Appendix A9

OU1 Remedial Design Investigation Report

Day Environmental, Inc.

October 31, 2007

OU1 REMEDIAL DESIGN INVESTIGATION REPORT
FORMER AIR FORCE PLANT 51
4777 DEWEY AVENUE, GREECE, NEW YORK
DERP-FUDS SITE NO. C02NY057500
NYSDEC SITE NO. V00421

OPERABLE UNIT OU1
AOC1 (FORMER PLATING POND/LAGOON)

Prepared For: 4800 Dewey Avenue, Inc.
80 Steel Street
Rochester, New York 14606

Prepared By: Day Environmental, Inc.
40 Commercial Street
Rochester, New York 14614

Project No.: 2806S-01

Date: October 31, 2007

OU1 REMEDIAL DESIGN INVESTIGATION REPORT
FORMER AIR FORCE PLANT 51
4777 DEWEY AVENUE, GREECE, NEW YORK
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OPERABLE UNIT OU1
AOC1 (FORMER PLATING POND/LAGOON)

_____ Date: _____

Jeffrey A. Danzinger
Project Manager

_____ Date: _____

David D. Day, P.E.
President

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APPENDICES

1.0 INTRODUCTION

The subject property (Site) consists of an approximate 33.6-acre property (addressed as 4777 Dewey Avenue) located on the west side of Dewey Avenue in the Town of Greece, County of Monroe, New York and is commonly referred to as the former Air Force Plant No. 51 (AFP51). Figure AOC1-A depicts the location of the Site.

This Remedial Design Investigation for Operable Unit OU1 was developed in accordance with a document titled "*OU1 Remedial Work Plan, Former Air Force Plant 51, 4777 Dewey Avenue, Greece, New York; DERP-FUDS Site No. C02NY057500; NYSDEC Site No. V00421; Operable Unit OU1; AOC1 (Former Plating Pond/Lagoon)*" dated February 9, 2007.

Operable Unit OU1 Area of Concern AOC1 is for a former plating pond/lagoon located on the northwest portion of the Site (refer to Figure AOC1-B). Information indicates that plating rinse wastewater was disposed of into a man-made plating pond/lagoon, which ultimately flowed to Round Pond Creek. Chlorinated volatile organic compounds (VOCs), petroleum-related VOCs, petroleum-related semi-volatile organic compounds (SVOCs), and some metals have been detected in sediment, soil and/or groundwater at, or in proximity to, the former plating pond/lagoon. As an initial remedial action, surface water in the plating pond/lagoon was removed via pumping, and underlying sediments/soils were excavated down to the top of the groundwater table in 2000/2001 by the United States Army Corps of Engineers (USACE). However, contamination, including dense non-aqueous phase liquid (DNAPL) that predominantly consists of chlorinated VOCs, is still present at AOC1. As presented in the document titled "*Environmental Site Investigation Report; Former Air Force Plant 51; 4777 Dewey Avenue, Greece, New York; DERP-FUDFS Site No. C02NY057500; NYSDEC Site No. V00421; Operable Unit OU1; AOC1 (Former Plating Pond/Lagoon); AOC2 (Lagoon and Stormwater Outfalls)*" dated April 3, 2006, environmental work was conducted after the initial remedial action in order to further delineate the nature and extent of contamination at Operable Unit OU1. As part of this work, an Interim Remedial Measure (IRM) was commenced in July 2003 to monitor and recover DNAPL from the former plating pond/lagoon area. Over 184 gallons of DNAPL has been recovered between July 2003 and August 2007.

This remedial design investigation was completed to further evaluate subsurface conditions in the area between well MW1-7 and the former plating pond/lagoon. The results of this remedial design investigation will be used to modify details concerning the selected remedy as deemed necessary.

1.1 Site Background

The facilities on the Site were generally constructed in the early 1940's. The Department of Defense either owned or leased facilities situated on approximately 44 acres of land located in the Town of Greece, New York, including the Site. These facilities were used for the manufacture of ocean-going ships and cranes during and immediately following World War II, and subsequently for the manufacture of B-52 aircraft parts and Talos ground handling equipment. Information has not been obtained to suggest radioactive materials were used, stored or disposed of at the Site.

The site was declared excess to the needs of the United States Air Force, and care and custody for the site was transferred to the General Services Administration (GSA). GSA conveyed 40.33 acres fee and 3.66 acres easement to the Monroe County Water Authority (MCWA), which later conveyed 36.63 acres fee and 3.24 acres easement to 4800 Dewey Avenue, Inc. (4800 Dewey). 4800 Dewey currently owns the Site.

The Site is currently bounded to the north by the Monroe County Shoremont Water Treatment Plant; to the east by Dewey Avenue, with a residential apartment complex beyond; to the west by vacant undeveloped land and New York State/Federal wetlands (containing Round Pond Creek); and to the south by the Ontario State Parkway with residential property beyond. The Site is zoned as "IL" (light industrial).

2.0 REMEDIAL DESIGN INVESTIGATION

This remedial design investigation was performed to further evaluate/define the extent of VOC impact to soil and groundwater on the Site in the area generally between existing monitoring well MW1-7 and the former plating pond/lagoon. Additional goals of the remedial design investigation included: obtaining data to assist in selecting and designing the remedial program for the area between MW1-7 and the former plating pond/lagoon; and filling data gaps, if any, in order to complete the overall remedial design for operable unit OU1. The scope of the remedial design investigation is presented in this section of the report.

2.1 Soil Evaluation

On June 13, 2007 and June 14, 2007, nine test borings (designated as TB-17 through TB-25) were advanced in the general area between well MW1-7 and the former plating pond/lagoon (refer to Figure AOC1-B). DAY retained TREC Environmental, Inc. (TREC) to provide and operate direct-push drilling and sampling equipment that was used to advance the test borings and generally collect continuous soil samples from the existing ground surface to the final depth of each test boring. Test borings TB-17 through TB-23 and TB-25 were advanced through overburden to final depths of approximately 20 feet, and test boring TB-24 was advanced to a final depth of approximately 19.6 feet.

The work completed was monitored and documented by a DAY representative. Monitoring included visually observing soil samples for evidence of impact (e.g., staining, odors, etc.) as well as screening the direct-push samples, and the headspace on portions of select samples, with a RAE Systems MiniRAE 2000 photoionization detector (PID) equipped with a 10.6 eV lamp for evidence of VOC impact. Other portions of the samples were collected for possible laboratory analysis. Pertinent information for each test boring is provided on test boring logs included in Appendix A.

As shown on Table 1, one soil sample from each test boring (i.e., designated as Samples 265 through 273) was selected and subsequently submitted under chain-of-custody control to Mitkem Corporation (Mitkem), which is a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified analytical laboratory (ELAP #11522). Samples with the greatest field evidence of impact (e.g., elevated PID readings, staining, odors) were selected for laboratory testing. At test locations where there was no field evidence of impact, a soil sample at or near the top of the groundwater table (based on observation of moisture content on soil samples) was selected for laboratory testing. The NYSDEC site representative provided input regarding the soil samples that were selected for laboratory testing. Mitkem analyzed the nine soil samples for the following parameters:

- Target compound list (TCL) VOCs using Analytical Services Protocol (ASP) Method OLM04.2; and
- Target analyte list (TAL) metals using ASP Method ILM04.1.

2.2 Groundwater Evaluation

On June 13, 2007, test boring TB-19 was converted into a groundwater monitoring well designated as MW1-22 (refer to Figures AOC1-B and AOC1-C). The groundwater monitoring well was constructed of one-inch inner diameter Schedule 40 polyvinyl chloride (PVC) with a ten-foot long 10-slot screen attached to solid riser. The well screen was placed from about 6 feet and 16 feet below the existing ground surface (i.e., similar screened depth interval of existing wells MW1-

7, MW1-8 and MW1-11). The annulus around, and about one foot above, the screen was backfilled with a sand pack. A 3.5-foot thick bentonite seal was placed above the sand pack, and the remaining annulus was filled with cement/bentonite grout. A steel protective casing equipped with a locked cover was placed over the monitoring well and sealed in place with concrete. A monitoring well construction diagram for MW1-22 is included in Appendix A.
Approximately one week following installation, well MW1-22 was developed in accordance with the protocol outlined in the OU1 Remedial Work Plan. The field measurement data is presented on a Monitoring Well Development Log included in Appendix B.

On July 24, 2007 and July 25, 2007, groundwater samples were collected from new well MW1-22 and also existing wells MW1-6, MW1-7, MW1-8 and MW1-11 (designated as Samples 276, and 278 through 281). The samples were collected in accordance with the low-flow purge and sample techniques outlined in the OU1 Remedial Work Plan. Water quality parameters such as dissolved oxygen (DO), oxidation-reduction potential (ORP), pH, temperature, conductivity, and turbidity were recorded during low-flow purging and sampling at each well. The procedures and equipment used during the purging and groundwater sampling and the field measurement data were documented in the field and are recorded on Low-Flow Groundwater Purging and Sampling Logs included in Appendix B.

As shown on Table 1, the five groundwater samples were submitted under chain-of-custody control to Mitkem, which analyzed the groundwater samples for the following parameters:

- TCL VOCs using ASP Method OLM04.2;
- TAL metals using ASP Method ILM04.1;
- Nitrate, sulfate and chloride using Method E300IC;
- Alkalinity using Method SM2320;
- Methane using Method RSK175; and
- Ferrous Iron using Method SM3500D

Table 2 presents NAD83 UTM Zone 18N horizontal coordinates of the new test boring locations and new well location in meters. The elevation of the new well was surveyed in feet using the same vertical datum that was used for the existing wells. On July 24, 2007, static water levels were obtained from each OU1 overburden groundwater monitoring well, including the new well. As exceptions, static water levels were not collected from: 1) well MW1-10 due to previous damage; and 2) well MW1-21 due to materials being stored over this well.

Table 3 provides the ground surface elevations, top of PVC casing elevations, static water levels measured on July 24, 2007, and calculated groundwater elevations for each well. The calculated groundwater elevations and the Surfer 8 software program by Golden Software, Inc. were used to assist in developing a potentiometric groundwater contour map, which is included as Figure AOC1-C.

2.3 Quality Assurance/Quality Control

The applicable quality assurance/quality control (QA/QC) protocols and procedures included in Section 5.0 of the General Investigation Work Plan dated June 2002 were implemented during performance of the tasks associated with the remedial design investigation. As part of the

QA/QC, the following QA/QC samples were submitted to Mitkem and analyzed for the parameters identified:

- A field blank from soil sampling equipment (designated as Sample 274 / RIN061307) was analyzed for TCL VOCs using ASP Method OLM04.2 and TAL Metals using ASP Method ILM04.1.
- A trip blank (designated as Sample 275 / TB061407) was analyzed for TCL VOCs using ASP Method OLM04.2,
- A matrix spike/matrix spike duplicate (MS/MSD) was performed on soil sample 272 / TB-24 (0-1').
- A field blank from groundwater sampling equipment (designated as Sample 276 / FB072407) was analyzed for: TCL VOCs using ASP Method OLM04.2; TAL metals using ASP Method ILM04.1; nitrate, sulfate and chloride using Method E300IC; alkalinity using Method SM2320; methane using Method RSK175; and ferrous iron using Method SM3500D.
- A trip blank (designated as Sample 282 / TB072507) was analyzed for TCL VOCs using ASP Method OLM04.2.
- A MS/MSD was performed on groundwater sample 278 / MW1-7.

3.0 FINDINGS

The findings of the work performed during the remedial design investigation are presented in this section of the report. Analytical laboratory reports and chain-of-custody documentation for soil samples, groundwater samples and QA/QC samples are included in Appendix C.

3.1 Soil

As shown on the test boring logs included in Appendix A, peak PID readings on soil samples from the nine test borings ranged between 0.0 parts per million (ppm) (TB-18, TB-20, and TB-21) and 209 ppm (TB-19).

Fill material consisting of rock and gravel underlain by sandy silt intermixed with white ash was encountered at TB-18 to a depth of approximately 4.5 feet bgs. Fill material consisting of sandy silt intermixed with varying amounts of gravel, organics, white rock, glass and metal was encountered at TB-25 to a depth of approximately 6.0 feet bgs. Fill material was not apparent at the other seven test borings. Indigenous soil at the nine test borings generally consisted of varying mixtures of fine sand and silt with lesser amounts of clays, gravel and rock. Refusal was not encountered at the test borings during advancement of the Geoprobe Systems sampling equipment that was operated by TREC.

The soil sample analytical laboratory test results for TCL VOCs and TAL metals are provided on Table 4 and Table 5, respectively. These results are further discussed below.

VOCs

As shown on Table 4, TCL VOCs were detected in each of the nine subsurface soil samples that were tested. TCL VOCs detected in one or more soil sample included: vinyl chloride; methylene chloride; cis-1,2-dichloroethene; trichloroethene; toluene; and xylenes. Tentatively identified compounds (TICs) were not detected in the 9 subsurface soil samples that were tested. These VOCs that were detected are typically associated with chlorinated solvents or petroleum products, and are generally similar to those detected in soil samples from test locations within, or in proximity to, the former plating pond/lagoon. Total TCL VOCs and TICs concentrations detected in the soil samples from each test boring are shown on Figure AOC1-B. The detected concentrations of specific VOCs, ranging between 1 part per billion (ppb) and 180 ppb, were compared to soil cleanup objectives (SCOs) for Unrestricted Use and Restricted Commercial Use as referenced in the New York State Department of Environmental Conservation (NYSDEC) document titled "*6 NYCRR Part 375 Environmental Remediation Program*"; dated December 14, 2006. As shown, the concentrations of specific VOCs detected in the nine subsurface soil samples did not exceed SCOs for Unrestricted Use and Restricted Commercial Use.

TAL Metals

As shown on Table 5, TAL metals detected in one or more of the nine subsurface soil samples tested included: aluminum; antimony; arsenic; barium; beryllium; cadmium; calcium; chromium; cobalt; copper; iron; lead; magnesium; manganese; mercury; nickel; potassium; selenium; silver; sodium; vanadium; and zinc.

The detected concentrations of TAL metals, ranging between 0.021 ppm and 65,500 ppm, were compared to SCOs for Unrestricted Use and Restricted Commercial Use. The metals concentrations are also compared to area background ranges as determined from the analysis of five background surface soil samples that were collected on February 14, 2006 at two vacant undeveloped parcels in Greece, New York. The detected concentrations of the metals aluminum, calcium, cobalt, iron, magnesium, potassium, sodium and vanadium exceeded the upper limit of corresponding background ranges. However, the detected concentrations of TAL metals do not exceed SCOs for Unrestricted Use or Restricted Commercial Use. Naturally occurring concentrations of some metals in soil may be contributing to the detected concentrations of those metals in soil samples. As such, the detected concentrations of many of the metals may not be attributable to historical operations at the Site.

3.2 Groundwater

Based on the static water levels measured from overburden groundwater monitoring wells on July 24, 2007, groundwater in the study area generally flows toward the west/northwest (refer to Figure AOC1-C).

The groundwater sample analytical laboratory test results and/or water quality measurements for: 1) TCL VOCs; 2) TAL metals; and 3) chloride, nitrate, sulfate, alkalinity, ferrous iron, methane, DO, ORP, turbidity, conductivity, pH, and temperature are provided on Table 6, Table 7 and Table 8, respectively. These results are further discussed below.

VOCs

As shown on Table 6, TCL VOCs were detected in the groundwater samples from wells MW1-7, MW1-8, MW1-11 and MW1-22. VOC TICs were only detected in groundwater samples from wells MW1-8 and MW1-11. Total TCL VOCs and TICs concentrations detected in these groundwater samples are shown on Figure AOC1-D. Total VOCs (i.e., sum of TCL VOCs and TICs) in the samples from source area wells MW1-8 and MW1-11 (i.e., within the footprint of the former plating pond/lagoon) were detected at concentrations of 271,281 ppb and 195,458 ppb, respectively. Total VOCs in the sample from new well MW1-22 located approximately 55 feet downgradient (i.e., west) of the former plating pond/lagoon were detected at a concentration of 41,230 ppb. Total VOCs in the sample from well MW1-7 located approximately 140 feet downgradient (i.e., west) of the former plating pond/lagoon were detected at a concentration of 530 ppb. VOCs were not detected in the sample from well MW1-6 located approximately 160 feet downgradient (i.e., northwest) at concentrations above reported analytical laboratory detection limits.

TCL VOCs detected in one or more groundwater sample included: vinyl chloride; 1,1-dichloroethene; methyl acetate; trans-1,2-dichloroethene; 1,1-dichloroethane; cis-1,2-dichloroethene; benzene; 1,2-dichloroethane; trichloroethene; 4-methyl-2-pentanone; toluene; 1,1,2-trichloroethane; ethylbenzene; and xylenes. [Note: Some of the VOCs (e.g., vinyl chloride, cis-1,2-dichloroethene) may be attributable to degradation of trichloroethene caused by reductive dechlorination (i.e., considered "daughter" products of trichloroethene) As shown on Table 6, the highest concentrations of TCL VOCs plus TICs detected in

groundwater were in samples from wells MW1-8 and MW1-11, which are within the footprint of the former plating pond/lagoon. VOCs generally detected at highest concentrations at wells MW1-8, MW1-11 and MW1-22 included vinyl chloride and cis-1,2-dichloroethene. VOCs generally detected at highest concentrations at well MW1-7 included vinyl chloride and 1,1-dichloroethane.

Table 6 compares the detected concentrations of specific VOCs to groundwater standards and guidance values referenced in the NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 document titled "*Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations*" (TOGS 1.1.1) dated June 1998, including an April 2000 Addendum Table 1. Based upon this comparison, groundwater standards and guidance values for three or more VOCs were exceeded in groundwater samples from wells MW1-7, MW1-8, MW1-11, and MW1-22. Concentrations of the following VOCs exceeded groundwater standards or guidance values: vinyl chloride; 1,1-dichloroethene; trans-1,2-dichloroethene; 1,1-dichloroethane; cis-1,2-dichloroethene; benzene; 1,2-dichloroethane; trichloroethene; toluene; 1,1,2-trichloroethane; and xylene.

TAL Metals

As shown on Table 7, TAL metals were detected in groundwater samples from wells MW1-6, MW1-7, MW1-8, MW1-11, and MW1-22. TAL metals detected in one or more groundwater sample included: aluminum; antimony; arsenic; barium; beryllium; cadmium; calcium; chromium; cobalt; copper; iron; magnesium; manganese; mercury; nickel; potassium; selenium; silver; sodium; thallium; vanadium and zinc. The detected concentrations of TAL metals were compared to NYSDEC TOGS 1.1.1 groundwater standards and guidance values. Based upon this comparison, groundwater standards and guidance values for the following TAL metals were exceeded in one or more groundwater sample: antimony; barium; iron; magnesium; manganese; sodium; and thallium.

Naturally occurring concentrations of some metals in groundwater may be contributing to the detected concentrations of those metals in groundwater samples. As such, the detected concentrations of many of the metals may not be attributable to historical operations at the Site.

Natural Attenuation Parameters and Water Quality Measurements

Natural attenuation parameters and water quality parameters are provided on Table 8. These data document baseline conditions before in-situ chemical oxidation is completed at operable unit OU1, area of concern AOC1. These data indicate that reductive dechlorination processes are likely occurring, especially in the area that contains the highest concentrations of chlorinated VOCs (i.e., MW1-8 and MW1-11 located with the footprint of the former plating pond/lagoon).

3.3 QA/QC Samples

The test results of the QA/QC samples are provided in the analytical laboratory reports included in Appendix C, and the test results for the field QA/QC samples are summarized on Table 9, Table 10, and Table 11. Some VOCs and metals were detected in one or more QA/QC field sample, but at concentrations that do not significantly affect the analytical results of soil or groundwater samples that were collected as part of the remedial design investigation.

4.0 CONCLUSIONS

DAY performed a remedial design investigation in order to further evaluate/define the extent of VOC impact to soil and groundwater in the area generally between existing monitoring well MW1-7 and the former plating pond/lagoon. This investigation was also conducted to obtain information that can be used for the selection and design of the remedial program for the area between MW1-7 and the former plating pond/lagoon, and to obtain information that can be used to fill data gaps (if any) in order to complete the overall remedial design for OU1.

A total of nine test borings were advanced in the area west of the former plating pond/lagoon to near the western property boundary in proximity to well MW1-7. A soil sample from each test boring was analyzed for TCL VOCs and TAL metals.

One of these test borings was converted into a groundwater monitoring well (i.e., well MW1-22). Groundwater samples were collected in July 2007 from new well MW1-22 and existing wells MW1-6, MW1-7, MW1-8, and MW1-11. These samples were analyzed or measured for TCL VOCs, TAL metals and various natural attenuation parameters.

Based on the findings of the remedial design investigation, the following conclusions are made:

- Soil samples from each test boring that were selected in the field with NYSDEC concurrence for analytical laboratory testing did not contain TCL VOCs or TAL metals at concentrations exceeding NYSDEC Parts 375 SCOs for Unrestricted Use or Restricted Commercial Use.
- As measured from overburden groundwater monitoring wells, the groundwater in the uppermost water-bearing unit generally flows west/northwest in the study area.
- The concentration of total VOCs at source area wells MW1-8 and MW1-11 (i.e., within the footprint of the former plating pond/lagoon) is more than 4.5 times higher than the total VOC concentration detected at new well MW1-22 located approximately 55 feet downgradient (i.e., west) of the former plating pond/lagoon. The concentration of total VOCs at source area wells MW1-8 and MW1-11 is more than 365 times higher than the total VOC concentration detected at well MW1-7 located approximately 140 feet downgradient (i.e., west) of the former plating pond/lagoon. VOCs were not detected at well MW1-6, which is located approximately 160 feet downgradient (i.e., northwest) at concentrations above reported analytical laboratory detection limits.
- The presence of “daughter” products (e.g., cis-1,2-dichloroethene, vinyl chloride) and other natural attenuation laboratory results and water quality measurements indicate reductive dechlorination is occurring within the study area, especially at wells MW1-8 and MW1-11 located within the former plating pond/lagoon.
- The VOCs present in proximity to well MW1-7 located near the western property boundary appear to be associated with the plume of VOC contamination attributable to the former plating pond/lagoon (i.e., the VOCs at well MW1-7 do not appear attributable to a separate source).
- The remedial technologies presented in the OU1 Remedial Work Plan can be used to address the VOC contamination in the area between MW1-7 and the former plating pond/lagoon, to the extent deemed warranted.
- Data gaps have been filled so that the overall remedial design for operable unit OU1 can be developed.

5.0 REFERENCES

Project Documents

OU1 Remedial Work Plan; Former Air Force Plant 51; 4777 Dewey Avenue, Greece, New York; DERP-FUDS Site No. C02NY057500; NYSDEC Site No. V00421; Operable Unit OU1, AOC1 (Former Plating Pond/Lagoon); February 9, 2007; Day Environmental, Inc.

General Investigation Work Plan; Former Air Force Plant 51; 4777 Dewey Avenue, Town of Greece, New York; DERP-FUDS Site No. C02NY057500; Voluntary Agreement Index No. B8-590-01-02; NYSDEC Site No. V00421; June 2002; Day Environmental, Inc.

Previous Reports

Former Air Force Plant No. 51, Monroe County, Greece, New York, Interim Removal Action Area 1, Final Completion Report; August 2001; Roy F. Weston, Inc.

Environmental Site Investigation Report; Former Air Force Plant 51; 4777 Dewey Avenue, Greece, New York; DERP-FUDS Site No. C02NY057500; NYSDEC Site No. V00421; Operable Unit OU1; AOC1 (Former Plating Pond/Lagoon); AOC2 (Lagoon and Stormwater Outfalls); April 3, 2006; Day Environmental, Inc.

Regulatory Documents

NYSDEC 6 NYCRR Part 375 Environmental Remediation Program; revised December 14, 2006.

NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1; Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (TOGS 1.1.1); June 1998, including April 2000 Addendum Table 1.

Other Reference Materials

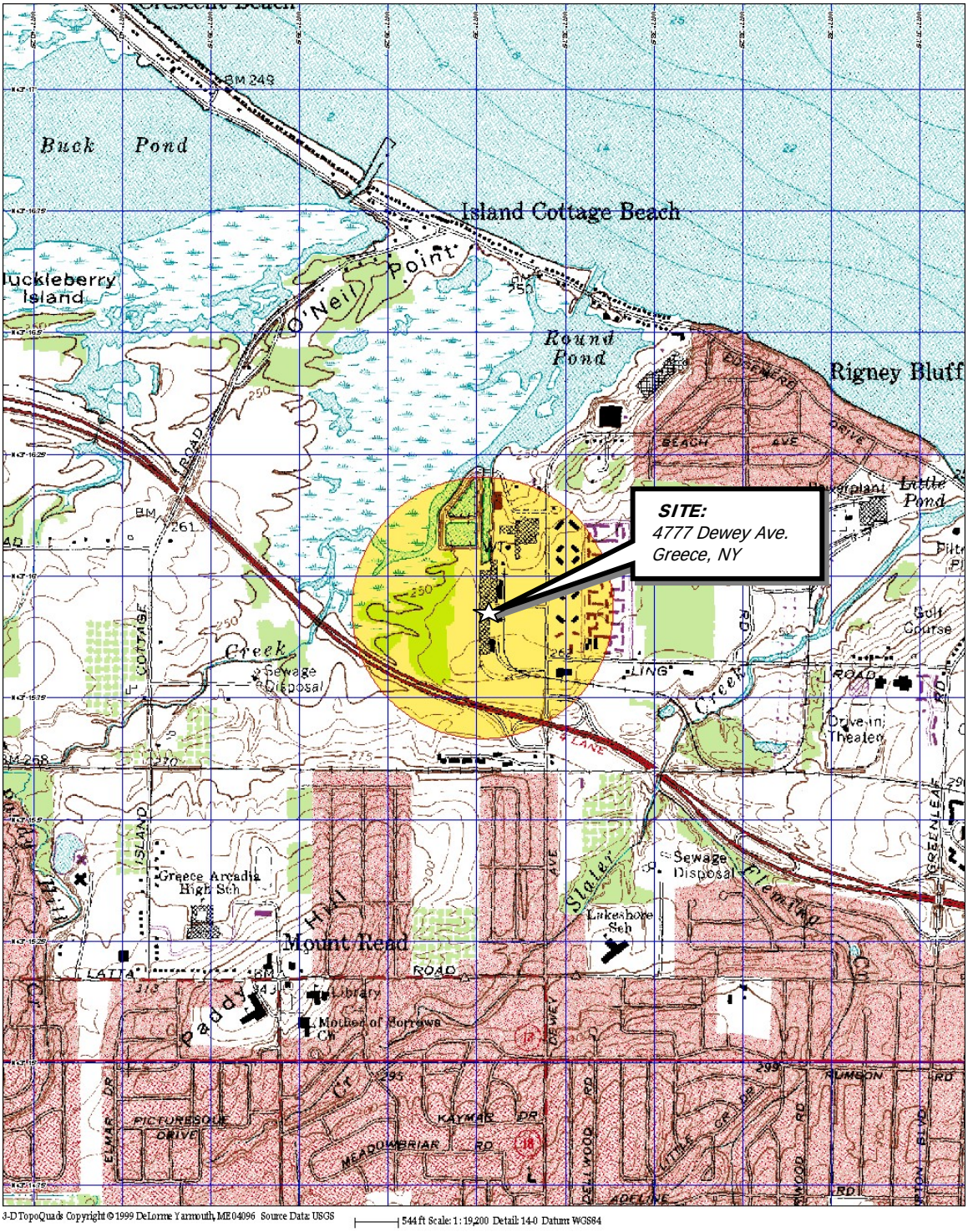
USGS topographic map for the Braddock Heights, New York quadrangle, 1995.

USGS topographic map for the Rochester East, New York quadrangle, 1995.

6.0 ACRONYMS

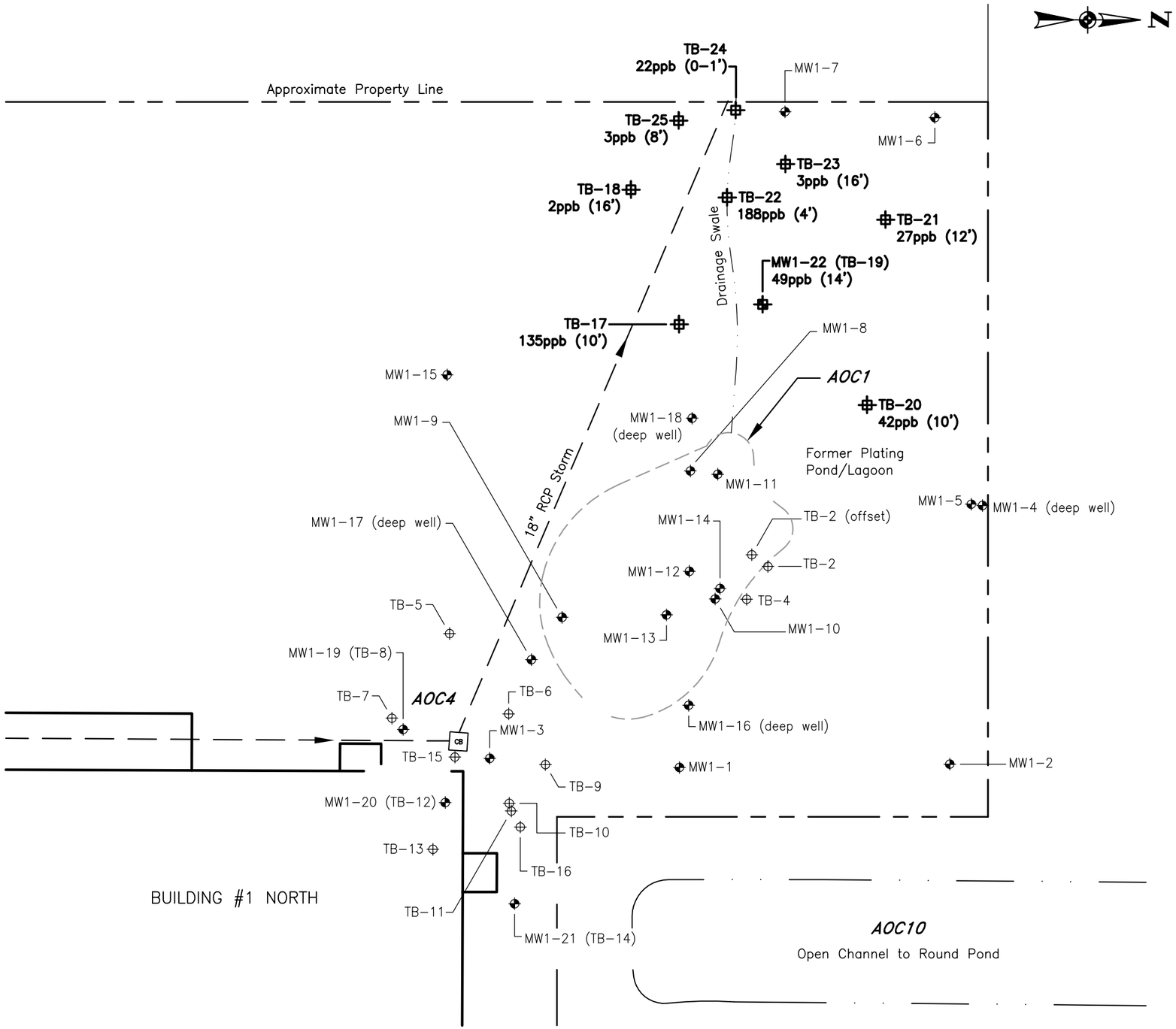
AFP51	Air Force Plant No. 51
AOC	Area of Concern
ASP	Analytical Services Protocol
4800 Dewey	4800 Dewey Avenue, Inc.
DNAPL	Dense Non-Aqueous Phase Liquid
DO	Dissolved Oxygen
ELAP	Environmental Laboratory Approval Program
GSA	General Services Administration
IRM	Interim Remedial Measure
MCWA	Monroe County Water Authority
Mitkem	Mitkem Corporation
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
ORP	Oxidation-Reduction Potential
OU1	Operable Unit OU1
PID	Photoionization Detector
PPB	Parts Per Billion
PPM	Parts Per Million
PVC	Polyvinyl Chloride
QA/QC	Quality Assurance/Quality Control
SCO	Soil Cleanup Objective
SVOC	Semi-Volatile Organic Compound
TAL	Target Analyte List
TCL	Target Compound List
TIC	Tentatively Identified Compound
TOGS	Technical and Operational Guidance Series
TREC	TREC Environmental, Inc.
VOC	Volatile Organic Compound
USACE	United States Army Corps of Engineers
USGS	United States Geological Survey

FIGURES



Drawing Produced From: 3-D TopoQuads, DeLorme Map Co., referencing USGS quad maps Braddock Heights (NY) 1995 and Rochester East (NY) 1995. Site Lat/Long: N43d-15.94' – W77d-38.98'

DATE **10/17/2007** DRAWN BY **Tww** SCALE **1" = 2000'**	DAY ENVIRONMENTAL, INC. ENVIRONMENTAL CONSULTANTS ROCHESTER, NEW YORK 14614-1008	PROJECT TITLE **4777 DEWEY AVENUE** **GREECE, NEW YORK** **OU1 REMEDIAL DESIGN INVESTIGATION** DRAWING TITLE **PROJECT LOCUS MAP**	PROJECT NO. **2806S-01** **Figure AOC1-A**



Test Location Plan
1" = 50'

NOTES:

1. Monitoring Well MW1-1 thru MW1-10 are 2" PVC wells installed December 2002.
2. Monitoring Wells MW1-11 thru MW1-14 are 4" Stainless Steel wells installed July 2003.
3. Monitoring Well MW1-15 thru MW1-21 are 2" PVC wells installed March 2004.
4. Monitoring Well MW1-22 and test borings TB-17 to TB-25 installed June 2007.
5. Drawing prepared from Figure GEN-2 in the general work plan dated June 2002 and site observations by representatives of Day Environmental, Inc. from December 2002 through July 2007.

LEGEND:

AOC1	Area Of Concern with Numbered Designation
MW1-1	Monitoring Well with Designation
TB-2	Test Boring with Designation
MW1-22 (TB-19)	Remedial Design Overburden Monitoring Well Location
TB-21	Remedial Design Test Boring Location
27ppb (12')	Total TCL VOCs and TICs Detected In Parts Per Billion (ppb) From Depth In Parenthesis

DesignTag: JAD | DRAWN BY: CPS/RJM | SCALE: AS Noted | DATE: 07-2007 | DATE DRAWN: 07-2007 | DATE ISSUED: 10-30-2007

DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK 14614-1008
NEW YORK, NEW YORK 10165-1617

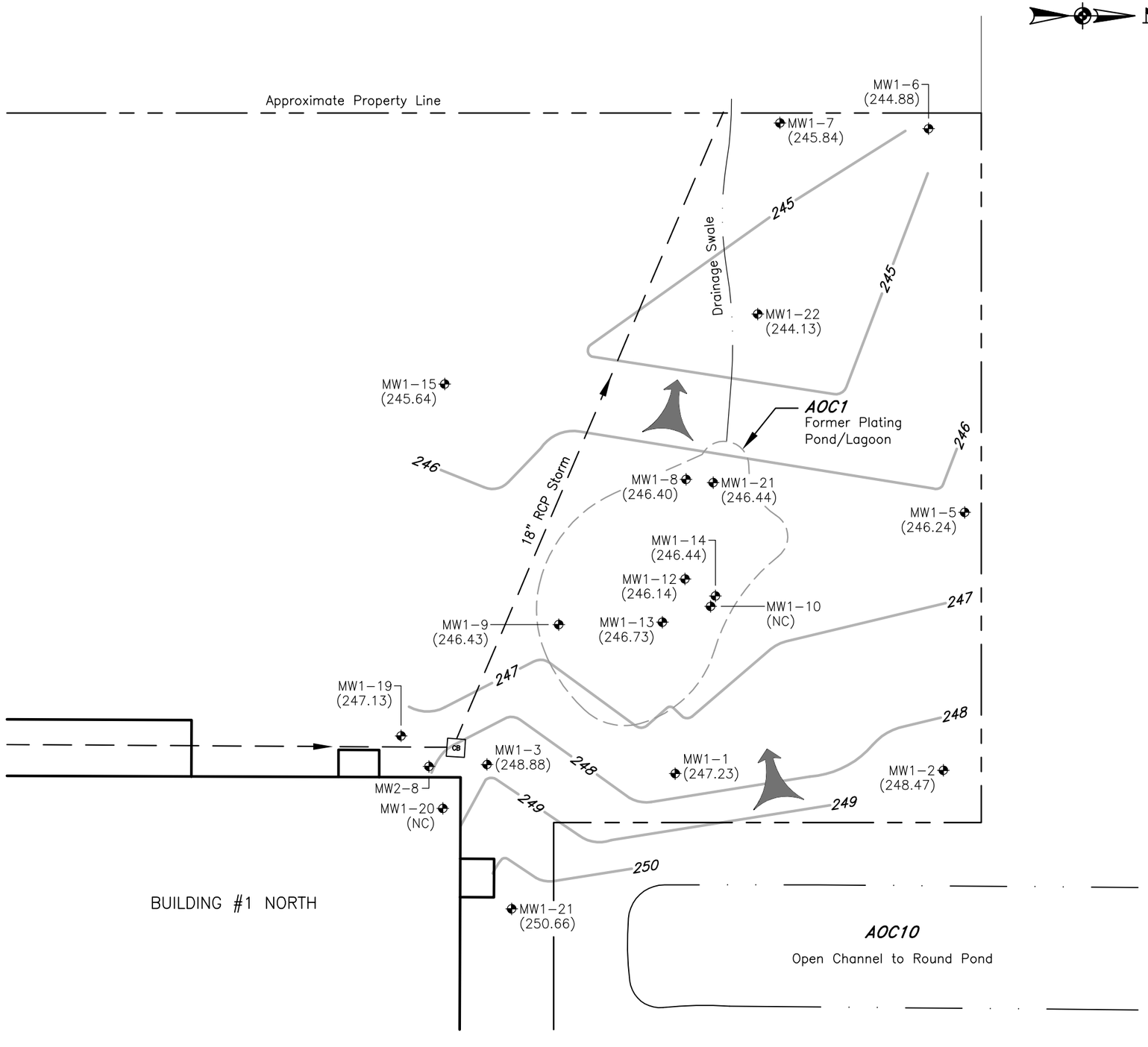
PROJECT TITLE: 4777 DEWEY AVENUE GREECE, NEW YORK

OU1 REMEDIAL DESIGN INVESTIGATION

DRAWING TITLE: Remedial Design Test Locations With Total TCL VOCs and TICs Detected in June 2007 Soil Samples

PROJECT NO. 2806S-01

AOC1-B



Test Location Plan
1" = 50'

N

NOTES:

1. Monitoring Well MW1–1 thru MW1–10 are 2" PVC wells installed December 2002.
2. Monitoring Wells MW1–11 thru MW1–14 are 4" Stainless Steel wells installed July 2003.
3. Monitoring Well MW1–15 thru MW1–21 are 2" PVC wells installed March 2004.
4. Monitoring Well MW1–22 installed June 2007.
5. Drawing prepared from Figure GEN–2 in the general work plan dated June 2002 and site observations by representatives of Day Environmental, Inc. from December 2002 through April 2004.

LEGEND:

AOC1	Area Of Concern with Numbered Designation
MW1–1 (247.23)	Monitoring Well with Designation and Groundwater Elevation Measured on July 24, 2007
(NC)	Measurement Not Collected
	Apparent Groundwater Flow Direction

FIELD VERIFIED BY: JAD	DRAWN BY: RJM	SCALE: 1" = 50'
DATE: 07-2007	DATE DRAWN: 10-3-2007	DATE ISSUED: 10-3-2007

DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK 14614-1008
NEW YORK, NEW YORK 10165-1617

PROJECT TITLE
4777 DEWEY AVENUE
GREECE, NEW YORK

OU1 REMEDIAL DESIGN INVESTIGATION

DRAWING TITLE
Potentiometric Overburden Groundwater Contour Map
For July 24, 2007

PROJECT NO.
2806S-01

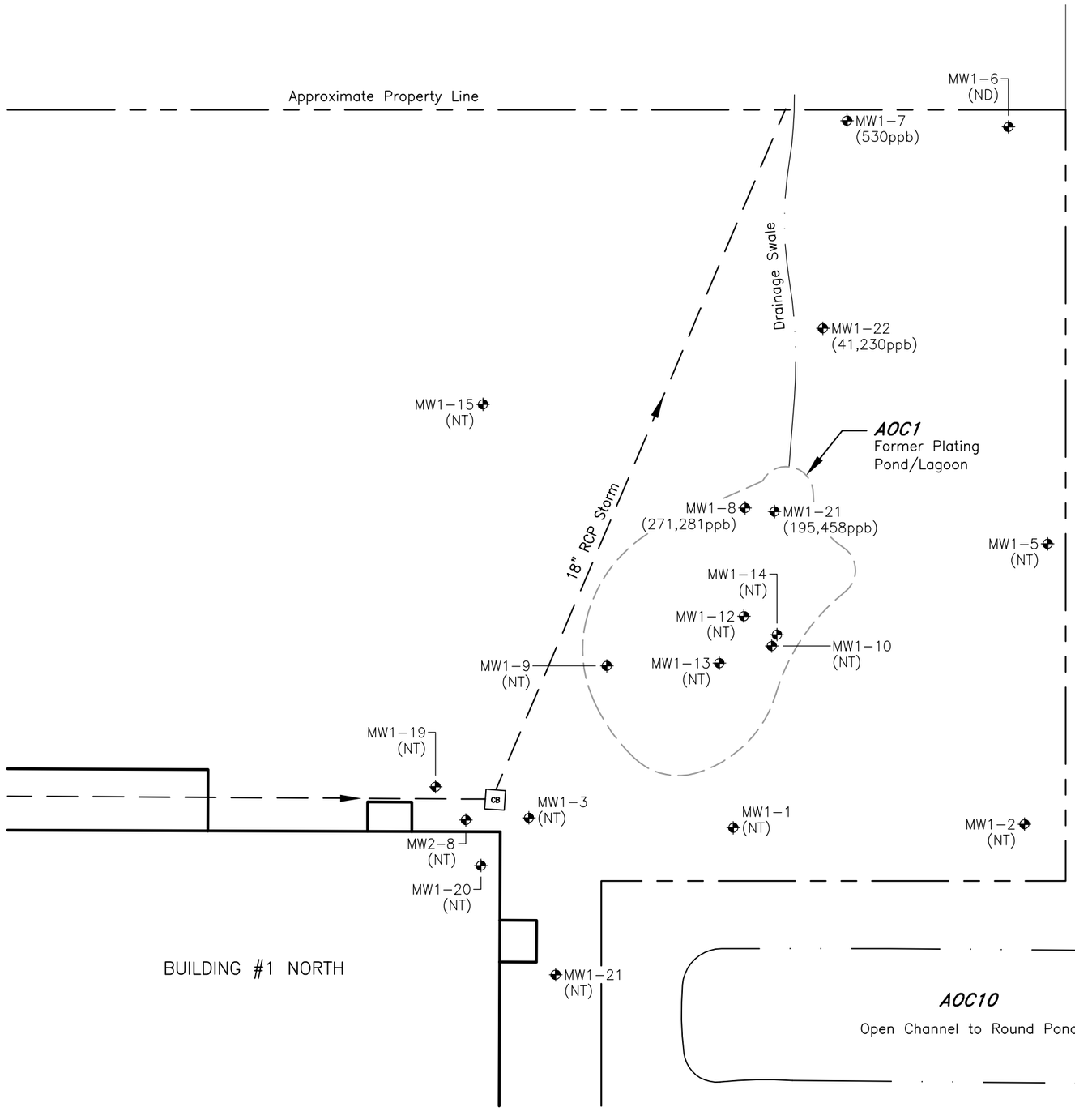
AOC1-C

Ref1: 2806S GW Contours 7-24-07 Ref4:
Ref2: Ref5:
Ref3: Ref6:

Time Plotted: Wed Oct 3 13:50 2007 Xerox4320nsiB-2; 11 x 17
File Name: Atkin\4800 Dewey\2806\2806S GW Map 7-24-2007.dwg Drawing Name: Layout 1

Ref4:
Ref5:
Ref6:

Ref1:
Ref2:
Ref3:



Test Location Plan
1" = 50'

NOTES:

1. Monitoring Well MW1-1 thru MW1-10 are 2" PVC wells installed December 2002.
2. Monitoring Wells MW1-11 thru MW1-14 are 4" Stainless Steel wells installed July 2003.
3. Monitoring Well MW1-15 thru MW1-21 are 2" PVC wells installed March 2004.
4. Monitoring Well MW1-22 installed June 2007.
5. Drawing prepared from Figure GEN-2 in the general work plan dated June 2002 and site observations by representatives of Day Environmental, Inc. from December 2002 through April 2004.

LEGEND:

AOC1	Area Of Concern with Numbered Designation
MW1-7 (530ppb)	Monitoring Well with Designation and Total TCL VOCs and TICs Detected In Parts Per Billion In July 2007 Groundwater Sample
(ND)	Not Detected At Concentration Above Reported Analytical Laboratory Detection Limit
(NT)	Not Tested

FIELD VERIFIED BY	JAD
DATE	07-2007
DRAWN BY	RJM
DATE DRAWN	10-30-2007
SCALE	1" = 50'
DATE ISSUED	10-30-2007

DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK 14614-1008
NEW YORK, NEW YORK 10165-1617

PROJECT TITLE
4777 DEWEY AVENUE
GREECE, NEW YORK

OU1 REMEDIAL DESIGN INVESTIGATION

DRAWING TITLE
Total TCL VOCs and TICs Detected In July 2007 Groundwater Samples From Selected Monitoring Well Locations

PROJECT NO.
2806S-01

AOC1-D

Time Plotted: Tues Oct 30 10:25 2007
File Name: Atkin\4800 Dewey\2806\2806-46.dwg
Xerox432AnsiB-2; 11 x 17
Layout Name: Layout 1

TABLES

Table 1

OU1 Remedial Design Investigation

Former Air Force Plant No. 51
4777 Dewey Avenue, Greece, New York
NYSDEC Site No. V00421

Analytical Laboratory Program For Field and QA/QC Samples

SAMPLE	DATE	LOCATION	DEPTH	MEDIA TYPE	LABORATORY ANALYSES
265	06/13/07	TB-17	10’	Soil	TCL VOC, TAL Metal
266	06/13/07	TB-18	16’	Soil	TCL VOC, TAL Metal
267	06/13/07	TB-19	14’	Soil	TCL VOC, TAL Metal
268	06/13/07	TB-20	10’	Soil	TCL VOC, TAL Metal
269	06/13/07	TB-21	12’	Soil	TCL VOC, TAL Metal
270	06/13/07	TB-22	4’	Soil	TCL VOC, TAL Metal
271	06/13/07	TB-23	16’	Soil	TCL VOC, TAL Metal
272	06/13/07	TB-24	0-1’	Soil	TCL VOC, TAL Metal*
273	06/13/07	TB-25	8’	Soil	TCL VOC, TAL Metal
274	06/13/07	RIN061307	NA	Water	TCL VOC, TAL Metal*
275	06/13/07	TB061407	NA	Water	TCL VOC*
276	07/24/07	MW1-6	NA	Groundwater	TCL VOC, TAL Metal, Nitrate, Sulfate, Chloride, Alkalinity, Methane and Ferrous Iron
277	07/24/07	FB072407	NA	Water	TCL VOC, TAL Metal, Nitrate, Sulfate, Chloride, Alkalinity, Methane and Ferrous Iron
278	07/25/07	MW1-7	NA	Groundwater	TCL VOC, TAL Metal, Nitrate, Sulfate, Chloride, Alkalinity, Methane and Ferrous Iron
279	07/25/07	MW1-22	NA	Groundwater	TCL VOC, TAL Metal, Nitrate, Sulfate, Chloride, Alkalinity, Methane and Ferrous Iron
280	07/25/07	MW1-8	NA	Groundwater	TCL VOC, TAL Metal, Nitrate, Sulfate, Chloride, Alkalinity, Methane and Ferrous Iron
281	07/25/07	MW1-11	NA	Groundwater	TCL VOC, TAL Metal, Nitrate, Sulfate, Chloride, Alkalinity, Methane and Ferrous Iron
282	07/25/07	TB072507	NA	Water	TCL VOC

***** = Quality Assurance/Quality Control Sample
TCL VOCs = Target compound list volatile organic compound. Method: ASP CLP OLM04.2
TAL Metal = Target analyte list metals and cyanide. Method: ASP CLP ILM04.1
Nitrate = Method E300IC
Sulfate = Method E300IC
Chloride = Method E300IC
Alkalinity = Method SM2320
Methane = Method RSK175
Ferrous Iron = Method SM3500D

Table 2

OU1 Remedial Design Investigation

Former Air Force Plant No. 51
4777 Dewey Avenue, Greece, New York
NYSDEC Site No. V00421

NAD 83 UTM Zone 18N Horizontal Coordinates (in Meters) for Test Locations

LOCATION	TYPE	NORTHING	EASTING
TB-17	Test Boring	4793906.55	284888.96
TB-18	Test Boring	4793901.08	284870.74
TB-19 (MW1-22)	Monitoring Well	4793917.78	284886.90
TB-20	Test Boring	4793930.98	284900.98
TB-21	Test Boring	4793934.69	284876.49
TB-22	Test Boring	4793913.80	284872.43
TB-23	Test Boring	4793921.78	284868.41
TB-24	Test Boring	4793915.69	284860.50
TB-25	Test Boring	4793907.89	284861.88

Table 3

Groundwater Elevation Data For July 24, 2007
Overburden Monitoring Wells

Operable Unit OU1
Former Air Force Plant No. 51
4777 Dewey Avenue, Greece, New York

WELL ID	GROUND SURFACE ELEVATION	TOP OF PVC CASING ELEVATION (FT)	STATIC WATER LEVEL MEASUREMENT (FT)	GROUNDWATER ELEVATION (FT)
MW1-1	253.90	256.17	8.94	247.23
MW1-2	253.90	256.35	7.88	248.47
MW1-3	254.10	255.86	6.98	248.88
MW1-5	253.70	255.97	9.73	246.24
MW1-6	251.50	253.85	8.97	244.88
MW1-7	251.60	253.79	7.95	245.84
MW1-8	253.90	256.38	9.98	246.40
MW1-9	254.90	257.21	10.78	246.43
MW1-11	257.71	256.49	10.05	246.44
MW1-12	254.51	257.05	10.91	246.14
MW1-13	254.43	257.35	10.62	246.73
MW1-14	254.20	256.96	10.51	246.45
MW1-15	255.79	257.33	11.69	245.64
MW1-19	254.30	256.23	9.10	247.13
MW1-20	NC	253.72	NC	NC
MW1-21	254.04	256.48	5.82	250.66
MW1-22	254.04	256.44	12.31	244.13

NC = Measurement not collected

SWL measurements at wells collected using a Heron H01.L oil/water interface probe.

Vertical reference datum used is NA1929 - Monument Station 1754 (MCGS) 1993 (Elevation = 262.2' $\pm$ 0.3')

Table 4
Former Air Force Plant 51
4777 Dewey Ave., Greece, NY

Summary of Detected Volatile Organic Compounds
in ug/Kg or Parts per Billion (ppb)

OU1 Remedial Design Investigation
Soil Samples

Detected Compound	Unrestricted SCO (1)	Restricted Commercial SCO (2)	265 TB-17 (10')	266 TB-18 (16')	267 TB-19 (14')	268 TB-20 (10')	269 TB-21 (12')	270 TB-22 (4')	271 TB-23 (16')	272 TB-24 (0-1')	273 TB-25 (8')
Vinyl Chloride	20	13000	U	U	U	10 J	U	3 J	U	U	U
Methylene Chloride	50	500000	U	U	U	U	U	2 J	U	U	3 J
Cis-1,2-Dichloroethene	250	500000	110	2 J	32	30	24	180	3 J	22	U
Trichloroethene	470	200000	23	U	17	2 J	3 J	3 J	U	U	U
Toluene	700	500000	1 J	U	U	U	U	U	U	U	U
Xylene (Total)	260	500000	1 J	U	U	U	U	U	U	U	U
TOTAL VOCS	NA	NA	135 J	2 J	49	42 J	27 J	188 J	3 J	22	3 J
TOTAL TICS	NA	NA	U	U	U	U	U	U	U	U	U
TOTAL VOCS AND TICS	NA	NA	135 J	2 J	49	42 J	27 J	188 J	3 J	22	3 J

NA = Not available J = Estimated value

(1) = Unrestricted Use soil cleanup objective (SCO) as referenced in 6 NYCRR Part 375 dated December 14, 2006.

(2) = Restricted Commercial Use SCO as referenced in 6 NYCRR Part 375 dated December 14, 2006.

U = Not detected at concentration above reported analytical laboratory detection limit

Table 5
Former Air Force Plant 51
4777 Dewey Ave., Greece, NY

Summary of TAL Metals
in mg/Kg or Parts per Million (ppm)

OU1 Remedial Design Investigation
Soil Samples

Detected Analyte	Unrestricted SCO (1)	Restricted Commercial SCO (2)	Area Background Range (3)	265 17 TB-(10')		266 18 TB (16')		267 19 TB-(14')		268 20 TB-(10')		269 21 TB (12')		270 22 TB-(4')		271 23 TB (16')		272 24 TB-(0-1')		273 25 TB-(8')	
Aluminum	NA	NA	7880 - 9310	6160		6040		4760		**11500**		**19600**		**11300**		6240		**14500**		**21300**	
Antimony	NA	NA	U	U	N	U	N	U	N	U	N	U	N	U	N	U	N	U	N	U	N
Arsenic	13	16	2.7 - 4.6	U		U		U		4.3		8.7		4.9		U		5.3		4.8	
Barium	350	400	53.5 - 76.3	58.2		68.5		42.4	B	141		183		75.9		63.9		67.9		162	
Beryllium	7.2	590	0.27 - 0.36	0.14	B	U		U		U		U		U		0.16	B	0.26	B	U	
Cadmium	2.5	9.3	U	U		U		U		0.21	B	0.38	B	0.37	B	U		0.9	B	0.34	B
Calcium	NA	NA	2480 - 4190	**30200**	E	**44100**	E	**23700**	E	**4930**	E	**7250**	E	**65500**	E	**38600**	E	3150	E	**6520**	E
Chromium	30	1500	12.1 - 13.1	9.8		10		8.1		18.3		30.1		17.3		10		19.9		36.7	
Cobalt	NA	NA	3.8 - 6.7	5.7	B	5.8	B	4.9	B	**11**		**18.7**		**10.2**	B	6.7	B	**12.4**		**16**	
Copper	50	270	8.8 - 14.5	17.3		18.2		11.7		18.9		37.3		23		7.5		18.5		31.7	
Iron	NA	NA	12100 - 14800	13400		13400		10400		**21800**		**34000**		**20400**		12900		**24000**		**31100**	
Lead	63	1000	13.5 - 24.9	2.6		2.6		11.1		7		13.7		8.2		2.4		10.6		13.6	
Magnesium	NA	NA	2190 - 2750	**7340**		**11400**		**5690**		**5170**		**6720**		**12000**		**8090**		**3900**		**8030**	
Manganese	1600	10000	175 - 526	591	*	437	*	382	*	689	*	922	*	538	*	414	*	515	*	939	*
Mercury	0.18	2.8	U - 0.077	U	N	U	N	U	N	U	N	0.021	BN	U	N	U	N	0.026	BN	U	N
Nickel	30	310	11.9 - 17.9	13.1		11.1		15.4		22.3		32.5		20.1		14.7		20.7		35.5	
Potassium	NA	NA	577 - 987	956	B	**1200**		767	B	**1750**		**2990**		**2030**		**1120**		**1060**	B	**3160**	
Selenium	3.9	1500	U	U	N	4.9	N	U	N	U	N	U	N	U	N	U	N	U	N	U	N
Silver	2	1500	0.62 - 0.84	1.1	BN	U	N	U	N	4.9	N	7.6	N	U	N	U	N	5.4	N	7	N
Sodium	NA	NA	94 - 133	**147**	B	**167**	B	96.1	B	**151**	B	**278**	B	**191**	B	106	B	72.2	B	**183**	B
Thallium	NA	NA	U - 1.4	U		U		U		U		U		U		U		U		U	
Vanadium	NA	NA	16.0 - 19.3	13.3		16.8		11.7		**26**		**46.1**		**26.4**		13		**27.5**		**41.8**	
Zinc	109	10000	34.3 - 57.2	32.1	E	33.1	E	28.7	E	48.4	E	74.6	E	49.8	E	29.8	E	56.9	E	82	E

E = Estimated concentration due to matrix interference determined by the serial dilution

* = Duplicate analysis not within control limits

(1) = Unrestricted Use soil cleanup objective (SCO) as referenced in 6 NYCRR Part 375 dated 12/14/06

N = Spiked sample recovery not within control limits

(2) = Restricted Commercial Use SCO as referenced in 6 NYCRR Part 375 dated 12/14/06

U = Not detected at concentrations above reported analytical laboratory detection limits

(3) = Area background range as determined from the analysis of five background surface soil samples that were collected on February 14, 2006 at two vacant undeveloped parcels in Greece, New York.

B = Reported value less than contract required detection limit, but greater than instrument detection limit

NA = Not available

26 = Exceeds upper limit of area background

Table 6
Former Air Force Plant 51
4777 Dewey Ave., Greece, NY

Summary of Detected Volatile Organic Compounds
in ug/l or Parts per Billion (ppb)

OU1 Remedial Design Investigation
Baseline Groundwater Samples

Detected Compound	Groundwater Standards and Guidance Values (1)	276 MW1-6 (07/24/07)	278 MW1-7 (07/25/07)	279 MW1-22 (07/25/07)	280 MW1-8 (07/25/07)	281 MW1-11 (07/25/07)
Vinyl Chloride	2	U	**110**	**2700** D	**110000** D	**44000** D
1,1-Dichloroethene	5	U	U	**26**	**430** E	**270** E
Methyl Acetate	NA	U	U	U	16	
Trans-1.2-Dichloroethene	5	U	3 J	**97**	**420** E	**450** E
1,1-Dichloroethane	5	U	**410** D	U	4 J	4 J
Cis-1,2-Dichloroethene	5	U	U	**32000** D	**160000** D	**150000** D
Benzene	1	U	U	U	**2** J	
1,2-Dichloroethane	0.6	U	U	U	**11**	**5** J
Trichloroethene	5	U	**7** J	**6400** D	**55**	**450** E
4-Methyl-2-Pentanone	NA	U	U	U	30	6 J
Toluene	5	U	U	5 J	**59**	**41**
1,1,2-Trichloroethane	1	U	U	**2** J	**19**	**4** J
Ethylbenzene	5	U	U	U	2 J	
Xylene (total)	5	U	U	U	**20**	**20**
TOTAL VOCS	NA	U	530 JD	41230 JD	271068 JDE	195250 JDE
TOTAL TICS	NA	U	U	U	213 NJ	208 NJ
TOTAL VOCS AND TICS	NA	U	530 JD	41230 JD	271281 NJDE	195458 NJDE

NA = Not available J = Estimated value D = Compound concentration obtained from a diluted analysis

(1) = Groundwater standards and guidance values referenced in NYSDEC TOGS 1.1.1 dated June 1998 (as amended by an April 2000 addendum)

U = Not detected at concentration above reported analytical laboratory detection limit

E = Compound concentration exceeded the calibration range

N = Tentatively identified compound (TIC) is considered to be positively identified

110 = Exceeds groundwater standard or guidance value

Table 7
Former Air Force Plant 51
4777 Dewey Ave., Greece, NY

Summary of TAL Metals
in ug/l or Parts per Billion (ppb)

OU1 Remedial Design Investigation
Baseline Groundwater Samples

Detected Analyte	Groundwater Standards and Guidance Values (1)	276 MW1-6 (07/24/07)	278 MW1-7 (07/25/07)	279 MW1-22 (07/25/07)	280 MW1-8 (07/25/07)	281 MW1-11 (07/25/07)
Aluminum	NA	168 B	48.1 B	3150	34.8 B	34.9 B
Antimony	3	**10** B	**11.1** B	**10.4** B	**10.1** B	**13.3** B
Arsenic	25	U	6.7 B	5 B	16.4	9.6 B
Barium	1000	581 E	125 BE	201 E	**1010** E	450 E
Beryllium	3	0.05 B	U	0.19 B	U	U
Cadmium	5	0.14 B	0.15 B	0.11 B	U	U
Calcium	NA	183000	205000	178000	221000	186000
Chromium	50	U	U	3.4 B	U	U
Cobalt	NA	12.9 B	14.3 B	14.3 B	15.5 B	13 B
Copper	200	17.1 B	8.3 B	11.6 B	4.1 B	5.3 B
Iron	300	**1360**	**1990**	**5550**	**32600**	**11800**
Lead	25	U	U	U	U	U
Magnesium	35000	**74800** E	**60200** E	**59700** E	**139000** E	**117000** E
Manganese	300	**2920** E	**533** E	300 E	**573** E	**1940** E
Mercury	0.7	0.089 B	0.026 B	0.032 B	0.017 B	0.02 B
Nickel	100	9.8 B	12.8 B	11.3 B	9.5 B	8.1 B
Potassium	NA	3490 B	1870 B	2970 B	2460 B	3870 B
Selenium	10	U N	U N	5.7 N	6.5 N	7.8 N
Silver	50	17.7	17.3	13.5	10	13.4
Sodium	20000	**22300**	**28100**	19200	**50400**	**47400**
Thallium	0.5	U	U	U	**2.5** B	U
Vanadium	NA	0.66 B	U	5.7 B	U	U
Zinc	2000	10.2 BE	24.8 E	19 BE	5 BE	5.6 BE

E = Estimated concentration due to matrix interference determined by the serial dilution

(1) = Groundwater standards and guidance values referenced in NYSDEC TOGS 1.1.1 dated June 1998 (as amended by an April 2000 addendum)

B = Reported value less than contract required detection limit, but greater than instrument detection limit

10 = Exceeds groundwater standard or guidance value

N = Spiked sample recovery not within control limits

* = Duplicate analysis not within control limits

NA = Not available

Table 8
Former Air Force Plant 51
4777 Dewey Avenue, Greece, New York

Summary of Natural Attenuation and Water Quality Parameters

OU1 Remedial Design Investigation
Baseline Groundwater Samples

Parameter Concentration	Groundwater Standards and Guidance Values (1)	276 MW1-6 (07/24/07)	278 MW1-7 (07/25/07)	279 MW1-22 (07/25/07)	280 MW1-8 (07/25/07)	281 MW1-11 (07/25/07)
Chloride (mg/l)	250000	110	89	69	370	280
Nitrate (mg/l)	10000	U	0.33	U	0.88	0.27
Sulfate (mg/l)	250000	U	59	51	U	U
Alkalinity (mg/l)	NA	610	510	500	610	550
Ferrous Iron (mg/l)	300	U	U	U	1.7	1
Methane (ug/l)	NA	U	34	150	4500 D	4500 D
DO (mg/l)	NA	1.04	0.28	4.13 *	0.25	7.91 *
ORP (mv)	NA	74	12	21	-136	-116
Turbidity (NTU)	NA	0	0	339	13.5	320
Conductivity (mS/cm)	NA	1.24	1.22	1.15	1.95	2
pH	NA	6.65	6.72	6.93	6.74	6.68
Temperature (C^o)	NA	14.9	13.5	23.2	14.4	16

(1) = Groundwater standards and guidance values referenced in NYSDEC TOGS 1.1.1 dated June 1998 (as amended by an April 2000 addendum)

NA = Not available

U = Not detected at concentrations above reported analytical laboratory detection limits

D = Compound concentration obtained from a diluted analysis

* = result suspected to be erroneous based on results of other parameters

Table 9
Former Air Force Plant 51
4777 Dewey Ave., Greece, NY
OU1 Remedial Design Investigation

Summary of Detected Volatile Organic Compounds (VOCs)
in ug/l or Parts per Billion (ppb)

QA/QC Field Samples

Detected Compound	274 Rinsate (6/13/07)	275 Trip Blank (6/14/07)	277 Rinsate (7/24/07)	282 Trip Blank (7/25/07)
Acetone	10	5 J	U	U
Methylene Chloride	6 J	11	U	U
cis-1,2-Dichloroethene	U	U	U	4 JB
TOTAL VOCS	16 J	16 J	U	4 JB
TOTAL TICS	U	U	U	U
TOTAL VOCS AND TICS	16 J	16 J	U	4 JB

U = Not detected at concentrations above reported analytical laboratory detection limits

J = Estimated value

B = Detected in Associated Method Blank

Table 10
Former Air Force Plant 51
4777 Dewey Ave., Greece, NY
OU1 Remedial Design Investigation

Summary of TAL Metals
in ug/l or Parts per Billion (ppb)

QA/QC Field Samples

Detected Analyte	277 Rinsate (7/24/07)	
Aluminum	56.5	B
Antimony	U	
Arsenic	U	
Barium	1.1	BE
Beryllium	0.046	B
Cadmium	U	
Calcium	161	B
Chromium	0.56	B
Cobalt	U	
Copper	7.7	B
Iron	88.6	B
Lead	U	
Magnesium	42	BE
Manganese	2.4	BE
Mercury	0.027	B
Nickel	8.1	B
Potassium	U	
Selenium	5.9	N
Silver	0.95	B
Sodium		U
Thallium		U
Vanadium		U
Zinc	26	E

U = Not detected at concentrations above reported analytical laboratory detection limits

E= Estimated concentration due to the presence of interferences

B= Reported value less than contract required detection limit, but greater than instrument detection limit

N = Spiked sample recovery not within control limits

Table 11
Former Air Force Plant 51
4777 Dewey Avenue, Greece, NY
OU1 Remedial Design Investigation

Summary of Natural Attenuation and Water Quality Parameters

QA/QC Field Samples

Detected Compound	277 Rinsate (7/24/07)
Chloride (mg/l)	U
Nitrate (mg/l)	U
Sulfate (mg/l)	U
Alkalinity (mg/l)	U
Ferrous Iron (mg/l)	U
Methane (ug/l)	U

U = Not detected at concentrations above reported analytical laboratory detection limits

APPENDIX A

Test Boring Logs and Monitoring Well Construction Diagram

day

DAY ENVIRONMENTAL, INC.

ENVIRONMENTAL CONSULTANTS

AN AFFILIATE OF DAY ENGINEERING, P.C.

Project #: 2806S-01
Project Address: 4800 Dewey Avenue
Greece, NY
DAY Representative: M. Dickinson
Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-17

Ground Elevation: NA Datum: NA
Date Started: 6/13/2007 Date Ended: 6/13/2007
Borehole Depth: 20.0' Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): wet soil at 12.5' (06/13/07)

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL	
2	NA	S-1	0-4	90	NA	3.5	0.0	Brown, Sandy SILT, trace Gravel, moist	
3							0.6		
4							1.7		
5								Brown, fine SAND, trace Silt, Gravel, very moist	
6	NA	S-2	4-8	95	NA	23.2	4.2		
7								...rock lens	
8							3.6	Brown, fine Sandy SILT, Rock, Gravel, very moist	
9							3.6		
10	NA	S-3	8-12	85	NA	51	52.7	...Red/Brown, trace Clay and Gravel, some Black stains	
11							2.1		
12							2.6		
13								...Brown, trace Clay and Gravel, wet	
14	NA	S-4	12-16	75	NA	8.0	1.4		
15							0.0	Red/Brown, fine SAND and some Clay, moist	
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-17

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AN AFFILIATE OF DAY ENGINEERING, P.C.

Project #: 2806S-01
Project Address: 4800 Dewey Avenue
Greece, NY
DAY Representative: M. Dickinson
Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-17

Ground Elevation: NA Datum: NA
Date Started: 6/13/2007 Date Ended: 6/13/2007
Borehole Depth: 20.0' Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): wet soil at 12.5' (06/13/07)

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
17							0.7	…very moist	
18	NA	S-5	16-20	55	NA	0.8	0.0	…moist, rock lens	
19							0.0		
20								Boring Complete @ 20.0'	
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-17

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Project #: 2806S-01
Project Address: 4800 Dewey Avenue
Greece, NY
DAY Representative: M. Dickinson
Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-18

Ground Elevation: NA Datum: NA
Date Started: 6/13/2007 Date Ended: 6/13/2007
Borehole Depth: 20.0' Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): Not encountered

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL	
								Rock and Gravel (FILL)	
2	NA	S-1	0-4	50	NA	0.0	0.0	Brown/Black, fine Sandy Silt, White Ash, moist (FILL)	
3							0.0		
4									
5							0.0	Brown/Tan, fine Sandy SILT, trace Clay and Gravel, moist	
6	NA	S-2	4-8	100	NA	0.0	0.0		
7							0.0		
8									
9							0.0	…some organics	
10	NA	S-3	8-12	100	NA	0.0	0.0		
11							0.0	Brown/Tan, fine SAND, trace Silt, Gravel, moist	
12							0.0	…red Rock, fine Brown Sand	
13									
14	NA	S-4	12-16	100	NA	0.0	0.0	...Brown/Tan, trace Silt and Gravel, moist	
15							0.0	...Red/Brown, some Silt, Gravel, Rock, moist	
16								...Red/Gray/Brown, some Gravel, Rock, trace Silt, moist	

Notes:
1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-18

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Project #: 2806S-01
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DAY Representative: M. Dickinson
Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-18

Ground Elevation: NA Datum: NA
Date Started: 6/13/2007 Date Ended: 6/13/2007
Borehole Depth: 20.0' Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): Not encountered

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
17							0.0	...Red/Gray/Brown, some Gravel, Rock, moist	
18	NA	S-5	16-20	100	NA	0.0	0.0		
19							0.0		
20								Boring Compete @ 20.0'	
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-18

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Project #: 2806S-01
Project Address: 4800 Dewey Avenue
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DAY Representative: M. Dickinson
Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-19 (MW1-22)

Ground Elevation: 253.01' Datum: 262.2'
Date Started: 6/13/2007 Date Ended: 6/13/2007
Borehole Depth: 20.0' Borehole Diameter: 2.25"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): 14.8' (06/13/07)

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL	
2	NA	S-1	0-4	60	NA	1.7	0.0	Brown, fine Sandy SILT, trace Gravel, moist	
3							0.0		
4							1.7		
5									
6	NA	S-2	4-8	100	NA	40.1	4.2	…Gravel and Rock	
7							10.7	Red/Brown, fine SAND, trace Silt, red Rock and Gravel, moist	
8							16.1		
9									
10	NA	S-3	8-12	100	NA	75.3	27.4	Brown/Red/Tan, fine Sandy SILT, moist	
11							3.8	…red Rock lens	
12							10.8		
13									
14	NA	S-4	12-16	100	NA	209	62.7	...Brown/Tan/Red, trace Gravel, very moist	
15							56		
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-19 (MW1-22)

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Greece, NY
DAY Representative: M. Dickinson
Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-19 (MW1-22)

Ground Elevation: 253.01' Datum: 262.2'
Date Started: 6/13/2007 Date Ended: 6/13/2007
Borehole Depth: 20.0' Borehole Diameter: 2.25"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): 14.8' (06/13/07)

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
17							11.7	…wet	
18	NA	S-5	16-20	100	NA	18.9	7.2		
19							1.1		
20								Boring Complete @ 20.0'	
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-19 (MW1-22)

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Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-20

Ground Elevation: NA Datum: NA
Date Started: 6/13/2007 Date Ended: 6/13/2007
Borehole Depth: 20.0' Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): Wet soil at 14.0' (06/13/07)

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL	
								Brown/Light Brown, fine Sandy SILT, Gravel and Rock, moist	
2	NA	S-1	0-4	80	NA	0.0	0.0		
								Red/Brown/Gray, fine SAND and SILT, trace Gravel, moist	
3							0.0		
4									
5							0.0	Brown/Gray, fine Sandy SILT, some Gravel, Tan streaks, moist	
6	NA	S-2	4-8	100	NA	0.0	0.0		
7							0.0	...Brown/Tan, some Gravel, moist	
8									
9							0.0		
10	NA	S-3	8-12	100	NA	0.0	0.0	…very moist	
11									
							0.0	Red/Gray, SAND, trace Silt, Gravel, Red Crushed Rock, moist	
12									
13							0.0		
14	NA	S-4	12-16	100	NA	0.0	0.0	…wet	
15							0.0	...Brown, trace Silt, Gravel, some Rock, moist	
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-20

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DAY Representative: M. Dickinson
Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-20

Ground Elevation: NA
Datum: NA
Date Started: 6/13/2007
Date Ended: 6/13/2007
Borehole Depth: 20.0'
Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): Wet soil at 14.0' (06/13/07)

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
17							0.0	...Brown, trace Silt, Gravel, some Rock, moist	
18	NA	S-5	16-20	100	NA	0.0	0.0		
19							0.0		
20								Boring Complete @ 20.0'	
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									

Notes:
1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-20

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Project #: 2806S-01
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DAY Representative: M. Dickinson
Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-21

Ground Elevation: NA Datum: NA
Date Started: 6/13/2007 Date Ended: 6/13/2007
Borehole Depth: 20.0' Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): Wet soil at 13.5' (06/13/07)

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL	
								Brown, fine Sandy SILT, trace Clay, some Gravel, moist	
2	NA	S-1	0-4	75	NA	0.0	0.0		
3							0.0		
4									
5							0.0		
6	NA	S-2	4-8	100	NA	0.0	0.0	…very moist	
7							0.0		
8									
9							0.0	Brown, fine SAND, trace Silt, moist	
10	NA	S-3	8-12	100	NA	0.0	0.0		
11								…some Organics	
12							0.0	Tan/Light Brown/Brown, Silty CLAY, trace Gravel, moist	
13							0.0		
14	NA	S-4	12-16	100	NA	0.0	0.0	…wet	
15							0.0	Red/Brown, fine Silty SAND, some Clay, Rock and Gravel, moist	
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-21

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Project #: 2806S-01
Project Address: 4800 Dewey Avenue
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DAY Representative: M. Dickinson
Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-21

Ground Elevation: NA Datum: NA
Date Started: 6/13/2007 Date Ended: 6/13/2007
Borehole Depth: 20.0' Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): Wet soil at 13.5' (06/13/07)

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
17							0.0		
18	NA	S-5	16-20	100	NA	0.0	0.0	...rock lens	
19							0.0	Red/Brown, Silty CLAY, trace Gravel, moist	
20								Boring Complete @ 20.0'	
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-21

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Project #: 2806S-01
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DAY Representative: M. Dickinson
Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-22

Ground Elevation: NA Datum: NA
Date Started: 6/13/2007 Date Ended: 6/13/2007
Borehole Depth: 20.0' Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): Wet soil at 8' (06/13/07)

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.5	TOPSOIL	
								Brown, fine Sandy SILT, trace Clay, trace Gravel, Organics, moist	
2	NA	S-1	0-4	100	NA	11.4	1.4		
3							3.5		
4								…very moist	
5							3.1		
6	NA	S-2	4-8	100	NA	4.4	3.8		
7							0.0	...Brown/Tan/Light Brown, some Clay, trace Gravel, moist	
8							0.0		
9								…wet	
10	NA	S-3	8-12	100	NA	0.9	0.0	Red/Brown, fine SILT, trace Sand, Gravel, Rock, moist	
11							0.0		
12							0.0		
13								…wet	
14	NA	S-4	12-16	100	NA	0.0	0.0		
15							0.0		
16								...Brown, Red, trace Gravel, moist to very moist	

Notes:
1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-22

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Project #: 2806S-01
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DAY Representative: M. Dickinson
Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-22

Ground Elevation: NA
Datum: NA
Date Started: 6/13/2007
Date Ended: 6/13/2007
Borehole Depth: 20.0'
Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): Wet soil at 8' (06/13/07)

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
17							0.0		
18	NA	S-5	16-20	100	NA	0.0	0.0	…Red Rock Lens	
19							0.0	Red/Brown, Silty CLAY, trace Gravel, moist	
20								Boring Complete @ 20.0'	
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-22

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DAY Representative: M. Dickinson
Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-23

Ground Elevation: NA Datum: NA
Date Started: 6/14/2007 Date Ended: 6/14/2007
Borehole Depth: 20.0' Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): Wet soil at 15.5' (06/14/07)

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL	
								Brown, Sandy SILT, some Gravel, Organics, moist	
2	NA	S-1	0-4	45	NA	0.0	0.0		
3							0.0	…Brown/Tan/Dark Brown	
4									
5							0.0		
6	NA	S-2	4-8	100	NA	3.5	0.0	...Brown, some Clay, trace Gravel, moist	
7							0.0		
8									
9							0.0		
10	NA	S-3	8-12	100	NA	0.0	0.0	…very moist	
11							0.0		
12								Red/Brown/Tan, fine Silty SAND, some Clay, Gravel and broken Rock, moist	
13							0.0		
14	NA	S-4	12-16	60	NA	0.0	0.0		
15							0.0	…wet	
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-23

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AN AFFILIATE OF DAY ENGINEERING, P.C.

Project #: 2806S-01
Project Address: 4800 Dewey Avenue
Greece, NY
DAY Representative: M. Dickinson
Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-23

Ground Elevation: NA
Datum: NA
Date Started: 6/14/2007
Date Ended: 6/14/2007
Borehole Depth: 20.0'
Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): Wet soil at 15.5' (06/14/07)

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
17							0.0		
18	NA	S-5	16-20	100	NA	0.0	0.0	Brown/Light Brown, Silty CLAY, moist	
19							0.0		
20								Boring Complete @ 20.0'	
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-23

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Project #: 2806S-01
Project Address: 4800 Dewey Avenue
Greece, NY
DAY Representative: M. Dickinson
Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-24

Ground Elevation: NA Datum: NA
Date Started: 6/14/2007 Date Ended: 6/14/2007
Borehole Depth: 19.6' Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): Wet soil at 5.0' (06/14/07)

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.5	TOPSOIL	
								Brown/Tan/Light Brown, Sandy SILT, moist	
2	NA	S-1	0-4	90	NA	2.7	0.2		
3							0.0		
4							0.0	…wet	
5									
6	NA	S-2	4-8	100	NA	0.4	0.0		
								Red/Brown, fine SAND, some Silt and Clay, Gravel, moist	
7							0.0		
8							0.0		
9								Crushed Red ROCK, trace Silty Sand, moist	
10	NA	S-3	8-12	100	NA	0.2	0.0		
11							0.0		
								Red/Brown, coarse to medium SAND, trace Silt, Gravel and Rock, very moist	
12							0.0		
13									
14	NA	S-4	12-16	90	NA	0.3	0.0		
15							0.0	…wet	
16									

Notes:
1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-24

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Project Address: 4800 Dewey Avenue
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DAY Representative: M. Dickinson
Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-24

Ground Elevation: NA
Datum: NA
Date Started: 6/14/2007
Date Ended: 6/14/2007
Borehole Depth: 19.6'
Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): Wet soil at 5.0' (06/14/07)

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
17							0.0	…wet	
18	NA	S-5	16-19.6	30	NA	0.0	0.0		
19							0.0		
20								Boring Complete @ 19.6'	
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									

Notes:
1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-24

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Project #: 2806S-01
Project Address: 4800 Dewey Avenue
Greece, NY
DAY Representative: M. Dickinson
Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-25

Ground Elevation: NA Datum: NA
Date Started: 6/14/2007 Date Ended: 6/14/2007
Borehole Depth: 20.0' Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): Wet soil at 8' (06/14/07)

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL	
								Brown, Sandy Silt, Gravel, Organics, moist (FILL)	
2	NA	S-1	0-4	50	NA	7.1	0.0		
								Crushed White Rock, some Sandy Silt, moist (FILL)	
3							0.0		
4								Black/Brown, fine Sandy Silt, Gravel, Glass, Metal, moist (FILL)	
5							0.0		
6	NA	S-2	4-8	100	NA	0.0	0.0		
								Brown, fine Sandy SILT, trace Clay, trace Gravel, moist	
7							0.0		
8							0.0		
9								…wet	
10	NA	S-3	8-12	100	NA	0.0	0.0		
								Red/Brown, fine Sandy SILT, Gravel, Crushed Red Rock, moist	
11							0.0		
12							0.0	…wet	
13								Brown/Light Brown/Tan, Silty SAND and CLAY, Gravel, Crushed Rock, very moist to wet	
14	NA	S-4	12-16	80	NA	0.0	0.0		
15							0.0		
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-25

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Project #: 2806S-01
Project Address: 4800 Dewey Avenue
Greece, NY
DAY Representative: M. Dickinson
Drilling Contractor: TREC Environmental
Sampling Method: Direct Push

TEST BORING TB-25

Ground Elevation: NA Datum: NA
Date Started: 6/14/2007 Date Ended: 6/14/2007
Borehole Depth: 20.0' Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date): Wet soil at 8' (06/14/07)

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
17									No recovery 16 - 20'
18	NA	NA	16-20	0	NA	NA	NA		
19									
20								Boring Complete @ 20.0'	
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

TEST BORING TB-25

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MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 2806S-01 (OU2)
Project Address: 4777 Dewey Avenue
Greece, New York
DAY Representative: M. Dickinson
Drilling Contractor: TREC Env.

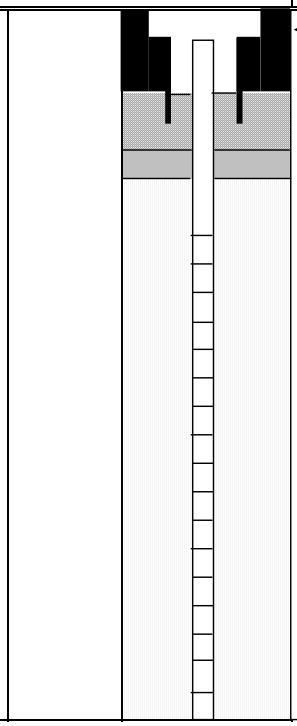
MONITORING WELL MW1-22

Ground Elevation: 253.01 Datum: 262.2'

Date Started: 6/13/2007 Date Ended: 6/13/2007

Water Level (Date): SWL 14.8' (06-13-07)

Refer to Test Boring Log TB-19 for Soil Description



Pro-Top Casing
3.43' Height of Top of Riser Pipe (ft)

1 Depth to Bottom of Cement Surface Patch (ft)
Backfill Type Bentonite / Grout
1.5 Depth to Top of Bentonite Seal (ft)
5 Depth to Bottom of Bentonite Seal (ft)

6 Depth to Top of Well Screen (ft)

2.25 Diameter of Borehole (in)

Backfill Type Sand

1 Inside Diameter of Well (in)

Type of Pipe Schedule 40 PVC
Screen slot size 10

16 Depth to Bottom of Well Screen (ft)

20 Depth of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW1-22

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APPENDIX B

Monitoring Well Development Log
and Low-Flow Groundwater Purging and Sampling Logs

WELL DEVELOPMENT DATA
MW1-22

SITE LOCATION: Former AFP51, 4777 Dewey Avenue, Greece, New York JOB#: 2806S-01

DATE/ TIME	7/6/07 11:00	7/6/07 11:30	7/6/07 12:00	7/6/07 12:30	7/6/07 13:00	7/6/07 13:30		
EVACUATION METHOD	3' Disposable Bailer	3' Disposable Bailer	3' Disposable Bailer	3' Disposable Bailer	3' Disposable Bailer	3' Disposable Bailer		
PID/FID (PPM)	NC	NC	NC	NC	NC	NC		
DEPTH OF WELL (FT)	19.46	19.63	19.78	19.81	19.89	19.99		
STATIC WATER LEVEL (SWL) FT	11.31	--	--	--	--	11.30		
VOLUME EVACUATED (GAL)	--	0.20	0.20	0.20	0.20	0.20		
TOTAL VOLUME EVACUATED (GAL)	--	0.20	0.40	0.60	0.80	1.00		
TEMPERATURE (^{O}C)	--	22.8	22.7	22.6	22.6	22.6		
pH	--	6.90	6.87	6.86	6.86	6.87		
ORP (mV)	--	104	98	93	92	90		
CONDUCTIVITY (µs/cm)	--	1.21	1.25	1.24	1.24	1.22		
TURBIDITY (NTU)	--	>999.0	>999.0	>999.0	>999.0	>999.0		
VISUAL OBSERVATION	Cloudy	Cloudy, Sediment	Cloudy, Sediment	Cloudy, Sediment	Cloudy, Sediment	Cloudy, Sediment		

LEGEND: NC = Not Collected
ND = Not Detected
* = Not Measurable

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DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW1-6

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION 4777 Dewey Avenue, Greece, New York **JOB #** 2806S-01

PROJECT NAME: Former Air Force Plant No. 51 **DATE:** 7/24/07

SAMPLE COLLECTOR(S): D. Gnage **WEATHER:** 80° F, overcast

PID READING IN WELL HEADSPACE (PPM): _____ **MEASURING POINT:** T.O.C.

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 2

SCREENED INTERVAL [FT]: 5 – 15 bgs **WATER LEVEL (SWL) [FT]:** 9.25

WELL DEPTH [FT]: 17 bgs **DEPTH OF PUMP INTAKE [FT]:** ~12

(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: None **DNAPL:** None **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

CONTROL BOX: QED Model MP-10 **TUBING TYPE:** 1/4" Water , 1/8" Air

WATER QUALITY METER: Horiba U-22 **WATER LEVEL METER:** Slope Indicator

PUMP TYPE: ¾" Bladder **PURGE GAS:** Air

CONTROL BOX DISCHARGE RATE: 3 sec **CONTROL BOX REFILL RATE:** 7 sec

STABILIZED PUMP RATE (ml/min): ~ 50 ml **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 9.25

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (C^0)	Total Vol. Pumped (L)
13:20	50 ml	9.25	12.17	120	0.0	1.34	6.44	16.1	0.5
13:23	50 ml	9.25	7.40	81	0.0	1.24	6.48	16.5	0.65
13:26	50 ml	9.25	3.41	75	0.0	1.23	6.54	16.6	0.8
13:29	50 ml	9.25	2.20	65	0.0	1.24	6.59	16.4	0.95
13:32	50 ml	9.25	1.67	64	0.0	1.25	6.59	16.3	1.1
13:35	50 ml	9.25	1.23	58	0.0	1.25	6.69	16.3	1.25
13:38	50 ml	9.25	1.04	64	0.0	1.25	6.65	15.7	1.4
13:41	50 ml	9.25	1.02	66	0.0	1.25	6.65	15.1	1.55
13:44	50 ml	9.25	1.05	68	0.0	1.25	6.65	14.8	1.7
13:47	50 ml	9.25	1.04	74	0.0	1.24	6.65	14.4	1.85

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
276 / MW1-6	7-24-07 / 13:50	Bladder Pump	TCL VOCs, TAL Metals, Nitrate, Sulfate, Chloride, Ferrous Iron, Methane, Alkalinity

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LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW1-7

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION 4777 Dewey Avenue, Greece, New York **JOB #** 2806S-01

PROJECT NAME: Former Air Force Plant No. 51 **DATE:** 7/25/07

SAMPLE COLLECTOR(S): J. Danzinger **WEATHER:** 80º F, sunny, 0-5 mph

PID READING IN WELL HEADSPACE (PPM): _____ **MEASURING POINT:** T.O.C.

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 2

SCREENED INTERVAL [FT]: 5 - 15 bgs **WATER LEVEL (SWL) [FT]:** 8.02 (7/25/07)

WELL DEPTH [FT]: 17 bgs **DEPTH OF PUMP INTAKE [FT]:** ~10 bgs

(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: None **DNAPL:** None **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

CONTROL BOX: QED Well Wizard **TUBING TYPE:** 1/4" Water , 1/8" Air

WATER QUALITY METER: Horiba U-22 **WATER LEVEL METER:** Solinst Model 101-mini

PUMP TYPE: ¾" Bladder **PURGE GAS:** Air 75 psi

CONTROL BOX DISCHARGE RATE: 3.0 **CONTROL BOX REFILL RATE:** 4.0

STABILIZED PUMP RATE (ml/min): 90 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 8.38

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (C^0)	Total Vol. Pumped (L)
09:14	90	8.38	0.47	42	15.2	1.24	6.67	13.1	1.0
09:17	90	8.38	0.43	44	7.3	1.23	6.61	13.3	1.27
09:20	90	8.38	0.41	43	0.0	1.24	6.65	13.3	1.54
09:23	90	8.38	0.38	42	0.0	1.24	6.69	13.2	1.81
09:26	90	8.38	0.35	41	0.0	1.24	6.70	13.2	2.08
09:29	90	8.38	0.34	39	0.0	1.24	6.70	13.2	2.35
09:32	90	8.38	0.31	34	0.0	1.24	6.69	13.0	2.62
09:35	90	8.38	0.30	29	0.0	1.24	6.70	12.9	2.89
09:38	90	8.38	0.30	26	0.0	1.23	6.70	13.0	3.16
09:41	90	8.38	0.30	22	0.0	1.23	6.70	13.1	3.43
09:44	90	8.38	0.30	17	0.0	1.23	6.71	13.1	3.7
09:47	90	8.38	0.28	12	0.0	1.22	6.72	13.5	3.97

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
278 / MW1-7	7-25-07 / 10:30	Bladder Pump	TCL VOCs, TAL Metals, Nitrate, Sulfate, Chloride, Ferrous Iron, Methane, Alkalinity, MS/MSD

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW1-8

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION 4777 Dewey Avenue, Greece, New York **JOB #** 2806S-01

PROJECT NAME: Former Air Force Plant No. 51 **DATE:** 7/25/07

SAMPLE COLLECTOR(S): J. Danzinger **WEATHER:** 80º F, sunny, 0-5 mph

PID READING IN WELL HEADSPACE (PPM): _____ **MEASURING POINT:** T.O.C.

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 2

SCREENED INTERVAL [FT]: 5 - 15 bgs **WATER LEVEL (SWL) [FT]:** 10.03 (7-25-07)

WELL DEPTH [FT]: 17 bgs **DEPTH OF PUMP INTAKE [FT]:** 13

(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: None **DNAPL:** None **OTHER OBSERVATIONS:** Light yellow water and slight sheen

SECTION 2 – SAMPLING EQUIPMENT

CONTROL BOX: QED Well Wizard Model 400 **TUBING TYPE:** 1/4" Water , 1/8" Air

WATER QUALITY METER: Horiba U-22 **WATER LEVEL METER:** Solinst Mini 101

PUMP TYPE: ¾" Bladder **PURGE GAS:** Air 100 PSI

CONTROL BOX DISCHARGE RATE: 2 **CONTROL BOX REFILL RATE:** 2

STABILIZED PUMP RATE (ml/min): 155 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 10.20

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (C^0)	Total Vol. Pumped (L)
12:03	155	10.20	0.46	-121	0.0	2.04	6.55	14.7	1.0
12:06	155	10.20	0.38	-123	0.0	2.02	6.55	14.6	1.465
12:09	155	10.20	0.33	-131	0.0	2.01	6.67	14.5	1.93
12:12	155	10.20	0.32	-133	0.0	2.00	6.69	14.6	2.395
12:15	155	10.20	0.31	-128	0.0	1.96	6.58	14.7	2.86
12:18	155	10.20	0.30	-132	1.4	1.97	6.68	14.5	3.325
12:21	155	10.20	0.27	-135	4.0	1.95	6.72	14.5	3.79
12:24	155	10.20	0.26	-135	5.2	1.95	6.72	14.5	4.255
12:27	155	10.20	0.25	-136	11.2	1.95	6.73	14.5	4.72
12:30	155	10.20	0.25	-136	13.5	1.95	6.74	14.4	5.185

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
280 / MW1-8	7-25-07 / 12:40	Bladder Pump	TCL VOCs, TAL Metals, Nitrate, Sulfate, Chloride, Ferrous Iron, Methane, Alkalinity

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW1-11

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION 4777 Dewey Avenue, Greece, New York **JOB #** 2806S-01

PROJECT NAME: Former Air Force Plant No. 51 **DATE:** 7-25-07

SAMPLE COLLECTOR(S): M. Dickinson **WEATHER:** 80º F, sunny

PID READING IN WELL HEADSPACE (PPM): _____ **MEASURING POINT:** T.O.C.

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 4

SCREENED INTERVAL [FT]: 6 - 16 bgs **WATER LEVEL (SWL) [FT]:** 10.09

WELL DEPTH [FT]: 18 bgs **DEPTH OF PUMP INTAKE [FT]:** 14.0

(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: None **DNAPL:** None **OTHER OBSERVATIONS:** Clear, slight sheen, chemical odor

SECTION 2 – SAMPLING EQUIPMENT

CONTROL BOX: QED Micropurge Basics Model MP-10 **TUBING TYPE:** 1/4" Water , 1/8" Air

WATER QUALITY METER: Horiba U-22 **WATER LEVEL METER:** Herron Dipper-T

PUMP TYPE: ¾" Bladder **PURGE GAS:** Air

CONTROL BOX DISCHARGE RATE: 1 **CONTROL BOX REFILL RATE:** 4

STABILIZED PUMP RATE (ml/min): 345 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 10.27

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (C^0)	Total Vol. Pumped (L)
12:09	345	10.21	8.68	-124	31.4	2.03	6.70	16.6	1.345
12:12	345	10.21	9.59	-116	56.5	2.02	6.53	17.4	2.38
12:15	345	10.21	8.64	-125	73.3	2.02	6.58	18.6	3.415
12:18	345	10.21	6.99	-127	140.0	1.86	6.76	21.2	4.45
12:21	345	10.21	6.19	-120	223.0	1.86	6.90	23.4	5.485
12:29	345	10.21	7.43	-111	176.0	1.81	6.93	21.4	7.555
12:32	345	10.21	7.81	-101	272.0	1.97	6.71	17.2	8.59
12:35	345	10.21	7.64	-108	311.0	1.99	6.68	16.6	9.625
12:38	345	10.21	7.89	111	314.0	2.00	6.68	16.1	10.66
12:41	345	10.21	7.92	-114	322.0	2.00	6.68	16.0	11.695
12:44	345	10.21	7.90	-114	318.0	2.00	6.68	16.0	12.73
12:47	345	10.21	7.91	-116	320.0	2.00	6.68	16.0	13.765

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
281 / MW1-11	7-25-07 / 12:53	Bladder Pump	TCL VOCs, TAL Metals, Nitrate, Sulfate, Chloride, Ferrous Iron, Methane, Alkalinity

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW1-22

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION 4777 Dewey Avenue, Greece, New York **JOB #** 2806S-01

PROJECT NAME: Former Air Force Plant No. 51 **DATE:** 7-25-07

SAMPLE COLLECTOR(S): M. Dickinson **WEATHER:** 77º F, sunny

PID READING IN WELL HEADSPACE (PPM): _____ **MEASURING POINT:** T.O.C.

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1

SCREENED INTERVAL [FT]: 6 – 16 bgs **WATER LEVEL (SWL) [FT]:** 11.38

WELL DEPTH [FT]: 20 bgs **DEPTH OF PUMP INTAKE [FT]:** 17

(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: None **DNAPL:** None **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

CONTROL BOX: QED Well Wizard Model 400 **TUBING TYPE:** 1/4" Water , 1/4" Air

WATER QUALITY METER: Horiba U-22 **WATER LEVEL METER:** Herron Dipper-T

PUMP TYPE: ¾" Bladder **PURGE GAS:** Air

CONTROL BOX DISCHARGE RATE: 1 **CONTROL BOX REFILL RATE:** 50

STABILIZED PUMP RATE (ml/min): 45 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 11.84

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (C^0)	Total Vol. Pumped (L)
09:48	45	11.84	3.92	106	309.0	1.15	6.91	23.4	1.045
09:51	45	11.84	4.41	96	301.0	1.15	6.91	23.3	1.18
09:54	45	11.84	3.83	86	298.0	1.15	6.91	23.4	1.315
09:57	45	11.84	3.92	70	331.0	1.14	6.91	23.2	1.45
10:00	45	11.84	3.45	61	330.0	1.14	6.92	23.1	1.585
10:03	45	11.84	3.91	54	326.0	1.14	6.92	23.1	1.72
10:06	45	11.84	4.04	41	337.0	1.14	6.93	23.0	1.855
10:09	45	11.84	4.08	31	335.0	1.14	6.93	23.1	1.99
10:12	45	11.84	4.10	27	342.0	1.15	6.93	23.1	2.125
10:15	45	11.84	4.13	21	339.0	1.15	6.93	23.2	2.26

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
279 / MW1-22	7-25-07 / 11:25	Bladder Pump	TCL VOCs, TAL Metals, Nitrate, Sulfate, Chloride, Ferrous Iron, Methane, Alkalinity

APPENDIX C

Analytical Laboratory Reports and Chain-of-Custody Documentation (on CD)