/09           EPA 200.7 Total Hardness as CaCO3         sq/l         10/8/09         10/22/09           EPA 350.1, Rev 2.0 Ammonia         sq/l         10/8/09         10/22/09           EPA 8260 BTEX         sq/l         10/7/09           Ethyl benzene         sq/l         10/7/09         10/7/09           Xylenes (Total)         sq/l         10/7/09         10/7/09           Surrogate (1,2-DCA-d4)         103         %R         10/7/09           Surrogate (Tol-d8)         99         %R         10/7/09           Surrogate (4-BFB)         100         %R         10/7/09           EPA Method 300.0 A         sq/l         10/8/09           Nitrate as N         sq/l         10/8/09           Sulfate         sq/l         10/8/09           SM 18 2320B, Alkalinity as CaCO3         340         mg/l         10/14/09           Carbonate Alkalinity as CaCO3         340         mg/l         10/14/09	Analyte         Result         Units         Date         Date & Time           Dissolved Gases         Methane         0.021         mg/l         10/13/09         14/22           EPA 200.7 Total Hardness as CaCO3         mg/l         10/8/09         10/22/09         10/22/09           EPA 350.1, Rev 2.0 Ammonia         40.03         mg/l         10/8/09         10/22/09         10/22/09           EPA 8260 BTEX         80 mg/l         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09         10/7/09 <td< td=""></td<>

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-114-10/09

LSL Sample ID:

0918695-010

Location:

Sampled:

10/06/09 17:00

Sampled By: Client

An	alytical Method Analyte	Result	Result Units		Analysis Date & Time		Analyst Initials
(6)	Dissolved Gases Methane	0.0044	mg/l		10/13/09	14:41	BL
6)	EPA 200.7 Total Hardness as CaCO3 Hardness, Total	400	mg/i	10/8/09	10/21/09		DP
(1)	EPA 350.1, Rev 2.0 Ammonia Ammonia as N	<0.03	mg/l		10/22/09		DRB
(I)	EPA 8260 BTEX  Benzene Ethyl benzene Xylenes (Total) Surrogate (1,2-DCA-d4)	<1 <1 <2 106	ug/l ug/l ug/l %R		10/7/09 10/7/09 10/7/09 10/7/09		BD BD BD
	Surrogate (Tol-d8) Surrogate (4-BFB)	98 98	%R %R		10/7/09 10/7/09		BC BC
(1)	EPA Method 300.0 A Nitrate as N Sulfate	<0.1 56	mg/l mg/l		10/8/09 10/8/09	02:24 02:24	RAI RAI
<i>(1)</i>	SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Hydroxide Alkalinity as CaCO3	350 <3 <3	mg/l mg/l mg/l		10/14/09 10/14/09 10/14/09		TEF TEF TEF

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-DUP-01-10/09

LSL Sample ID:

0918695-013

Location:

Sampled:

10/06/09 0:00

Sampled By: Client

Sample Matrix: QC

Aı	nalytical Method			Prep	Analysis		Analyst
	Analyte	Result	Units	Date	Date & T	ime	Initials
(6)	Dissolved Gases						
	Methane	0.64	mg/l		10/13/09	15:37	BL
(6)	EPA 200.7 Total Hardness as CaCO3						
	Hardness, Total	500	mg/l	J 10/8/09	10/22/09		DP
	*This result should be considered an est	imate because the concer	tration of	Calcium exceeded the linear	range of the	instrument	
(1)	EPA 350.1, Rev 2.0 Ammonia						
	Ammonia as N	<0.03	mg/I		10/22/09		DRB
(1)	EPA 8260 BTEX						
	Benzene	<1	ug/l		10/7/09		BD
	Ethyl benzene	46	ug/l		10/7/09		BD
	Xylenes (Total)	8.4	ug/l		10/7/09		BD
	Surrogate (1,2-DCA-d4)	108	%R		10/7/09		BD
	Surrogate (Tol-d8)	101	%R		10/7/09		BD
	Surrogate (4-BFB)	93	%R		10/7/09		BD
(1)	EPA Method 300.0 A						
	Nitrate as N	<0.1	mg/l		10/8/09	04:27	RAF
	Sulfate	11	mg/l		10/8/09	04:27	RAF
(1)	SM 18 2320B, Alkalinity as CaCO3						
	Bicarbonate Alkalinity as CaCO3	360	mg/l		10/14/09		TER
	Carbonate Alkalinity as CaCO3	<3	mg/l		10/14/09		TER
	Hydroxide Alkalinity as CaCO3	<3	mg/l		10/14/09		TER

Date Printed:

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-EB-01-10/09

LSL Sample ID:

0918695-014

Location:

Sampled:

10/06/09 17:20

Sampled By: Client

Sample Matrix: QC

A.	nalytical Method	· ·	TT	Prep	Analysis		Analyst
	Analyte	Result	Units	Date	Date & I	ine	Initials
(6)	Dissolved Gases					-	
	Methane	< 0.001	mg/i		10/13/09	15:49	BL
(6)	EPA 200.7 Total Hardness as CaCO3						
	Hardness, Total	<7	mg/l	10/8/09	10/21/09		DP
(1)	EPA 350.1, Rev 2.0 Ammonia						
	Ammonia as N	<0.03	mg/I		10/22/09		DRB
<i>(1)</i>	EPA 8260 BTEX						
	Benzene	<1	ug/l		10/7/09		BD
	Ethyl benzene	<1	ug/i		10/7/09		BD
	Xylenes (Total)	<2	ug/l		10/7/09		BD
	Surrogate (1,2-DCA-d4)	109	%R		10/7/09		BD
	Surrogate (Tol-d8)	99	%R		10/7/09		BD
	Surrogate (4-BFB)	96	%R		10/7/09		BD
(1)	EPA Method 300.0 A		•				
	Nitrate as N	<0.1	mg/l		10/21/09	17:52	RAF
	This analysis was performed beyond the	holding time limit.					
	Sulfate	<1	mg/l		10/21/09	17:52	RAF
(1)	SM 18 2320B, Alkalinity as CaCO3						
	Bicarbonate Alkalinity as CaCO3	7.0	mg/l		10/14/09		TER
	Carbonate Alkalinity as CaCO3	<3	mg/t		10/14/09		TER
	Hydroxide Alkalinity as CaCO3	<3	mg/l		10/14/09		TER

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-TB-01-10/09

LSL Sample ID:

0918695-015

Location:

Sampled:

10/06/09 0:00

Sampled By: Client

Sample Matrix: TB

Analytical Method		7	Manufe Wester		Analysis	Analyst
Analyte		Result	Units	Date	Date & Time	<u>Initials</u>
(1) EPA 8260 BTEX		•		-		
Benzene		<1	ug/l		10/7/09	BD
Ethyl benzene		<1	ug/i		10/7/09	BD
Xylenes (Total)		<2	ug/i		10/7/09	BD
Surrogate (1,2-DCA-d	4)	107	%R		10/7/09	BD
Surrogate (Tol-d8)		100	%R		10/7/09	BD
Surrogate (4-BFB)		100	%R		10/7/09	BD

Date Printed:

ERM, Inc. - DeWitt

Dewitt, NY

Sample ID:

ANG-MW-2-10/09

LSL Sample ID:

0918960-001

Location:

Sampled:

10/07/09 9:35

Sampled By: SP

Aı	alytical Method Analyte	Result	Result Units		Analysis Date & Time		Analyst Initials
<u>—</u> (6)	Dissolved Gases	Acoust	OM C	Date			
1-7	Methane	4.4	mg/l		10/19/09	13:52	BL
(6)	EPA 200.7 Total Hardness as CaCO3						
	Hardness, Total	590	mg/l	10/14/09	10/21/09		TER
(1)	EPA 350.1, Rev 2.0 Ammonia						
	Ammonia as N	0.20	mg/l		10/22/09		DRB
(1)	EPA 8260 BTEX						
	Benzene	<1	ug/l		10/21/09		CRT
	Ethyl benzene	200	ug/l		10/21/09		CRT
	Xylenes (Total)	370	ug/l		10/21/09		CRT
	Surrogate (1,2-DCA-d4)	101	%R		10/21/09		CRT
	Surrogate (Tol-d8)	99	%R		10/21/09		CRT
	Surrogate (4-BFB)	106	%R		10/21/09		CRT
(1)	EPA Method 300.0 A						
	Sulfate	2.8	mg/l		10/9/09	19:51	CRT
(1)	SM 18 2320B, Alkalinity as CaCO3						
	Bicarbonate Alkalinity as CaCO3	400	mg/l		10/14/09		TER
	Carbonate Alkalinity as CaCO3	<3	mg/l		10/14/09		TER
	Hydroxide Alkalinity as CaCO3	<3	mg/l		10/14/09		TER

ERM, Inc. - DeWitt

Dewitt, NY

Sample ID:

ANG-MW-3-10/09

LSL Sample ID:

0918960-002

Location:

Sampled:

10/07/09 16:30

Sampled By: Client

Aı	nalytical Method Analyte	Pasult	Result Units		Analysis Date & Time		Analyst Initials
(6)	Dissolved Gases	Acsuit	Office	Date	2000 00 1		
197	Methane	0.28	mg/l		10/19/09	14:14	BL
(6)	EPA 200.7 Total Hardness as CaCO3						
	Hardness, Total	500	mg/l	10/14/09	10/21/09		TER
(1)	EPA 350.1, Rev 2.0 Ammonia						
	Ammonia as N	0.75	mg/l		10/22/09		DRB
(1)	EPA 8260 BTEX						
	Benzene	<1	ug/l		10/21/09		CRT
	Ethyl benzene	<1	ug/l		10/21/09		CRT
	Xylenes (Total)	<2	ug/l		10/21/09		CRT
	Surrogate (1,2-DCA-d4)	81	%R		10/21/09		CRT
	Surrogate (Tol-d8)	107	%R		10/21/09		CRT
	Surrogate (4-BFB)	107	%R		10/21/09		CRT
(1)	EPA Method 300.0 A						
	Nitrate as N	<0.1	mg/l		10/9/09	16:03	CRT
	Sulfate	9.3	mg/l		10/9/09	16:03	CRT
(1)	SM 18 2320B, Alkalinity as CaCO3						
	Bicarbonate Alkalinity as CaCO3	360	mg/l		10/14/09		TER
	Carbonate Alkalinity as CaCO3	<3	mg/l		10/14/09		TER
	Hydroxide Alkalinity as CaCO3	<3	mg/l		10/14/09		TER

ERM, Inc. - DeWitt

Dewitt, NY

Sample ID:

ANG-MW-4-10/09

LSL Sample ID:

0918960-003

Location:

Sampled:

10/07/09 16:35

Sampled By: Client

Sample Matrix: NPW

Āī	nalytical Method Analyte	Result	Result Units		Analysis Date & Time		Analyst Initials
(6)	Dissolved Gases						
	Methane	0.012	mg/l		10/19/09	14:25	BL
(6)	EPA 200.7 Total Hardness as CaCO3						
	Hardness, Total	350	mg/l	10/14/09	10/21/09		TER
(1)	EPA 350.1, Rev 2.0 Ammonia						
	Ammonia as N	0.11	mg/l		10/22/09		DRB
(1)	EPA 8260 BTEX						
	Benzene	<1	ug/l		10/21/09		CRT
	Ethyl benzene	</td <td>ug/l</td> <td></td> <td>10/21/09</td> <td></td> <td>CRT</td>	ug/l		10/21/09		CRT
	Xylenes (Total)	<2	ug/l		10/21/09		CRT
	Surrogate (1,2-DCA-d4)	102	%R		10/21/09		CRT
	Surrogate (Tol-d8)	101	%R		10/21/09		CRT
	Surrogate (4-BFB)	99	%R		10/21/09		CRT
(1)	EPA Method 300.0 A						
	Nitrate as N	0.21	mg/l		10/9/09	16:20	CRT
	Sulfate	37	mg/l		10/9/09	16:20	CRT
(I)	SM 18 2320B, Alkalinity as CaCO3						
	Bicarbonate Alkalinity as CaCO3	290	mg/l		10/14/09		TER
	Carbonate Alkalinity as CaCO3	<3	mg/l		10/14/09		TER
	Hydroxide Alkalinity as CaCO3	<3	mg/l		10/14/09		TER

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ERM, Inc. - DeWitt

Dewitt, NY

Sample ID:

ANG-MW-5-10/09

LSL Sample ID:

0918960-004

Location:

Sampled:

10/07/09 15:10

Sampled By: Client

· ·			Prep Date	Analysis Date & Time		Analyst Initials
Dissolved Gases						
Methane	0.02	mg/l		10/19/09	14:38	BL
EPA 200.7 Total Hardness as CaCO3						
Hardness, Total	310	mg/l	10/14/09	10/21/09		TER
EPA 350.1, Rev 2.0 Ammonia						
Ammonia as N	< 0.03	mg/l		10/22/09		DRB
EPA 8260 BTEX						
Benzene	<1	ug/[		10/21/09		CRT
Ethyl benzene	<1	ug/l		10/21/09		CRT
Xylenes (Total)	<2	ug/l		10/21/09		CRT
Surrogate (1,2-DCA-d4)	115	%R		10/21/09		CRT
Surrogate (Tol-d8)	98	%R		10/21/09		CRT
Surrogate (4-BFB)	96	%R		10/21/09		CRT
EPA Method 300.0 A						
Sulfate	8.6	mg/l		10/9/09	15:28	CRT
SM 18 2320B, Alkalinity as CaCO3						
Bicarbonate Alkalinity as CaCO3	280	mg/J		10/14/09		TER
Carbonate Alkalinity as CaCO3	<3	mg/l		10/14/09		TER
Hydroxide Alkalinity as CaCO3	<3	mg/l		10/14/09		TER
	Methane EPA 200.7 Total Hardness as CaCO3 Hardness, Total EPA 350.1, Rev 2.0 Ammonia Ammonia as N EPA 8260 BTEX Benzene Ethyl benzene Xylenes (Total) Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB) EPA Method 300.0 A Sulfate SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3	Analyte         Result           Dissolved Gases         0.02           EPA 200.7 Total Hardness as CaCO3         310           Hardness, Total         310           EPA 350.1, Rev 2.0 Ammonia         <0.03	Analyte         Result         Units           Dissolved Gases         0.02         mg/l           Methane         0.02         mg/l           EPA 200.7 Total Hardness as CaCO3         310         mg/l           Hardness, Total         310         mg/l           EPA 350.1, Rev 2.0 Ammonia         40.03         mg/l           Ammonia as N         <0.03	Analyte         Result         Units         Date           Dissolved Gases         0.02         mg/l         Park           Methane         0.02         mg/l         Park           EPA 200.7 Total Hardness as CaCO3         mg/l         10/14/09           Hardness, Total         310         mg/l         10/14/09           EPA 350.1, Rev 2.0 Ammonia         40.03         mg/l         10/14/09           EPA 8260 BTEX         5         5         10/1         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09         10/14/09	Analyte         Result         Units         Date         Date & T           Dissolved Gases         Methane         0.02         mg/l         10/19/09           EPA 200.7 Total Hardness as CaCO3         Hardness, Total         310         mg/l         10/14/09         10/21/09           EPA 350.1, Rev 2.0 Ammonia         Ammonia as N         <0.03	Dissolved Gases

ERM, Inc. - DeWitt D

Dewitt, NY

Sample ID:

ANG-MW-8-10/09

LSL Sample ID:

0918960-005

Location:

Sampled:

10/08/09 14:25

Sampled By: Client

ialytical Method			Prep	Analysis		Analyst
Analyte	Result	Units	Date	Date & Time		Initials
Dissolved Gases						
Methane	0.011	mg/l		10/19/09	14:52	BL
EPA 200.7 Total Hardness as CaCO3						
Hardness, Total	650	mg/l	10/14/09	10/21/09		TER
EPA 350.1, Rev 2.0 Ammonia						
Ammonia as N	<0.03	mg/l		10/22/09		DRB
EPA 8260 BTEX						
Benzene	<1	ug/l		10/21/09		CRT
Ethyl benzene	<1	ug/l		10/21/09		CRT
Xylenes (Total)	<2	ug/l		10/21/09		CRT
Surrogate (1,2-DCA-d4)	117	%R		10/21/09		CRT
Surrogate (Tol-d8)	100	%R		10/21/09		CRT
Surrogate (4-BFB)	93	%R		10/21/09		CRT
EPA Method 300.0 A						
Nitrate as N	<0.1	mg/l		10/9/09	16:38	CRT
Sulfate	52	mg/l		10/9/09	16:38	CRT
SM 18 2320B, Alkalinity as CaCO3						
Bicarbonate Alkalinity as CaCO3	400	mg/l		10/14/09		TER
Carbonate Alkalinity as CaCO3	<3	mg/l		10/14/09		TER
Hydroxide Alkalinity as CaCO3	<3	mg/l		10/14/09		TER
	Dissolved Gases Methane  EPA 200.7 Total Hardness as CaCO3 Hardness, Total  EPA 350.1, Rev 2.0 Ammonia Ammonia as N  EPA 8260 BTEX Benzene Ethyl benzene Xylenes (Total) Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB)  EPA Method 300.0 A Nitrate as N Sulfate  SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3	Dissolved Gases           Methane         0.011           EPA 200.7 Total Hardness as CaCO3         4650           Hardness, Total         650           EPA 350.1, Rev 2.0 Ammonia         300           Ammonia as N         400           EPA 8260 BTEX         4           Benzene         4           Ethyl benzene         4           Xylenes (Total)         4           Surrogate (1,2-DCA-d4)         117           Surrogate (Tol-d8)         100           Surrogate (4-BFB)         93           EPA Method 300.0 A         401           Nitrate as N         401           Sulfate         52           SM 18 2320B, Alkalinity as CaCO3         400           Carbonate Alkalinity as CaCO3         400           Carbonate Alkalinity as CaCO3         400	Dissolved Gases         Methane         0.011         mg/l           EPA 200.7 Total Hardness as CaCO3         Hardness, Total         650         mg/l           EPA 350.1, Rev 2.0 Ammonia         Ammonia as N         <0.03	Dissolved Gases         Methane         0.011         mg/l           EPA 200.7 Total Hardness as CaCO3         Hardness, Total         650         mg/l         10/14/09           EPA 350.1, Rev 2.0 Ammonia         <0.03	Dissolved Gases         Methane         0.011         mg/l         10/19/09           EPA 200.7 Total Hardness as CaCO3           Hardness, Total         650         mg/l         10/21/09         10/22/09           EPA 350.1, Rev 2.0 Ammonia         wg/l         10/22/09           EPA 8260 BTEX           Benzene          10/21/09           Ethyl benzene          10/21/09           Xylenes (Total)          2         ug/l         10/21/09           Surrogate (1,2-DCA-d4)         117         %R         10/21/09           Surrogate (70-d8)         10         %R         10/21/09           Surrogate (4-BFB)         93         %R         10/21/09           EPA Method 300.0 A           Nitrate as N         <0.1         mg/l         10/9/09           Sulfate         52         mg/l         10/9/09	Dissolved Gases         Methane         0.011         mg/l         10/19/09         14:52           EPA 200.7 Total Hardness as CaCO3         Hardness, Total         650         mg/l         10/14/09         10/21/09         10/21/09         10/21/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09         10/22/09

ERM, Inc. - DeWitt

Dewitt, NY

Sample ID:

ANG-MW-9-10/09

LSL Sample ID:

0918960-006

Location:

Sampled:

10/07/09 8:45

Sampled By: Client

Sample Matrix: NPW

Ar	alytical Method  Analyte	Result	Units	Prep Date	Analysis Date & Time		Analyst Initials
(6)		ACSUIT	Onits	Duit	20000		
(6)	Dissolved Gases	0.017	o /1		10/19/09	15:04	BL
	Methane	0.037	mg/l		10/13/03	13.04	DL
(6)	EPA 200.7 Total Hardness as CaCO3						
	Hardness, Total	220	mg/l	10/14/09	10/21/09		TER
(1)	EPA 350.1, Rev 2.0 Ammonia						
	Ammonia as N	0.33	mg/l		10/22/09		DRB
(1)	EPA 8260 BTEX						
	Benzene	<1	ug/l		10/21/09		CRT
	Ethyl benzene	<1	ug/l		10/21/09		CRT
	Xylenes (Total)	<2	ug/l		10/21/09		CRT
	Surrogate (1,2-DCA-d4)	112	%R		10/21/09		CRT
	Surrogate (Tol-d8)	98	%R		10/21/09		CRT
	Surrogate (4-BFB)	97	%R		10/21/09		CRT
(I)	EPA Method 300.0 A						
	Sulfate	12	mg/l		10/9/09	20:09	CRT
(1)	SM 18 2320B, Alkalinity as CaCO3						
	Bicarbonate Alkalinity as CaCO3	260	mg/l		10/14/09		TER
	Carbonate Alkalinity as CaCO3	<3	mg/l		10/14/09		TER
	Hydroxide Alkalinity as CaCO3	<3	mg/l		10/14/09		TER

Life Science

Dewitt, NY

ERM, Inc. - DeWitt

Sample ID:

ANG-MW-2-10/09

LSL Sample ID:

0918960-007

Location:

Sampled:

10/12/09 11:25

Sampled By: Client

Sample Matrix: NPW

Analytical Method			Prep	Analysis	Analyst
Analyte	Result	Units	Date	Date & Time	Initials
			· · · · · · · · · · · · · · · · · · ·		

(1) EPA Method 300.0 A

Nitrate as N

<0.1 mg/l

10/12/09 16:50

CRT

Date Printed:

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-5-10/09

LSL Sample ID:

0918960-008

Location:

Sampled:

10/12/09 10:40

Sampled By: Client

Analytical Method Analyte	Result	Units	Prep Date	Analys Date & T		Analyst Initials
(I) EPA Method 300.0 A						
Nitrate as N	<0.1	mg/l		10/12/09	17:08	CRT

ERM, Inc. - DeWitt

Dewitt, NY

Sample ID:

ANG-MW-9-10/09

LSL Sample ID:

0918960-009

Location:

Sampled:

10/12/09 13:15

Sampled By: Client

Analytical Method Analyte	Result	Units	Prep Date	Analys Date & T		Analyst Initials
(1) EPA Method 300.0 A						· · · · · · · · · · · · · · · · · · ·
Nitrate as N	<0.1	mg/l		10/12/09	17:25	CRT

MW-11 VOLATILE ORGANICS ANALYSIS DATA SHEET Life Science Laboratories, Inc. Contract: Lab Name: SAS No.: SDG No.: 0918965 10248 Case No.: Lab Code: Lab Sample ID: 0918965-001 Matrix: (soil/water) WATER Lab File ID: C12457S Sample wt/vol: 10 (g/ml) ML Date Received: _____10/8/2009 (low/med) LOW Level: Date Analyzed: 10/22/2009 % Moisture: not dec. NA Dilution Factor: 1.0 ID 0.53 (mm) GC Column: DB-624 Soil Aliquot Volume: NA ____ (uL) NA (uL) Soil Extract Volume: CONCENTRATION UNITS: COMPOUND Q CAS NO. UG/L 71-43-2 100-41-4 Ethylberizene 108-38-3 m p Xylone

**exxylerie** 

95-47-6

EPA SAMPLE, NO.

EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET Life Science Laboratories, Inc. Contract: Lab Name: 0918965 SDG No.: SAS No.: Lab Code: 10248 Case No.: Lab Sample ID: 0918965-001RE 2X Matrix: (soil/water) WATER Lab File ID: C12471S 10 ML Sample wt/vol: (g/ml) Date Received: 10/8/2009 LOW (low/med) Level: Date Analyzed: ____ 10/22/2009 % Moisture: not dec. NA Dilution Factor: 2.0 0.53 (mm) GC Column: DB-624 ID NA (uL) Soil Aliquot Volume: NA (uL) Soil Extract Volume:

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	49	
100-41-4	Ethylbenzene	11	
108-38-3	m/p-Xylene	16	
95-47-6	o-Xylene	2	U

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Lab Name:		TILE ORGA e Laborator		/SIS DATA SHEET Contract:		W-14
Lab Code:	10248	Case No.:		SAS No.:	SDG No.:	0918965
Matrix: (soil/w	ater)	WATER	_		Lab Sample ID: _	0918965-002
Sample wt/vol	;	10	. (g/ml)	ML	Lab File ID:	C12458S
Level:	(low/med)	LOW			Date Received: _	10/8/2009
% Moisture:	not dec.	NA			Date Analyzed:	10/22/2009
GC Column:	DB-624	. ID	0.53	(mm)	Dilution Factor:	1.0
Soil Extract Vo	olume:	NA	_(uL)	Soil Aliquot Volume:	NA (uL)	

#### CONCENTRATION UNITS:

EPA SAMPLE, NO.

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	3.9	
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

1 A EPA SAMPLE, NO. **VOLATILE ORGANICS ANALYSIS DATA SHEET** MW-15 DL Lab Name: Life Science Laboratories, Inc. Contract: SAS No.: SDG No.: 0918965 Lab Code: 10248 Case No.: _____ Matrix: (soil/water) WATER Lab Sample ID: 0918965-003 2X Lab File ID: 03778S Sample wt/vol: 25 (g/ml) ML. Date Received: 10/8/2009 Level: (low/med) LOW Date Analyzed: ____ 10/20/2009 % Moisture: not dec. NA Dilution Factor: 2.0 GC Column: Rtx-VMS ID 0.25 (mm) Soil Aliquot Volume: NA (uL) Soil Extract Volume: NA (uL) CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	10	
100-41-4	Ethylbenzene	11	
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET MW-16 Contract: Life Science Laboratories, Inc. Lab Name: SAS No.: SDG No.: 0918965 Lab Code: 10248 Case No.: Lab Sample ID: 0918965-006 Matrix: (soil/water) WATER Lab File ID: C12464S Sample wt/vol: 10 (g/ml) ML Date Received: 10/8/2009 Level: (low/med) LOW % Moisture: not dec. Date Analyzed: 10/22/2009 NA 0.53 Dilution Factor: GC Column: DB-624 ID 1.0 (mm) Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL) CONCENTRATION UNITS: CAS NO. COMPOUND Q UG/L

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Benzene

Ethylbenzene

m/p-Xylene

o-Xylene

71-43-2

100-41-4

108-38-3

95-47-6

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Lab Name:		FILE ORGA e Laborator		YSIS DATA SHEET Contract:	T	MW-17
Lab Code:	10248	Case No.:		SAS No.:	SDG No.:	0918965
Matrix: (soil/v	vater)	WATER		·	Lab Sample ID	: 0918965-007
Sample wt/vo	<b>I</b> :	10	. (g/ml)	ML	Lab File 1D	:C12465S
Level:	(low/med)	LOW	_		Date Received	: 10/8/2009
% Moisture:	not dec.	NA		,	Date Analyzed	1: 10/22/2009
GC Column:	DB-624	. ID	0.53	(mm) (	Dilution Factor	:1.0
Soil Extract V	olume:	NA	_(uL)	Soil Aliquot Volur	me: <u>NA</u> (uL	)
					CONCENTRATION UNITS	3:
	CASIN	10.	COMP	POUND	UG/L	Q
	71-43-2		Benzene		1	U
	100-41-4		Ethylbenze	ene	1	U
	108-38-3	<del></del>	m/p-Xylene		1	U
	05 47 0	····	- Milain		4	11

EPA SAMPLE, NO. 1 A **VOLATILE ORGANICS ANALYSIS DATA SHEET** MW-18 OL Life Science Laboratories, Inc. Lab Name: Contract: SAS No.: SDG No.: 0918965 Lab Code: 10248 Case No.: Lab Sample ID: 0918965-008 2X Matrix: (soil/water) WATER K03783S Lab File ID: ML Sample wt/vol: 25 (g/ml) Date Received: 10/8/2009 Level: (low/med) LOW Date Analyzed: 10/20/2009 % Moisture: not dec. NA Dilution Factor: 2.0 GC Column: Rtx-VMS ID 0.25 (mm) NA (uL) Soil Aliquot Volume: NA (uL) Soil Extract Volume:

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	, U
95-47-6	o-Xylene	1	U

EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET MW-19 0 Lab Name: Life Science Laboratories, Inc. Contract: SAS No.: SDG No.: 0918965 Lab Code: 10248 Case No.: Lab Sample ID: 0918965-009 20X Matrix: (soil/water) WATER Lab File ID: K03780S Sample wt/vol: 25 (g/mi) ML. Date Received: 10/8/2009 Level: (low/med) LOW Date Analyzed: 10/20/2009 % Moisture: not dec. NΑ Dilution Factor: 20.0 GC Column: Rtx-VMS ID 0.25 (mm) Soil Aliquot Volume: NA (uL) NA (uL) Soil Extract Volume:

### CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	QQ
71-43-2	Benzene	10	U
100-41-4	Ethylbenzene	380	
108-38-3	m/p-Xylene	420	
95-47-6	o-Xylene	1	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

VOLATILE ORGANICS ANALYS	SIS DATA SHEET
ife Science Laboratories, Inc.	Contract:

EPA SAMPLE, NO.					
MW-20	DL				

Lab Name:	Life Scienc	e Laborato	ries, Inc.	Contract:		
Lab Code:	10248	Case No.:		SAS No.:	SDG No.:	0918965
Matrix: (soil/	water)	WATER	-		Lab Sample ID:	0918965-010 2X
Sample wt/vo	d;	25	(g/ml)	ML	Lab File ID:	K03784S
Level:	(low/med)	LOW	-		Date Received:	10/8/2009
% Moisture:	not dec.	NA			Date Analyzed:	10/20/2009
GC Column:	Rtx-VMS	ID	0.25	(mm) _	Dilution Factor:	2.0
Soil Extract V	olume:	NA	_(uL)	Soil Aliquot Volume:	NA (uL)	
	2421		00110	COLINE	DNCENTRATION UNITS:	0

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

EPA SAMPLE. NO. 1 A **VOLATILE ORGANICS ANALYSIS DATA SHEET** MW-22 0L Lab Name: Life Science Laboratories, Inc. Contract: SAS No.: SDG No.: 0918965 Case No.: Lab Code: Lab Sample ID: 0918965-011 2X Matrix: (soil/water) WATER Sample wt/vol: 25 ML Lab File ID: K03785S (g/ml) Date Received: 10/8/2009 LOW Level: (low/med) Date Analyzed: 10/20/2009 % Moisture: not dec. NA 2.0 GC Column: Rtx-VMS 0.25 (mm) Dilution Factor: ID Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL) CONCENTRATION UNITS: Q

UG/L

5.6 21

3.0

1

COMPOUND

Benzene

o-Xylene

Ethylbenzene m/p-Xylene

CAS NO.

71-43-2

100-41-4

108-38-3 95-47-6

EPA SAMPLE, NO. 1 A **VOLATILE ORGANICS ANALYSIS DATA SHEET** MW-101 0 Lab Name: Life Science Laboratories, Inc. Contract: SAS No.: ____SDG No.: 0918965 Lab Code: 10248 Case No.: Lab Sample ID: 0918965-012 2X Matrix: (soil/water) WATER Lab File ID: K03779S Sample wt/vol: 25 (g/ml) ML Date Received: ____ 10/8/2009 Level: (low/med) LOW Date Analyzed: 10/20/2009 % Moisture: not dec. NA Dilution Factor: 2.0 GC Column: Rtx-VMS ID 0.25 (mm) Soil Aliquot Volume: NA (uL) NA (ul..) Soil Extract Volume:

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	7.9	
108-38-3	m/p-Xylene	7.4	
95-47-6	o-Xylene	1	Ú

1 A VOLATILE ORGANICS ANALYSIS DAT

	EPA SAMPLE, NO.
TA SHEET	MW-102 ກູ
ntract:	

Lab Name:	Life Scienc	e Laborator	ies, Inc.	Contract:	_ <del>,</del>	
Lab Code:	10248	Case No.:		SAS No.:	SDG No.:	0918965
Matrix: (soil/w	rater)	WATER		•	Lab Sample ID:	0918965-013 2X
` Sample wt/vol	,	25	(g/ml)	ML	Lab File ID:	K03786S
Level:	(low/med)	LOW	(3)		Date Received:	10/8/2009
% Moisture:	,	NA			Date Analyzed:	
			. 0.05	(100.000)	•	
GC Column:	Rtx-VMS	ID	0.25	_(mm)	Dilution Factor:	
Soil Extract Vo	olume:	NA	_(uL)	Soil Aliquot Volume:		
				C(	ONCENTRATION UNITS:	

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

1 A EPA SAMPLE. NO. VOLATILE ORGANICS ANALYSIS DATA SHEET MW-108 Lab Name: Life Science Laboratories, Inc. Contract: ___ Lab Code: 10248 Case No.: SAS No.: SDG No.: 0918965 Lab Sample ID: 09108965-014 Matrix: (soil/water) WATER Lab File ID: C12466S Sample wt/vol: 10 ML (g/ml) Date Received: 10/8/2009 Level: (low/med) LOW Date Analyzed: 10/22/2009 % Moisture: not dec. NA 0.53 Dilution Factor: 1.0 GC Column: DB-624 ID (mm) NA (uL) Soil Aliquot Volume: NA Soil Extract Volume: CONCENTRATION UNITS:

		001102111111111111111111111111111111111	
CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	Ū
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

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Lab Name:

VOLATILE ORGANICS ANALYSIS DATA SHEET Life Science Laboratories, Inc.

Contract:

EPA SAMPLE, NO. MW-109

0918965

Lab Code:	10248	Case No.: _	 SAS No.:	****	SDG No.:
			•		

Lab Sample ID: 0918965-015 Matrix: (soil/water) WATER Sample wt/vol: 10 MLLab File ID: C12467S (g/ml)

Date Received: ____ 10/8/2009 Level: (low/med) LOW

Date Analyzed: ____10/22/2009 % Moisture: not dec. NA

Dilution Factor: 1.0 0.53 (mm) GC Column: DB-624 ID

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

### CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

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m/p-Xylene

o-Xylene

108-38-3

95-47-6

VOLATILE ORGANICS ANALYSIS DATA SHEET DUPE2 04 Lab Name: Life Science Laboratories, Inc. Contract: SAS No.: SDG No.: 0918965 Lab Code: 10248 Case No.: Lab Sample ID: 0918965-016 10X Matrix: (soil/water) WATER Lab File ID: C12468S Sample wt/vol: 10 (g/ml) ML. Date Received: 10/8/2009 Level: (low/med) LOW Date Analyzed: 10/22/2009 % Moisture: not dec. NA 0.53 Dilution Factor: GC Column: DB-624 ID 10 (mm) NA (uL) Soil Extract Volume: Soil Aliquot Volume: NA (uL) CONCENTRATION UNITS: CAS NO. COMPOUND UG/L 71-43-2 Benzene 100-41-4 Ethylbenzene 440

470

EPA SAMPLE, NO.

83

EPA SAMPLE. NO. 1 A **VOLATILE ORGANICS ANALYSIS DATA SHEET** DUPE2 Ol Life Science Laboratories, Inc. Contract: Lab Name: 10248 Case No.: SAS No.: SDG No.: 0918965 Lab Code: Lab Sample ID: 0918965-016 2X Matrix: (soil/water) WATER Lab File ID: K03782S Sample wt/vol: 25 ML (g/ml) Date Received: 10/8/2009 Level: (low/med) LOW Date Analyzed: 10/20/2009 % Moisture: not dec. NA 2.0 GC Column: Rtx-VMS ID 0.25 (mm) Dilution Factor: Soil Aliquot Volume: NA (uL) Soil Extract Volume: NA (uL) CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	3.9	ナ
100-41-4	Ethylbenzene	-000	-
108-38-3	m/p-Xylene	400	<b>F</b>
95-47-6	o-Xylene	1.9	5

1 A EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET RW-1 Lab Name: Life Science Laboratories, Inc. Contract: SDG No.: 0918965 10248 SAS No.: Lab Code: Case No.: Lab Sample ID: 0918965-017 2X Matrix: (soil/water) WATER Lab File ID: K03781S Sample wt/vol: 25 (g/ml) ML. Date Received: 10/8/2009 (low/med) LOW Level: Date Analyzed: 10/20/2009 % Moisture: not dec. NA Dilution Factor: 2.0 0.25 (mm) GC Column: Rtx-VMS ID Soil Aliquot Volume: NA (uL) Soil Extract Volume: NA (uL) CONCENTRATION UNITS: Q CAS NO. COMPOUND UG/L Ū 71-43-2 Benzene Ü 100-41-4 Ethylbenzene

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m/p-Xylene

o-Xylene

108-38-3

95-47-6

1 A EPA SAMPLE. NO. VOLATILE ORGANICS ANALYSIS DATA SHEET EB-02 Lab Name: Life Science Laboratories, Inc. Contract: Lab Code: 10248 SAS No.: SDG No.: 0918965 Case No.: Lab Sample ID: 0918965-018 Matrix: (soil/water) WATER Lab File ID: C12469S Sample wt/vol: 10 ML (g/ml) Date Received: 10/8/2009 Level: (low/med) LOW Date Analyzed: 10/22/2009 % Moisture: not dec. NA 0.53 Dilution Factor: GC Column: DB-624 ID (mm) 1.0 NA (uL) Soil Aliquot Volume: NA (uL) Soil Extract Volume: CONCENTRATION UNITS: COMPOUND CAS NO. UG/L 71-43-2 Benzene 100-41-4 Ethylbenzene U

m/p-Xylene

o-Xylene

108-38-3

95-47-6

1 A EPA SAMPLE, NO. VOLATILE ORGANICS ANALYSIS DATA SHEET TB-2 Life Science Laboratories, Inc. Contract: Lab Name: SDG No.: 0918965 SAS No.: Lab Code: Case No.: Lab Sample ID: 0918965-019 Matrix: (soil/water) WATER C12470S Sample wt/vol: 10 (g/ml) ML Lab File ID: LOW Date Received: 10/8/2009 Level: (low/med) Date Analyzed: ____ 10/22/2009 % Moisture: not dec. NA Dilution Factor: 0.53 1.0 ID (mm) GC Column: DB-624 (uL) Soil Aliquot Volume: NA (uL) Soil Extract Volume: NA

CONCENTRATION UNITS:

CAS NO.	COMPOUND	UG/L.	Q
71-43-2	Benzene	, 1	U
100-41-4	Ethylbenzene	1	U
108-38-3	m/p-Xylene	1	U
95-47-6	o-Xylene	1	U

#### USEPA - CLP

# 1B - IN

EPA SAMPLE NO. ANG-MW-11-

		RGANIC ANALYSI	S DATA SHEET	A	10/09	
b Name: LIFE SCIE	NCE LABORATORIES, INC.	Contract:		<u> </u>		
b Code: 10248	Case No.:	NRAS No.:		SDG No	.: 0918965	
atrix: (soil/water) <u>V</u>	/ATER		Lab Sam	ple ID: <u>09</u>	18965-001	
vel: <u>MED</u>			Date Rec	eived:	10/08	/2009
Solids:	<u>_</u>					
Solids:CAS NO.	Concentration Units: (I		Concentration	С	Q ·	M
	•		· - ·	C	Q ·	M W
CAS NO.	Analyte		Concentration		Q ·	
CAS NO.	Analyte Ammonia as N	s CaCO3	Concentration 0.03		Q ·	W
CAS NO.	Analyte Ammonia as N Bicarbonate Alkalinity a	is CaCO3	Concentration 0.03 360	U	Q	w W
CAS NO.	Analyte Ammonia as N Bicarbonate Alkalinity a Carbonate Alkalinity as	is CaCO3	Concentration 0.03   360   3	U	Q	w w w

Color Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:		

### USEPA - CLP

#### 1B - IN INODGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO. ANG-MW-14-

	MONGAMOA	NALTSIS DATA SHEET		10/09	
ame: LIFE SCI	ENCE LABORATORIES, INC. Con	tract:			
ode: 10248	Case No.: NRAS	No.:	SDG	No.: <u>0918965</u>	
c: (soil/water)	WATER	Lab San	sple ID:	0918965-002	
: MED	•••	Date Re	ceived:	10/08	/2009
lids:					
	Concentration Units: (mg/L or m	ng/Kg dry weight) MG/L			
CAS NO.	Concentration Units: (mg/L or m	ng/Kg dry weight) MG/L Concentration	C	Q	IV
CAS NO. NH3-N	, ,		C U	Q	,
	Analyte	Concentration 0.03		Q	N W
	Analyte Ammonia as N	Concentration 0.03		Q	٧
	Analyte Ammonia as N Bicarbonate Alkalinity as CaCO3	Concentration 0.03 340	U	Q	N
	Analyte Ammonia as N Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3	Concentration   0.03   340   3	U U	Q	N N

Color Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:		
	FOF 105	ILM05.3

#### USEPA - CLP

#### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO. ANG-MW-15-

					10/09	
ab Name: LIFE SC	CIENCE LABORATORIES, INC.	Contract:				
ab Code: 10248	Case No.:	NRAS No.: _		SDG	No.: <u>0918965</u>	
atrix: (soil/water)	WATER		Lab Sam	ple ID:	0918965-003	<del>_</del>
evel: <u>MED</u>			Date Rec	ceived:	10/08	/2009
Solids:						
-						
	·					
	Concentration Units	: (mg/L or mg/Kg c	dry weight) MG/L			
CAS NO.	Concentration Units	: (mg/L or mg/Kg c	dry weight) MG/L Concentration	c	Q	М
CAS NO.				C U	<u>a</u>	M W
	Analyte Ammonia as	N	Concentration		Q	
	Analyte	N y as CaCO3	Concentration 0.03		Q	W
	Analyte Ammonia as Bicarbonate Alkalinity	N y as CaCO3 as CaCO3	Concentration 0.03 340	υ	Q	w
	Analyte Ammonia as Bicarbonate Alkalinity Carbonate Alkalinity	N y as CaCO3 as CaCO3	0.03 340 3	U	Q	W W

Color Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:		
	FO 106	ILM05.3

#### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANG-MW-1610/09

		INORGA		IS DATA SHEET		10/09	0-
Lab Name:	LIFE SCIE	NCE LABORATORIES, INC.			1		
Lab Code:	10248	Case No.:	NRAS No.: _		SDG No.	.: 0918965	
Matrix: (soi	l/water) W	ATER		Lab Samp	le ID: <u>09</u>	18965-006	
Level:	MED			Date Rece	eived:	10/08/2	009
% Solids:							
		Concentration Units: (mg/l	L or mg/Kg d	lry weight) MG/L			
c	AS NO.	Analyte		Concentration	С	Q	M
	NH3-N	Ammonia as N		0.03	U		W
		Bicarbonate Alkalinity as C	aCO3	370			W
		Carbonate Alkalinity as Ca		3	U		W
		Hydroxide Alkalinity as Ca		3	ប		W
14	808-79-8	Sulfate		63			1
Color Befo	re:	Clarity Before	e:		Textur	e:	<del></del>
			r:		Artifacts		

Comments:

### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO. ANG-MW-17-

						10/09	)
Name:	LIFE SC	IENCE LABORATORIES, I	NC. Contract:		1		
Code:	10248	Case No.:	NRAS No.:		SDG	No.: 091896	5
trix: (soil	/water)	WATER		Lab Sam	ple ID:	0918965-007	·
rel:	MED			Date Rec	ceived:	10/0	8/2009
Solids:							
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		<del></del>					
	AS NO.	Concentration L	Jnits: (mg/L or mg/Kg o	dry weight) MG/L Concentration	c	Q	M
C/	AS NO.		lyte		С	q	<u>м</u>   w
C/		Anal	lyte ia as N	Concentration	С	Q	
C/		Anal Ammon	lyte ia as N alinity as CaCO3	Concentration 0.22	C	Q	W
C/		Anal Ammon Bicarbonate Alka	lyte ia as N alinity as CaCO3 linity as CaCO3	Concentration 0.22 370		Q	W
CA		Anal Ammon Bicarbonate Alka Carbonate Alkal	lyte ia as N alinity as CaCO3 linity as CaCO3	0.22 370 3	U	Q	W W

Color Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:		
	FOI 110	ILM05.3

#### 18 - IN INORGANIC ANALYSIS DATA SHEET

ANG-MW-18-	
10/09	

oh Nomas I IEE COIE		of		10/09	
an Mannet LIFE SCIE	NCE LABORATORIES, INC. Contra	ы. 	-		
ab Code: 10248	Case No.: NRAS No		SDG No	.: 0918965	
atrix: (soil/water) <u>V</u>	/ATER	Lab San	ple ID: <u>09</u>	18965-008	
evel: <u>MED</u>		Date Re	ceived:	10/08	/2009
Solids:					
	Concentration Units: (mg/L or mg/	Kg dry weight) MG/L		_	
CAS NO.	Concentration Units: (mg/L or mg/l	Kg dry weight) MG/L Concentration	c	_ Q	M
	, -	-	C	Q Q	M W
CAS NO.	Analyte	Concentration		Q Q	
CAS NO.	Analyte Ammonia as N	Concentration 0.03		Q	W
CAS NO.	Analyte Ammonia as N Bicarbonate Alkalinity as CaCO3	Concentration 0.03 390	U	Q	w w

Color Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:		
	. FO 111	ILM05.3

## 18 - IN

EPA SAMPLE NO.

Concentration Units: (mg/L or mg/Kg dry weight)   MG/L			INO	RGANIC ANALYS	SIS DATA SHEET	4	4NG-MW- 10/09	-19-
trix: (soil/water) WATER Lab Sample ID: 0918965-009    MED	ab Name: LIF	E SCIEN	ICE LABORATORIES, INC.	Contract:	<u>,</u>			
MED	ab Code: 10	248	Case No.:	NRAS No.:		SDGI	No.: <u>0918965</u>	
Date Received: 10/08/2009   Concentration Units: (mg/L or mg/Kg dry weight)   MG/L	atrix: (soil/wat	ter) W	ATER		Lab San	nple ID:	0918965-009	
Concentration Units: (mg/L or mg/Kg dry weight) MG/L  CAS NO. Analyte Concentration C Q M  NH3-N Ammonia as N 0.16 W  Bicarbonate Alkalinity as CaCO3 340 W  Carbonate Alkalinity as CaCO3 3 U W  Hydroxide Alkalinity as CaCO3 3 U W		_			Date Re	ceived:	10/08	/2009
Concentration Units: (mg/L or mg/Kg dry weight)   MG/L	,	<u> </u>	•		water to			<del></del>
NH3-N			Concentration Units:	(mg/L or mg/Kg	dry weight) MG/L	***************************************		
NH3-N         Ammonia as N         0.16         W           Bicarbonate Alkalinity as CaCO3         340         W           Carbonate Alkalinity as CaCO3         3         U         W           Hydroxide Alkalinity as CaCO3         3         U         W	CAS N	10.	Analyte		Concentration	C	Q	M
Carbonate Alkalinity as CaCO3 3 U W Hydroxide Alkalinity as CaCO3 3 U W				N	0.16			W
Hydroxide Aikalinity as CaCO3 3 U W			Bicarbonate Alkalinity	as CaCO3	340			W
Trydroxide Arkatiney as out of			Carbonate Alkalinity	as CaCO3	3	U		W
14808-79-8 Sulfate 4.9			Hydroxide Alkalinity a	s CaCO3	3	บ		w
	14808-7	79-8	Sulfate		4.9			<u> </u>

Color Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:		
	440	U BEOG A

FO 112

ILM05.3

### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANG-MW-20-

			Ì	10/09	
ab Name: LIFE SCI	ENCE LABORATORIES, INC. Contrac	t:	. <b>!</b> -		·
ab Code: 10248	Case No.: NRAS No.		SDG No.	.: 0918965	
latrix: (soil/water)	WATER	Lab Sam	ple ID: <u>09</u>	18965-010	<u></u>
evel: MED	<u> </u>	Date Rec	ceived:	10/08	/2009
6 Solids:					
Solids:					
Solids:	Concentration Units: (mg/L or mg/K	g dry weight) MG/L			
6 Solids:	Concentration Units: (mg/L or mg/K Analyte	g dry weight) MG/L Concentration	c	_ Q	M
			C U	 Q	M W
CAS NO.	Analyte	Concentration		_ Q	
CAS NO.	Analyte Ammonia as N Bicarbonate Alkalinity as CaCO3	Concentration 0.03		_ Q	W
CAS NO.	Analyte Ammonia as N	Concentration 0.03 350	Ü	Q	W W

Color Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:		

FC 113

ILM05.3

## 1B - IN INORGANIC ANALYSIS DATA SHEET

ANG-MW-22-

				10/09	
	NCE LABORATORIES, INC. Contract			0040005	
Lab Code: 10248	Case No.: NRAS No.:		•	: 0918965	
Matrix: (soil/water) W	ATER	Lab Sam	ple ID: <u>09</u>	18965-011	
Level: MED		Date Red	ceived:	10/08	/2009
% Solids:					
	Concentration Units: (mg/L or mg/K	g dry weight) MG/L			
CAS NO.	Analyte	Concentration	С	Q	M
NH3-N	Ammonia as N	0.03	U		W
	Bicarbonate Alkalinity as CaCO3	410			W
	Carbonate Alkalinity as CaCO3	3	U		W
	Hydroxide Alkalinity as CaCO3	3	U		W
14808-79-8	Sulfate	31			<u> </u>
Color Before:			Textur	e:	

Comments:

### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANG-MW-10110/09

ode: 10248	Case No.:	NRAS No.:		SDG	No.: 0918	3965
x: (soil/water)				- nple ID:	0918965-	012
: MED	<del></del>		Date Re	ceived:	1	0/08/2009
lids:						
	Concent	ration Units: (mg/L or mg/K	g dry weight) MG/L			
CAS NO.	Concent	ration Units: (mg/L or mg/K Analyte	g dry weight) MG/L Concentration	С	Q	N
CAS NO. NH3-N				C	<u>Q</u>	M V
		Analyte	Concentration		Q	
	Bicarbon	Analyte Ammonia as N	Concentration 0.03		Q	′ V
	Bicarbon Carbona	Analyte Ammonia as N ate Alkalinity as CaCO3	Concentration 0.03 360	U	Q	/ V

Color Before:	Clarity Before:	Texture:	_
Color After:	Color After:	Artifacts:	-
Comments:			
			_

## 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANG-MW-102-

				10/09	
b Name: <u>LIFE SCIE</u> b Code: <u>10248</u>	NCE LABORATORIES, INC. Contract Case No.: NRAS No		SDG No.	.: <u>0918965</u>	
atrix: (soil/water) 👢	VATER	Lab Sam	ple ID: <u>09</u>	18965-013	. ,
evel: MED		Date Red	ceived:	10/08	/2009
Solids:					
Solids:	Concentration Units: (ளg/L or mg/l Analyte	Kg dry weight) MG/L Concentration	С	_ Q	M
				Q	W
CAS NO.	Analyte	Concentration	С	Q	w
CAS NO.	Analyte Ammonia as N	Concentration 0.03	С	Q	W
CAS NO.	Analyte Ammonia as N Bicarbonate Alkalinity as CaCO3	Concentration   0.03   340	C U	Q	w

Color Before:	Clarity Before:	Texture:	
Color After:	Color After:	Artifacts:	
Comments:			
	4.4.0		

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ILM05.3

### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANG-MW-108-10/09

					10/09	
Name: LIFE SC	ENCE LABORATORIES, INC	C. Contract: _				
Code: 10248	Case No.:	NRAS No.:		SDG	No.: <u>0918965</u>	
rix: (soil/water)	WATER	<u>-</u>	Lab Sam	ple ID:	0918965-014	
el: MED			Date Rec	eived:	10/08	/2009
Solids:						
Solids:						
Solids:	Concentration Uni	its: (mg/L or mg/Kg d	ry weight) MG/L			
CAS NO.	Concentration Uni		ry weight) MG/L Concentration	c	Q	М
terres terres de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante		e	***************************************	C U	Q	M W
CAS NO.	Analyte	e as N	Concentration		Q Q	
CAS NO.	Analyte Ammonia	e as N nity as CaCO3	Concentration 0.03		Q	W
CAS NO.	Analyte Ammonia Bicarbonate Alkalir	e as N nity as CaCO3 ity as CaCO3	Concentration 0.03 380	U	Q	w w

Color Before:	Clarity Before:	Texture:
Color After:	Color After:	Artifacts:
Comments:	<u> </u>	

### 1B - IN INORGANIC ANALYSIS DATA SHEET

ANG-MW-109-

							10/00	
Lab Na	ame: ]	LIFE SCI	ENCE LABORATORIES, INC.				-	
Lab Co	ode:	10248	Case No.:	NRAS No.:	<del> </del>	SDG No.	.: 0918965	
Matrix	: (soil/	water)	WATER		Lab Sam	ple ID: <u>09</u>	18965-015	
Level:		MED			Date Re	ceived:	10/08	/2009
% Soli	ds:							
	-							
			Concentration Units: (	mg/L or mg/Kg	dry weight) MG/L			
	CA	S NO.	Analyte		Concentration	c	Q	M
Г		H3-N	Ammonia as N		0.03	U		W
			Bicarbonate Alkalinity a	s CaCO3	340			W
<u> </u>			Carbonate Alkalinity as		3	U		W
-		***************************************	Hydroxide Alkalinity as		3	U		W
	1480	08-79-8	Sulfate		65		<u> </u>	11

Color Before: Clarity Before: Texture: ______

Color After: Color After: Artifacts: ______

Comments:

### 1B - IN

		!	INORGANIC ANALYS	SIS DATA SHEET	A	NG-DUP 10/09	E 2-
Lab l	Name: LIFE SCIE	ENCE LABORATORIES, INC	Contract:		I		
Lab	Code: 10248	Case No.:	NRAS No.:		SDG N	o.: <u>0918965</u>	
Matr	ix: (soil/water)		_	Lab Samp	le ID: 🧐	918965-016	
Leve	el: MED	_		Date Rece	eived:	10/08	2009
% Sc	olids:						
		Concentration Un	its: (mg/L or mg/Kg	dry weight)			
	CAS NO.	Analyt	e	Concentration	С	Q	M
	NH3-N	Ammonia		0.15			W
		Bicarbonate Alkalii	nity as CaCO3	340			W
		Carbonate Alkalin	ity as CaCO3	3	U		W
		Hydroxide Alkalin	ity as CaCO3	3	U .		W
	14808-79-8	Sulfat	e	5.5			l l

Color Before:	Clarity Before:	Texture:	
Color After:	Color After:	Artifacts:	
Comments:			

## 1B - IN

	SAMPLE NO.	
ANG	-RW-1-10/09	

	•	INORGANIC ANA	LYSIS DATA SHEET	AIVO	7-1/44-1-	10/03
Lab Name:	LIFE SCI	ENCE LABORATORIES, INC. Contra	ct:	L		
Lab Code:	10248	Case No.: NRAS No	u.:	SDG No	.: 0918965	
Matrix: (soi		WATER	Lab Sam	ple ID: 09	18965-017	
	· •			-	10/08	
Level:	MED	<del>-</del>	Date Nec	.eivea	10700	
% Solids:						
		Concentration Units: (mg/L or mg/	Ka dar weight MG/			
	AS NO.	Analyte	Concentration	c	Q T	M W
!	NH3-N	Ammonia as N	0.82 310			W
		Bicarbonate Alkalinity as CaCO3  Carbonate Alkalinity as CaCO3	3	U		w
		Hydroxide Alkalinity as CaCO3	3	U		w
	NO3-N	Nitrate as N	0.1	U		i
	808-79-8	Sulfate	5.0			<u> </u>
L						
Color Befo	re:	Clarity Before:			·e:	
Color Aff	er.	Color After:		Artifacts	3:	

FOI 120 ILM05.3

Comments:

#### 1B - IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO. ANG-EB-02-

						10/09	
Lab Name:	LIFE SCI	ENCE LABORATORIES, INC.	Contract:		1		
Lab Code:	10248	Case No.:	NRAS No.:		SDG	No.: <u>0918965</u>	
Matrix: (soi	l/water)			Lab Sam	ple ID:	0918965-018	
Level:	MED	-		Date Red	eived:	10/08	3/2009
% Solids:	<del> </del>						
		Concentration Units: (	mg/L or mg/Kg	dry weight)			
С	AS NO.	Analyte		Concentration	C	Q	M
	NH3-N	Ammonia as N	i i	0.03	บ		W
<del></del>		Bicarbonate Alkalinity	s CaCO3	3	U		W
<del> </del>	<u> </u>	Carbonate Alkalinity a		3	U		W
		Hydroxide Alkalinity as		3	U	,	W
14	808-79-8	Sulfate		1	U		1

Color Before: _	Clarity Before:	Texture:	
Color After: _	Color After:	Artifacts:	
Comments:			_
	FOI 121	1LM05.3	-

## 1B.IN

INORGANIC ANALYSIS DATA SHEET					6-MVV-16- 10/09
Lab Name: LIFE SO	CIENCE LABORATORIES, INC	Contract:	····	ŧ	
Lab Code: 10248	Case No.:	NRAS No.:		SDG No.:	0918965
Matrix: (soil/water)	WATER		Lab Sam	ple ID: <u>0918</u>	965-020
Level: MED			Date Rec	ceived:	10/08/2009
% Solids:					
	Concentration Uni	its: (mg/L or mg/Kg	dry weight) MG/L		
CAS NO.	Analyte		Concentration	С	Q M
NO3-N	Nitrate a	s N	0.1	U ]	
		ity Before:			
	C	olor After:		Artitacts:	
Comments:					

	INOR		SIS DATA SHEET	AN	G-MW-1 10/09	8-
Lab Name: LIFE SC	EIENCE LABORATORIES, INC.					
Lab Code: 10248	Case No.:	NRAS No.: _			0918965	<del></del>
Matrix: (soil/water)	WATER		_	ple ID: 091		
Level: MED			Date Rec	ceived:	10/08/2	009
% Solids:	Concentration Units: (i	mg/L or mg/Kg	dry weight) MG/L Concentration	С	- Q	M
NO3-N	Nitrate as N		0.23			<u> </u>
Color Deferen	Clark. B	oforo:		Tevture	:	
Color After:		efore:				
Color After:	Color					***************************************

	ANG-MW-19- 10/09		
***************************************		Contract:	
Lab Code: 10248		RAS No.:	SDG No.: 0918965
` ,	WATER		ple ID: 0918965-022
Level: MED	<del></del>	Date Rec	ceived: 10/08/2009
% Solids:	······································		
	Concentration Units: (mg/L	or mg/Kg dry weight) MG/L	
CAS NO.	Analyte	Concentration	C Q M
NO3-N	Nitrate as N	0.1	U
Color Before:	Clarity Before	:	Texture:
Color After:	Color After		Artifacts:
Comments:			

EPA SAMPLE NO.

	ANG-MW-20- 10/09					
	ENCE LABORATORIES, INC.	Contract: NRAS No.:		SDG No.:	0918965	
Lab Code: 10248  Matrix: (soil/water)	Case No.:			ole ID: <u>0918</u>		<del></del>
Level: MED	1771.01			eived:		)9
% Solids:	_					<del></del>
/6 301lus.	·····					
	Concentration Units	: (mg/L or mg/Kg				
CAS NO.	Analyte Nitrate as I	v 1	Concentration 0.1	C U I	Q	M
NO3-N	Wittate as i	1	<u> </u>			
						٠
Color Before:	Clarity	Before:	<u></u>	Texture:		
Color After:	Col	or After:		Artifacts:		
Comments:				<u>, ,</u>		

FO 125

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### 1B - IN

EPA SAMPLE NO.

•	INORGANIC ANALYSIS DATA SHEET ANG-MW-15 10/09						15-
Lab Name: 1	LIFE SC	IENCE LABORATORIES, INC.	Contract:		<u> </u>		
Lab Code:	10248	Case No.:	NRAS No.:		SDG No.:	0918965	
Matrix: (soil/	water)	WATER		Lab Samp	le ID: <u>0918</u>	965-024	
Level:	MED			Date Rece	ived:	10/08/	2009
% Solids:					-		
•							
		Concentration Units: (r	ng/L or mg/Kg	dry weight) MG/L			
CA	S NO.	Analyte		Concentration	С	Q	M
NO	O3-N	Nitrate as N		0.1	U		
			_		<b>**</b> 4		
			efore:				
Color After	r:	Color	After:		Artifacts:		
Comments	<b>s:</b>				······································		

FO 126

ILM05.3

## 4D IN

EPA SAMPLE NO.

		ANG-MW-22- 10/09		
Lab Name: LIFE SCIENCE Lab Code: 10248 Ca		Contract:RAS No.:	SDG No.:	0918965
Matrix: (soil/water) WATE			 ample ID: <u>0918</u>	
Level: MED			Received:	10/08/2009
% Solids:		2.00	·····-	
	Concentration Units: (mg/L	or mg/Kg dry weight) MG/	<u>L</u>	
CAS NO.	Analyte	Concentration		Q M
NO3-N	Nitrate as N	0.1	U	
Color Before:	Clarity Before		Texture:	
Color After:				
			-	

FO 127 ILM05.3

	ANG-MW-101- 10/09			
Lab Name: <u>LIFE SCIENCE</u> Lab Code: 10248 Cas		:	SDG No.:	0918965
Matrix: (soil/water) WATE			ple ID: <u>0918</u>	
Level: MED			eived:	
% Solids:		2400		
78 JUNUS.	Concentration Units: (mg/L or mg/l	Kg dry weight) MG/L		
CAS NO.	Analyte	Concentration	С	Q M
NO3-N	Nitrate as N	0.25	<u> </u>	
Color Before:	Clarity Before:	,	Texture:	
Color After:	Color After:		Artifacts:	
Comments:				

## 18 - IN

INORGANIC ANALYSIS DATA SHEET						ANG-MW-102- 10/09		
Lab Name:	LIFE SCIENCE LA	BORATORIES, INC.	Contract:		L			
Lab Code:	10248 Case	No.:	NRAS No.:		SDG No.:	0918965		
Matrix: (soil	/water) WATER			Lab Sam	ple ID: <u>0918</u>	965-027		
Level:	MED			Date Red	eived:	10/08/2009		
% Solids:								
		Concentration Units: (m	g/L or mg/Kg	dry weight) MG/L				
	AS NO.	Analyte	<del></del>	Concentration	C	Q M		
N	IO3-N	Nitrate as N		0.1	U			
Color Befor	e:	Clarity Bef	ore:		Texture:			
	er:		fter:		Artifacts:			
Comment	s:							

EPA SAMPLE NO.

			IS DATA SHEET		i-MW- ⁴ 10/09	108-
Lab Name: LIFE SCIENCE Lab Code: 10248		Contract: NRAS No.:		SDG No.:	0918965	
	Case No.: TER	_ 11145 116		ple ID: <u>0918</u>		
Level: MED				eived:		2009
% Solids:					······································	
	Concentration Units: (m	ng/L or mg/Kg o	try weight) MG/L			
CAS NO.	Analyte		Concentration	C	Q	M
NO3-N	Nitrate as N		0.1	U		1
Color Before:	Clarity Bef	ore:		Texture:		
Color After:	Color A	fter:		Artifacts:		
Comments:						

FO 130

ILM05.3

## 1B - IN

INORGANIC ANALYSIS DATA SHEET					ANG	ANG-MW-109- 10/09		
Lab Name:		ENCE LABORATORIES, INC.						
Lab Code:	10248	Case No.:	_ NRAS No.: _		SDG No.:	0918965		
Matrix: (soi	l/water)	WATER		Lab Samp	le ID: <u>0918</u>	3965-029	<del></del>	
Level:	MED	_		Date Received: 10/08/200			2009	
% Solids:								
		Concentration Units: (n	ng/L or mg/Kg	dry weight) MG/L				
C	AS NO.	Analyte		Concentration	С	Q	M	
ı	N-80N	Nitrate as N		1.2		1	ı	
Color Befor	re:	Clarity Be	fore:		Texture:			
			After:		Artifacts:			
Commen								

## 1B - IN

INORGANIC ANALYSIS DATA SHEET						ANG-DUP-2- 10/09		
Lab Name:		ENCE LABORATORIES, INC.						
Lab Code:	10248	Case No.:	NRAS No.:		SDG No.:			
Matrix: (soi	i/water)				ple ID: <u>091</u>			
Level:	MED	<del>-</del>		Date Re	ceived:	10/08/	2009	
% Solids:								
		Concentration Units: (	mg/L or mg/Kg	dry weight)				
C	AS NO.	Analyte		Concentration	С	Q	M	
1	1O3-N	Nitrate as N		0.1	U		1	
Color Befor	re:	Clarity B	efore:		Texture:			
Color Aft	er:	Color	After:	<del></del>	Artifacts:			
Commen	ts:							

### 1B - IN INORGANIC ANALYSIS DATA SHEET

ANG-EB-02-

INORGANIC ANALYSIS DATA SHEET  ANG-EB-02- 10/09							
Lab Name:	LIFE SCIE	NCE LABORATORIE	S, INC. Contrac	t:			
Lab Code:	10248	Case No.:	NRAS No.	*	SDG No.: 9	J918965	
Matrix: (soi	l/water)		<u></u>	Lab Sam	ple ID: <u>09189</u>	965-031	
Level:	MED			Date Red	ceived:	10/08/2009	
% Solids:							
		Concentration	on Units: (mg/L or mg/K	(g dry weight)			
	AS NO.		Analyte	Concentration	C	Q M	
<u> </u>	NO3-N	Nit	rate as N	0.1	U		
r							
Color Befor	ra·		Clarity Before:		Texture:		
			Color After:				
COIDL VIG	51	<del></del>	OUIOI AILEI.		, a strategy		
Comment	ts:		······································			<u></u>	



### Life Science Laboratories, Inc.

**Analytical Results** 

LSL 5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155 0910055-001A

CLIENT:

Life Science Laboratories, Inc.

Project:

ILT091007CL2

W Order:

0910055

Matrix:

WATER

Inst. ID:

GCOS 17E

ColumnID: Alumina Revision:

10/22/09 15:39

Sample Size: 32 mL

%Moisture:

TestCode: 8015W RSK175 FileID:

PrepDate:

Collection Date:

Date Received:

Lab ID:

BatchNo:

10/08/09 11:50 10/15/09 8:58

Client Sample ID: 0918965-001C,D

10/18/09 8:51 10154/R18593

I-SAMP-E:\Osioct09\E101806.r

Col Type:

Analyte	Result Qua	i PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175M	(RSK 175)
Methane	1.6	0.10	0.070	mg/L	50	10/18/09 10:02

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- Analyte detected below the PQL
- Prim./Conf. column %D or RPD exceeds limit

Anthony Crescenzi

Analyte detected in the associated Method Blank

Spike Recovery outside accepted recovery limits

Not Detected at the Practical Quantitation Limit (PQL)

H Holding times for preparation or analysis exceeded

Print Date: 10/22/09 15:40 477584 Project

### Life Science Laboratories, Inc.

**Analytical Results** 

____5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Sample Size: 31 mL

%Moisture:

StateCertNo: 10155

CLIENT: Life Science Laboratories, Inc.

ILT091007CL2

W Order: 0910055 Matrix: WATER

GCOS 17E Inst. ID: ColumnID: Alumina

Revision: 10/22/09 15:05 Lab ID:

0910055-002A Client Sample ID: 0918965-002C,D

Collection Date: Date Received:

10/08/09 9:55 10/15/09 8:58 10/18/09 8:51

PrepDate: BatchNo:

10154/R18593

TestCode: 8015W RSK175 FileID:

1-SAMP-E:\Osioct09\E101807.r

Col Type:

Project:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175M	(RSK 175)
Methane	0.16	0.0021	0.0014	mg/L	1	10/18/09 10:11

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
  - S Spike Recovery outside accepted recovery limits

Print Date: 10/22/09 15:25

477556

Project

# LSL

Project:

Col Type:

### Life Science Laboratories, Inc.

**Analytical Results** 

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT: Life Science Laboratories, Inc.

ILT091007CL2

W Order: 0910055 Matrix: WATER

Inst. ID: GCOS 17E ColumnID: Alumina

Revision: 10/22/09 15:05

Lab ID:

0910055-003A

Client Sample ID:  $\theta 918965-\theta 03C$ , D

Collection Date: Date Received: 10/08/09 12:25 10/15/09 8:58

PrepDate: 10/18/09 8:51 BatchNo: 10154/R18593

%Moisture: BatchN 09 15:05 TestCode: 8015W RSK175 FileID:

Sample Size: 32 mL

1-SAMP-E:\Osioct09\E101808.r

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID	•			8015M/	RSK175M	(RSK 175)
Methane	0.19	0.0020	0.0014	mg/L	1	10/18/09 10:22

Qualifiers:

* Value exceeds Maximum Contaminant Level

E Value exceeds the instrument calibration range

J Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

Print Date: 10/22/09 15:25

477557

Project

Project:

### Life Science Laboratories, Inc.

**Analytical Results** 

LSL 5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

Life Science Laboratories, Inc.

ILT091007CL2

W Order: 0910055 Matrix: WATER

GCOS 17E Inst. ID: ColumnID: Alumina

Revision: 10/22/09 15:05 Lab ID:

0910055-004A Client Sample ID: 0918965-006C,D

Collection Date: Date Received:

10/08/09 11:10 10/15/09 8:58 10/18/09 8:51

PrepDate: BatchNo:

10154/R18593

%Moisture: TestCode: 8015W RSK175 FileID:

Sample Size: 32 mL

1-SAMP-E:\Osioct09\E101811.r

Col Type:

Analyte	Result Qu	Result Qual PQL		Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M	RSK175M	(RSK 175)
Methane	0.0089	0.0020	0.0014	mg/L	1	10/18/09 10:54

Qualifiers:

- Value exceeds Maximum Contaminant Level
- Value exceeds the instrument calibration range
- Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- Spike Recovery outside accepted recovery limits

Print Date: 10/22/09 15:25

477560 Project 5

### Life Science Laboratories, Inc. LSL 5000 Brittonfield Parkway, Suite 200

**Analytical Results** 

East Syracuse, NY 13057

(315) 437-0200

Sample Size: 32 mL

StateCertNo: 10155

CLIENT: Life Science Laboratories, Inc. Project:

ILT091007CL2

W Order: 0910055 Matrix: WATER

Inst. ID: GCOS 17E ColumnID: Alumina

10/22/09 15:44 Revision:

Lab ID:

BatchNo:

0910055-005A Client Sample ID: 0918965-007C,D

10/08/09 14:15 Collection Date: 10/15/09 8:58 Date Received: PrepDate: 10/18/09 8:51

10154/R18593

%Moisture: TestCode: 8015W RSK175 FileID:

1-SAMP-E:\Osioct09\E101814.r

Col Type:

Analyte	Result Qual PQL		MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175M	I (RSK 175)
Methane	1.1	0.10	0.070	mg/L	50	10/18/09 11:26

Qualifiers:

Value exceeds Maximum Contaminant Level

E Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

B Analyte detected in the associated Method Blank

S Spike Recovery outside accepted recovery limits

Print Date: 10/22/09 15:45

477585

Project!

### Life Science Laboratories, Inc. LSL 5000 Brittonfield Parkway, Suite 200

### **Analytical Results**

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT:

Life Science Laboratories, Inc.

0910055-006A

Project:

ILT091007CL2

W Order:

Client Sample ID: 0918965-008C,D

0910055

Collection Date:

10/07/09 15:35

Matrix:

WATER

Date Received:

10/15/09 8:58

Inst. ID:

GCOS 17E

10/22/09 15:05

PrepDate:

Lab ID:

10/18/09 8:51

ColumnID: Alumina

Sample Size: 32 mL %Moisture:

BatchNo:

10154/R18593

Revision: Coi Type: TestCode: 8015W RSK175 FileID:

1-SAMP-E:\Osioct09\E101815.r

Analyte	Result Qua	l PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/I	RSK175M	(RSK 175)
Methane	0.0029	0.0020	0.0014	mg/L	1	10/18/09 11:59

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/22/09 15:25

477563

Project



### Life Science Laboratories, Inc.

**Analytical Results** 

I-SAMP-E:\Osioct09\E101817.r

LSL 5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT:

Life Science Laboratories, Inc.

Lab ID:

0910055-007A

Project:

ILT091007CL2

Client Sample ID: 0918965-009C,D

10/22/09 15:05

Collection Date:

10/07/09 10:15

W Order:

0910055

Date Received:

Matrix:

WATER

PrepDate:

10/15/09 8:58 10/18/09 8:51

Inst. ID: ColumnID: Alumina

GCOS 17E

Sample Size: 32 mL BatchNo: %Moisture:

10154/R18593

Revision: Col Type: TestCode: 8015W RSK175 FileID:

Date Analyzed DF MDL Units Analyte Result Qual PQL 8015M/RSK175M (RSK 175) **DISSOLVED GASES BY GC/FID** 10/18/09 12:30 0.070 mg/L 3.0 0.10 Methane

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E. Value exceeds the instrument calibration range
- Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
  - S Spike Recovery outside accepted recovery limits

Print Date: 10/22/09 15:25

477564

Project

: Anthony Crescenzi

### Life Science Laboratories, Inc.

**Analytical Results** 

LSL 5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Sample Size: 32 mL

%Moisture:

StateCertNo: 10155

Life Science Laboratories, Inc.

Project: ILT091007CL2

W Order: 0910055 Matrix: WATER

Inst. ID: GCOS 17E ColumnID: Alumina

Revision: 10/22/09 15:05 Lab ID:

0910055-008A

Client Sample ID: 0918965-010C,D Collection Date: 10/07/09 8:00

Date Received: 10/15/09 8:58 PrepDate: BatchNo:

10/18/09 8:51

10154/R18593 1-SAMP-E:\Osioct09\E101818.r

Col Type:

Analyte DF **Date Analyzed** Result Qual PQL MDL Units **DISSOLVED GASES BY GC/FID** 8015M/RSK175M (RSK 175) Methane 0.13 0.0014 10/18/09 12:45 0.0020 mg/L

TestCode: 8015W RSK175 FileID:

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

Spike Recovery outside accepted recovery limits

Print Date: 10/22/09 15:25

477565

Project!



Col Type:

### Life Science Laboratories, Inc.

**Analytical Results** 

 $oldsymbol{LSL}$ 5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Sample Size: 31 mL

StateCertNo: 10155

CLIENT: Life Science Laboratories, Inc.

Project: ILT091007CL2

W Order: 0910055 Matrix: WATER

Inst. ID: GCOS 17E ColumnID: Alumina

Revision: 10/22/09 15:05

Lab ID:

0910055-009A

Client Sample ID: 0918965-011C,D Collection Date: 10/07/09 10:55

Collection Date: Date Received:

10/15/09 8:58

PrepDate: 10/18/09 8:51 BatchNo: 10154/R18593

%Moisture: BatchN TestCode: 8015W RSK175 FileID:

1-SAMP-E:\Osioct09\E101820.r

Analyte	Result Qu		MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175	II (RSK 175)
Methane	1.0	0.10	0.072	mg/L	50	10/18/09 13:15

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

### Life Science Laboratories, Inc. LSL 5000 Brittonfield Parkway, Suite 200

**Analytical Results** 

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT:

Life Science Laboratories, Inc.

Lab ID:

0910055-010A

Project:

ILT091007CL2

Client Sample ID: 0918965-012C,D

W Order:

0910055

Collection Date:

10/07/09 9:55

Matrix:

WATER

Date Received:

10/15/09 8:58

Inst. ID:

GCOS 17E

Sample Size: 32 mL

PrepDate: BatchNo:

10/18/09 8:51 10154/R18593

ColumnID: Alumina

10/22/09 15:05

%Moisture:

TestCode: 8015W RSK175 FileID:

1-SAMP-E:\Osioct09\E101822.r

Revision: Coi Type:

Analyte	Result Qual PQL		MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID	· · <b></b>			8015M/	RSK175	M (RSK 175)
Methane	0.44	0.010	0.0070	mg/L	5	10/18/09 13:37

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
  - S Spike Recovery outside accepted recovery limits

Print Date: 10/22/09 15:25

477567

Project

Anthony Crescenzi



### Life Science Laboratories, Inc.

**Analytical Results** 

LSL 5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT:

Life Science Laboratories, Inc.

Project:

ILT091007CL2

W Order:

0910055 WATER

Matrix: Inst. ID:

GCOS 17E

ColumnID: Alumina

10/22/09 15:05

Sample Size: 32 mL %Moisture:

PrepDate: BatchNo:

Lab ID:

Collection Date:

Date Received:

TestCode: 8015W RSK175 FileID:

0910055-011A

Client Sample ID: 0918965-013C,D

10/07/09 14:20

10/15/09 8:58

10/18/09 8:51 10154/R18593

1-SAMP-E:\Osioct09\E101824.r

Revision: Col Type:

Analyte	Result Qual PQL		MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175N	1 (RSK 175)
Methane	0.0084	0.0020	0.0014	mg/L	1	10/18/09 14:13

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- Analyte detected below the PQL
- P Prim/Conf. column %D or RPD exceeds limit

Not Detected at the Practical Quantitation Limit (PQL) S Spike Recovery outside accepted recovery limits

Anthony Crescenzi

B Analyte detected in the associated Method Blank

II Holding times for preparation or analysis exceeded

Print Date: 10/22/09 15:25

477569

Project

## Life Science Laboratories, Inc.

#### **Analytical Results**

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

Project:

Life Science Laboratories, Inc.

ILT091007CL2

W Order: Matrix:

0910055 WATER

Inst. ID:

Revision:

Col Type:

GCOS 17E

ColumnID: Alumina

10/22/09 15:05

Sample Size: 32 mL

%Moisture:

TestCode: 8015W RSK175 FileID:

0910055-012A

Client Sample ID: 0918965-014C,D

Collection Date: Date Received:

10/07/09 14:05 10/15/09 8:58

PrepDate: BatchNo:

Lab ID:

10/18/09 8:51 10154/R18593

1-SAMP-E:\Osioct09\E101825.r

Analyte	Result Qual PQL MDL		MDL	Units DF		Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/I	RSK175M	(RSK 175)
Methane	0.0082	0.0020	0.0014	mg/L	1	10/18/09 14:23

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim /Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

Print Date: 10/22/09 15:25

477570

Project



#### Life Science Laboratories, Inc.

**Analytical Results** 

LSL 5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

Sample Size: 32 mL

%Moisture:

StateCertNo: 10155

CLIENT: Life Science Laboratories, Inc. Project:

ILT091007CL2

W Order: 0910055 Matrix: WATER

Inst. ID: GCOS 17E ColumnID: Alumina

10/22/09 15:05 Revision:

Lab ID:

PrepDate:

0910055-013A Client Sample ID: 0918965-015C,D

Collection Date: Date Received:

10/07/09 10:40 10/15/09 8:58 10/18/09 8:51 10154/R18593

BatchNo: TestCode: 8015W RSK175 FileID:

1-SAMP-E:\Osioct09\E101829.r

Col Type:

Analyte	Result Qu	ial PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175	W (RSK 175)
Methane	0.0078	0.0020	0.0014	mg/L	1	10/18/09 15:21

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

S Spike Recovery outside accepted recovery limits

Print Date: 10/22/09 15:25

477573

Project

#### Life Science Laboratories, Inc. LSL 5000 Brittonfield Parkway, Suite 200

#### **Analytical Results**

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT:

Life Science Laboratories, Inc.

Lab ID:

0910055-014A

Project:

1LT091007CL2

Client Sample ID: 0918965-016C,D

W Order:

10/22/09 15:05

Collection Date:

10/07/09 0:00

Matrix:

0910055

Date Received:

10/15/09 8:58

Inst. ID:

WATER GCOS 17E

10/18/09 8:51

ColumnID: Alumina

Sample Size: 32 mL %Moisture:

PrepDate: BatchNo:

10154/R18593 1-SAMP-E:\Osioct09\E101826.r

Revision: Col Type:

	<del></del>					
Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175	M (RSK 175)
Methane	0.0059	0.0020	0.0014	mg/L	1	10/18/09 14:37

TestCode: 8015W RSK175 FileID:

Qualifiers:

- Value exceeds Maximum Contaminant Level
- Value exceeds the instrument calibration range
- Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/22/09 15:25

477571

Project

# Life Science Laboratories, Inc. 5000 Brittonfield Parkway, Suite 200

**Analytical Results** 

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT:

Life Science Laboratories, Inc.

0910055-015A

Project:

ILT091007CL2

Lab ID: Client Sample ID: 0918965-017C,D

W Order:

0910055

Collection Date:

10/08/09 9:25

Matrix:

Date Received:

10/15/09 8:58

Inst. ID:

WATER

PrepDate:

10/18/09 8:51

ColumnID: Alumina

GCOS 17E

Sample Size: 32 mL %Moisture:

BatchNo:

10154/R18593

Revision:

10/28/09 14:43

TestCode: 8015W RSK175 FileID:

1-SAMP-E:\Osioct09\E101828.r

Col Type:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175	# (RSK 175)
Methane	1,3	0.10	0.070	mg/L	50	10/18/09 15:10

Qualifiers:

Value exceeds Maximum Contaminant Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

P Prim./Conf. column %D or RPD exceeds limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Practical Quantitation Limit (PQL)

Spike Recovery outside accepted recovery limits

Print Date: 10/28/09 14:44

478637

Project

#### Life Science Laboratories, Inc.

**Analytical Results** 

5000 Brittonfield Parkway, Suite 200

East Syracuse, NY 13057

(315) 437-0200

StateCertNo: 10155

CLIENT:

Life Science Laboratories, Inc.

0910055-016A

Project:

ILT091007CL2

Client Sample ID: 0918965-018C,D

W Order:

0910055

Collection Date: Date Received:

10/07/09 14:37 10/15/09 8:58

Matrix:

WATER

PrepDate:

Lab ID:

10/18/09 8:51

Inst. ID:

GCOS 17E

Sample Size: 34 mL

BatchNo:

10154/R18593

ColumnID: Alumina Revision:

10/28/09 14:43

%Moisture:

TestCode: 8015W RSK175 FileID:

1-SAMP-E:\Osioct09\E101830.r

Col Type:

Analyte	Result Qu	al PQL	MDL	Units	DF	Date Analyzed
DISSOLVED GASES BY GC/FID				8015M/	RSK175M	(R\$K 175)
Methane	ND	0.0019	0.0013	mg/L	1	10/18/09 15:31

Qualifiers:

- Value exceeds Maximum Contaminant Level
- Value exceeds the instrument calibration range
- Analyte detected below the PQL
- Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

Print Date: 10/28/09 14:44

478638 Project

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-11-10/09

LSL Sample ID:

0918965-001

Location:

Sampled:

10/08/09 11:50

Sampled By: Client

Analyte   Result Units   Date   Date & The	10:02 BL
Methane       1.6 mg/l       10/18/09         (6) EPA 200.7 Total Hardness as CaCO3         Hardness, Total       510 mg/l       10/13/09 10/21/09         (1) EPA 350.1, Rev 2.0 Ammonia         Ammonia as N       < 0.03 mg/l	10:02 BL
Hardness, Total   510 mg/l   10/13/09   10/21/09	
(1) EPA 350.1, Rev 2.0 Ammonia  Ammonia as N  (2) Sepa 350.1, Rev 2.0 Ammonia  Ammonia as N  (3) Mg/I  (4) EPA 8260 BTEX  Benzene  Ethyl benzene  Ethyl benzene  11 ug/I  Xylenes (Totat)  Surrogate (1,2-DCA-d4)  Surrogate (1,0-DCA-d4)  Surrogate (Tol-d8)  Surrogate (4-BFB)  10 Mg/I  10/22/09  10/22/09  10/22/09  10/22/09	
Ammonia as N < 0.03 mg/l 10/22/09  (I) EPA 8260 BTEX  Benzene	BL
### Anniona as N  #### (I) EPA 8260 BTEX  Benzene	
Benzene       49 ug/l       10/22/09         Ethyl benzene       11 ug/l       10/22/09         Xylenes (Total)       16 ug/l       10/22/09         Surrogate (1,2-DCA-d4)       117 %R       10/22/09         Surrogate (Tol-d8)       10l %R       10/22/09         Surrogate (4-BFB)       96 %R       10/22/09	DRB
Ethyl benzene       11 ug/l       10/22/09         Xylenes (Total)       16 ug/l       10/22/09         Surrogate (1,2-DCA-d4)       117 %R       10/22/09         Surrogate (Tol-d8)       101 %R       10/22/09         Surrogate (4-BFB)       96 %R       10/22/09	
Xylenes (Fotal)       16 ug/l       10/22/09         Surrogate (1,2-DCA-d4)       117 %R       10/22/09         Surrogate (Tol-d8)       101 %R       10/22/09         Surrogate (4-BFB)       96 %R       10/22/09	CRT
Surrogate (1,2-DCA-d4)       117       %R       10/22/09         Surrogate (Tol-d8)       101       %R       10/22/09         Surrogate (4-BFB)       96       %R       10/22/09	CRT
Surrogate (1,2-DCA-04)  Surrogate (Tol-d8)  Surrogate (4-BFB)  96 %R  10/22/09	CRT
Surrogate (4-BFB) 96 %R 10/22/09	CRT
Surrogate (4-brb)	CRT
(I) EPA Method 300.0 A	CRT
Nitrate as N <0.1 mg/l 10/9/09	16:56 RAF
Sulfate 4.5 mg/l 10/9/09	16:56 RAF
(I) SM 18 2320B, Alkalinity as CaCO3	
Bicarbonate Alkalinity as CaCO3 360 mg/l 10/15/09	TER
Carbonate Alkalinity as CaCO3 <3 mg/l 10/15/09	TER
Hydroxide Alkalinity as CaCO3 <3 mg/l 10/15/09	TER

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-14-10/09

LSL Sample ID:

0918965-002

Location:

Sampled:

10/08/09 9:55

Sampled By: Client

An	alytical Method			Prep	Analysis		Analyst
	Analyte	Result	Units	Date	Date & T	ime	Initials
(6)	Dissolved Gases Methane	0.16	mg/l		10/18/09	10:11	BL
(6)	EPA 200.7 Total Hardness as CaCO3 Hardness, Total	470	mg/l	10/13/09	10/21/09		BL
(A)	EPA 350.1, Rev 2.0 Ammonia Ammonia as N	<0.03	mg/l		10/22/09		DRB
(I)	EPA 8260 BTEX  Benzene  Ethyl benzene  Xylenes (Total)	3.9 <1 <2	ug/l ug/l ug/l %R		10/22/09 10/22/09 10/22/09 10/22/09		CRT CRT CRT CRT
	Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB)	112 99 95	%R %R %R		10/22/09		CRT CRT
(1)	EPA Method 300.0 A Nitrate as N Sulfate	<0.1 45	mg/l mg/l		10/9/09 10/9/09	17:13 17:13	RAF RAF
(1)	SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Hydroxide Alkalinity as CaCO3	340 <3 <3	mg/l mg/l mg/l		10/15/09 10/15/09 10/15/09		TER TER TER

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-15-10/09

LSL Sample ID:

0918965-003

Location:

Sampled:

10/08/09 12:25

Sampled By: Client

Sample Matrix: NPW

Analytical Method			Prep	Analysis		Analyst	
	Analyte	Result	Units	Date	Date & T	'ime	Initials
(6)	Dissolved Gases Methane	0.19	mg/l		10/18/09	10:22	BL
(6)	EPA 200.7 Total Hardness as CaCO3  Hardness, Total	420	mg/l	10/13/09	10/21/09		ВL
<i>(1</i> )	EPA 350.1, Rev 2.0 Ammonia Ammonia as N	<0.03	mg/l		10/22/09		DRB
<i>(1)</i>	EPA 8260 BTEX  Benzene Ethyl benzeue  Xylenes (Total)  Surrogate (1,2-DCA-d4)  Surrogate (Tol-d8)  Surrogate (4-BFB)	10 11 <2 94 102	ug/I ug/I ug/I %R %R %R		10/20/09 10/20/09 10/20/09 10/20/09 10/20/09		BD BD BD BD BD BD
(1)	EPA Method 300.0 A  Nitrate as N  Sulfate	<0.1 31	mg/l mg/l		10/9/09 10/9/09	17:31 17:31	RAF RAF
(1)	SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Hydroxide Alkalinity as CaCO3	340 <3 <3	mg/l mg/l mg/l		10/15/09 10/15/09 10/15/09		TER TER TER

atories, Inc.

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-16-10/09

LSL Sample ID:

0918965-006

Location:

Sampled:

10/08/09 11:10

Sampled By: Client

Sample Matrix: NPW

=	Recult	Unite	Prep Date	Analysis Date & Time		Analyst Initials
	IXCSUIL	Onits				
	0.0000	ma/l		10/18/09	10-54	BL
Methane	0.0009	mg/i		10,10,03	10.01	
EPA 200.7 Total Hardness as CaCO3						
Hardness, Total	550	mg/l	10/13/09	10/21/09		BL
EPA 350.1, Rev 2.0 Ammonia						
Ammonia as N	<0.03	mg/l		10/22/09		DRB
EPA 8260 BTEX						
Benzene	<1	ug/l		10/22/09		CRT
Ethyl benzene	<1	ug/l		10/22/09		CRT
Xylenes (Total)	<2	ug/l		10/22/09		CRT
Surrogate (1,2-DCA-d4)	115	%R		10/22/09		CRT
Surrogate (Tol-d8)	102	%R		10/22/09		CRT
Surrogate (4-BFB)	96	%R		10/22/09		CRT
EPA Method 300.0 A						
Sulfate	63	mg/l		10/21/09	19:02	RAF
SM 18 2320B, Alkalinity as CaCO3						
Bicarbonate Alkalinity as CaCO3	370	mg/l		10/15/09		TER
Carbonate Alkalinity as CaCO3	<3	mg/l		10/15/09		TER
Hydroxide Alkalinity as CaCO3	<3	mg/l		10/15/09		TER
	Hardness, Total  EPA 350.1, Rev 2.0 Ammonia Ammonia as N  EPA 8260 BTEX Benzene Ethyl benzene Xylenes (Total) Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB)  EPA Method 300.0 A Sulfate  SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3	Analyte         Result           Dissolved Gases         0.0089           EPA 200.7 Total Hardness as CaCO3         300           Hardness, Total         550           EPA 350.1, Rev 2.0 Ammonia         400           Ammonia as N         400           EPA 8260 BTEX         41           Benzene         41           Ethyl benzene         41           Xylenes (Total)         42           Surrogate (1,2-DCA-d4)         115           Surrogate (Tol-d8)         102           Surrogate (4-BFB)         96           EPA Method 300.0 A         400           Sulfate         63           SM 18 2320B, Alkalinity as CaCO3         370           Carbonate Alkalinity as CaCO3         370           Carbonate Alkalinity as CaCO3         4	Analyte         Result         Units           Dissolved Gases         0.0089         mg/l           EPA 200.7 Total Hardness as CaCO3         mg/l           Hardness, Total         550         mg/l           EPA 350.1, Rev 2.0 Ammonia         ammonia as N         <0.03	Name	Analyte         Result         Units         Date         Date & T           Dissolved Gases         0.0089         mg/l         10/18/09           EPA 200.7 Total Hardness as CaCO3         Hardness, Total         550         mg/l         10/13/09         10/21/09           EPA 350.1, Rev 2.0 Ammonia         Ammonia as N         <0.03	Dissolved Gases

Page 7 of 32

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-17-10/09

LSL Sample ID:

0918965-007

Location:

Sampled:

10/08/09 14:15

Sampled By: Client

Aı	alytical Method			Prep	Analys		Analyst
	Analyte	Result	Units	Date	Date & T	ime	Initials
(6)	Dissolved Gases						
	Methane	1.1	mg/l		10/18/09	11:26	BL
(6)	EPA 200.7 Total Hardness as CaCO3		*				
	Hardness, Total	540	mg/f	10/13/09	10/21/09		BL
(1)	EPA 350.1, Rev 2.0 Ammonia						
	Ammonia as N	0.22	mg/l		10/22/09		DRB
<i>(1)</i>	EPA 8260 BTEX						
	Венгенс	<1	ug/l		10/22/09		CRT
	Ethyl benzene	<1	ug/l		10/22/09		CRT
	Xylenes (Total)	<2	ug/l		10/22/09		CRT
	Surrogate (1,2-DCA-d4)	109	%R		10/22/09		CRT
	Surrogate (Tol-d8)	99	%R		10/22/09		CRT
	Surrogate (4-BFB)	95	%R		10/22/09		CRT
(I)	EPA Method 300.0 A						
	Nitrate as N	<0.1	mg/l		10/9/09	18:41	RAF
	Sulfate	• 19	mg/l		10/9/09	18:41	RAF
(1)	SM 18 2320B, Alkalinity as CaCO3						
	Bicarbonate Alkalinity as CaCO3	370	mg/l		10/15/09		TER
	Carbonate Alkalinity as CaCO3	<3	mg/l		10/15/09		TER
	Hydroxide Alkalinity as CaCO3	<3	mg/l		10/15/09		TER

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-18-10/09

LSL Sample ID:

0918965-008

Location:

Sampled:

10/07/09 15:35

Sampled By: Client

Ar	alytical Method Analyte	rtical Method Analyte Result Units		Prep Date	Analysis Date & Time		Analyst Initials
(6)	Dissolved Gases						
	Methane	0.0029	mg/l		10/18/09	11:59	BL
(6)	EPA 200.7 Total Hardness as CaCO3						
	Hardness, Total	430	mg/l	10/13/09	10/21/09		BL
(1)	EPA 350.1, Rev 2.0 Ammonia						
	Ammonia as N	< 0.03	mg/l		10/22/09		DRB
(I)	EPA 8260 BTEX						
	Веплепе	<1	ug/l		10/20/09		BD
	Ethyl benzene	<1	ug/l		10/20/09		BD
	Xylenes (Total)	<2	ug/l		10/20/09		BD
	Surrogate (1,2-DCA-d4)	82	%R		10/20/09		BD
	Surrogate (Tol-d8)	101	%R		10/20/09		BD
	Surrogate (4-BFB)	107	%R		10/20/09		BD
(1)	EPA Method 300.0 A						
	Sulfate	14	mg/I		10/21/09	19:20	RAF
(1)	SM 18 2320B, Alkalinity as CaCO3						
	Bicarbonate Alkalinity as CaCO3	390	mg/l		10/15/09		TER
	Carbonate Alkalinity as CaCO3	<3	mg/l		10/15/09		TER
	Hydroxide Alkalinity as CaCO3	<3	mg/l		10/15/09		TER

ERM, Inc. - DeWitt

Dewitt, NY

Sample ID:

ANG-MW-19-10/09

LSL Sample ID:

0918965-009

Location:

Sampled:

10/07/09 10:15

Sampled By: Client

Sample Matrix: NPW

An	alytical Method	Result Units		Prep Date	Analysis Date & Time		Analyst Initials
_	Analyte	Result	Units				
(6)	Dissolved Gases Methane	3.0	mg/l		10/18/09	12:30	BL
(6)	EPA 200.7 Total Hardness as CaCO3  Hardness, Total	550	mg/l	10/13/09	10/21/09		₿L
(1)	EPA 350.1, Rev 2.0 Ammonia Ammonia as N	0.16	mg/l		10/22/09		DRB
(1)	EPA 8260 BTEX Benzene	<10	ug/l		10/20/09		BD
	Ethyl benzene Xytenes (Total)	380 420	ug/l ug/l		10/20/09 10/20/09		BD BD
	Surrogate (1,2-DCA-d4) Surrogate (Tol-d8)	91 101	%R %R		10/20/09 10/20/09		BD BD
	Surrogate (4-BFB)	102	%R		10/20/09		BD
(1)	EPA Method 300.0 A Sulfate	4.9	mg/l		10/21/09	19:37	RAF
(1)	SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3	340	mg/l		10/15/09		TER
	Carbonate Alkalinity as CaCO3  Hydroxide Alkalinity as CaCO3	<3 <3	mg/l mg/l		10/15/09 10/15/09		TER TER

21

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-20-10/09

LSL Sample ID:

0918965-010

Location:

Sampled:

10/07/09 8:00

Sampled By: Client

Analytical Method		D 14	TY:4.0	Prep Date	Analysis Date & Time		Analyst Initials
	Analyte	Result	Units	Date	Date of 1	IIIIC	Hillians
(6)	Dissolved Gases						ΥC
	Methane	0.13	mg/l		10/18/09	12:45	BL
(6)	EPA 200.7 Total Hardness as CaCO3						
	Hardness, Total	330	mg/l	10/13/09	10/21/09		BL
(1)	EPA 350.1, Rev 2.0 Ammonia						
	Ammonia as N	< 0.03	mg/l		10/22/09		DRB
(1)	EPA 8260 BTEX						
	Веплене	<1	ug/l		10/20/09		BD
	Ethyl benzene	</td <td>ug/l</td> <td></td> <td>10/20/09</td> <td></td> <td>BD</td>	ug/l		10/20/09		BD
	Xylenes (Total)	<2	ug/i		10/20/09		BD
	Surrogate (1,2-DCA-d4)	80	%R		10/20/09		BD
	Surrogate (Tol-d8)	103	%R		10/20/09		BD
	Surrogate (4-BFB)	103	%R		10/20/09		BD
(1)	EPA Method 300.0 A						
	Sulfate	9.4	mg/l		10/21/09	19:55	RAF
<i>(1)</i>	SM 18 2320B, Alkalinity as CaCO3						
	Bicarbonate Alkalinity as CaCO3	350	mg/l		10/15/09		TER
	Carbonate Alkalinity as CaCO3	<3	mg/l		10/15/09		TER
	Hydroxide Alkalinity as CaCO3	<3	mg/l		10/15/09		TER

ERM, Inc. - DeWitt

Dewitt, NY

Sample ID:

ANG-MW-22-10/09

LSL Sample ID:

0918965-011

Location:

Sampled:

10/07/09 10:55

Sampled By: Client

Analytical Method				Prep Date	Analysis Date & Time		Analyst Initials
	Analyte	ACSUIC	Outs				
(6)	Dissolved Gases Methane	1.0	mg/l		10/18/09	13:15	BL
(6)	EPA 200.7 Total Hardness as CaCO3						
1-7	Hardness, Total	570	mg/l	10/13/09	10/21/09		BL
(1)	EPA 350.1, Rev 2.0 Ammonia						
	Ammonia as N	< 0.03	mg/l		10/22/09		DRB
(1)	EPA 8260 BTEX						
	Benzene	5.6	ug/l		10/20/09		BD
	Ethyl benzene	21	ag/l		10/20/09		BD
	Xylenes (Total)	3.0	ug/l		10/20/09		BD
	Surrogate (1,2-DCA-d4)	81	%R		10/20/09		BD
	Surrogate (Tol-d8)	102	%R		10/20/09		BD
	Surrogate (4-BFB)	106	%R		10/20/09		BD
(1)	EPA Method 300.0 A						
	Sulfate	31	mg/l		10/21/09	20:13	RAF
(1)	SM 18 2320B, Alkalinity as CaCO3						
	Bicarbonate Alkalinity as CaCO3	410	mg/l		10/15/09		TER
	Carbonate Alkalinity as CaCO3	<3	mg/l		10/15/09		TER
	Hydroxide Alkalinity as CaCO3	<3	mg/l		10/15/09		TER

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-101-10/09

LSL Sample ID:

0918965-012

Location:

Sampled:

10/07/09 9:55

Sampled By: Client

Analytical Method Analyte		YN 12 YT . 14		Prep Date	Analysis Date & Time		Analyst Initials
(6)	Dissolved Gases Methane	0.44	mg/l		10/18/09	13:37	BL
(6)	EPA 200.7 Total Hardness as CaCO3 Hardness, Total	490	mg/l	10/13/09	10/21/09		BL
(1)	EPA 350.1, Rev 2.0 Ammonia Ammonia as N	<0.03	mg/l		10/22/09		DRB
(1)	EPA 8260 BTEX  Benzene Ethyl benzene Xylenes (Total) Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB)	<1 7.9 7.4 92 99	ug/l ug/l ug/l %R %R %R		10/20/09 10/20/09 10/20/09 10/20/09 10/20/09		BD BD BD BD BD
(1)	EPA Method 300.0 A Sulfate	. 42	mg/l		10/9/09	19:16	RAF
<i>(1)</i>	SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Hydroxide Alkalinity as CaCO3	360 <3 <3	mg/l mg/l mg/l		10/15/09 10/15/09 10/15/09		TER TER TER

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-102-10/09

LSL Sample ID:

0918965-013

Location:

Sampled:

10/07/09 14:20

Sampled By: Client

Sample Matrix: NPW

Analytical Method Analyte		alytical Method Analyte Result Units		Prep Date	Analysis Date & Time		Analyst Initials
(6)	Dissolved Gases Methane	0.0084	mg/l		10/18/09	14:13	BL
(6)	EPA 200.7 Total Hardness as CaCO3  Hardness, Total	640	mg/l	10/13/09	10/21/09		BL
(1)	EPA 350.1, Rev 2.0 Ammonia Ammonia as N	<0.03	mg/l		10/22/09		DRB
(1)	EPA 8260 BTEX  Benzene  Ethyl benzene	<1 <1	ug/l ug/l		10/20/09 10/20/09		BD BD
	Xylenes (Total) Surrogate (1,2-DCA-d4)	<2 83	ug/l %R		10/20/09 10/20/09		BD BD
	Surrogate (ToI-d8) Surrogate (4-BFB)	100 103	%R %R		10/20/09 10/20/09		BD BD
(I)	EPA Method 300.0 A Sulfate	5.0	mg/l		10/9/09	19:34	RAF
(I)	SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3	340 <3	mg/l mg/l		10/15/09 10/15/09		TER TER
	Hydroxide Alkalinity as CaCO3	<3	mg/l		10/15/09		TER

Life Science

ERM, Inc. - DeWitt D

Dewitt, NY

Sample ID:

ANG-MW-108-10/09

LSL Sample ID:

0918965-014

Location:

Sampled:

10/07/09 14:05

Sampled By: Client

Sample Matrix: NPW

Analytical Method Analyte		ytical Method Analyte Result Units		Prep Date	Analysis Date & Time		Analyst Initials
<del></del> (6)	Dissolved Gases Methane	0.0082	mg/l		10/18/09	14:23	BL
(6)	EPA 200.7 Total Hardness as CaCO3 Hardness, Total	540	mg/l	10/13/09	10/21/09		BL
(I)	EPA 350.1, Rev 2.0 Ammonia Ammonia as N	<0.03	mg/i		10/22/09		DRB
(1)	EPA 8260 BTEX Benzene Ethyl benzene Xylenes (Total)	<1 <1 <2	ug/l ug/l ug/l		10/22/09 10/22/09 10/22/09		CRT CRT CRT
	Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB)	128 98 95	%R %R %R		10/22/09 10/22/09 10/22/09		CRT CRT CRT
(I)	EPA Method 300.0 A Sulfate	44	mg/l		10/21/09	20:30	RAF
<i>(1)</i>	SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Hydroxide Alkalinity as CaCO3	380 <3 <3	mg/l mg/l mg/l		10/15/09 10/15/09 10/15/09		TER TER TER

28, (4) LSL Southern Tier, (5) LSL MidLakes, (6) LSL Brittonfield

ERM, Inc. - DeWitt

Dewitt, NY

Sample ID:

ANG-MW-109-10/09

LSL Sample ID:

0918965-015

Location:

Sampled:

10/07/09 10:40

Sampled By: Client

Sample Matrix: NPW

Analytical Method Analyte		ytical Method Analyte Result Units		Prep Date	Analysis Date & Time		Analyst Initials
(6)	Dissolved Gases Methane	0.0078	mg/l		10/18/09	15:21	BL
(6)	EPA 200.7 Total Hardness as CaCO3  Hardness, Total	420	mg/l	10/13/09	10/21/09		BL
<i>(1)</i>	EPA 350.1, Rev 2.0 Ammonia Ammonia as N	<0.03	mg/l		10/22/09		DRB
<i>(1)</i>	EPA 8260 BTEX  Benzene Ethyl benzene Xylenes (Total) Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB)	<1 <1 <2 125 101	ug/l ug/l ug/l %R %R %R		10/22/09 10/22/09 10/22/09 10/22/09 10/22/09		CRT CRT CRT CRT CRT CRT
(1)	EPA Method 300.0 A Sulfate	65	mg/l		10/21/09	21:23	RAF
(1)	SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Hydroxide Alkalinity as CaCO3	340 <3 <3	mg/l mg/l mg/l		10/15/09 10/15/09 10/15/09		TER TER TER

Page 16 of 32

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-DUPE 2-10/09

LSL Sample ID:

0918965-016

Location:

Sampled:

10/07/09 0:00

Sampled By: Client

Sample Matrix: QC

Analytical Method Analyte	Result	Units	Prep Date	Analysis Date & Time		Analyst Initials
(6) Dissolved Gases Methane	0.0059	mg/l		10/18/09	14:37	BL
(6) EPA 200.7 Total Hardness as CaCO3  Hardness, Total	560	mg/l	10/13/09	10/21/09		BL
(1) EPA 350.1, Rev 2.0 Ammonia Ammonia as N	0.15	mg/l		10/22/09		DRB
(1) EPA 8260 BTEX  Benzene Ethyl benzene Xylenes (Total) Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB)  Surrogate recoveries for this analysis were above established co	3.9 440 440 470 140 96 91 ontrol limus, Sample r	ug/l J ug/l J ug/l J %R %R %R %R esults may be biasc	ed high.	10/22/09 10/22/09 10/22/09 10/22/09 10/22/09		CRT CRT CRT CRT CRT CRT
(1) EPA Method 300.0 A Sulfate	5.5	mg/l		10/21/09	21:41	RAF
(1) SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Hydroxide Alkalinity as CaCO3	340 <3 <3	mg/l mg/l mg/l		10/15/09 10/15/09 10/15/09		TER TER TER

Page 17 of 32 : 10/29/09

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-RW-1-10/09

LSL Sample ID:

0918965-017

Location:

Sampled:

10/08/09 9:25

Sampled By: Client

Sample Matrix: NPW

Sample Matrix: NPW  Analytical Method  Analyte	lytical Method		Prep Date	Analysis Date & Time		Analyst Initials
6) Dissolved Gases Methane	1.3	mg/l		10/18/09	15:10	BL
6) EPA 200.7 Total Hardness as CaCO3  Hardness, Total	430	mg/i	10/13/09	10/21/09		BL
(1) EPA 350.1, Rev 2.0 Ammonia Ammonia as N	0.82	mg/l		10/22/09		DRB
(1) EPA 8260 BTEX  Benzene Ethyl benzene  Xylenes (Total) Surrogate (1,2-DCA-d4) Surrogate (Tol-d8) Surrogate (4-BFB)	<1 <1 <2 90 100	ug/l ug/l ug/l %R %R %R		10/20/09 10/20/09 10/20/09 10/20/09 10/20/09		BD BD BD BD BD
(1) EPA Method 300.0 A  Nitrate as N  Sulfate	<0.1 5.0	mg/l mg/l		10/9/09 10/9/09	18:59 18:59	RAF RAF
(1) SM 18 2320B, Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Hydroxide Alkalinity as CaCO3	310 <3 <3	mg/l mg/l mg/l		10/15/09 10/15/09 10/15/09		TER TER TER

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ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-EB-02-10/09

LSL Sample ID:

0918965-018

Location:

Sampled:

10/07/09 14:37

Sampled By: Client

Sample Matrix: QC

lytical Method Analyte Result Units		Prep Date	Analysis Date & Time		Analyst Initials
Kesun	Citts				
.0.0000			10/19/00	15.31	BL
<0.0020	mg/I		10/10/07	13.31	DL
ND	mg/I	10/13/09	10/21/09		BL
< 0.03	mg/l		10/22/09		DRB
<1	ug/l		10/22/09		CRT
<1>	ug/l		10/22/09		CRT
<2	ug/l		10/22/09		CRT
137	%R		10/22/09		CRT
98	%R		10/22/09		CRT
93	%R		10/22/09		CRT
imits. Sample 1	results may be bid	ised high.			
<1	mg/l		10/21/09	21:58	RAF
<3	mg/l		10/15/09		TER
<3	mg/l		10/15/09		TER
<3	mg/l		10/15/09		TER
	<0.03  <1 <1 <2 137 98 93 imits. Sample 1  <1  <3 <3	<0.0020 mg/l  ND mg/l  <0.03 mg/l  <1 ug/l  <1 ug/l  <2 ug/l  137 %R  98 %R  93 %R  93 %R  imits. Sample results may be bid  <1 mg/l  <3 mg/l  <3 mg/l	Result   Units   Date	Result Units   Date   Date & T	Result   Units   Date   Date & Time

atories, Inc.

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-TB-2-10/09

LSL Sample ID:

0918965-019

Location:

Sampled:

10/08/09 0:00

Sampled By: Client

Sample Matrix: TB

Analytical Method Analyte			Prep Date	Analysis Date & Time	Analyst Initials	
(I) EPA 8260 BTEX						
Benzene	<1	ug/l		10/22/09	CRT	
Ethyl benzene	<1	ug/l		10/22/09	CRT	
Xylenes (Total)	<2	ug/l		10/22/09	CRT	
Surrogate (1,2-DCA-d4)	124	%R		10/22/09	CRT	
Surrogate (Tol-d8)	96	%R		10/22/09	CRT	
Surrogate (4-BFB)	93	%R		10/22/09	CRT	

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-16-10/09

LSL Sample ID:

0918965-020

Location:

Sampled:

10/12/09 11:30

Sampled By: Client

Sample Matrix: NPW

Analytical Method			Prep	Analysis	Analyst
Analyte	Result	Units	Date	Date & Time	<u>Initials</u>
(I) EPA Method 300 0 A					

Nitrate as N

<0.1 mg/l

10/12/09 17:43

CRT

Date Printed:

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-18-10/09

LSL Sample ID:

0918965-021

Location:

Sampled:

10/12/09 10:50

Sampled By: Client

Sample Matrix: NPW

Analytical Method		Prep	Analysis	Analyst
Analyte	Result Units	Date	Date & Time	<u>Initials</u>
(7) EDA Method 300 0 A				

(1) EPA Method 300.0 A

Nitrate as N

0.23 mg/l

10/12/09 18:01

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-19-10/09

LSL Sample ID:

0918965-022

Location:

Sampled:

10/12/09 13:00

Sampled By: Client

Analytical Method			Prep	Analys	is	Analyst
Analyte	Result	Units	Date	Date & T		Initials
(1) EPA Method 300.0 A						
Nitrate as N	<0.1	mg/l		10/12/09	18:18	CRT

ERM, Inc. - DeWitt

Dewitt, NY

Sample ID:

ANG-MW-20-10/09

LSL Sample ID:

0918965-023

Location:

Sampled:

10/12/09 13:30

Sampled By: Client

Sample Matrix: NPW

		Pren	Analysis	Analyst
Analytical Method			*	•
Analyte	Result Units	Date	Date & Time	<u>Initials</u>
Analyte				

(1) EPA Method 300.0 A

Nitrate as N

<0.1 mg/l

10/12/09 18:36

Dewitt, NY ERM, Inc. - DeWitt

Sample ID:

ANG-MW-15-10/09

LSL Sample ID:

0918965-024

Location:

Sampled:

10/12/09 13:45

Sampled By: Client

Sample Matrix: NPW

Analytical Method Analyte	Result Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA Method 300.0 A				an m

Nitrate as N

<0.1 mg/l

10/12/09 18:53

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-22-10/09

LSL Sample ID:

0918965-025

Location:

Sampled:

10/12/09 11:15

Sampled By: Client

Analytical Method Analyte	Result	Units	Prep Date	Analys Date & T		Analyst Initials
(1) EPA Method 300.0 A						
Nitrate as N	<0.1	mg/l		10/12/09	19:11	CRT

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-101-10/09

LSL Sample ID:

0918965-026

Location:

Sampled:

10/12/09 11:05

Sampled By: Client

Sample Matrix: NPW

Analytical Method
Analyte
Result Units
Prep Analysis Analyst
Date Date Time Initials

(I) EPA Method 300.0 A

Nitrate as N

0.25 mg/l

10/12/09 19:28

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-102-10/09

LSL Sample ID:

0918965-027

Location:

Sampled:

10/12/09 12:10

Sampled By: Client

Analytical Method Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA Method 300.0 A					
Nitrate as N	<0.1	mg/l		10/12/09 20:21	CRT

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-108-10/09

LSL Sample ID:

0918965-028

Location:

Sampled:

10/12/09 12:25

Sampled By: Client

Analytical Method Analyte	Result Units	Prep Date	Analysis Date & Time	Analyst Initials
(I) EPA Method 300.0 A				
Nitrate as N	<0.1 mg/l		10/12/09 20:39	CRT

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-MW-109-10/09

LSL Sample ID:

0918965-029

Location:

Sampled:

10/12/09 11:50

Sampled By: Client

Sample Matrix: NPW

Analytical Method		Prep	Analysis	Analyst
Analyte		Date	Date & Time	<u>Initials</u>
(1) EPA Method 300.0 A	***************************************	 		

Nitrate as N

1.2 mg/l

10/12/09 20:56

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-DUP-2-10/09

LSL Sample ID:

0918965-030

Location:

Sampled:

10/12/09 0:00

Sampled By: Client

Sample Matrix: QC

Analytical Method			Prep	Analysis	Analyst
Analyte	Result	Units	Date	Date & Time	Initials
				~~~~	

(I) EPA Method 300.0 A

Nitrate as N

<0.1 mg/l

10/12/09 21:14

ERM, Inc. - DeWitt Dewitt, NY

Sample ID:

ANG-EB-02-10/09

LSL Sample ID:

0918965-031

Location:

Sampled:

10/12/09 10:55

Sampled By: Client

Sample Matrix: QC

Analytical Method	<del>-</del>	Prep	Analysis	Analyst
Analyte	Units	Date	Date & Time	Initials
		· · · · · · · · · · · · · · · · · · ·		

(I) EPA Method 300.0 A

Nitrate as N

<0.1 mg/l

10/12/09 21:32