Annual 2011 Monitoring Event Letter Report for Site No. 932001 Airco Properties, Inc., Airco Parcel Niagara Falls, New York

Prepared for

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Prepared by

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April 2012
Revision: 0
Project No.: 1047.004

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18 April 2012

Mr. Brian Thiesse
Head of US SHEQ Operations
Linde, LLC
575 Mountain Avenue
Murray Hill, New Jersey 07974

RE: 2011 Annual Monitoring Event Letter Report and Remedy Review Report, Site No. 932001, Airco Properties Inc., Airco Parcel, Niagara Falls, New York

Dear Mr. Thiesse:

Greenstar Environmental Solutions, LLC (Greenstar) is pleased to provide the 2011 Annual Monitoring Event Letter Report summarizing the operation and maintenance activities at the Airco Parcel (Site), Niagara Falls, New York, for the period 1 January 2011 to 31 December 2011. The post-closure monitoring and facility maintenance program was initiated at the Airco Parcel during December 2000. Post-closure monitoring and facility maintenance is required by New York State Solid Waste Management Facilities Regulations (6 NYCRR Part 360-2.15[k][4]) and stipulated in Order on Consent No. B9-0470-94-12. The purpose of this Annual Monitoring Event Letter Report is to summarize the analytical results of the annual 2011 groundwater monitoring event conducted in October 2011 and the semi-annual surface water monitoring conducted in June and October 2011; and operations and maintenance activities conducted at the Site from January through December 2011.

OBJECTIVES

In accordance with the Revised Final Post-Closure Monitoring and Facility Maintenance Plan for the Airco Parcel, prepared by EA Engineering, PC and its affiliate EA Science and Technology (EA 2004)[1], environmental monitoring points are to be maintained and sampled during the post-closure monitoring period, including the collection of appropriate groundwater, surface water, and groundwater collection treatment system (GCTS) samples. The Post-Closure Monitoring and Facility Maintenance Plan specifies sampling locations, sampling parameters and analytical methods, in addition to other required maintenance activities, such as landfill cap inspections and the operations and maintenance plan for the GCTS. Following completion of the first five years of post-closure monitoring, the original Revised Final Post-Closure Monitoring and Facility Maintenance Plan, which was included as Appendix A in the Interim Remedial Measure Report (EA 2001a)[2], was re-evaluated and revised based on the data collected at the site so that the monitoring plan is now more focused to address site-specific issues that were identified during the first five years of post-closure monitoring.

1. EA Engineering, P.C. and its Affiliate EA Science and Technology. 2004. Revised Final Post-Closure Monitoring and Facility Maintenance Plan for the Airco Parcel, Niagara Falls, New York. September.
2. EA Engineering, P.C. and its Affiliate EA Science and Technology. 2001a. Interim Remedial Measure Report Documenting Closure of the Witmer Road Landfill, Niagara Falls, New York. Appendix A – Revised Final Post-Closure Monitoring and Facility Maintenance Plan. January.

In accordance with the Revised Post-Closure Monitoring and Facility Maintenance Program the following activities are being conducted annually:

- Environmental monitoring points are being maintained and sampled during the post-closure period.
- An annual summary report is submitted to site stakeholders including the New York State Department of Environmental Conservation (NYSDEC) Division of Solid and Hazardous Materials, Region 9; the New York State Department of Health, Albany, New York; Linde, LLC; and the document repository located at the Town of Niagara Clerk's Office.
- Routine inspections of the sediment ponds and the engineered wetlands are conducted to assess the presence of mosquito larvae.
- Drainage structures and ditches are maintained to prevent ponding of water and erosion of the landfill soil cap.
- Soil cover integrity, slopes, cover vegetation, drainage structures, and the perimeter road are maintained during the post-closure monitoring and maintenance period.
- A vegetative cover is maintained on all exposed final cover material, and adequate measures are taken to ensure the integrity of the final vegetated cover, topsoil layer, and underlying barrier protection layer.
- The GCTS is being operated and maintained to effectively mitigate the discharge of groundwater to surface water in the southwest corner of the Airco Parcel.
- Records are maintained of sample analytical results.

BACKGROUND

The Airco Parcel is part of the Vanadium Corporation of America site that is located in the Town of Niagara Falls, New York (Figure 1). The entire Vanadium site is approximately 150 acres in size, with the Airco Parcel encompassing approximately 25 acres. The 25-acre Airco parcel is the focus of this annual sampling event letter report. The site contains waste material from the historic operations of onsite and nearby production facilities.

An Immediate Investigative Work Assignment (IIWA) investigation was conducted by NYSDEC for a portion of the 150-acre parcel in August 1997, and included investigation of the 70 acre parcel owned by Niagara Mohawk Power Corporation and New York Power Authority. During the investigation, NYSDEC determined that the site had been used by Vanadium Corporation of America (the owners of the site from 1924 to 1964) to dispose of wood, brick, ash, lime slag, ferrochromium silicon slag, and ferrochromium silicon dust. Based on results of the IIWA investigation NYSDEC determined that much of the surface material consisted of fill, including fly ash, dust, slag, and cinder materials.

Analytical results of groundwater samples collected at the site during the IIWA investigation indicated that surface water and groundwater standards were exceeded for hexavalent chromium and pH. The Vanadium site, including the Airco Parcel, has been listed as a Class 2 Hazardous Waste Site in the New York State Registry of Inactive Hazardous Waste Sites (Site No. 932001).

Remedial measures at the Airco Parcel were completed in 2000 when the landfill was capped as part of an Interim Remedial Measure (IRM) implemented at the Site. A complete description of the history of the site, and the construction details of the landfill capping system, can be found in the Interim Remedial Measure Report (EA 2001b)[3]. During cap construction a relief pipe system was installed to allow perched water to exit from under the cap without causing slope instability. Flow monitoring and sampling were initiated as part the monitoring program. The data collected indicated that the leachate was actually groundwater recharging to surface water and elevated hexavalent chromium concentrations and pH in groundwater remained in excess of the ambient water quality criteria after mixing with surface water.

Therefore, the IRM was augmented in 2003 with the design and implementation of the GCTS, which was determined to be necessary to meet the goals of the interim remedial measures program. The GCTS was designed to prevent the uncontrolled discharge of impacted groundwater from the Airco Parcel and includes pH adjustment via carbon dioxide aeration, settling for precipitate removal, oxidation/reduction via zero valence iron, and final clarification via an engineered wetland. The main portion of the GCTS is located at the northwest corner of the site and contains the main control panel, carbon dioxide storage tank, carbon dioxide aeration system, sedimentation tanks, pump stations, zero valence iron reaction tanks, and an engineered wetland. An influent pump station is located at the southwest corner of the site.

In December 2011, modifications to the GCTS control system, which were outlined in a Proposal for Data Collection for Alternate Remedial Strategy (Greenstar 2011a)[4] dated 11 October 2011 were completed as approved by the NYSDEC. As part of the proposal, one extraction well was installed through the landfill into weathered bedrock and fitted with a 4 in. diameter variable speed submersible pump capable of yielding at least 10 gallons per minute. This installation is part of a pilot study to explore whether dewatering the upper portion of bedrock can prevent leachate generation.

MONITORING EVENT FIELD ACTIVITIES

The annual and semi-annual monitoring events for 2011 were completed on June 16 2011 and 16 - 18 October 2011. The frequency of monitoring events was reduced at the Airco Parcel for 2011, moving from a biannual to annual basis for groundwater monitoring and remaining on a semi-annual basis for surface water sampling. Approval for modification to the existing Post-Closure Monitoring and Facility Maintenance Plan, outlined in a Proposal for Modifications to Existing Operation and Maintenance Plan at the Witmer Road Landfill, Niagara Falls, New York (Greenstar 2011b)[5], was given by the NYSDEC in a letter dated 6 June 2011.The sections below provide a summary of data collected as part of this Monitoring event.

3. EA Engineering, Science, and Technology. 2001b. Interim Remedial Measure Report Documenting Closure of the Witmer Road Landfill, Niagara Falls, New York. January.

4 . Greenstar Environmental Solutions. 2011a. Proposal for Data Collection for Alternate Remedial Strategy. October.

5. Greenstar Environmental Solutions. 2011b. Proposal for Modifications to Existing Operation and Maintenance Plan at the Witmer Road Landfill, Niagara Falls, New York. April.

Monitoring Well Gauging

The site monitoring wells, Figure 2, were gauged on 16 October 2011 prior to sampling. Gauging data are summarized in the table below:

Monitoring Well	Depth to Water (ft TOC)	Well Elevation (ft AMSL)	Water Elevation (ft AMSL)
MW-1B	11.71	617.77	606.06
MW-2B	12.31	615.88	603.57
MW-3B	10.05	611.22	601.17
MW-4B	13.34	606.68	593.34
MW-5B	10.87	605.48	594.61
MW-6B	4.45	603.47	599.02
MW-7B	11.19	609.48	598.29
MW-8B	6.69	611.62	604.93

NOTE: TOC = Top of casing.
AMSL = Above mean sea level.

Figure 3 shows the inferred groundwater flow direction at the site, based on the October 2011 gauging data.

LABORATORY ANALYSIS

Groundwater and surface water samples were submitted to TestAmerica Laboratories of Amherst, New York for analysis of phenolics by U.S. Environmental Protection Agency (EPA) Method 420.2, sulfate by EPA Method 375.3, ammonia (expressed as nitrogen) by EPA Method 350.2, and Target Analyte List metals by EPA Series 6010/6020, including hexavalent chromium.

Regulatory Criteria

Groundwater sampling results were compared to NYSDEC Ambient Water Quality Standards (AWQS) (NYSDEC 1999) and guidance values for Class GA waters. Class GA groundwater is used as a source of drinking water. Surface water samples were compared to NYSDEC AWQS for Class D surface waters. Class D waters are used for fishing but are not conducive to fish propagation. If no Class D standards were applicable for a particular compound, analytical results were compared to the more stringent Class C standards. Class C waters are suitable for fishing and fish propagation.

Groundwater Sampling

Monitoring wells were sampled on 17 – 18 October 2011. Eight monitoring wells are present at the site. Groundwater samples were collected from eight monitoring wells during this sampling event. Monitoring wells MW-3B, MW-4B, MW-5B, and MW-8B were purged using dedicated bailers due to slow recharge and limited well volume. Consistent with previous sampling, these wells yield very little groundwater and were bailed dry and allowed to recharge prior to sample collection. Monitoring wells MW-1B, MW-2B, MW-6B and MW-7B had adequate groundwater

yield for low flow sampling utilizing a peristaltic pump. Water quality readings were allowed to stabilize prior to sample collection. Monitoring well locations are shown on Figure 2.

Surface Water Sampling

Surface water samples were collected from the drainage swales in the southwest corner of the site twice during 2011. Sampling occurred on 16 June 2011 and then again during the monitoring well sampling event during 17 – 18 October 2011. The samples were collected from the eastern swale approximately 80 feet east of the pump station (SS-02); the confluence of the two swales where they discharge from the property (SS-01); and upstream of the confluence (SS-03). The surface water sample locations are shown on Figures 2 and 4.

ANALYTICAL RESULTS

Analytical results are summarized on the table provided in Attachment A. Copies of the well gauging, purging, and sampling forms are provided in Attachment B. Laboratory chain of-custody records are provided in Attachment C. A copy of the laboratory data package for groundwater and surface water sampling is included in Attachment D.

Summary tables listing analytical results compared to applicable NYSDEC AWQS are included in Attachment A, and tag maps illustrating analytical results are provided as Figure 4 and 5.

Metals

Unfiltered surface water samples were collected from the three surface water sampling locations in June and October 2011. Significant results included the following:

- Iron was detected in excess of the NYSDEC AWQS in SS-02 (June and October 2011) and SS-03 (October 2011) at concentrations ranging from 0.63 mg/L (SS-02 October 2011) to 2.1 mg/L (SS-02 June 2011). No other metals exceeded their respective NYSDEC AWQS for Class D surface waters.

Unfiltered groundwater samples were collected from the 8 monitoring wells for metals analyses. Significant results included the following:

- Chromium, hexavalent chromium, iron, magnesium, manganese, selenium and sodium were detected in one or more of the groundwater samples at concentrations in excess of NYSDEC AWQS.
- Chromium was detected in excess of the NYSDEC AWQS in MW-2B, MW-4B and MW-8B at concentrations ranging from 0.0762 milligram per liter (mg/L) (MW-8B) to 0.77 mg/L (MW-2B).
- Hexavalent chromium was detected in excess of the NYSDEC AWQS in MW-2B, MW-4B and MW-8B at concentrations ranging from 0.0762 milligram per liter (mg/L) (MW-8B) to 0.925 mg/L (MW-2B).
- Iron was detected in excess of the NYSDEC AWQS in MW-4B, MW-5B and MW-8B at concentrations ranging from 0.47 mg/L (MW-8B) to 5.4 mg/L (MW-4B).

- Magnesium was detected in excess of the NYSDEC AWQS in MW-1B, MW-4B MW-5B, MW-6B and MW-8B at concentrations ranging from 57.7 mg/L (MW-4B) to 82.3 mg/L (MW-5B).
- Manganese was detected in excess of the NYSDEC AWQS in MW-1B at concentration of 0.66 mg/L.
- Selenium was detected in excess of the NYSDEC AWQS in MW-2B and MW-8B at concentrations of 0.011 mg/L and 0.012 mg/L, respectively.
- Sodium was detected in excess of the NYSDEC AWQS in all 8 monitoring wells at concentrations ranging from 31.2 mg/L (MW-5B) to 125 mg/L (MW-1B).

Water Quality Parameters

Water quality parameters, including pH, temperature, conductivity, dissolved oxygen, turbidity, and salinity, were collected in the field. In addition, water quality parameters, including ammonia (expressed as N), phenolics, and sulfate, were analyzed by the laboratory. Notable results for the eight groundwater monitoring wells included the following:

- Phenolics were detected in excess of the NYSDEC AWQS in MW-1B, MW-2B and MW-7B at concentrations ranging from 0.0056J mg/L (MW-1B) to 0.0111 mg/L (0.0111).
- Sulfate was detected in excess of the NYSDEC AWQS in MW-6B at a concentration of 392 mg/L.
- pH measurements were measured outside the NYSDEC AWQS of 6.5-8.5 standard pH units in monitoring well MW-2B, with a pH value of 12.20.

There were no results above NYSDEC AWQC for the three surface water samples collected in June or October 2011.

LANDFILL INSPECTION

Landfill cap inspections were conducted on 16 March, 16 June, 11 September and 12 November 2011. The completed Landfill Cap Inspection Checklists are provided as Attachment E. No deterioration, damage, or erosion to the landfill cap was noted during the engineering inspections. The following action items were identified during the 1st, 2nd, 3rd and 4th quarters included:

- Piezometers installed as part of the pilot study were painted with safety blue paint and reflective markers added.
- Flocculent secondary containment removed from the site. Chemicals transferred into drums and require disposal.
- Area around T-7 reseeded, and vegetation established.
- Check dam was installed around T-7 outlet pipe to prevent organic matter from clogging outfall pipe.

Additional items noted during the inspection that require corrective measures included addressing rodent population issues by repairing/replacing the shed doors to prevent rodents from accessing the interior spaces and removal of the chemical flocculent.

GCTS OPERATIONS AND MAINTENANCE MONITORING ACTIVITIES

Starting in 2011 routine operations and maintenance of the GCTS is preformed during site visits once per month, which is a reduction from biweekly site visits completed in 2010. Approval for modification to the existing Revised Final Post-Closure Monitoring and Facility Maintenance Plan was given by the NYDSEC in a letter dated 6 June 2011. Activities performed include data collection, cleaning and calibration of pH probes, cleaning of pressure transmitters, operational parameter adjustments based on observed site conditions, and general housekeeping tasks. The replacement of system components, including pumps, pressure transmitters, and pH probes is also scheduled and performed during the routine visits when practicable.

System Operations and Maintenance (January – December 2011)

The GCTS was operated throughout the period of 1 January – 31 December 2011. System monitoring was conducted throughout the operation period. Attachment G provides details of the problems encountered, and the implemented solutions.

During the reporting period, the GCTS operated for 8,755 hours (99.94 percent) pumping 8,534,220 gallons at an average flow rate of 16.2 gallons per minute (gpm). The system went down for 5 hours in November due to a CO2 tank system failure. Linde personnel as well as Greenstar personnel were dispatched to the site to correct the failure. The system continued to pump to the T-8 emergency overflow pond and no uncontrolled releases of impacted water occurred. The GCTS sampling occurred monthly during the operation period. Samples were collected at various locations within the system to evaluate treatment system performance and compliance with discharge criteria. Annual samples were collected from the system at T3B after CO_2 aeration; T6B after treatment via the zero valence iron tank; after the engineered wetland (EWE); and at the point where the drainage swale exits the site in the southwest corner, when accessible. The samples were analyzed in the field for total chromium and hexavalent chromium using a HACH DR4000® spectrophotometer. The HACH DR4000® spectrophotometer field method is EPA approved for reporting water and wastewater analyses within a detection limit of 0.006 and 0.005 mg/L for hexavalent chromium, and 0.003 mg/L for total chromium.

The GCTS discharge samples were analyzed in the field, and separate quarterly samples were collected for off-site laboratory analysis at Test America Laboratories of Amherst, New York for a full list of discharge criteria. During the report period, field analysis on 12 February 2011, 6 June 2011, 19 October 2011, 2 December 2011 noted a hexavalent chromium concentration in excess of the NYSDEC discharge guidance value (11 μg/L), in the GCTS discharge sample collected from the SS-01 location in the southwest corner. Confirmatory samples were collected and sent to Test America for analysis. The confirmatory samples indicated non-detect or below NYSEC discharge guidance value for hexavalent chromium. Field analysis on 12 November 2011 also noted hexavalent chromium concentrations in excess of the NYSDEC discharge guidance value (11 μg/L). Due to Test America closure, no confirmatory sample could be

analyzed. Field sampling results for total and hexavalent chromium can be found in Table 1, and results of the quarterly GCTS discharge samples can be found in Table 2.

Analytical results for the quarterly discharge sampling indicated that NYSDEC discharge guidance values for Total Suspended Solids (10 mg/L) was exceeded during the first, third and fourth quarters with values of 18.8 mg/L, 22.8 mg/L and 32.8 mg/L respectively. The NYSDEC discharge guidance value for Dissolved Oxygen (7 mg/L) was not achieved during the fourth quarter. The dissolved oxygen value during the fourth quarter was 5.3 mg/L. The NYSDEC discharge value for Selenium (0.0046 mg/L) was exceeded during the First quarter with a value of 0.005 mg/L. All other analytical results for the quarterly discharge sampling were in compliance with NYSDEC discharge values. The Laboratory data package for the GCTS discharge sampling can be found in Attachment F.

GCTS Modifications (January – December 2011)

In December 2011, modifications to the GCTS, which were outlined in a Proposal for Data Collection for Alternate Remedial Strategy dated 11 October 2011, were completed. As part of the proposal, one extraction well was installed through the landfill into weathered bedrock and fitted with a 4 in. diameter variable speed submersible pump capable of yielding at least 10 gallons per minute. This installation is part of a pilot study to explore whether dewatering the upper portion of bedrock can prevent leachate generation. The extraction well was installed through the low permeability cap and geosynthetic liner which was repaired and sealed after the installation was complete to prevent precipitation from entering the waste mass. The discharge line for extraction well EW-1 was initially connected to the existing piping network for groundwater to be pumped to the GCTS. However, after startup it was determined that the water quality of the EW-1 discharge would meet the SPDES discharge guidance values and was permitted to discharge directly to the GCTS discharge swale. This change was requested due to fouling of the GCTS discharge line (From T-1 to the GCTS) caused by clean neutral pH water mixing with the high pH leachate which resulted in a calcium precipitate forming and blocking the line. Although controlled by the existing SCADA system, this extraction well is no longer part of the GCTS.

Electrical wiring was run from a junction box that supplies power to the T-1 shed. Power for the submersible pump was run from the junction box to a new NEMA 3R control panel mounted to the exterior of a small (3 ft by 3 ft) concrete vault. A vault was installed to cover the well head to permit winter operation. A control panel was constructed to contain a Modicon PLC which will link to the existing Modicon control system via an Ethernet radio consistent with the existing radio network utilized at the site. A variable frequency drive (VFD) used to control the pump was mounted in the wellhead control panel, along with a small heater to keep control systems at operating temperature during winter. The VFD will be used in conjunction with a pressure transducer placed in EW-1 to maintain a constant head drawdown within the well.

Other than modifications associated with the ongoing pilot study, site activities were limited to routine operations and maintenance and emergency response mobilization to alarm conditions. Routine site maintenance included repairs to pumps, VFDs, and pH probes and routine tank and line cleaning. Routine site maintenance to address some of the deficiencies noted in the engineering inspections was performed. Personnel mobilized to an emergency response on 2

December 11 to replace P3B. Attachment G summarizes monthly operation and maintenance and emergency response in detail for the period January through December 2011, as well as provides details of any proposed operation and maintenance projects and modification improvements to be implemented in the near future.

If you have any questions regarding the results of this Annual 2011 Monitoring Event Letter Report, please do not hesitate to contact the undersigned at (845) 223-9944.

Sincerely,

GREENSTAR ENVIRONMENTAL SOLUTIONS

Charles E. McLeod, Jr., P.E.
Project Manager

Peter L. Nimmer, P.G.
Senior Geologist

Attachment

cc: M. Hinton (NYSDEC)
M. Forcucci (NYSDOH)
Town of Niagara Falls (Town Clerk)

TABLE 1 SUMMARY OF GCTS FIELD SAMPLING RESULTS
1 JANUARY – 31 DECEMBER 2011, AIRCO PARCEL, NIAGARA FALLS, NEW YORK

	Chromium Tank 3B		Iron Tank 6B		Engineered Wetland		Southwest Corner	
Date	Total Chromium	Hexavalent Chromium	Total Chromium	Hexavalent Chromium	Total Chromium	Hexavalent Chromium	Total Chromium	Hexavalent Chromium
1/24/11	125 µg/L	1 µg/L	12 µg/L	0 µg/L	18 µg/L	0 µg/L	NS	NS
2/12/11(1)	18 µg/L	29 µg/L	61 µg/L	8 µg/L	42 µg/L	0 µg/L	4.8 µg/L	<10 µg/L
3/16/11	84 µg/L	75 µg/L	1 µg/L	21 µg/L	0 µg/L	1 µg/L	19 µg/L	10 µg/L
4/12/11	164 µg/L	29 µg/L	4 µg/L	73 µg/L	56 µg/L	0 µg/L	44 µg/L	8 µg/L
5/16/11	91 µg/L	105 µg/L	2 µg/L	51 µg/L	0 µg/L	0 µg/L	20 µg/L	8 µg/L
6/16/11(2)	80 µg/L	73 µg/L	4 µg/L	0 µg/L	6 µg/L	2 µg/L	1.6J µg/L	<10 µg/L
7/16/11(3)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/1/11	17 µg/L	7 µg/L	32 µg/L	8 µg/L	6 µg/L	2 µg/L	21 µg/L	9 µg/L
9/11/11(4)	100 µg/L	91 µg/L	79 µg/L	82 µg/L	58 µg/L	1 µg/L	1.3J µg/L	9J µg/L
10/19/11(5)	92 µg/L	117 µg/L	41 µg/L	53 µg/L	72 µg/L	56 µg/L	1.0J µg/L	<5 µg/L
11/12/11(6)	128 µg/L	107 µg/L	5 µg/L	14 µg/L	64 µg/L	77 µg/L	64 µg/L	**118 µg/L**
12/2/11(7)	124 µg/L	131 µg/L	39 µg/L	59 µg/L	15 µg/L	40 µg/L	<3.1 µg/L	<10 µg/L

NOTE: NS = Not Sampled
NS – Ice = Not Sampled due to winter weather conditions.
Bold field sample results were in excess of SPDES discharge guidance values.

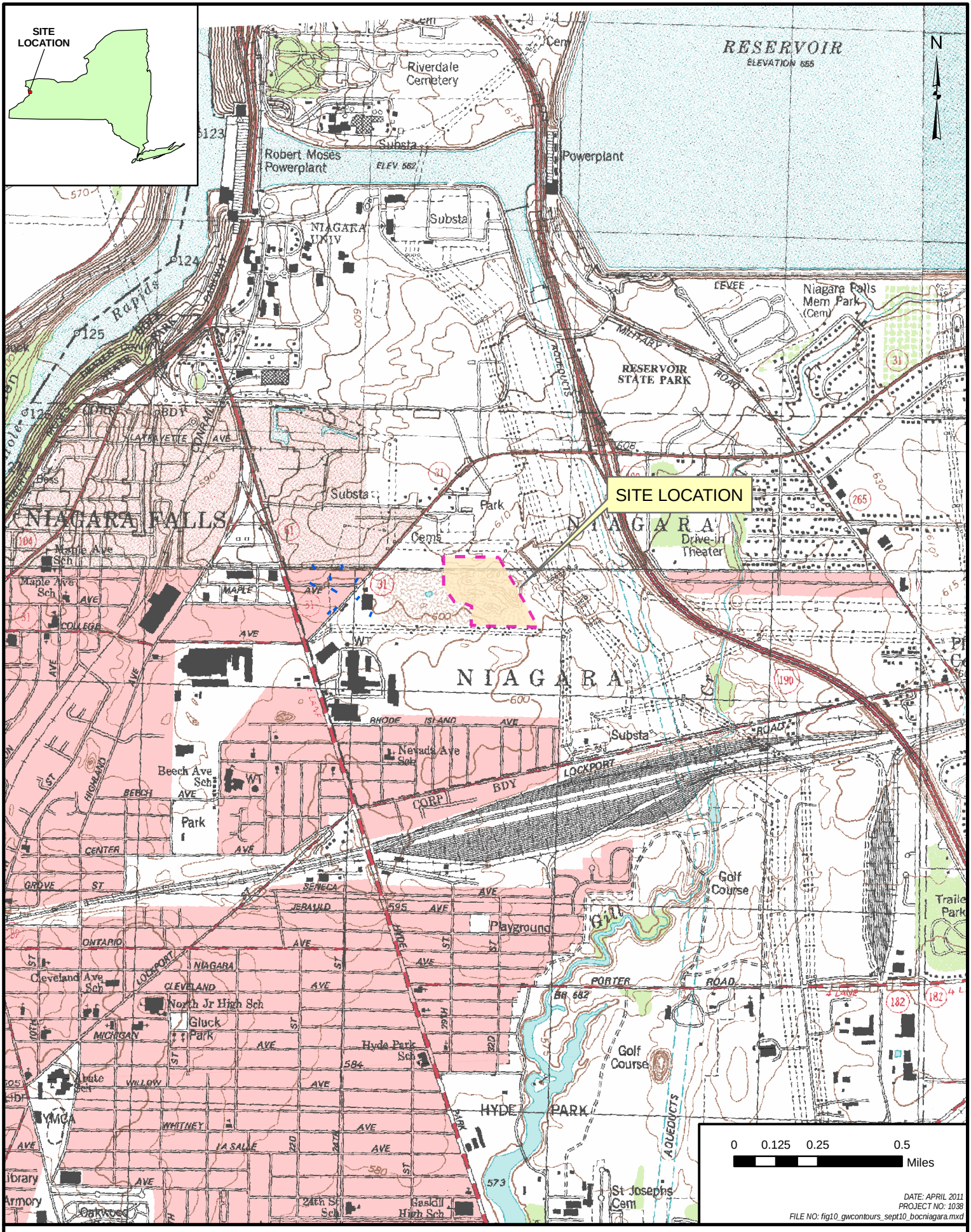
(1) Confirmation sample sent to Test America for analysis along with quarterly discharge samples. Sample was ND for hexavalent chromium, and below the NYSDEC discharge value for total chromium.
(2) Sample collected and sent to Test America for analysis.
(3) GCTS Maintenance Recording Log misplaced, no field concentrations available.
(4) Sample collected and sent to Test America for analysis.
(5) Confirmation sample sent to Test America for analysis. Sample was ND for hexavalent chromium, and below the NYSDEC discharge value for total chromium.
(6) Test America closed. No confirmation sample analyzed.
(7) Confirmation sample sent to Test America for analysis along with quarterly discharge samples. Sample was ND for both hexavalent and total chromium.

Field samples analyzed using a HACH DR4000® Spectrophotometer.
Hach Methods 8023 for Hexavalent Chromium and Hach Method 8084 for Total Chromium.

TABLE 2 SUMMARY OF QUARTERLY GCTS DISCHARGE SAMPLING 1 JANUARY AND 31 DECEMBER 2011, AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Parameter	12 February 2011	16 June 2011	9 September 2011	18 October 2011	New York State Department of Environmental Conservation Discharge Criteria
pH	7.67	7.79	7.95	7.69	6-8
Total suspended solids	**18.8**	<4.0U	**22.8**	**32.8**	10 mg/L
Dissolved Oxygen	**9.5**	**7.4**	6.6	5.3	7 mg/L
Ammonia as N	1.4	<0.020U	<0.020U	<9.2U	9.2 mg/L
Total Kjeldahl nitrogen	2.4	0.28	0.21	0.41	Monitor (mg/L)
Total Recoverable Phenolics	<0.010U	<0.010U	0.0065J	<0.010U	0.008 mg/L
Biochemical oxygen demand	<2.0U	<2.0U	<2.0U	<2.0U	5.0 mg/L
1,1-Dichloroethane	<5U	<5U	<5U	<5U	5.0 µg/L
Trichloroethene	<5U	<5U	<5U	<5U	5.0 µg/L
Nickel	0.0033J	0.0019J	0.0019J	0.0013J	0.07 mg/L
Copper	0.0015J	<0.010U	<0.010U	<0.010U	0.0147 mg/L
Barium	0.253	0.21	0.216	0.195	2 mg/L
Total chromium	0.0048	0.0016J	0.0013J	0.0010J	0.1 mg/L
Hexavalent chromium	<0.010U	<0.010U	0.0090J	<0.010U	0.011 mg/L
Iron	0.0508	0.036J	0.142	0.0942	0.3 mg/L
Selenium	**0.005**	<0.015U	0.00089J	0.00066J	0.0046 mg/L
Thallium	0.000018J	<0.20U	<0.00020U	0.000025J	0.004 mg/L
Zinc	<0.010U	<0.010U	<0.010U	0.0036J	0.115 mg/L
Nitrate as N	1.0	0.53	0.69	0.69	Monitor (mg/L-N)
Nitrite as N	<0.050U	<0.050U	<0.050U	<0.050U	Monitor (mg/L-N)
Chemical oxygen demand	<10U	<10U	8.0J	13.3	40 mg/L
Total dissolved solids	1020	622	531	655	Monitor (mg/L)

Values in bold exceeded discharge guidance values.



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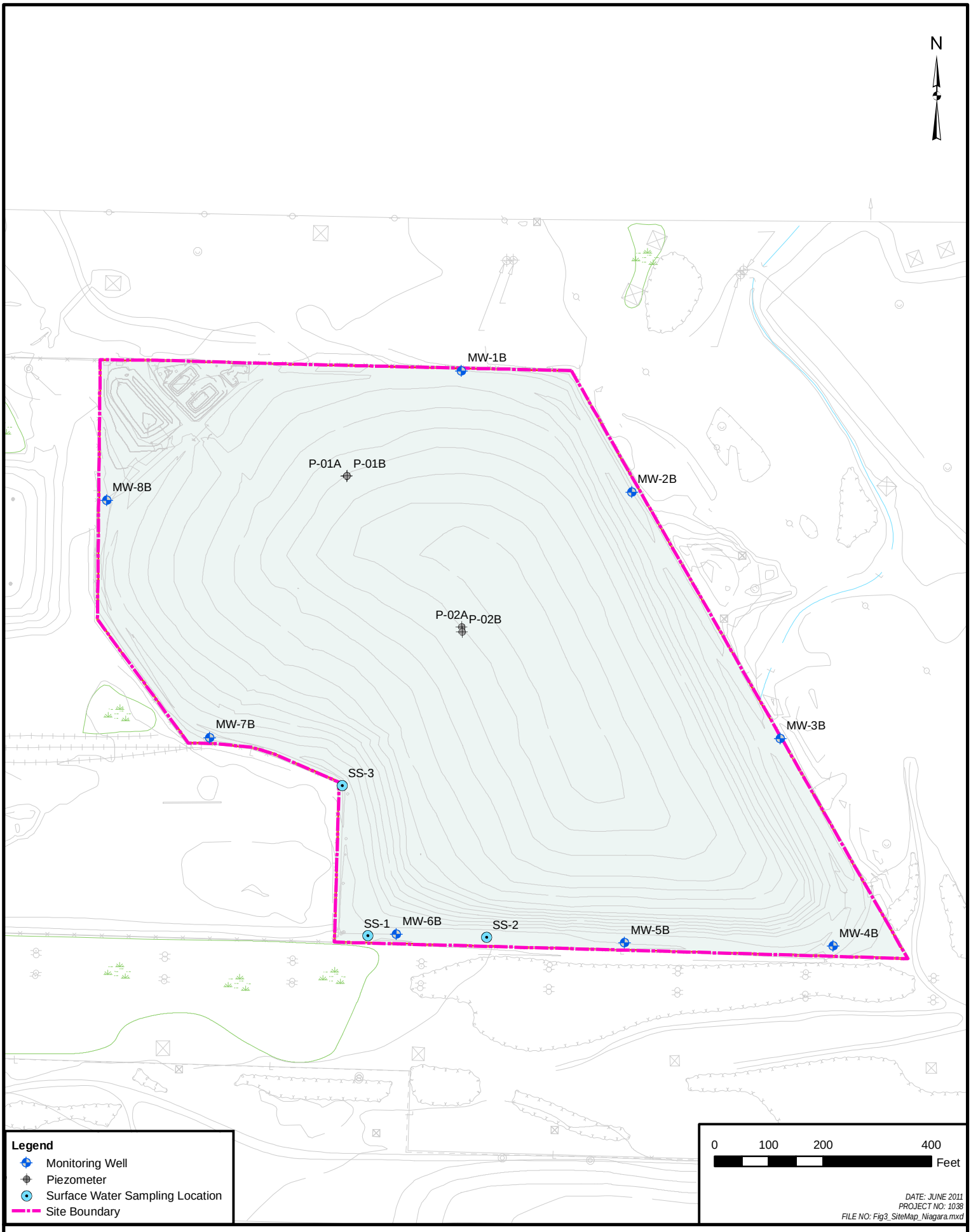
AIRCO PARCEL
NIAGARA FALLS, NEW YORK

FIGURE 1
SITE LOCATION



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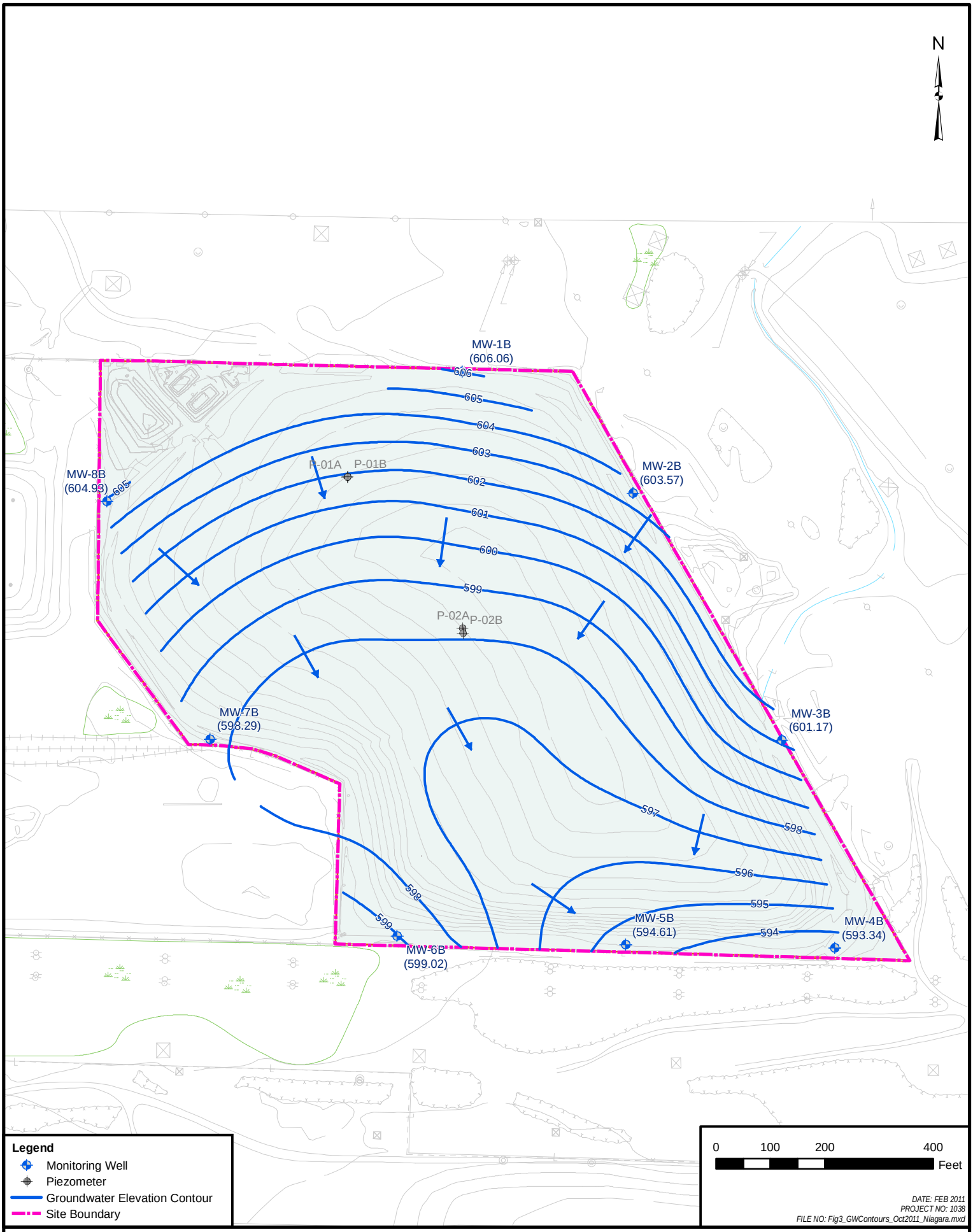
AIRCO PARCEL
NIAGARA FALLS, NEW YORK

FIGURE 2
SITE MAP



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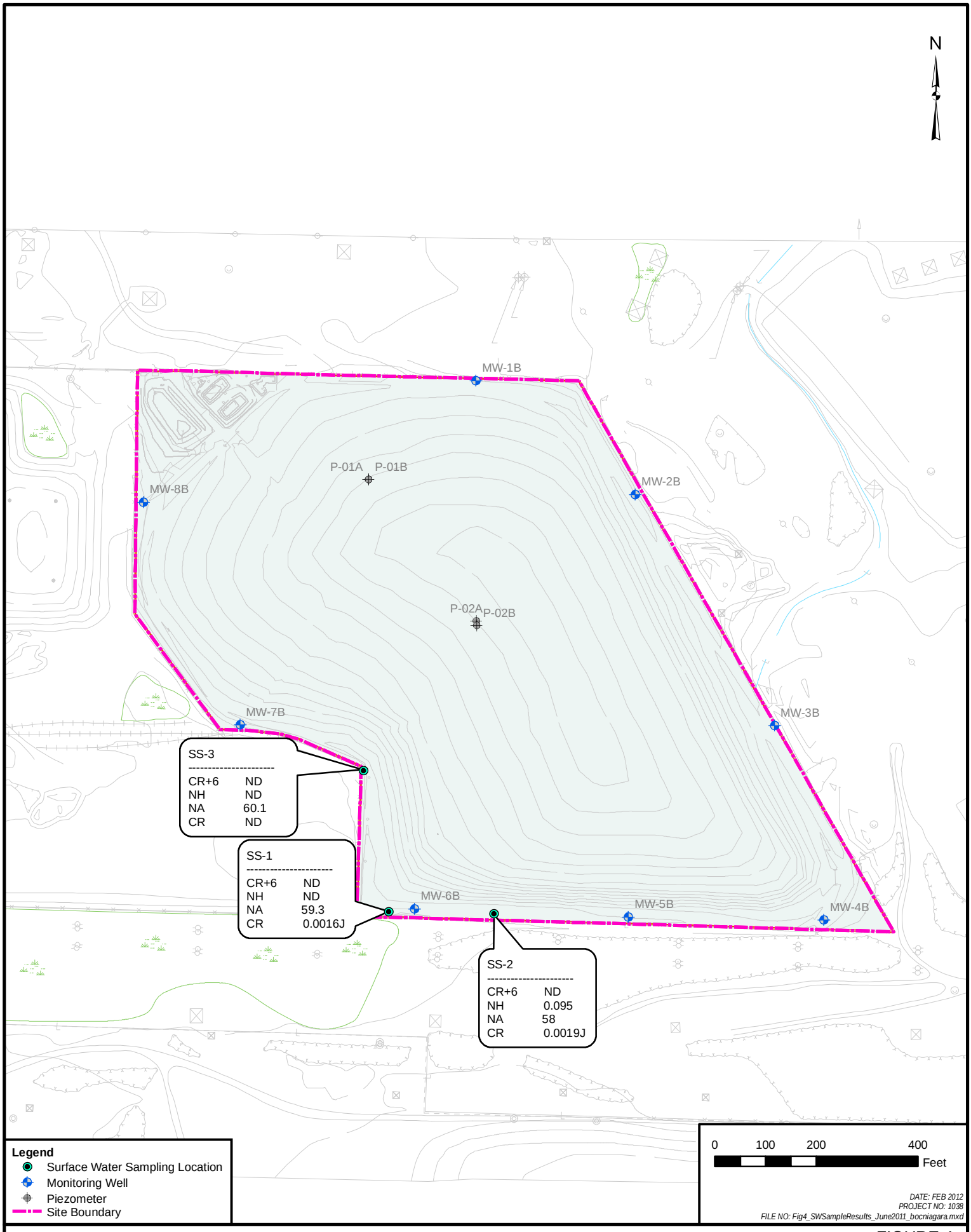
AIRCO PARCEL
NIAGARA FALLS, NEW YORK

FIGURE 3
GROUNDWATER CONTOURS
OCTOBER 2011



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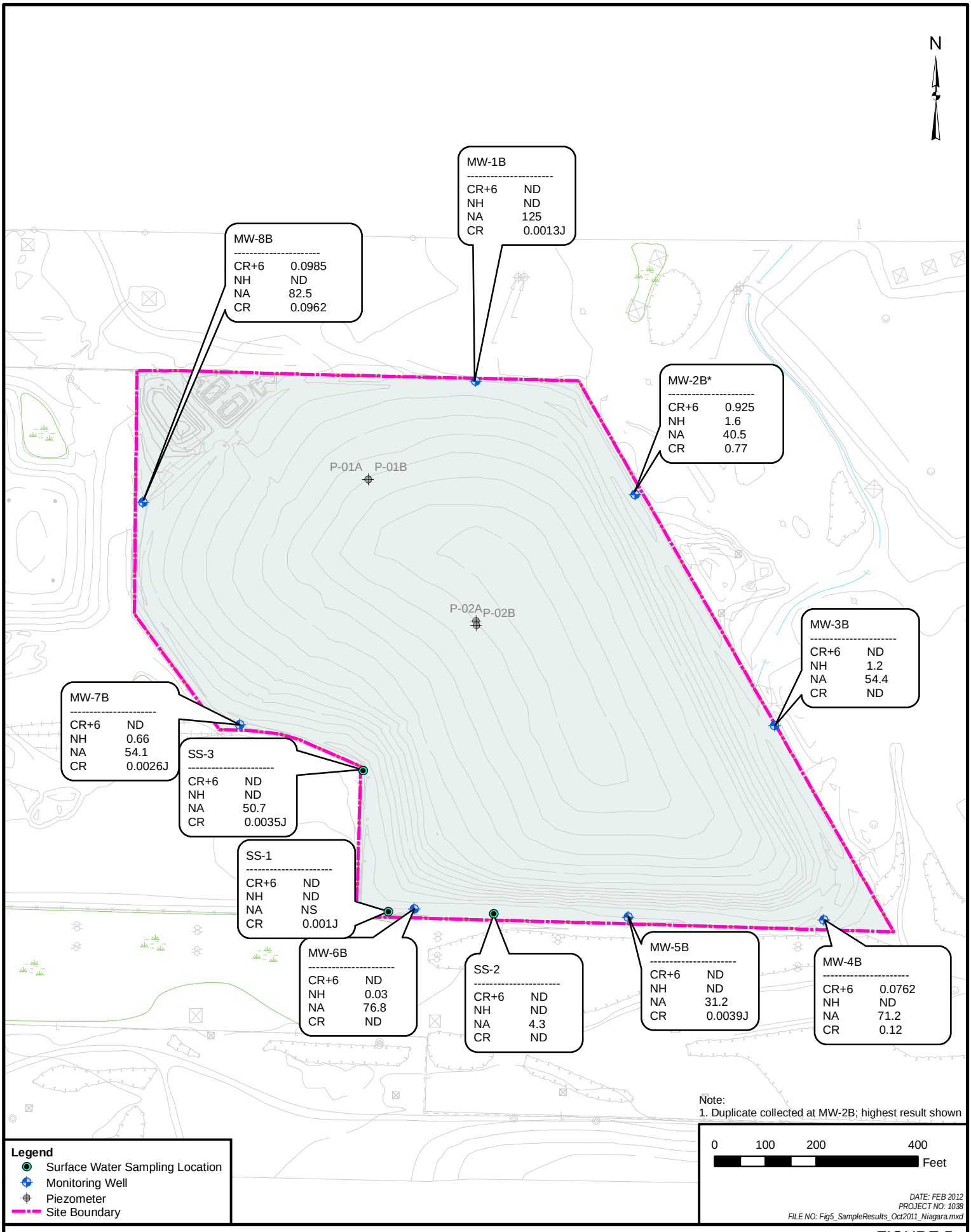
NIAGARA FALLS, NEW YORK

FIGURE 4
SURFACE WATER SAMPLE RESULTS
JUNE 2010



GREENSTAR
Environmental Solutions, LLC

AIRCO PARCEL
NIAGARA FALLS, NEW YORK

FIGURE 5
SAMPLE RESULTS
OCTOBER 2011

Attachment A

Summary of Analytical Results
Groundwater and Surface Water Samples
June and October 2011

ATTACHMENT A
SUMMARY OF ANALYTICAL RESULTS OF SURFACE WATER AND GROUNDWATER SAMPLES COLLECTED IN JUNE 2011,
AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Surface Water

Volatile Organic Compounds by EPA Method 624 (µg/L)

		SS-01
Analyte	**AWQS**	
Total VOC	---	ND
1,1-Dichloroethane	---	(<0.59U)
Trichloroethene	40	(<0.6U)

Baseline Metals by EPA Method 200.7 (mg/L)

Total (Unfiltered)

		SS-01	SS-02	SS-03
Analyte	**AWQS**			
Barium	---	0.21		
Cadmium	---	<0.00033U	<0.00033U	<0.00033U
Chromium	---	0.0016J	0.0019J	0.0013J
Chromium, Hexavalent	0.016	(<0.005U)	(<0.005U)	(<0.005U)
Copper	---	(<0.0015U)		
Iron	0.3	0.036J	**2.1**	0.16
Lead	---	(<0.003U)	0.011	(<0.003U)
Magnesium	---	1.2	8.4	1.2
Manganese	---	0.0031B	0.2B	0.0089B
Nickel	---	0.0019J		
Selenium	0.0046	(<0.0087U)	(<0.0087U)	(<0.0087U)
Silica	---	2.1	4.7	2.33
Sodium	---	59.3	58	60.1
Thallium	0.02	(<0.01U)	(<0.01U)	(<0.01U)
Zinc	---	(<0.0017U)	0.016B	0.0017JB

Water Quality Parameters (mg/L)

		SS-01	SS-02	SS-03
Analyte	**AWQS**			
Ammonia (expressed as N)	---	(<0.009U)	0.095	(<0.009U)
BOD	---	(<2U)		
COD	---	(<5U)		
Dissolved Oxygen	---	7.4		
Nitrate (expressed as N)	---	0.53		
Nitrite (expressed as N)	0.01	(<0.02U)		
pH	---	7.79		
Phenolics	---	(<0.005U)	(<0.005U)	(<0.005U)
Sulfate	---	7.3	0.47J	7.2
TDS	---	622		
TKN	---	0.28		
TSS	---	(<4U)		

TABLE NOTES

AWQS	=	New York State Ambient Water Quality Standards and Guidance Values from Water Quality Regulations, Title 6, Chapter X Parts 700-706 August 1999.
*	=	Indicates guidance value.
U	=	Not detected. Sample quantitation limits shown as (<__U).

Only those analytes detected in at least one of the samples is shown on this table.
Results shaded and in boldface indicate concentrations in excess of New York State Ambient Water Quality Standards or Guidance Values.

Analytical Methods for Water Quality Parameters

Ammonia (expressed as Nitrogen)	=	EPA 350.2
Phenolics	=	EPA 420.2
Silica	=	EPA 6010
Sulfate	=	EPA 375.3

ATTACHMENT A
SUMMARY OF ANALYTICAL RESULTS OF SURFACE WATER AND GROUNDWATER SAMPLES COLLECTED IN OCTOBER 2011,
AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Groundwater

Baseline Metals by EPA Method 200.7 (mg/L)

Total (Unfiltered)

		MW-1B	MW-2B	MW-2B (Dup)	MW-3B	MW-4B	MW-5B	MW-6B	MW-7B	MW-8B
Analyte	**AWQS**									
Cadmium	0.005	0.00099J	<0.00033U	<0.00033U	<0.00033U	0.00085J	0.00034J	<0.00033U	<0.00033U	0.00065J
Chromium	0.05	0.0013J	**0.77**	**0.77**	<0.00087U	**0.12**	0.0039J	<0.00087U	0.0026J	**0.076**
Chromium, Hexavalent	0.05	(<0.005U)	**0.754**	**0.925**	(<0.005U)	**0.0762**	(<0.005U)	(<0.005U)	(<0.005U)	**0.0762**
Iron	0.3	0.12	(<0.019U)	(<0.019U)	0.042J	**5.4**	**0.6**	0.28	0.095	**0.47**
Lead	0.025	(<0.003U)	(<0.003U)	(<0.003U)	(<0.003U)	(<0.003U)	(<0.003U)	(<0.003U)	(<0.003U)	(<0.003U)
Magnesium	35*	**62.2**	(<0.043U)	(<0.043U)	5.8	**57.7**	**82.3**	**73.1**	8.3	**68.3**
Manganese	0.3	**0.66**	(<0.0003U)	(<0.0003U)	0.0059	0.11	0.021	0.14	0.037	0.23
Selenium	0.01	(<0.0087U)	0.0097J	**0.011J**	(<0.0087U)	(<0.0087U)	(<0.0087U)	(<0.0087U)	(<0.0087U)	**0.012J**
Silica	---	6.91B	0.509B	0.496B	8.26B	36B	16.8B	5.95B	4.96B	7.55B
Sodium	20	**125**	**40.5**	**39.8**	**54.4**	**71.2**	**31.2**	**76.8**	**54.1**	**73.5**
Thallium	0.0005*	(<0.01U)	(<0.01U)	(<0.01U)	(<0.01U)	(<0.01U)	(<0.01U)	(<0.01U)	(<0.01U)	(<0.01U)
Zinc	2*	0.56	(<0.0017U)	0.0021J	0.0069J	0.06	0.025	0.002J	0.0023J	0.12

Water Quality Parameters (mg/L)

		MW-1B	MW-2B	MW-2B (Dup)	MW-3B	MW-4B	MW-5B	MW-6B	MW-7B	MW-8B
Analyte	**AWQS**									
Ammonia (expressed as N)	2	(<0.009U)	1.6	1.6	1.2	(<0.009U)	(<0.009U)	0.03	0.66	0.043
Phenolics	0.001	**0.0056J**	**0.0105**	**0.01**	(<0.005U)	(<0.005U)	(<0.005U)	(<0.005U)	**0.0111**	(<0.005U)
Sulfate	250	186	21.5	21.6	66.7	153	150	**363**	30.4	193

Surface Water

Volatile Organic Compounds by EPA Method 624 (µg/L)

		SS-01
Analyte	**AWQS**	
Total VOC	---	ND
1,1-Dichloroethane	---	(<0.59U)
Trichloroethene	40	(<0.6U)

Baseline Metals by EPA Method 200.7 (mg/L)

Total (Unfiltered)

		SS-01	SS-02	SS-03
Analyte	**AWQS**			
Barium	---	0.195		
Cadmium	---		<0.00033U	<0.00033U
Chromium	---	0.001J	<0.00087U	0.0035J
Chromium, Hexavalent	0.016	(<0.005U)	(<0.005U)	(<0.005U)
Copper	---	(<0.0015U)		
Iron	0.3	0.0942	**0.63**	**1.6**
Lead	---		(<0.003U)	(<0.003U)
Magnesium	---		20.1	7.5
Manganese	---		0.38	0.13
Nickel	---	0.0013J		
Selenium	0.0046	0.00066J	(<0.0087U)	(<0.0087U)
Silica	---	2.86B	7.83B	2.58B
Sodium	---		4.3	50.7
Thallium	0.02	0.000025J	(<0.01U)	(<0.01U)
Zinc	---	0.0036J	0.0049J	0.02

Water Quality Parameters (mg/L)

		SS-01	SS-02	SS-03
Analyte	**AWQS**			
Ammonia (expressed as N)	---	(<0.009U)	(<0.009U)	(<0.009U)
BOD	---	(<2U)		
COD	---	13.3		
Dissolved Oxygen	---	5.3		
Nitrate (expressed as N)	---	0.69		
Nitrite (expressed as N)	0.01	(<0.02U)		
pH	---	7.69		
Phenolics	---	(<0.005U)	0.0206	0.0062J
Sulfate	---	24.5	27.8	23.4
TDS	---	655		
TKN	---	0.41		
TSS	---	32.8		

QA/QC

Volatile Organic Compounds by EPA Method 624 (µg/L)

		TB-01
Analyte	**AWQS**	
Total VOC	---	ND
1,1-Dichloroethane	---	(<0.59U)
Trichloroethene	---	(<0.6U)

Baseline Metals by EPA Method 200.7 (mg/L)

Total (Unfiltered)

		RB-01	SWB-01
Analyte	**AWQS**		
Cadmium	---	<0.00033U	<0.00033U
Chromium	---	<0.00087U	<0.00087U
Chromium, Hexavalent	---	0.0056J	0.0056J
Iron	---	(<0.019U)	(<0.019U)
Lead	---	(<0.003U)	(<0.003U)
Magnesium	---	1.3	1.3
Manganese	---	(<0.0003U)	(<0.0003U)
Selenium	---	(<0.0087U)	(<0.0087U)
Silica	---	3.89B	3.78B
Sodium	---	6.8	6.7
Thallium	---	(<0.01U)	(<0.01U)
Zinc	---	0.0026J	0.0022J

Water Quality Parameters (mg/L)

		RB-01	SWB-01
Analyte	**AWQS**		
Ammonia (expressed as N)	---	(<0.009U)	(<0.009U)
Phenolics	---	0.0052J	0.0054J
Sulfate	---	6.5	6.4

TABLE NOTES

AWQS	=	New York State Ambient Water Quality Standards and Guidance Values from Water Quality Regulations, Title 6, Chapter X Parts 700-706 August 1999.
*	=	Indicates guidance value.
U	=	Not detected. Sample quantitation limits shown as (<__U).

Only those analytes detected in at least one of the samples is shown on this table.
Results shaded and in boldface indicate concentrations in excess of New York State Ambient Water Quality Standards or Guidance Values.

Analytical Methods for Water Quality Parameters

Ammonia (expressed as Nitrogen)	=	EPA 350.2
Phenolics	=	EPA 420.2
Silica	=	EPA 6010
Sulfate	=	EPA 375.3

Attachment B

Well Gauging, Purging, and Sampling Forms
October 2011

GREENSTAR Engineering, P.C.

WELL GAUGING, PURGING AND SAMPLING FORM

Well I.D.:	Personnel:	Client:
AP-MW1B	NM	Linde, Inc.
Location:	**Well Condition:**	**Weather:**
Niagara Falls	Good; Locked	Cloudy, Windy, 50°
Sounding Method:	**Gauge Date:**	**Measurement Ref:**
WLI	10/16/2011	TOC
Stick Up/Down (ft):	**Gauge Time:**	**Well Diameter (in):**
UP	11:05	2"

Purge Date:	Purge Time:
10/18/2011	38 min.
Purge Method:	**Greenstar Personnel:**
Low-Flow	NM

Well Volume

A. Well Depth (ft):	D. Well Volume (ft^3):	Depth/Height of Top of PVC:
27.83	0.35	N/A
B. Depth to Water (ft):	**E. Well Volume (L)**	**Pump Type:**
11.71	10.0	Peristaltic
C. Liquid Depth (ft) (A-B):		**Pump Designation:**
16.12		N/A

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	Conduct. (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temp. (° C)	ORP (mv)
11:08	12.12	0.2	0.20	9.30	1.72	0.2	1.24	12.27	74
11:12	12.15	1	0.20	8.93	1.74	0.0	0.75	11.98	74
11:16	12.19	1.8	0.20	8.51	1.74	0.0	0.62	11.83	77
11:20	12.19	2.6	0.20	8.09	1.74	0.1	0.56	11.73	75
11:24	12.19	3.4	0.20	7.79	1.73	0.0	0.50	11.66	71
11:28	12.19	4.2	0.20	7.61	1.72	0.1	0.48	11.69	68
11:32	12.19	5	0.20	7.35	1.72	0.0	0.42	11.77	60
11:36	12.19	5.8	0.20	7.26	1.71	0.0	0.41	11.79	59
11:40	12.19	6.6	0.20	7.14	1.71	0.0	0.40	11.79	54
11:44	12.19	7.4	0.20	7.07	1.70	0.0	0.39	11.74	52
11:46	12.19	8.2	0.20	7.04	1.70	0.0	0.38	11.75	51

Total Quantity of Water Removed:	8.2 L	**Sampling Time:**	11:55
Samplers:	NM	**Split Sample With:**	N/A
Sampling Date:	10/18/2011	**Sample Type:**	GRAB

COMMENTS AND OBSERVATIONS: Well remarked with paint pen.

GREENSTAR Engineering, P.C.

WELL GAUGING, PURGING AND SAMPLING FORM

Well I.D.:	Personnel:	Client:
AP-MW2B	NM	Linde, Inc.
Location:	**Well Condition:**	**Weather:**
Niagara Falls	Good; Locked	Cloudy, Windy, 50°
Sounding Method:	**Gauge Date:**	**Measurement Ref:**
WLI	10/16/2011	TOC
Stick Up/Down (ft):	**Gauge Time:**	**Well Diameter (in):**
UP	11:10	2"

Purge Date:	Purge Time:
10/18/2011	44 min
Purge Method:	**Greenstar Personnel:**
Low-Flow	NM

Well Volume

A. Well Depth (ft):	D. Well Volume (ft^3):	Depth/Height of Top of PVC:
27.31	0.33	N/A
B. Depth to Water (ft):	**E. Well Volume (L):**	**Pump Type:**
12.31	9.3	Peristaltic
C. Liquid Depth (ft) (A-B):		**Pump Designation:**
15.00		N/A

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	Conduct. (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temp. (° C)	ORP (mv)
9:41	12.33	0.2	0.10	11.14	1.52	0.2	3.88	10.31	-210
9:45	12.35	0.6	0.10	11.84	2.37	0.4	3.47	10.53	-176
9:49	12.35	1	0.10	12.05	3.61	0.0	3.42	10.73	-156
9:53	12.35	1.4	0.10	12.14	4.17	0.0	3.37	10.90	-145
9:57	12.35	1.7	0.10	12.19	4.68	0.3	3.31	11.15	-133
10:01	12.35	2.1	0.10	12.22	5.08	0.0	3.29	11.40	-124
10:05	12.35	2.4	0.10	12.23	5.26	0.5	3.21	12.23	-118
10:09	12.35	2.7	0.10	12.22	5.32	2.7	3.30	11.76	-113
10:13	12.35	3.1	0.10	12.21	5.15	2.7	3.39	11.94	-108
10:17	12.35	3.5	0.10	12.20	5.02	2.7	3.43	12.13	-104
10:21	12.35	3.9	0.10	12.20	4.99	3.8	3.44	12.21	-101
10:25	12.35	4.3	0.10	12.20	4.95	3.5	3.58	12.36	-99

Total Quantity of Water Removed:	4.3 L	**Sampling Time:**	10:25
Samplers:	NM	**Split Sample With:**	AP-DUP-01
Sampling Date:	10/18/2011	**Sample Type:**	GRAB

COMMENTS AND OBSERVATIONS: AP-DUP-01 collected from MW-2B. Well remarked with paint pen.

GREENSTAR Engineering, P.C.

WELL GAUGING, PURGING AND SAMPLING FORM

Well I.D.: AP-MW3B	**Personnel:** NM	**Client:** Linde, Inc.
Location: Niagara Falls	**Well Condition:** Good; Locked	**Weather:** Cloudy, Windy, 50°
Sounding Method: WLI	**Gauge Date:** 10/16/2011	**Measurement Ref:** TOC
Stick Up/Down (ft): UP	**Gauge Time:**	**Well Diameter (in):** 2"

Purge Date: 10/16/2011	**Purge Time:** 11 min.
Purge Method: Hand-Bail	**Greenstar Personnel:** NM

Well Volume

A. Well Depth (ft): 18.41	**D. Well Volume (ft^3):** 0.18	**Depth/Height of Top of PVC:** N/A
B. Depth to Water (ft): 10.05	**E. Well Volume (L):** 5.2	**Pump Type:** 3' Poly Bailer
C. Liquid Depth (ft) (A-B): 8.36		**Pump Designation:** N/A

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	Conduct. (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temp. (° C)	ORP (mv)
11:28	16.40	5.2	-	8.19	0.647	1.7	4.71	11.39	222
11:32	Dry	7.6	-	-	-	-	-	-	-
15:49	10.33	-	-	7.45	0.479	6.2	5.17	13.67	136

Total Quantity of Water Removed:	7.6 L	**Sampling Time:**	12:10
Samplers:	NM	**Split Sample With:**	N/A
Sampling Date:	10/17/2011	**Sample Type:**	GRAB

COMMENTS AND OBSERVATIONS: Well remarked with paint pen. Bailer replaced.

GREENSTAR Engineering, P.C.

WELL GAUGING, PURGING AND SAMPLING FORM

Well I.D.: AP-MW4B	**Personnel:** NM	**Client:** Linde, Inc.
Location: Niagara Falls	**Well Condition:** Good; Locked	**Weather:** Cloudy, Windy, 50°
Sounding Method: WLI	**Gauge Date:** 10/16/2011	**Measurement Ref:** TOC
Stick Up/Down (ft): UP	**Gauge Time:** 0:00	**Well Diameter (in):** 2"

Purge Date: 10/16/2011	**Purge Time:** 4 min.
Purge Method: Hand Bail	**Greenstar Personnel:** NM

Well Volume

A. Well Depth (ft): 15.08	**D. Well Volume (ft^3):** 0.04	**Depth/Height of Top of PVC:** N/A
B. Depth to Water (ft): 13.34	**E. Well Volume (L):** 1.1	**Pump Type:** 3' Poly Bailer
C. Liquid Depth (ft) (A-B): 1.74		**Pump Designation:** N/A

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	Conduct. (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temp. (° C)	ORP (mv)
11:45	13.34	0	-	6.26	1.01	16.0	3.28	11.62	145
11:49	Dry	1.1	-	-	-	-	-	-	-
15:58	13.67	-	-	7.43	0.92	591.0	4.93	12.49	156

Total Quantity of Water Removed:	1.1 L	**Sampling Time:**	0:00
Samplers:	NM	**Split Sample With:**	N/A
Sampling Date:	10/17/2011	**Sample Type:**	GRAB

COMMENTS AND OBSERVATIONS: Well remarked with paint pen. Bailer replaced.

GREENSTAR Engineering, P.C.

WELL GAUGING, PURGING AND SAMPLING FORM

Well I.D.: AP-MW5B	**Personnel:** NM	**Client:** Linde, Inc.
Location: Niagara Falls	**Well Condition:** Good; Locked	**Weather:** Cloudy, Windy, 50°
Sounding Method: WLI	**Gauge Date:** 10/16/2011	**Measurement Ref:** TOC
Stick Up/Down (ft): UP	**Gauge Time:** 11:55	**Well Diameter (in):** 2"

Purge Date: 10/16/2011	**Purge Time:** 3 min.
Purge Method: Hand Bail	**Greenstar Personnel:** NM

Well Volume

A. Well Depth (ft): 14.22	**D. Well Volume (ft^3):** 0.07	**Depth/Height of Top of PVC:** N/A
B. Depth to Water (ft): 10.87	**E. Well Volume (L):** 2.1	**Pump Type:** 3' Poly Bailer
C. Liquid Depth (ft) (A-B): 3.35		**Pump Designation:** N/A

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	Conduct. (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temp. (° C)	ORP (mv)
12:00	10.87	0	-	6.62	1.20	5.9	4.52	11.86	144
12:03	Dry	2.2	-	-	-	-	-	-	-
16:04	11.72	-	-	7.20	1.16	43.0	3.05	13.12	169

Total Quantity of Water Removed:	2.2	**Sampling Time:**	12:50
Samplers:	NM	**Split Sample With:**	N/A
Sampling Date:	10/17/2011	**Sample Type:**	GRAB

COMMENTS AND OBSERVATIONS: Well remarked with paint pen. Bailer replaced.

GREENSTAR Engineering, P.C.

WELL GAUGING, PURGING AND SAMPLING FORM

Well I.D.: AP-MW6B	**Personnel:** NM	**Client:** Linde, Inc.
Location: Niagara Falls	**Well Condition:** Good; Locked	**Weather:** Cloudy, Windy, 50°
Sounding Method: WLI	**Gauge Date:** 10/16/2011	**Measurement Ref:** TOC
Stick Up/Down (ft): UP	**Gauge Time:** 12:11	**Well Diameter (in):** 2"

Purge Date: 10/18/2011	**Purge Time:** 41 min.
Purge Method: Low-Flow	**Greenstar Personnel:** NM

Well Volume

A. Well Depth (ft): 23.02	**D. Well Volume (ft^3):** 0.41	**Depth/Height of Top of PVC:** N/A
B. Depth to Water (ft): 4.45	**E. Well Volume (L):** 11.5	**Pump Type:** Peristaltic
C. Liquid Depth (ft) (A-B): 18.57		**Pump Designation:** N/A

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	Conduct. (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temp. (° C)	ORP (mv)
8:22	5.42	0.2	0.10	5.97	1.31	0.0	1.59	10.60	136
8:25	5.71	0.5	0.10	6.26	1.29	0.0	1.17	10.78	94
8:29	5.91	0.9	0.10	6.40	1.28	0.0	1.00	10.75	70
8:33	6.16	1.3	0.10	6.54	1.27	0.0	0.89	10.86	48
8:37	6.50	1.7	0.10	6.64	1.27	0.0	0.76	11.04	23
8:41	6.71	2.1	0.10	6.67	1.26	0.0	0.67	11.23	14
8:45	6.89	2.5	0.10	6.71	1.26	0.0	0.66	11.36	3
8:49	7.27	2.9	0.10	6.74	1.26	0.0	0.60	11.47	-10
8:53	7.55	3.3	0.10	6.77	1.26	0.0	0.60	11.50	-22
8:57	7.81	3.7	0.10	6.79	1.26	0.0	0.56	11.53	-27
9:01	7.99	4.1	0.10	6.80	1.26	0.0	0.54	11.55	-32

Total Quantity of Water Removed:	4.1 L	**Sampling Time:**	9:10
Samplers:	NM	**Split Sample With:**	N/A
Sampling Date:	10/18/2011	**Sample Type:**	GRAB

COMMENTS AND OBSERVATIONS: Well remarked with paint pen. Well produces little water, significant drawdown.

GREENSTAR Engineering, P.C.

WELL GAUGING, PURGING AND SAMPLING FORM

Well I.D.: AP-MW7B	**Personnel:** NM	**Client:** Linde, Inc.
Location: Niagara Falls	**Well Condition:** Good; Locked	**Weather:** Cloudy, Windy, 50°
Sounding Method: WLI	**Gauge Date:** 10/16/2011	**Measurement Ref:** TOC
Stick Up/Down (ft): UP	**Gauge Time:** 12:19	**Well Diameter (in):** 2"

Purge Date: 10/17/2011	**Purge Time:** 30 min.
Purge Method: Low-Flow	**Greenstar Personnel:** NM

Well Volume

A. Well Depth (ft): 21.79	**D. Well Volume (ft^3):** 0.23	**Depth/Height of Top of PVC:** N/A
B. Depth to Water (ft): 11.19	**E. Well Volume (L):** 6.5	**Pump Type:** Peristaltic
C. Liquid Depth (ft) (A-B): 10.60		**Pump Designation:** N/A

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	Conduct. (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temp. (° C)	ORP (mv)
12:22	12.20	0.3	0.20	7.57	0.419	0.3	1.50	13.02	56
12:26	13.00	0.9	0.15	7.68	0.413	0.0	0.82	13.36	9
12:30	13.41	1.3	0.10	7.75	0.407	0.0	0.65	13.89	-32
12:34	13.83	1.7	0.10	7.84	0.406	0.0	0.60	14.38	-60
12:36	14.05	2.1	0.10	7.86	0.404	0.0	0.57	14.48	-67
12:40	14.26	2.5	0.10	7.87	0.402	0.0	0.52	14.56	-81
12:44	14.65	2.9	0.10	7.98	0.399	0.0	0.52	14.54	-85
12:48	15.06	3.3	0.10	7.99	0.398	0.0	0.48	14.61	-90
12:52	15.47	3.7	0.10	7.99	0.397	0.0	0.49	14.56	-95

Total Quantity of Water Removed:	3.7 L	**Sampling Time:**	13:05
Samplers:	NM	**Split Sample With:**	N/A
Sampling Date:	10/18/2011	**Sample Type:**	GRAB

COMMENTS AND OBSERVATIONS: Well remarked with paint pen.

GREENSTAR Engineering, P.C.

WELL GAUGING, PURGING AND SAMPLING FORM

Well I.D.: AP-MW8B	**Personnel:** NM	**Client:** Linde, Inc.
Location: Niagara Falls	**Well Condition:** Good; Locked	**Weather:** Cloudy, Windy, 50°
Sounding Method: WLI	**Gauge Date:** 10/16/2011	**Measurement Ref:** TOC
Stick Up/Down (ft): UP	**Gauge Time:** 12:28	**Well Diameter (in):** 2"

Purge Date: 10/16/2011	**Purge Time:** 9 min.
Purge Method: Hand Bail	**Greenstar Personnel:** NM

Well Volume

A. Well Depth (ft): 15.51	**D. Well Volume (ft^3):** 0.19	**Depth/Height of Top of PVC:** N/A
B. Depth to Water (ft): 6.69	**E. Well Volume (L):** 5.4	**Pump Type:** 3' Poly Bailer
C. Liquid Depth (ft) (A-B): 8.82		**Pump Designation:** N/A

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	Conduct. (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temp. (° C)	ORP (mv)
12:34	15.45	5.3	-	6.88	1.40	>800	4.11	12.50	143
12:37	Dry	6	-	-	-	-	-	-	-
16:10	6.65	-	-	7.19	1.36	20.4	5.02	12.74	172

Total Quantity of Water Removed:	6 L	**Sampling Time:**	13:10
Samplers:	NM	**Split Sample With:**	N/A
Sampling Date:	10/17/2011	**Sample Type:**	GRAB

COMMENTS AND OBSERVATIONS: Well remarked with paint pen. Bailer replaced.

Sample ID	Date	Time	Sample Location	Notes
AP-DUP-01	10/18/2011	N/A	AP-MW-2B	
AP-RB-01	10/18/2011	14:00	Rinse Blank	Poland Springs H2O off tip of water level meter
AP-SWB-01	10/18/2011	14:10	Source Water Blank	Poland Spring Water
AP-SS-01	10/17/2011	14:30	At collection pool b4 leaving property in SW corner	
AP-SS-02	10/17/2011	14:50	80' N of MW-6 towards MW-5	
AP-SS-03	10/17/2011	15:10	BTW shed and MW-7; drainage swale uphill	
AP-EWE-01	N/A	N/A	At collection pool b4 leaving property in SW corner	Same as AP-SS-01

Attachment C

Chain-of-Custody Records

TestAmerica Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica

Client Information	Sampler	Lab PM: Gray-Erdmann, Peggy	Carrier Tracking No(s):	COC No: 480-13944-2691.1
Client Contact: Charles E. McLeod Jr.	Phone:	E-Mail: peggy.gray-erdmann@testamericainc.com		Page: Page 1 of 2
Company: Greenstar Environmental Solutions, LLC				Job #:
Address: 6 Gellatly Drive	Due Date Requested:			
City: Wappingers Falls	TAT Requested (days):			
State, Zip: NY, 12590				
Phone: 845-223-9944(Tel)	PO #: 150C265-1005-01			
Email: cmcleod@greenstarsolutions.com	WO #:			
Project Name: Greenstar Environmental Solutions, LLC	Project #: 48002405			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	60108 - Silicon	300.0_28D - Sulfate	350.1 - Ammonia as N	200.7 - (MOD) Local Method	420.4 - Phenolics, Total Recoverable	Field Sampling - (MOD) pH,Cond,Temp,DO,ORP,OWEN	7196A - Chromium, Hexavalent	350.1, 351.2, 410.4	200.7, 200.8	624_5ml - 624	5210B - Biochemical Oxygen Demand	2540C_Calcd - Total Dissolved Solids	2540D - Total Suspended Solids	Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	D	N	S	D	S	N	N	S	D	A	N	N	N	X	
SS-02	6/16	16:10	G	Water			1	1	1	1	1		1								
SS-03	6/16	16:20	G	Water			1	1	1	1	1		1								
SS-01	6/16	16:00	G	Water			1	1			1		1	1	1	3	1	1	1		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	6/16 17:50			6/16/11 17:50	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 5.6

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica

Client Information	Sampler:	Lab PM: Gray-Erdmann, Peggy	Carrier Tracking No(s):	COC No: 480-13944-2891.2
Client Contact: Charles E. McLeod, Jr	Phone:	E-Mail: peggy.gray-erdmann@testamericainc.com		Page: Page 2 of 2
Company: Greenstar Environmental Solutions, LLC		Analysis Requested		Job #:
Address: 6 Gellatly Drive	Due Date Requested:			Preservation Codes:
City: Wappingers Falls	TAT Requested (days):			A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify); Other:
State, Zip: NY, 12590	PO #: 150C26S-1005-01			
Phone: 845-223-9944(Tel)	WO #:			
Email: cmcleod@greenstarsolutions.com	Project #: 48002405			
Project Name: Greenstar Environmental Solutions, LLC	SSOW#:			
Site: New York				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500 O, G - Oxygen, Dissolved	353.2, 353.2_Nitrite, 9040B, Nitrate, Calc	Total Number of containers	Special Instructions/Note:
Preservation Code:						X	N	N	X	
SS-02				Water						
SS-03				Water						
SS-01	6/16	16:00	G	Water			1	2		

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	6/16 17:50		[signature]	6/16/11 1750	
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 5.1 6 0C

[redacted]

Chain of Custody Record

TAL-4124 (1007)

Temperature on Receipt ____

Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client: Greenstar	Project Manager: Chip Mcleod	Date: 10/17/11	Chain of Custody Number: 209543
Address: 6 Gellatly Drive	Telephone Number (Area Code)/Fax Number: (845)-223-9944 / (845-223-9455	Lab Number:	Page 1 of 1
City: Wappingers Falls; State: NY; Zip Code: 12590	Site Contact: Chip Mcleod; Lab Contact: Peggy Gray		
Project Name and Location (State): 2011 Semi-Annual GW Sampling, Arco Landfill, NY	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.:			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Hex Chrome 7196A	T. phenols 420.4	Ammonia 350.1	Total Metals 200.7	Total Silica 200.7	Sulf/Cl 300.0_28D	351.2, 410.4, 350.1	T.S.Solids 2540D	TDS-2540C	DO-SM4500-O-G	BOD-5210B	VOC-624	[illegible]	[illegible]	Special Instructions/ Conditions of Receipt
AP-MW-3B	10/17/11	1210		X			2	2	2				X	X	X	X	X	X									
AP-MW-4B	10/17/11	1230		X			2	2	2				X	X	X	X	X	X									
AP-MW-5B	10/17/11	1250		X			2	2	2				X	X	X	X	X	X									
AP-MW-8B	10/17/11	1310		X			2	2	2				X	X	X	X	X	X									
AP-SS-03	10/17/11	1430		X			2	2	2				X	X	X	X	X	X									
AP-SS-02	10/17/11	1450		X			2	2	2				X	X	X	X	X	X									
AP-SS-01/EWE-01	10/17/11	1510		X			6	2	2	3			X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Trip Blank	N/A	N/A		X				1																X			

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other Standard

QC Requirements (Specify)

1. Relinquished By: [signature]	Date: 10/17/11	Time: 1705	1. Received By: [signature]	Date: 10/17/11	Time: 1705
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

104.0

Page 47 of 54

11/7/2011

[redacted]

Chain of Custody Record

Temperature on Receipt ______

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Greenstar

Project Manager: Chip Mcleod

Date: 10/18/11

Chain of Custody Number: 209542

Address: 6 Gellatly Drive

Telephone Number (Area Code)/Fax Number: (845)-223-4444 / (845)-223-4455

Lab Number:

Page 1 of 1

City: Wappingers Falls | State: NY | Zip Code: 12590

Site Contact: Chip Mcleod

Lab Contact: Peggy Gray

Project Name and Location (State): 2011 Semi-Annual GW Sampling, Aircoland All, NY

Carrier/Waybill Number:

Contract/Purchase Order/Quote No:

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	HexChrome 7196A	Phenols 420.4	Ammonia 350.1	Tot Metals 200.7	Total Silica 6008	Sulfate 300.0 28D	Special Instructions/ Conditions of Receipt
AP-MW-6B	10/18/11	0910		X			2	2	2				X	X	X	X	X	X	
AP-MW-2B	10/18/11	1025		X			2	2	2				X	X	X	X	X	X	
AP-MW-1B	10/18/11	1155		X			2	2	2				X	X	X	X	X	X	
AP-MW-7B	10/18/11	1305		X			2	2	2				X	X	X	X	X	X	
AP-SUB-01	10/18/11	1400		X			2	2	2				X	X	X	X	X	X	
AP-RB-01	10/18/11	1410		X			2	2	2				X	X	X	X	X	X	
AP-GWDUP-01	10/18/11	N/A		X			2	2	2				X	X	X	X	X	X	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other: Standard

QC Requirements (Specify)

1. Relinquished By: [signature] Date: 10/18/11 Time: 1510

1. Received By: [signature] Date: 10/18/11 Time: 1510

2. Relinquished By: Date: Time:

2. Received By: Date: Time:

3. Relinquished By: Date: Time:

3. Received By: Date: Time:

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

2035

TestAmerica Burlington

INTERNAL CHAIN OF CUSTODY LOG (ICOC)

Project Information:

Log In #: 480-11333	**Method:** 6010B
Client: TA Buffalo	**LAB IDs:** 480-11355-1 TO 480-1135-2

Samples associated with this log-in were placed into storage on 10/20/11 (Date) 1020 (Time[2]) **By:** *Sample Custodian Signature*

Storage Location: Walk in Rack Shelf 1 *Specify storage location (refrigerator, freezer ID or lab location) for original sample containers*

Storage Condition: ☒ Refrigeration ☐ Frozen ☐ Ambient

Internal Transfer Information

Sample Type		Lab ID(s)	Transfer	Transfer	Purpose of Transfer			Relinquished	Received	Storage Location
Original	Prepared[1]		Date	Time[2]	Prep	Analysis	Storage	By:	By:	Prepared Sample[1]
X		All	10/21/11	8:15	X					
X		"	"	8:45			X			
	X	"	"	14:30			X			
	X	All	10/21/11	22:00		X		BL	BL	
	X	"	"	22:05			X	BL	BL	

[1] Extract, digestate, or any other prepared sample that is no longer in original sample container

[2] Military Time

BRFSR012:07.09.10:2
TestAmerica

TestAmerica Burlington

INTERNAL CHAIN OF CUSTODY LOG (ICOC)

Project Information:

Log In #: 480-11387 **Method:** 6010B

Client: TA Buffalo **LAB IDs:** 480-11387-1 to 480-11387-2

Samples associated with this log-in were placed into storage on 10/20/11 (Date) 1020 (Time[2]) by: [signature] *Sample Custodian Signature*

Storage Location: Walk-in 1 *Specify storage location (refrigerator, freezer ID or lab location) for original sample containers*

Storage Condition: ☒ Refrigeration ☐ Frozen ☐ Ambient

Internal Transfer Information

Sample Type		Lab ID(s)	Transfer Date	Transfer Time[2]	Purpose of Transfer			Relinquished By:	Received By:	Storage Location Prepared Sample[1]
Original	Prepared[1]				Prep	Analysis	Storage			
X		All	10/21/11	8:25	X			[signature]	[signature]	
X		↓	↓	8:45			X	[signature]	[signature]	
	X	↓	↓	14:30			X	[signature]	[signature]	
	X	All	10/21/11	22:00		X		BL	BL	
	X	↓	↓	22:05			X	BL	BL	

[1] Extract, digestate, or any other prepared sample that is no longer in original sample container

[2] Military Time

BRFSR012:07.09.10:2
TestAmerica

11/7/2011

Chain of Custody Record

TAL-4124 (1007)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt ____

Drinking Water? Yes ☐ No ☑

Client	Greenstar Environmental
Project Manager	
Date	2-12-11
Chain of Custody Number	193209
Address	6 Gellatly Dr.
Telephone Number (Area Code)/Fax Number	(845) 223-9944
Lab Number	
Page ___ of ___	
City	Wappingers Falls
State	NY
Zip Code	12590
Site Contact	Chip McLeod
Lab Contact	
Project Name and Location (State)	Airco Parcel Niagara Falls NY
Carrier/Waybill Number	
Contract/Purchase Order/Quote No.	

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Matrix: Aqueous	Matrix: Sed.	Matrix: Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	BOD	L.A.H.: Nitrite	Nitrate: Hex Cr	T-phenols	Ammonia: COD: TKN	T-Metals	DO	TDS	TSS	624 VOAs	Special Instructions/ Conditions of Receipt
AP-EWE-01	2-12-11	13:00		12									1	2	1	1	1	1	1	1	1	3	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other ____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By [signature]	2-12-11	14:00	1. Received By [signature]	2/12/11	1400
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: 2.4 °C

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

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02/28/2011

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler:	Lab PM: Gray-Erdmann, Peggy	Carrier Tracking No(s):
Client Contact: Charles E. McLeod, Jr.	Phone:	E-Mail: peggy.gray-erdmann@testamericainc.com	COC No: 480-16405-3888.1
Company: Greenstar Environmental Solutions, LLC			Page: Page 1 of 1
Address: 6 Gellatly Drive	Due Date Requested:		Job #:
City: Wappingers Falls	TAT Requested (days):		
State, Zip: NY, 12590			
Phone: 845-223-9944(Tel)	PO #: 150C265-1005-01		
Email: cmcleod@greenstarsolutions.com	WO #:		
Project Name: Greenstar Environmental Solutions, LLC	Project #: 48002405		
Site: New York	SSOW#:		

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	[redacted]	300.1, 351.2, 410.4	200.7, 200.8	420.4 - Phenolics, Total Recoverable	624 Bml - (MOD) Local Method	5210B - Biochemical Oxygen Demand	2540C_Calcd - Total Dissolved Solids	2540D - Total Suspended Solids	SM4500_O_G - Oxygen, Dissolved	FieldSampling - Flow	353.2, 353.2 Nitrite, 9040B, Nitrate_Calc	7196A - Chromium, hexavalent			Total Number of containers	Special Instructions/Note:
				Preservation Code:	X	X	S	D	S	A	N	N	N	N	N	N	N			X	
AP_EWE-01	9-10-11	09:20		Water			1	1	1	3	1	1	1	1		2	1				

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA
M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify)
Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ______ Months

Deliverable Requested: I, II, III, IV, Other (specify)
Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:	
Relinquished by: [signature]	Date/Time: 9/10/11 10:07	Company:	Received by: [signature]	Date/Time: 9/10/11 10:07	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 19.2 N ice on bottom

Page 21 of 22

09/26/2011

Attachment D

Laboratory Analytical Results for Groundwater and Surface Water Sampling June and October 2011

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-6216-1
Client Project/Site: Greenstar Environmental Solutions, LLC
Sampling Event: Semi-Annual groundwater Monitoring 4,10

For:
Greenstar Environmental Solutions, LLC
6 Gellatly Drive
Wappingers Falls, New York 12590

Attn: Charles E. McLeod, Jr.

Jennifer M. Byrnes

Authorized for release by:
06/29/2011 01:30:19 PM
Jennifer Byrnes
Project Administrator
jennifer.byrnes@testamericainc.com

Designee for

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Table of Contents

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-6216-1

Job ID: 480-6216-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-6216-1

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

HPLC
No analytical or quality issues were noted.

Metals
Method(s) 200.7 Rev 4.4: The Method Blank for batch 480-20529 contained total manganese and zinc above the method detection limits. These target analyte concentrations were less than the reporting limits (RLs); therefore, re-extraction and/or re-analysis of samples SS-01 (480-6216-1), SS-02 (480-6216-2), SS-03 (480-6216-3) was not performed.

No other analytical or quality issues were noted.

General Chemistry
Method(s) SM 5210B: For batch 20546 the dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L.MHOL1 (480-6180-1)

Method(s) 7196A: The matrix spike (MS) recoveries for batch 20382 was outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 9040B: Sample 6216-1 was analyzed outside of holding time for pH. This method has a short holding time (<48 hours), and this sample was assigned to this method with insufficient holding time remaining for analysis.

No other analytical or quality issues were noted.

Detection Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-6216-1

Client Sample ID: SS-01 — Lab Sample ID: 480-6216-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.0016	J	0.0040	0.00087	mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.036	J	0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1.2		0.20	0.043	mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.0031	B	0.0030	0.00030	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	59.3		1.0	0.32	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.21		0.0020	0.00050	mg/L	1		200.7 Rev 4.4	Total/NA
Nickel	0.0019	J	0.010	0.0013	mg/L	1		200.7 Rev 4.4	Total/NA
Selenium	1.4		1.0	0.44	ug/L	1		200.8	Total/NA
Thallium	0.023	J	0.20	0.0080	ug/L	1		200.8	Total/NA
Silicon	2100		100	4.7	ug/L	1		6010B	Total/NA
Sulfate	7.3		2.0	0.35	mg/L	1		300.0	Total/NA
Total Kjeldahl Nitrogen	0.28		0.20	0.15	mg/L as N	1		351.2	Total/NA
Nitrate as N	0.53		0.050	0.011	mg/L	1		353.2	Total/NA
Total Dissolved Solids	622		10.0	4.0	mg/L	1		SM 2540C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	7.79	H	0.100	0.100	SU	1		9040B	Total/NA
Oxygen, Dissolved	7.4		0.050	0.050	mg/L	1		SM 4500 O G	Total/NA

Client Sample ID: SS-02 — Lab Sample ID: 480-6216-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.0019	J	0.0040	0.00087	mg/L	1		200.7 Rev 4.4	Total/NA
Iron	2.1		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Lead	0.011		0.0050	0.0030	mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	8.4		0.20	0.043	mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.20	B	0.0030	0.00030	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	58.0		1.0	0.32	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.016	B	0.010	0.0017	mg/L	1		200.7 Rev 4.4	Total/NA
Silicon	4700		100	4.7	ug/L	1		6010B	Total/NA
Sulfate	0.47	J	2.0	0.35	mg/L	1		300.0	Total/NA
Ammonia as N	0.095		0.020	0.0090	mg/L as N	1		350.1	Total/NA

Client Sample ID: SS-03 — Lab Sample ID: 480-6216-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.0013	J	0.0040	0.00087	mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.16		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1.2		0.20	0.043	mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.0089	B	0.0030	0.00030	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	60.1		1.0	0.32	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.0017	J B	0.010	0.0017	mg/L	1		200.7 Rev 4.4	Total/NA
Silicon	2330		100	4.7	ug/L	1		6010B	Total/NA
Sulfate	7.2		2.0	0.35	mg/L	1		300.0	Total/NA

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-6216-1

Client Sample ID: SS-01
Date Collected: 06/16/11 16:00
Date Received: 06/16/11 17:50

Lab Sample ID: 480-6216-1
Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.59	ug/L			06/17/11 20:40	1
Trichloroethene	ND		5.0	0.60	ug/L			06/17/11 20:40	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*72 - 130*		*06/17/11 20:40*	*1*
4-Bromofluorobenzene (Surr)	*97*		*69 - 121*		*06/17/11 20:40*	*1*
Toluene-d8 (Surr)	*101*		*70 - 123*		*06/17/11 20:40*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	0.00033	mg/L		06/20/11 09:40	06/21/11 21:15	1
Chromium	**0.0016**	**J**	0.0040	0.00087	mg/L		06/20/11 09:40	06/21/11 21:15	1
Iron	**0.036**	**J**	0.050	0.019	mg/L		06/20/11 09:40	06/21/11 21:15	1
Lead	ND		0.0050	0.0030	mg/L		06/20/11 09:40	06/21/11 21:15	1
Magnesium	**1.2**		0.20	0.043	mg/L		06/20/11 09:40	06/21/11 21:15	1
Manganese	**0.0031**	**B**	0.0030	0.00030	mg/L		06/20/11 09:40	06/21/11 21:15	1
Selenium	ND		0.015	0.0087	mg/L		06/20/11 09:40	06/21/11 21:15	1
Sodium	**59.3**		1.0	0.32	mg/L		06/20/11 09:40	06/21/11 21:15	1
Thallium	ND		0.020	0.010	mg/L		06/20/11 09:40	06/21/11 21:15	1
Zinc	ND		0.010	0.0017	mg/L		06/20/11 09:40	06/21/11 21:15	1
Barium	**0.21**		0.0020	0.00050	mg/L		06/20/11 09:40	06/21/11 21:15	1
Nickel	**0.0019**	**J**	0.010	0.0013	mg/L		06/20/11 09:40	06/21/11 21:15	1
Copper	ND		0.010	0.0015	mg/L		06/20/11 09:40	06/21/11 21:15	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**1.4**		1.0	0.44	ug/L		06/20/11 11:40	06/21/11 23:32	1
Thallium	**0.023**	**J**	0.20	0.0080	ug/L		06/20/11 11:40	06/21/11 23:32	1

Method: 6010B - Metals (Custom List)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**2100**		100	4.7	ug/L		06/22/11 08:59	06/23/11 14:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**7.3**		2.0	0.35	mg/L			06/23/11 16:17	1
Ammonia as N	ND		0.020	0.0090	mg/L as N			06/18/11 12:27	1
Total Kjeldahl Nitrogen	**0.28**		0.20	0.15	mg/L as N		06/23/11 10:12	06/25/11 16:08	1
Nitrate as N	**0.53**		0.050	0.011	mg/L			06/17/11 10:49	1
Nitrite as N	ND		0.050	0.020	mg/L			06/17/11 11:17	1
Chemical Oxygen Demand	ND		10.0	5.0	mg/L			06/28/11 13:25	1
Phenolics, Total Recoverable	ND		10.0	5.0	ug/L		06/22/11 19:30	06/23/11 09:02	1
Chromium, hexavalent	ND		10.0	5.0	ug/L			06/17/11 00:27	1
Total Dissolved Solids	**622**		10.0	4.0	mg/L			06/21/11 15:43	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			06/17/11 17:46	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.79**	**H**	0.100	0.100	SU			06/17/11 19:17	1
Total Suspended Solids	ND		4.0	4.0	mg/L			06/17/11 09:00	1
Oxygen, Dissolved	**7.4**		0.050	0.050	mg/L			06/16/11 22:55	1

Client Sample ID: SS-02

Lab Sample ID: 480-6216-2

Date Collected: 06/16/11 16:10

Matrix: Water

Date Received: 06/16/11 17:50

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	0.00033	mg/L		06/20/11 09:40	06/21/11 21:17	1
Chromium	**0.0019**	**J**	0.0040	0.00087	mg/L		06/20/11 09:40	06/21/11 21:17	1
Iron	**2.1**		0.050	0.019	mg/L		06/20/11 09:40	06/21/11 21:17	1
Lead	**0.011**		0.0050	0.0030	mg/L		06/20/11 09:40	06/21/11 21:17	1
Magnesium	**8.4**		0.20	0.043	mg/L		06/20/11 09:40	06/21/11 21:17	1
Manganese	**0.20**	**B**	0.0030	0.00030	mg/L		06/20/11 09:40	06/21/11 21:17	1
Selenium	ND		0.015	0.0087	mg/L		06/20/11 09:40	06/21/11 21:17	1
Sodium	**58.0**		1.0	0.32	mg/L		06/20/11 09:40	06/21/11 21:17	1
Thallium	ND		0.020	0.010	mg/L		06/20/11 09:40	06/21/11 21:17	1
Zinc	**0.016**	**B**	0.010	0.0017	mg/L		06/20/11 09:40	06/21/11 21:17	1

Method: 6010B - Metals (Custom List)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**4700**		100	4.7	ug/L		06/22/11 08:59	06/23/11 14:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**0.47**	**J**	2.0	0.35	mg/L			06/23/11 16:27	1
Ammonia as N	**0.095**		0.020	0.0090	mg/L as N			06/18/11 12:28	1
Phenolics, Total Recoverable	ND		10.0	5.0	ug/L		06/22/11 19:30	06/23/11 09:02	1
Chromium, hexavalent	ND		10.0	5.0	ug/L			06/17/11 00:30	1

Client Sample ID: SS-03

Lab Sample ID: 480-6216-3

Date Collected: 06/16/11 16:20

Matrix: Water

Date Received: 06/16/11 17:50

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	0.00033	mg/L		06/20/11 09:40	06/21/11 21:19	1
Chromium	**0.0013**	**J**	0.0040	0.00087	mg/L		06/20/11 09:40	06/21/11 21:19	1
Iron	**0.16**		0.050	0.019	mg/L		06/20/11 09:40	06/21/11 21:19	1
Lead	ND		0.0050	0.0030	mg/L		06/20/11 09:40	06/21/11 21:19	1
Magnesium	**1.2**		0.20	0.043	mg/L		06/20/11 09:40	06/21/11 21:19	1
Manganese	**0.0089**	**B**	0.0030	0.00030	mg/L		06/20/11 09:40	06/21/11 21:19	1
Selenium	ND		0.015	0.0087	mg/L		06/20/11 09:40	06/21/11 21:19	1
Sodium	**60.1**		1.0	0.32	mg/L		06/20/11 09:40	06/21/11 21:19	1
Thallium	ND		0.020	0.010	mg/L		06/20/11 09:40	06/21/11 21:19	1
Zinc	**0.0017**	**J B**	0.010	0.0017	mg/L		06/20/11 09:40	06/21/11 21:19	1

Method: 6010B - Metals (Custom List)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**2330**		100	4.7	ug/L		06/22/11 08:59	06/23/11 15:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**7.2**		2.0	0.35	mg/L			06/23/11 16:37	1
Ammonia as N	ND		0.020	0.0090	mg/L as N			06/18/11 12:35	1
Phenolics, Total Recoverable	ND		10.0	5.0	ug/L		06/22/11 23:14	06/23/11 09:02	1
Chromium, hexavalent	ND		10.0	5.0	ug/L			06/17/11 00:32	1

Surrogate Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-6216-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(72-130)	(69-121)	(70-123)
480-6216-1	SS-01	103	97	101
LCS 480-20476/4	Lab Control Sample	109	101	99
MB 480-20476/6	Method Blank	111	99	97

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-20476/6
Matrix: Water
Analysis Batch: 20476

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.59	ug/L			06/17/11 13:44	1
Trichloroethene	ND		5.0	0.60	ug/L			06/17/11 13:44	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*72 - 130*		*06/17/11 13:44*	*1*
4-Bromofluorobenzene (Surr)	*99*		*69 - 121*		*06/17/11 13:44*	*1*
Toluene-d8 (Surr)	*97*		*70 - 123*		*06/17/11 13:44*	*1*

Lab Sample ID: LCS 480-20476/4
Matrix: Water
Analysis Batch: 20476

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
1,1-Dichloroethane	20.0	20.2		ug/L		101	73 - 128
Trichloroethene	20.0	19.2		ug/L		96	67 - 134

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*72 - 130*
4-Bromofluorobenzene (Surr)	*101*		*69 - 121*
Toluene-d8 (Surr)	*99*		*70 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-20529/1-A
Matrix: Water
Analysis Batch: 21065

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20529

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	0.00033	mg/L		06/20/11 09:40	06/21/11 20:58	1
Chromium	ND		0.0040	0.00087	mg/L		06/20/11 09:40	06/21/11 20:58	1
Iron	ND		0.050	0.019	mg/L		06/20/11 09:40	06/21/11 20:58	1
Lead	ND		0.0050	0.0030	mg/L		06/20/11 09:40	06/21/11 20:58	1
Magnesium	ND		0.20	0.043	mg/L		06/20/11 09:40	06/21/11 20:58	1
Manganese	0.000660	J	0.0030	0.00030	mg/L		06/20/11 09:40	06/21/11 20:58	1
Selenium	ND		0.015	0.0087	mg/L		06/20/11 09:40	06/21/11 20:58	1
Sodium	ND		1.0	0.32	mg/L		06/20/11 09:40	06/21/11 20:58	1
Thallium	ND		0.020	0.010	mg/L		06/20/11 09:40	06/21/11 20:58	1
Zinc	0.00189	J	0.010	0.0017	mg/L		06/20/11 09:40	06/21/11 20:58	1
Barium	ND		0.0020	0.00050	mg/L		06/20/11 09:40	06/21/11 20:58	1
Nickel	ND		0.010	0.0013	mg/L		06/20/11 09:40	06/21/11 20:58	1
Copper	ND		0.010	0.0015	mg/L		06/20/11 09:40	06/21/11 20:58	1

Lab Sample ID: LCS 480-20529/2-A
Matrix: Water
Analysis Batch: 21065

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20529

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Cadmium	0.200	0.202		mg/L		101	85 - 115
Chromium	0.200	0.197		mg/L		98	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-20529/2-A
Matrix: Water
Analysis Batch: 21065

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20529

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Iron	10.0	9.71		mg/L		97	85 - 115
Lead	0.200	0.196		mg/L		98	85 - 115
Magnesium	10.0	9.99		mg/L		100	85 - 115
Manganese	0.200	0.201		mg/L		101	85 - 115
Selenium	0.200	0.207		mg/L		104	85 - 115
Sodium	10.0	10.25		mg/L		103	85 - 115
Thallium	0.200	0.196		mg/L		98	85 - 115
Zinc	0.200	0.193		mg/L		97	85 - 115
Barium	0.200	0.204		mg/L		102	85 - 115
Nickel	0.200	0.195		mg/L		97	85 - 115
Copper	0.200	0.205		mg/L		102	85 - 115

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 480-20686/1-A
Matrix: Water
Analysis Batch: 21076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20686

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		1.0	0.44	ug/L		06/20/11 11:40	06/21/11 23:21	1
Thallium	ND		0.20	0.0080	ug/L		06/20/11 11:40	06/21/11 23:21	1

Lab Sample ID: LCS 480-20686/2-A
Matrix: Water
Analysis Batch: 21076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20686

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Selenium	20.0	20.41		ug/L		102	85 - 115
Thallium	20.0	20.27		ug/L		101	85 - 115

Method: 6010B - Metals (Custom List)

Lab Sample ID: MB 200-19987/1-A
Matrix: Water
Analysis Batch: 20138

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19987

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	ND		100	4.7	ug/L		06/22/11 08:59	06/23/11 14:42	1

Lab Sample ID: LCS 200-19987/2-A
Matrix: Water
Analysis Batch: 20138

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19987

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Silicon	1000	1011		ug/L		101	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-21221/28
Matrix: Water
Analysis Batch: 21221

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		2.0	0.35	mg/L			06/23/11 15:47	1

Lab Sample ID: LCS 480-21221/27
Matrix: Water
Analysis Batch: 21221

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Sulfate			20.0	19.40		mg/L		97	90 - 110		

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-20616/147
Matrix: Water
Analysis Batch: 20616

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.020	0.0090	mg/L as N			06/18/11 12:09	1

Lab Sample ID: MB 480-20616/171
Matrix: Water
Analysis Batch: 20616

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.020	0.0090	mg/L as N			06/18/11 12:33	1

Lab Sample ID: LCS 480-20616/148
Matrix: Water
Analysis Batch: 20616

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Ammonia as N			1.00	1.08		mg/L as N		108	90 - 110		

Lab Sample ID: LCS 480-20616/172
Matrix: Water
Analysis Batch: 20616

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Ammonia as N			1.00	1.07		mg/L as N		107	90 - 110		

Lab Sample ID: 480-6216-2 MS
Matrix: Water
Analysis Batch: 20616

Client Sample ID: SS-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec	% Rec. Limits		
Ammonia as N	0.095		0.200	0.273		mg/L as N		89	54 - 150		

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 480-6216-2 DU
Matrix: Water
Analysis Batch: 20616

Client Sample ID: SS-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Ammonia as N	0.095			0.0925		mg/L as N				3	20

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: LCS 480-21303/2-A
Matrix: Water
Analysis Batch: 21593

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21303

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Total Kjeldahl Nitrogen			2.50	2.56		mg/L as N		102	90 - 110		

Method: 353.2 - Nitrogen, Nitrite

Lab Sample ID: MB 480-20479/3
Matrix: Water
Analysis Batch: 20479

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.050	0.020	mg/L			06/17/11 11:10	1

Lab Sample ID: LCS 480-20479/4
Matrix: Water
Analysis Batch: 20479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Nitrite as N			1.50	1.53		mg/L		102	90 - 110		

Method: 410.4 - COD

Lab Sample ID: MB 480-21850/27
Matrix: Water
Analysis Batch: 21850

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0	5.0	mg/L			06/28/11 13:25	1

Lab Sample ID: LCS 480-21850/28
Matrix: Water
Analysis Batch: 21850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Chemical Oxygen Demand			25.0	25.48		mg/L		102	90 - 110		

Method: 420.4 - Phenolics, Total Recoverable

Lab Sample ID: MB 480-21162/2-A
Matrix: Water
Analysis Batch: 21252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21162

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		10.0	5.0	ug/L		06/22/11 19:30	06/23/11 08:12	1

Lab Sample ID: LCS 480-21162/1-A
Matrix: Water
Analysis Batch: 21252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21162

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Phenolics, Total Recoverable	100	100.3		ug/L		100	90 - 110

Lab Sample ID: MB 480-21179/1-A
Matrix: Water
Analysis Batch: 21252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21179

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		10.0	5.0	ug/L		06/22/11 21:30	06/23/11 08:12	1

Lab Sample ID: LCS 480-21179/2-A
Matrix: Water
Analysis Batch: 21252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21179

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Phenolics, Total Recoverable	100	106.1		ug/L		106	90 - 110

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 480-20382/3
Matrix: Water
Analysis Batch: 20382

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		10.0	5.0	ug/L			06/17/11 00:23	1

Lab Sample ID: LCS 480-20382/4
Matrix: Water
Analysis Batch: 20382

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Chromium, hexavalent	50.0	52.07		ug/L		104	85 - 115

Lab Sample ID: 480-6216-3 MS
Matrix: Water
Analysis Batch: 20382

Client Sample ID: SS-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec	% Rec. Limits
Chromium, hexavalent	ND		50.0	31.71	F	ug/L		63	85 - 115

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: 480-6216-1 DU
Matrix: Water
Analysis Batch: 20382

Client Sample ID: SS-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chromium, hexavalent	ND			ND		ug/L				NC	15

Method: 9040B - pH

Lab Sample ID: LCS 480-20559/1
Matrix: Water
Analysis Batch: 20559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
pH			7.00	7.000		SU		100	99 - 101		

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 480-20805/1
Matrix: Water
Analysis Batch: 20805

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10.0	4.0	mg/L			06/21/11 02:10	1

Lab Sample ID: LCS 480-20805/2
Matrix: Water
Analysis Batch: 20805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Total Dissolved Solids			541	537.0		mg/L		99	85 - 115		

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-20434/1
Matrix: Water
Analysis Batch: 20434

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/17/11 09:00	1

Lab Sample ID: LCS 480-20434/2
Matrix: Water
Analysis Batch: 20434

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Total Suspended Solids			296	290.0		mg/L		98	88 - 110		

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-6216-1

Method: SM 4500 O G - Oxygen, Dissolved

Lab Sample ID: 480-6216-1 DU
Matrix: Water
Analysis Batch: 20391

Client Sample ID: SS-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Oxygen, Dissolved	7.4			7.65		mg/L				3.73	

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-20546/1 USB
Matrix: Water
Analysis Batch: 20546

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			06/17/11 12:23	1

Lab Sample ID: LCS 480-20546/2
Matrix: Water
Analysis Batch: 20546

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Biochemical Oxygen Demand			198	202.7		mg/L		102	85 - 115		

GC/MS VOA

Analysis Batch: 20476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-20476/4	Lab Control Sample	Total/NA	Water	624	
MB 480-20476/6	Method Blank	Total/NA	Water	624	
480-6216-1	SS-01	Total/NA	Water	624	

Metals

Prep Batch: 19987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 200-19987/1-A	Method Blank	Total/NA	Water	3010A	
LCS 200-19987/2-A	Lab Control Sample	Total/NA	Water	3010A	
480-6216-1	SS-01	Total/NA	Water	3010A	
480-6216-2	SS-02	Total/NA	Water	3010A	
480-6216-3	SS-03	Total/NA	Water	3010A	

Analysis Batch: 20138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 200-19987/1-A	Method Blank	Total/NA	Water	6010B	19987
LCS 200-19987/2-A	Lab Control Sample	Total/NA	Water	6010B	19987
480-6216-1	SS-01	Total/NA	Water	6010B	19987
480-6216-2	SS-02	Total/NA	Water	6010B	19987
480-6216-3	SS-03	Total/NA	Water	6010B	19987

Prep Batch: 20529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-20529/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-20529/2-A	Lab Control Sample	Total/NA	Water	200.7	
480-6216-1	SS-01	Total/NA	Water	200.7	
480-6216-2	SS-02	Total/NA	Water	200.7	
480-6216-3	SS-03	Total/NA	Water	200.7	

Prep Batch: 20686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-20686/1-A	Method Blank	Total/NA	Water	200.8	
LCS 480-20686/2-A	Lab Control Sample	Total/NA	Water	200.8	
480-6216-1	SS-01	Total/NA	Water	200.8	

Analysis Batch: 21065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-20529/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	20529
LCS 480-20529/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	20529
480-6216-1	SS-01	Total/NA	Water	200.7 Rev 4.4	20529
480-6216-2	SS-02	Total/NA	Water	200.7 Rev 4.4	20529
480-6216-3	SS-03	Total/NA	Water	200.7 Rev 4.4	20529

Analysis Batch: 21076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-20686/1-A	Method Blank	Total/NA	Water	200.8	20686
LCS 480-20686/2-A	Lab Control Sample	Total/NA	Water	200.8	20686
480-6216-1	SS-01	Total/NA	Water	200.8	20686

General Chemistry

Analysis Batch: 20382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-20382/3	Method Blank	Total/NA	Water	7196A	
LCS 480-20382/4	Lab Control Sample	Total/NA	Water	7196A	
480-6216-1	SS-01	Total/NA	Water	7196A	
480-6216-1 DU	SS-01	Total/NA	Water	7196A	
480-6216-2	SS-02	Total/NA	Water	7196A	
480-6216-3	SS-03	Total/NA	Water	7196A	
480-6216-3 MS	SS-03	Total/NA	Water	7196A	

Analysis Batch: 20391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-6216-1	SS-01	Total/NA	Water	SM 4500 O G	
480-6216-1 DU	SS-01	Total/NA	Water	SM 4500 O G	

Analysis Batch: 20434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-20434/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-20434/2	Lab Control Sample	Total/NA	Water	SM 2540D	
480-6216-1	SS-01	Total/NA	Water	SM 2540D	

Analysis Batch: 20479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-20479/3	Method Blank	Total/NA	Water	353.2	
LCS 480-20479/4	Lab Control Sample	Total/NA	Water	353.2	
480-6216-1	SS-01	Total/NA	Water	353.2	

Analysis Batch: 20481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-6216-1	SS-01	Total/NA	Water	353.2	

Analysis Batch: 20546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
USB 480-20546/1 USB	Method Blank	Total/NA	Water	SM 5210B	
LCS 480-20546/2	Lab Control Sample	Total/NA	Water	SM 5210B	
480-6216-1	SS-01	Total/NA	Water	SM 5210B	

Analysis Batch: 20559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-20559/1	Lab Control Sample	Total/NA	Water	9040B	
480-6216-1	SS-01	Total/NA	Water	9040B	

Analysis Batch: 20616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-20616/147	Method Blank	Total/NA	Water	350.1	
LCS 480-20616/148	Lab Control Sample	Total/NA	Water	350.1	
480-6216-1	SS-01	Total/NA	Water	350.1	
480-6216-2	SS-02	Total/NA	Water	350.1	
480-6216-2 DU	SS-02	Total/NA	Water	350.1	
480-6216-2 MS	SS-02	Total/NA	Water	350.1	
MB 480-20616/171	Method Blank	Total/NA	Water	350.1	
LCS 480-20616/172	Lab Control Sample	Total/NA	Water	350.1	
480-6216-3	SS-03	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 20805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-20805/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 480-20805/2	Lab Control Sample	Total/NA	Water	SM 2540C	
480-6216-1	SS-01	Total/NA	Water	SM 2540C	

Prep Batch: 21162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-21162/1-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
MB 480-21162/2-A	Method Blank	Total/NA	Water	Distill/Phenol	
480-6216-1	SS-01	Total/NA	Water	Distill/Phenol	
480-6216-2	SS-02	Total/NA	Water	Distill/Phenol	

Prep Batch: 21179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-21179/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 480-21179/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
480-6216-3	SS-03	Total/NA	Water	Distill/Phenol	

Analysis Batch: 21221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-21221/27	Lab Control Sample	Total/NA	Water	300.0	
MB 480-21221/28	Method Blank	Total/NA	Water	300.0	
480-6216-1	SS-01	Total/NA	Water	300.0	
480-6216-2	SS-02	Total/NA	Water	300.0	
480-6216-3	SS-03	Total/NA	Water	300.0	

Analysis Batch: 21252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-21162/1-A	Lab Control Sample	Total/NA	Water	420.4	21162
MB 480-21162/2-A	Method Blank	Total/NA	Water	420.4	21162
MB 480-21179/1-A	Method Blank	Total/NA	Water	420.4	21179
LCS 480-21179/2-A	Lab Control Sample	Total/NA	Water	420.4	21179
480-6216-3	SS-03	Total/NA	Water	420.4	21179
480-6216-1	SS-01	Total/NA	Water	420.4	21162
480-6216-2	SS-02	Total/NA	Water	420.4	21162

Prep Batch: 21303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-21303/2-A	Lab Control Sample	Total/NA	Water	351.2	
480-6216-1	SS-01	Total/NA	Water	351.2	

Analysis Batch: 21593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-21303/2-A	Lab Control Sample	Total/NA	Water	351.2	21303
480-6216-1	SS-01	Total/NA	Water	351.2	21303

Analysis Batch: 21850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-21850/27	Method Blank	Total/NA	Water	410.4	
LCS 480-21850/28	Lab Control Sample	Total/NA	Water	410.4	
480-6216-1	SS-01	Total/NA	Water	410.4	

Lab Chronicle

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-6216-1

Client Sample ID: SS-01

Lab Sample ID: 480-6216-1

Date Collected: 06/16/11 16:00

Matrix: Water

Date Received: 06/16/11 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	20476	06/17/11 20:40	TRB	TAL BUF
Total/NA	Prep	3010A			19987	06/22/11 08:59	ALS	TAL BUR
Total/NA	Analysis	6010B		1	20138	06/23/11 14:52	BAA	TAL BUR
Total/NA	Prep	200.7			20529	06/20/11 09:40	MM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	21065	06/21/11 21:15	LH	TAL BUF
Total/NA	Prep	200.8			20686	06/20/11 11:40	MM	TAL BUF
Total/NA	Analysis	200.8		1	21076	06/21/11 23:32	JRK	TAL BUF
Total/NA	Analysis	7196A		1	20382	06/17/11 00:27	KS	TAL BUF
Total/NA	Analysis	SM 4500 O G		1	20391	06/16/11 22:55	ML	TAL BUF
Total/NA	Analysis	SM 2540D		1	20434	06/17/11 09:00	MD	TAL BUF
Total/NA	Analysis	353.2		1	20479	06/17/11 11:17	LRM	TAL BUF
Total/NA	Analysis	353.2		1	20481	06/17/11 10:49	LRM	TAL BUF
Total/NA	Analysis	SM 5210B		1	20546	06/17/11 17:46	AP	TAL BUF
Total/NA	Analysis	9040B		1	20559	06/17/11 19:17	KS	TAL BUF
Total/NA	Analysis	350.1		1	20616	06/18/11 12:27	MD	TAL BUF
Total/NA	Analysis	SM 2540C		1	20805	06/21/11 15:43	KS	TAL BUF
Total/NA	Analysis	300.0		1	21221	06/23/11 16:17	RF	TAL BUF
Total/NA	Prep	Distill/Phenol			21162	06/22/11 19:30	AP	TAL BUF
Total/NA	Analysis	420.4		1	21252	06/23/11 09:02	JR	TAL BUF
Total/NA	Prep	351.2			21303	06/23/11 10:12	PN	TAL BUF
Total/NA	Analysis	351.2		1	21593	06/25/11 16:08	JR	TAL BUF
Total/NA	Analysis	410.4		1	21850	06/28/11 13:25	AP	TAL BUF

Client Sample ID: SS-02

Lab Sample ID: 480-6216-2

Date Collected: 06/16/11 16:10

Matrix: Water

Date Received: 06/16/11 17:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			19987	06/22/11 08:59	ALS	TAL BUR
Total/NA	Analysis	6010B		1	20138	06/23/11 14:57	BAA	TAL BUR
Total/NA	Prep	200.7			20529	06/20/11 09:40	MM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	21065	06/21/11 21:17	LH	TAL BUF
Total/NA	Analysis	7196A		1	20382	06/17/11 00:30	KS	TAL BUF
Total/NA	Analysis	350.1		1	20616	06/18/11 12:28	MD	TAL BUF
Total/NA	Analysis	300.0		1	21221	06/23/11 16:27	RF	TAL BUF
Total/NA	Prep	Distill/Phenol			21162	06/22/11 19:30	AP	TAL BUF
Total/NA	Analysis	420.4		1	21252	06/23/11 09:02	JR	TAL BUF

Lab Chronicle

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-6216-1

Client Sample ID: SS-03
Date Collected: 06/16/11 16:20
Date Received: 06/16/11 17:50

Lab Sample ID: 480-6216-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			19987	06/22/11 08:59	ALS	TAL BUR
Total/NA	Analysis	6010B		1	20138	06/23/11 15:02	BAA	TAL BUR
Total/NA	Prep	200.7			20529	06/20/11 09:40	MM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	21065	06/21/11 21:19	LH	TAL BUF
Total/NA	Analysis	7196A		1	20382	06/17/11 00:32	KS	TAL BUF
Total/NA	Analysis	350.1		1	20616	06/18/11 12:35	MD	TAL BUF
Total/NA	Analysis	300.0		1	21221	06/23/11 16:37	RF	TAL BUF
Total/NA	Prep	Distill/Phenol			21179	06/22/11 23:14	KS	TAL BUF
Total/NA	Analysis	420.4		1	21252	06/23/11 09:02	JR	TAL BUF

Laboratory References:
TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Certification Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-6216-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Buffalo	Arkansas	State Program	6	88-0686
TestAmerica Buffalo	California	NELAC	9	1169CA
TestAmerica Buffalo	Connecticut	State Program	1	PH-0568
TestAmerica Buffalo	Florida	NELAC	4	E87672
TestAmerica Buffalo	Georgia	Georgia EPD	4	N/A
TestAmerica Buffalo	Georgia	State Program	4	956
TestAmerica Buffalo	Illinois	NELAC	5	100325 / 200003
TestAmerica Buffalo	Iowa	State Program	7	374
TestAmerica Buffalo	Kansas	NELAC	7	E-10187
TestAmerica Buffalo	Kentucky	Kentucky UST	4	30
TestAmerica Buffalo	Kentucky	State Program	4	90029
TestAmerica Buffalo	Louisiana	NELAC	6	02031
TestAmerica Buffalo	Maine	State Program	1	NY0044
TestAmerica Buffalo	Maryland	State Program	3	294
TestAmerica Buffalo	Massachusetts	State Program	1	M-NY044
TestAmerica Buffalo	Michigan	State Program	5	9937
TestAmerica Buffalo	Minnesota	NELAC	5	036-999-337
TestAmerica Buffalo	New Hampshire	NELAC	1	68-00281
TestAmerica Buffalo	New Hampshire	NELAC	1	2337
TestAmerica Buffalo	New Jersey	NELAC	2	NY455
TestAmerica Buffalo	New York	NELAC	2	10026
TestAmerica Buffalo	North Dakota	State Program	8	R-176
TestAmerica Buffalo	Oklahoma	State Program	6	9421
TestAmerica Buffalo	Oregon	NELAC	10	NY200003
TestAmerica Buffalo	Pennsylvania	NELAC	3	68-00281
TestAmerica Buffalo	Tennessee	State Program	4	TN02970
TestAmerica Buffalo	Texas	NELAC	6	T104704412-08-TX
TestAmerica Buffalo	USDA	USDA		P330-08-00242
TestAmerica Buffalo	Virginia	State Program	3	278
TestAmerica Buffalo	Washington	State Program	10	C1677
TestAmerica Buffalo	West Virginia	West Virginia DEP	3	252
TestAmerica Buffalo	Wisconsin	State Program	5	998310390
TestAmerica Burlington	ACLASS	DoD ELAP		ADE-1492
TestAmerica Burlington	Connecticut	State Program	1	PH-0751
TestAmerica Burlington	Delaware	Delaware DNREC	3	NA
TestAmerica Burlington	Florida	NELAC Secondary AB	4	E87467
TestAmerica Burlington	Maine	State Program	1	VT00008
TestAmerica Burlington	Minnesota	State Program	5	050-999-436
TestAmerica Burlington	New Hampshire	NELAC	1	200610
TestAmerica Burlington	New Jersey	NELAC	2	VT972
TestAmerica Burlington	New York	NELAC	2	10391
TestAmerica Burlington	Pennsylvania	NELAC	3	68-00489
TestAmerica Burlington	Rhode Island	State Program	1	LAO00298
TestAmerica Burlington	USDA	USDA		P330-11-00093
TestAmerica Burlington	Vermont	State Program	1	VT-4000

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-6216-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
200.8	Metals (ICP/MS)	EPA	TAL BUF
6010B	Metals (Custom List)	SW846	TAL BUR
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL BUF
353.2	Nitrogen, Nitrite	MCAWW	TAL BUF
353.2	Nitrate	EPA	TAL BUF
410.4	COD	MCAWW	TAL BUF
420.4	Phenolics, Total Recoverable	MCAWW	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL BUF
9040B	pH	SW846	TAL BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 O G	Oxygen, Dissolved	SM	TAL BUF
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-6216-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-6216-1	SS-01	Water	06/16/11 16:00	06/16/11 17:50
480-6216-2	SS-02	Water	06/16/11 16:10	06/16/11 17:50
480-6216-3	SS-03	Water	06/16/11 16:20	06/16/11 17:50

Login Sample Receipt Checklist

Client: Greenstar Environmental Solutions, LLC

Job Number: 480-6216-1

Login Number: 6216

List Source: TestAmerica Buffalo

List Number: 1

Creator: Szymanski, Andrew

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	Greenstar
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Greenstar Environmental Solutions, LLC

Job Number: 480-6216-1

Login Number: 6216
List Number: 1
Creator: Marion, Greg T

List Source: TestAmerica Burlington
List Creation: 06/21/11 02:55 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	792133
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	24.2ºC IR GUN ID 96/CF= 0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	Check done at department level as required.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-11355-1
Client Project/Site: Greenstar Environmental Solutions, LLC
Sampling Event: Semi-Annual groundwater Monitoring 4,10

For:
Greenstar Environmental Solutions, LLC
6 Gellatly Drive
Wappingers Falls, New York 12590

Attn: Charles E. McLeod, Jr.

Peggy Gray-Erdmann

Authorized for release by:
11/7/2011 12:17:22 PM

Peggy Gray-Erdmann
Project Manager II
peggy.gray-erdmann@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Definitions/Glossary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
H	Sample was prepped or analyzed beyond the specified holding time
b	Result Detected in the USB
F	MS or MSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Job ID: 480-11355-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-11355-1

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

HPLC
Method(s) 300.0: Due to the high concentration of Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for batch 32466 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 300.0: The following samples were diluted due to the abundance of target analytes: (480-11355-3 MS), (480-11355-3 MSD), AP-MW-4B (480-11355-2), AP-MW-5B (480-11355-3). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following samples were diluted due to the abundance of target analytes: AP-MW-1B (480-11387-1), AP-MW-6B (480-11387-3), AP-MW-8B (480-11355-4). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Metals
Method(s) 200.7 Rev 4.4: The recoveries of Post Spike, (480-11355-1 PDS), in batch 480-35922 exhibited results outside the quality control limits for total cadmium, chromium, iron, magnesium, manganese, sodium, lead, selenium, and thallium. However, the Serial Dilution of this sample was compliant. Therefore, no corrective action was necessary

Method(s) 200.7 Rev 4.4: The recoveries of Post Spike, (480-11387-3 PDS), in batch 480-36075 exhibited results outside the quality control limits for total magnesium and sodium. However, the Serial Dilution of this sample was compliant. Therefore, no corrective action was necessary

Method(s) 200.7 Rev 4.4: The recovery of Post Spike, (480-11355-3 PDS), in batch 36308 exhibited results below the quality control limits for total sodium, magnesium, barium. However, the Serial Dilution of this sample was compliant. Therefore, no corrective action was necessary

No other analytical or quality issues were noted.

General Chemistry
Method(s) 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 37197 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria. (480-11387-3 MS), (480-11387-3 MSD)

Method(s) SM 5210B: The dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L.

Method(s) 7196A, SM 3500 CR D: The matrix spike (MS) recoveries for batch 31476 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 9040B: The following sample was logged in with greater than 50% of holding time expired: AP-SS-01/EWE-01 (480-11355-7). As such, the laboratory had insufficient time remaining to perform the analysis within holding time.

Method(s) SM 4500 O G: The following sample(s) was received within Holding Time, but was logged in after Holding Time expired: AP-SS-01/EWE-01 (480-11355-7).

No other analytical or quality issues were noted.

Detection Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Client Sample ID: AP-MW-3B — Lab Sample ID: 480-11355-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.042	J	0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	5.8		0.20	0.043	mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.0059		0.0030	0.00030	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	54.4		1.0	0.32	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.0069	J	0.010	0.0017	mg/L	1		200.7 Rev 4.4	Total/NA
Silicon	8260	B	100	4.7	ug/L	1		6010B	Total/NA
Sulfate	66.7		2.0	0.35	mg/L	1		300.0	Total/NA
Ammonia as N	1.2		0.020	0.0090	mg/L as N	1		350.1	Total/NA

Client Sample ID: AP-MW-4B — Lab Sample ID: 480-11355-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.00085	J	0.0010	0.00033	mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	0.12		0.0040	0.00087	mg/L	1		200.7 Rev 4.4	Total/NA
Iron	5.4		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	57.7		0.20	0.043	mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.11		0.0030	0.00030	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	71.2		1.0	0.32	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.060		0.010	0.0017	mg/L	1		200.7 Rev 4.4	Total/NA
Silicon	36000	B	100	4.7	ug/L	1		6010B	Total/NA
Sulfate	153		4.0	0.70	mg/L	2		300.0	Total/NA
Chromium, hexavalent	76.2		10.0	5.0	ug/L	1		7196A	Total/NA

Client Sample ID: AP-MW-5B — Lab Sample ID: 480-11355-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.00034	J	0.0010	0.00033	mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	0.0039	J	0.0040	0.00087	mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.60		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	82.3		0.20	0.043	mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.021		0.0030	0.00030	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	31.2		1.0	0.32	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.025		0.010	0.0017	mg/L	1		200.7 Rev 4.4	Total/NA
Silicon	16800	B	100	4.7	ug/L	1		6010B	Total/NA
Sulfate	150		4.0	0.70	mg/L	2		300.0	Total/NA

Client Sample ID: AP-MW-8B — Lab Sample ID: 480-11355-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.00065	J	0.0010	0.00033	mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	0.076		0.0040	0.00087	mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.47		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	68.3		0.20	0.043	mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.23		0.0030	0.00030	mg/L	1		200.7 Rev 4.4	Total/NA
Selenium	0.012	J	0.015	0.0087	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	73.5		1.0	0.32	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.12		0.010	0.0017	mg/L	1		200.7 Rev 4.4	Total/NA
Silicon	7550	B	100	4.7	ug/L	1		6010B	Total/NA
Sulfate	193		10.0	1.7	mg/L	5		300.0	Total/NA
Ammonia as N	0.043		0.020	0.0090	mg/L as N	1		350.1	Total/NA
Chromium, hexavalent	76.2		10.0	5.0	ug/L	1		7196A	Total/NA

Client Sample ID: AP-SS-03 — Lab Sample ID: 480-11355-5

Client Sample ID: AP-SS-03 (Continued) — Lab Sample ID: 480-11355-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.0035	J	0.0040	0.00087	mg/L	1		200.7 Rev 4.4	Total/NA
Iron	1.6		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	7.5		0.20	0.043	mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.13		0.0030	0.00030	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	50.7		1.0	0.32	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.020		0.010	0.0017	mg/L	1		200.7 Rev 4.4	Total/NA
Silicon	2580	B	100	4.7	ug/L	1		6010B	Total/NA
Sulfate	23.4		2.0	0.35	mg/L	1		300.0	Total/NA
Phenolics, Total Recoverable	6.2	J	10.0	5.0	ug/L	1		420.4	Total/NA

Client Sample ID: AP-SS-02 — Lab Sample ID: 480-11355-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.63		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	20.1		0.20	0.043	mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.38		0.0030	0.00030	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	4.3		1.0	0.32	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.0049	J	0.010	0.0017	mg/L	1		200.7 Rev 4.4	Total/NA
Silicon	7830	B	100	4.7	ug/L	1		6010B	Total/NA
Sulfate	27.8		2.0	0.35	mg/L	1		300.0	Total/NA
Phenolics, Total Recoverable	20.6		10.0	5.0	ug/L	1		420.4	Total/NA

Client Sample ID: AP-SS-01/EWE-01 — Lab Sample ID: 480-11355-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	195		2.0	0.50	ug/L	1		200.7 Rev 4.4	Total/NA
Chromium	1.0	J	4.0	0.87	ug/L	1		200.7 Rev 4.4	Total/NA
Iron	94.2		50.0	19.3	ug/L	1		200.7 Rev 4.4	Total/NA
Nickel	1.3	J	10.0	1.3	ug/L	1		200.7 Rev 4.4	Total/NA
Zinc	3.6	J	10.0	1.7	ug/L	1		200.7 Rev 4.4	Total/NA
Selenium	0.66	J	1.0	0.44	ug/L	1		200.8	Total/NA
Thallium	0.025	J	0.20	0.0080	ug/L	1		200.8	Total/NA
Silicon	2860	B	100	4.7	ug/L	1		6010B	Total/NA
Sulfate	24.5		2.0	0.35	mg/L	1		300.0	Total/NA
Total Kjeldahl Nitrogen	0.41		0.20	0.15	mg/L as N	1		351.2	Total/NA
Nitrate as N	0.69		0.050	0.011	mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	13.3		10.0	5.0	mg/L	1		410.4	Total/NA
Total Dissolved Solids	655		10.0	4.0	mg/L	1		SM 2540C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	7.69	H	0.100	0.100	SU	1		9040B	Total/NA
Total Suspended Solids	32.8		4.0	4.0	mg/L	1		SM 2540D	Total/NA
Oxygen, Dissolved	5.3	H	0.050	0.050	mg/L	1		SM 4500 O G	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-11355-8

No Detections

Client Sample ID: AP-MW-1B — Lab Sample ID: 480-11387-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.00099	J	0.0010	0.00033	mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	0.0013	J	0.0040	0.00087	mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.12		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA

Detection Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Client Sample ID: AP-MW-1B (Continued) — Lab Sample ID: 480-11387-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	62.2		0.20	0.043	mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.66		0.0030	0.00030	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	125		1.0	0.32	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.56		0.010	0.0017	mg/L	1		200.7 Rev 4.4	Total/NA
Silicon	6910	B	100	4.7	ug/L	1		6010B	Total/NA
Sulfate	186		4.0	0.70	mg/L	2		300.0	Total/NA
Phenolics, Total Recoverable	5.6	J	10.0	5.0	ug/L	1		420.4	Total/NA

Client Sample ID: AP-MW-2B — Lab Sample ID: 480-11387-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.77		0.0040	0.00087	mg/L	1		200.7 Rev 4.4	Total/NA
Selenium	0.0097	J	0.015	0.0087	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	40.5		1.0	0.32	mg/L	1		200.7 Rev 4.4	Total/NA
Silicon	509	B	100	4.7	ug/L	1		6010B	Total/NA
Sulfate	21.5		2.0	0.35	mg/L	1		300.0	Total/NA
Ammonia as N	1.6		0.020	0.0090	mg/L as N	1		350.1	Total/NA
Phenolics, Total Recoverable	10.5		10.0	5.0	ug/L	1		420.4	Total/NA
Chromium, hexavalent	754		20.0	10.0	ug/L	2		7196A	Total/NA

Client Sample ID: AP-MW-6B — Lab Sample ID: 480-11387-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.28		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	73.1		0.20	0.043	mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.14		0.0030	0.00030	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	76.8		1.0	0.32	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.0020	J	0.010	0.0017	mg/L	1		200.7 Rev 4.4	Total/NA
Silicon	5950	B	100	4.7	ug/L	1		6010B	Total/NA
Sulfate	363		10.0	1.7	mg/L	5		300.0	Total/NA
Ammonia as N	0.030		0.020	0.0090	mg/L as N	1		350.1	Total/NA

Client Sample ID: AP-MW-7B — Lab Sample ID: 480-11387-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.0026	J	0.0040	0.00087	mg/L	1		200.7 Rev 4.4	Total/NA
Iron	0.095		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	8.3		0.20	0.043	mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.037		0.0030	0.00030	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	54.1		1.0	0.32	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.0023	J	0.010	0.0017	mg/L	1		200.7 Rev 4.4	Total/NA
Silicon	4960	B	100	4.7	ug/L	1		6010B	Total/NA
Sulfate	30.4		2.0	0.35	mg/L	1		300.0	Total/NA
Ammonia as N	0.66		0.020	0.0090	mg/L as N	1		350.1	Total/NA
Phenolics, Total Recoverable	11.1		10.0	5.0	ug/L	1		420.4	Total/NA

Client Sample ID: AP-GW-DUP-01 — Lab Sample ID: 480-11387-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.77		0.0040	0.00087	mg/L	1		200.7 Rev 4.4	Total/NA
Selenium	0.011	J	0.015	0.0087	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	39.8		1.0	0.32	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.0021	J	0.010	0.0017	mg/L	1		200.7 Rev 4.4	Total/NA
Silicon	496	B	100	4.7	ug/L	1		6010B	Total/NA

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Client Sample ID: AP-GW-DUP-01 (Continued) — Lab Sample ID: 480-11387-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	21.6		2.0	0.35	mg/L	1		300.0	Total/NA
Ammonia as N	1.6		0.020	0.0090	mg/L as N	1		350.1	Total/NA
Phenolics, Total Recoverable	10		10.0	5.0	ug/L	1		420.4	Total/NA
Chromium, hexavalent	925		50.0	25.0	ug/L	5		7196A	Total/NA

Client Sample ID: AP-RB-01 — Lab Sample ID: 480-11387-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	1.3		0.20	0.043	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	6.8		1.0	0.32	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.0026	J	0.010	0.0017	mg/L	1		200.7 Rev 4.4	Total/NA
Silicon	3890	B	100	4.7	ug/L	1		6010B	Total/NA
Sulfate	6.5		2.0	0.35	mg/L	1		300.0	Total/NA
Phenolics, Total Recoverable	5.2	J	10.0	5.0	ug/L	1		420.4	Total/NA
Chromium, hexavalent	5.6	J	10.0	5.0	ug/L	1		7196A	Total/NA

Client Sample ID: AP-SWB-01 — Lab Sample ID: 480-11387-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	1.3		0.20	0.043	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	6.7		1.0	0.32	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.0022	J	0.010	0.0017	mg/L	1		200.7 Rev 4.4	Total/NA
Silicon	3780	B	100	4.7	ug/L	1		6010B	Total/NA
Sulfate	6.4		2.0	0.35	mg/L	1		300.0	Total/NA
Phenolics, Total Recoverable	5.4	J	10.0	5.0	ug/L	1		420.4	Total/NA
Chromium, hexavalent	5.6	J	10.0	5.0	ug/L	1		7196A	Total/NA

Client Sample ID: AP-MW-3B

Date Collected: 10/17/11 12:10
Date Received: 10/17/11 17:05

Lab Sample ID: 480-11355-1
Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	0.00033	mg/L		10/18/11 11:00	10/18/11 20:24	1
Chromium	ND		0.0040	0.00087	mg/L		10/18/11 11:00	10/18/11 20:24	1
Iron	**0.042**	**J**	0.050	0.019	mg/L		10/18/11 11:00	10/18/11 20:24	1
Lead	ND		0.0050	0.0030	mg/L		10/18/11 11:00	10/18/11 20:24	1
Magnesium	**5.8**		0.20	0.043	mg/L		10/18/11 11:00	10/18/11 20:24	1
Manganese	**0.0059**		0.0030	0.00030	mg/L		10/18/11 11:00	10/18/11 20:24	1
Selenium	ND		0.015	0.0087	mg/L		10/18/11 11:00	10/18/11 20:24	1
Sodium	**54.4**		1.0	0.32	mg/L		10/18/11 11:00	10/18/11 20:24	1
Thallium	ND		0.020	0.010	mg/L		10/18/11 11:00	10/18/11 20:24	1
Zinc	**0.0069**	**J**	0.010	0.0017	mg/L		10/18/11 11:00	10/18/11 20:24	1

Method: 6010B - Metals (Custom List)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**8260**	**B**	100	4.7	ug/L		10/21/11 08:15	10/22/11 00:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**66.7**		2.0	0.35	mg/L			10/26/11 10:06	1
Ammonia as N	**1.2**		0.020	0.0090	mg/L as N			10/25/11 13:58	1
Phenolics, Total Recoverable	ND		10.0	5.0	ug/L		11/03/11 16:22	11/03/11 18:49	1
Chromium, hexavalent	ND		10.0	5.0	ug/L			10/18/11 12:00	1

Client Sample ID: AP-MW-4B

Date Collected: 10/17/11 12:30
Date Received: 10/17/11 17:05

Lab Sample ID: 480-11355-2
Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.00085**	**J**	0.0010	0.00033	mg/L		10/18/11 11:00	10/19/11 22:38	1
Chromium	**0.12**		0.0040	0.00087	mg/L		10/18/11 11:00	10/19/11 22:38	1
Iron	**5.4**		0.050	0.019	mg/L		10/18/11 11:00	10/19/11 22:38	1
Lead	ND		0.0050	0.0030	mg/L		10/18/11 11:00	10/19/11 22:38	1
Magnesium	**57.7**		0.20	0.043	mg/L		10/18/11 11:00	10/19/11 22:38	1
Manganese	**0.11**		0.0030	0.00030	mg/L		10/18/11 11:00	10/19/11 22:38	1
Selenium	ND		0.015	0.0087	mg/L		10/18/11 11:00	10/19/11 22:38	1
Sodium	**71.2**		1.0	0.32	mg/L		10/18/11 11:00	10/19/11 22:38	1
Thallium	ND		0.020	0.010	mg/L		10/18/11 11:00	10/19/11 22:38	1
Zinc	**0.060**		0.010	0.0017	mg/L		10/18/11 11:00	10/19/11 22:38	1

Method: 6010B - Metals (Custom List)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**36000**	**B**	100	4.7	ug/L		10/21/11 08:15	10/22/11 00:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**153**		4.0	0.70	mg/L			10/27/11 20:45	2
Ammonia as N	ND		0.020	0.0090	mg/L as N			10/25/11 13:59	1
Phenolics, Total Recoverable	ND		10.0	5.0	ug/L		11/03/11 16:22	11/03/11 18:49	1
Chromium, hexavalent	**76.2**		10.0	5.0	ug/L			10/18/11 12:00	1

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Client Sample ID: AP-MW-5B

Date Collected: 10/17/11 12:50
Date Received: 10/17/11 17:05

Lab Sample ID: 480-11355-3
Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00034	J	0.0010	0.00033	mg/L		10/18/11 11:00	10/19/11 22:40	1
Chromium	0.0039	J	0.0040	0.00087	mg/L		10/18/11 11:00	10/19/11 22:40	1
Iron	0.60		0.050	0.019	mg/L		10/18/11 11:00	10/19/11 22:40	1
Lead	ND		0.0050	0.0030	mg/L		10/18/11 11:00	10/19/11 22:40	1
Magnesium	82.3		0.20	0.043	mg/L		10/18/11 11:00	10/19/11 22:40	1
Manganese	0.021		0.0030	0.00030	mg/L		10/18/11 11:00	10/19/11 22:40	1
Selenium	ND		0.015	0.0087	mg/L		10/18/11 11:00	10/19/11 22:40	1
Sodium	31.2		1.0	0.32	mg/L		10/18/11 11:00	10/19/11 22:40	1
Thallium	ND		0.020	0.010	mg/L		10/18/11 11:00	10/19/11 22:40	1
Zinc	0.025		0.010	0.0017	mg/L		10/18/11 11:00	10/19/11 22:40	1

Method: 6010B - Metals (Custom List)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	16800	B	100	4.7	ug/L		10/21/11 08:15	10/22/11 00:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	150		4.0	0.70	mg/L			10/27/11 20:55	2
Ammonia as N	ND		0.020	0.0090	mg/L as N			10/25/11 14:00	1
Phenolics, Total Recoverable	ND		10.0	5.0	ug/L		11/03/11 16:22	11/03/11 18:49	1
Chromium, hexavalent	ND		10.0	5.0	ug/L			10/18/11 12:00	1

Client Sample ID: AP-MW-8B

Date Collected: 10/17/11 13:10
Date Received: 10/17/11 17:05

Lab Sample ID: 480-11355-4
Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00065	J	0.0010	0.00033	mg/L		10/18/11 11:00	10/19/11 22:55	1
Chromium	0.076		0.0040	0.00087	mg/L		10/18/11 11:00	10/19/11 22:55	1
Iron	0.47		0.050	0.019	mg/L		10/18/11 11:00	10/19/11 22:55	1
Lead	ND		0.0050	0.0030	mg/L		10/18/11 11:00	10/19/11 22:55	1
Magnesium	68.3		0.20	0.043	mg/L		10/18/11 11:00	10/19/11 22:55	1
Manganese	0.23		0.0030	0.00030	mg/L		10/18/11 11:00	10/19/11 22:55	1
Selenium	0.012	J	0.015	0.0087	mg/L		10/18/11 11:00	10/19/11 22:55	1
Sodium	73.5		1.0	0.32	mg/L		10/18/11 11:00	10/19/11 22:55	1
Thallium	ND		0.020	0.010	mg/L		10/18/11 11:00	10/19/11 22:55	1
Zinc	0.12		0.010	0.0017	mg/L		10/18/11 11:00	10/19/11 22:55	1

Method: 6010B - Metals (Custom List)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	7550	B	100	4.7	ug/L		10/21/11 08:15	10/22/11 00:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	193		10.0	1.7	mg/L			10/27/11 22:06	5
Ammonia as N	0.043		0.020	0.0090	mg/L as N			10/25/11 14:01	1
Phenolics, Total Recoverable	ND		10.0	5.0	ug/L		11/03/11 16:26	11/03/11 18:58	1
Chromium, hexavalent	76.2		10.0	5.0	ug/L			10/18/11 12:00	1

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Client Sample ID: AP-SS-03

Date Collected: 10/17/11 14:30
Date Received: 10/17/11 17:05

Lab Sample ID: 480-11355-5

Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	0.00033	mg/L		10/18/11 11:00	10/19/11 22:57	1
Chromium	**0.0035**	**J**	0.0040	0.00087	mg/L		10/18/11 11:00	10/19/11 22:57	1
Iron	**1.6**		0.050	0.019	mg/L		10/18/11 11:00	10/19/11 22:57	1
Lead	ND		0.0050	0.0030	mg/L		10/18/11 11:00	10/19/11 22:57	1
Magnesium	**7.5**		0.20	0.043	mg/L		10/18/11 11:00	10/19/11 22:57	1
Manganese	**0.13**		0.0030	0.00030	mg/L		10/18/11 11:00	10/19/11 22:57	1
Selenium	ND		0.015	0.0087	mg/L		10/18/11 11:00	10/19/11 22:57	1
Sodium	**50.7**		1.0	0.32	mg/L		10/18/11 11:00	10/19/11 22:57	1
Thallium	ND		0.020	0.010	mg/L		10/18/11 11:00	10/19/11 22:57	1
Zinc	**0.020**		0.010	0.0017	mg/L		10/18/11 11:00	10/19/11 22:57	1

Method: 6010B - Metals (Custom List)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**2580**	**B**	100	4.7	ug/L		10/21/11 08:15	10/22/11 00:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**23.4**		2.0	0.35	mg/L			10/26/11 10:46	1
Ammonia as N	ND		0.020	0.0090	mg/L as N			10/25/11 14:02	1
Phenolics, Total Recoverable	**6.2**	**J**	10.0	5.0	ug/L		11/03/11 16:26	11/03/11 18:58	1
Chromium, hexavalent	ND		10.0	5.0	ug/L			10/18/11 12:00	1

Client Sample ID: AP-SS-02

Date Collected: 10/17/11 14:50
Date Received: 10/17/11 17:05

Lab Sample ID: 480-11355-6

Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	0.00033	mg/L		10/18/11 11:00	10/19/11 23:00	1
Chromium	ND		0.0040	0.00087	mg/L		10/18/11 11:00	10/19/11 23:00	1
Iron	**0.63**		0.050	0.019	mg/L		10/18/11 11:00	10/19/11 23:00	1
Lead	ND		0.0050	0.0030	mg/L		10/18/11 11:00	10/19/11 23:00	1
Magnesium	**20.1**		0.20	0.043	mg/L		10/18/11 11:00	10/19/11 23:00	1
Manganese	**0.38**		0.0030	0.00030	mg/L		10/18/11 11:00	10/19/11 23:00	1
Selenium	ND		0.015	0.0087	mg/L		10/18/11 11:00	10/19/11 23:00	1
Sodium	**4.3**		1.0	0.32	mg/L		10/18/11 11:00	10/19/11 23:00	1
Thallium	ND		0.020	0.010	mg/L		10/18/11 11:00	10/19/11 23:00	1
Zinc	**0.0049**	**J**	0.010	0.0017	mg/L		10/18/11 11:00	10/19/11 23:00	1

Method: 6010B - Metals (Custom List)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**7830**	**B**	100	4.7	ug/L		10/21/11 08:15	10/22/11 00:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**27.8**		2.0	0.35	mg/L			10/26/11 10:56	1
Ammonia as N	ND		0.020	0.0090	mg/L as N			10/25/11 14:03	1
Phenolics, Total Recoverable	**20.6**		10.0	5.0	ug/L		11/03/11 16:26	11/03/11 18:58	1
Chromium, hexavalent	ND		10.0	5.0	ug/L			10/18/11 12:00	1

Client Sample ID: AP-SS-01/EWE-01

Lab Sample ID: 480-11355-7

Date Collected: 10/17/11 15:10
Matrix: Water
Date Received: 10/17/11 17:05

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.59	ug/L			10/26/11 00:46	1
Trichloroethene	ND		5.0	0.60	ug/L			10/26/11 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*72 - 130*		*10/26/11 00:46*	*1*
4-Bromofluorobenzene (Surr)	*99*		*69 - 121*		*10/26/11 00:46*	*1*
Toluene-d8 (Surr)	*100*		*70 - 123*		*10/26/11 00:46*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**195**		2.0	0.50	ug/L		10/18/11 11:00	10/19/11 23:02	1
Chromium	**1.0**	**J**	4.0	0.87	ug/L		10/18/11 11:00	10/19/11 23:02	1
Copper	ND		10.0	1.5	ug/L		10/18/11 11:00	10/19/11 23:02	1
Iron	**94.2**		50.0	19.3	ug/L		10/18/11 11:00	10/19/11 23:02	1
Nickel	**1.3**	**J**	10.0	1.3	ug/L		10/18/11 11:00	10/19/11 23:02	1
Zinc	**3.6**	**J**	10.0	1.7	ug/L		10/18/11 11:00	10/19/11 23:02	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**0.66**	**J**	1.0	0.44	ug/L		10/19/11 07:40	10/22/11 16:17	1
Thallium	**0.025**	**J**	0.20	0.0080	ug/L		10/19/11 07:40	10/24/11 17:56	1

Method: 6010B - Metals (Custom List)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**2860**	**B**	100	4.7	ug/L		10/21/11 08:15	10/22/11 00:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**24.5**		2.0	0.35	mg/L			10/26/11 11:07	1
Ammonia as N	ND		0.020	0.0090	mg/L as N			10/26/11 16:19	1
Total Kjeldahl Nitrogen	**0.41**		0.20	0.15	mg/L as N		10/25/11 12:25	10/27/11 18:34	1
Nitrate as N	**0.69**		0.050	0.011	mg/L			10/19/11 00:57	1
Nitrite as N	ND		0.050	0.020	mg/L			10/19/11 01:04	1
Chemical Oxygen Demand	**13.3**		10.0	5.0	mg/L			10/28/11 12:23	1
Phenolics, Total Recoverable	ND		10.0	5.0	ug/L		11/03/11 16:26	11/03/11 18:58	1
Chromium, hexavalent	ND		10.0	5.0	ug/L			10/18/11 12:00	1
Total Dissolved Solids	**655**		10.0	4.0	mg/L			10/20/11 14:26	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			10/18/11 13:59	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.69**	**H**	0.100	0.100	SU			10/19/11 00:08	1
Total Suspended Solids	**32.8**		4.0	4.0	mg/L			10/21/11 01:45	1
Oxygen, Dissolved	**5.3**	**H**	0.050	0.050	mg/L			10/18/11 23:37	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-11355-8

Date Collected: 10/17/11 00:00
Matrix: Water
Date Received: 10/17/11 17:05

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.59	ug/L			10/26/11 01:08	1

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-11355-8
Matrix: Water
Date Collected: 10/17/11 00:00
Date Received: 10/17/11 17:05

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		5.0	0.60	ug/L			10/26/11 01:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*72 - 130*		*10/26/11 01:08*	*1*
4-Bromofluorobenzene (Surr)	*98*		*69 - 121*		*10/26/11 01:08*	*1*
Toluene-d8 (Surr)	*100*		*70 - 123*		*10/26/11 01:08*	*1*

Client Sample ID: AP-MW-1B

Lab Sample ID: 480-11387-1
Matrix: Water
Date Collected: 10/18/11 11:55
Date Received: 10/18/11 15:10

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.00099**	**J**	0.0010	0.00033	mg/L		10/19/11 09:20	10/19/11 17:17	1
Chromium	**0.0013**	**J**	0.0040	0.00087	mg/L		10/19/11 09:20	10/19/11 17:17	1
Iron	**0.12**		0.050	0.019	mg/L		10/19/11 09:20	10/19/11 17:17	1
Lead	ND		0.0050	0.0030	mg/L		10/19/11 09:20	10/19/11 17:17	1
Magnesium	**62.2**		0.20	0.043	mg/L		10/19/11 09:20	10/19/11 17:17	1
Manganese	**0.66**		0.0030	0.00030	mg/L		10/19/11 09:20	10/19/11 17:17	1
Selenium	ND		0.015	0.0087	mg/L		10/19/11 09:20	10/19/11 17:17	1
Sodium	**125**		1.0	0.32	mg/L		10/19/11 09:20	10/19/11 17:17	1
Thallium	ND		0.020	0.010	mg/L		10/19/11 09:20	10/19/11 17:17	1
Zinc	**0.56**		0.010	0.0017	mg/L		10/19/11 09:20	10/19/11 17:17	1

Method: 6010B - Metals (Custom List)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**6910**	**B**	100	4.7	ug/L		10/21/11 08:25	10/21/11 23:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**186**		4.0	0.70	mg/L			10/27/11 22:26	2
Ammonia as N	ND		0.020	0.0090	mg/L as N			10/25/11 14:14	1
Phenolics, Total Recoverable	**5.6**	**J**	10.0	5.0	ug/L		11/03/11 22:31	11/05/11 09:33	1
Chromium, hexavalent	ND		10.0	5.0	ug/L			10/18/11 20:53	1

Client Sample ID: AP-MW-2B

Lab Sample ID: 480-11387-2
Matrix: Water
Date Collected: 10/18/11 10:25
Date Received: 10/18/11 15:10

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	0.00033	mg/L		10/19/11 09:20	10/19/11 17:20	1
Chromium	**0.77**		0.0040	0.00087	mg/L		10/19/11 09:20	10/19/11 17:20	1
Iron	ND		0.050	0.019	mg/L		10/19/11 09:20	10/19/11 17:20	1
Lead	ND		0.0050	0.0030	mg/L		10/19/11 09:20	10/19/11 17:20	1
Magnesium	ND		0.20	0.043	mg/L		10/19/11 09:20	10/19/11 17:20	1
Manganese	ND		0.0030	0.00030	mg/L		10/19/11 09:20	10/19/11 17:20	1
Selenium	**0.0097**	**J**	0.015	0.0087	mg/L		10/19/11 09:20	10/19/11 17:20	1
Sodium	**40.5**		1.0	0.32	mg/L		10/19/11 09:20	10/19/11 17:20	1

Client Sample ID: AP-MW-2B

Date Collected: 10/18/11 10:25
Date Received: 10/18/11 15:10

Lab Sample ID: 480-11387-2
Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		0.020	0.010	mg/L		10/19/11 09:20	10/19/11 17:20	1
Zinc	ND		0.010	0.0017	mg/L		10/19/11 09:20	10/19/11 17:20	1

Method: 6010B - Metals (Custom List)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	509	B	100	4.7	ug/L		10/21/11 08:25	10/21/11 23:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	21.5		2.0	0.35	mg/L			10/27/11 22:36	1
Ammonia as N	1.6		0.020	0.0090	mg/L as N			10/25/11 14:15	1
Phenolics, Total Recoverable	10.5		10.0	5.0	ug/L		11/03/11 22:39	11/05/11 09:33	1
Chromium, hexavalent	754		20.0	10.0	ug/L			10/18/11 21:22	2

Client Sample ID: AP-MW-6B

Date Collected: 10/18/11 09:10
Date Received: 10/18/11 15:10

Lab Sample ID: 480-11387-3
Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	0.00033	mg/L		10/19/11 09:20	10/19/11 17:22	1
Chromium	ND		0.0040	0.00087	mg/L		10/19/11 09:20	10/19/11 17:22	1
Iron	0.28		0.050	0.019	mg/L		10/19/11 09:20	10/19/11 17:22	1
Lead	ND		0.0050	0.0030	mg/L		10/19/11 09:20	10/19/11 17:22	1
Magnesium	73.1		0.20	0.043	mg/L		10/19/11 09:20	10/19/11 17:22	1
Manganese	0.14		0.0030	0.00030	mg/L		10/19/11 09:20	10/19/11 17:22	1
Selenium	ND		0.015	0.0087	mg/L		10/19/11 09:20	10/19/11 17:22	1
Sodium	76.8		1.0	0.32	mg/L		10/19/11 09:20	10/19/11 17:22	1
Thallium	ND		0.020	0.010	mg/L		10/19/11 09:20	10/19/11 17:22	1
Zinc	0.0020	J	0.010	0.0017	mg/L		10/19/11 09:20	10/19/11 17:22	1

Method: 6010B - Metals (Custom List)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	5950	B	100	4.7	ug/L		10/21/11 08:25	10/21/11 23:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	363		10.0	1.7	mg/L			10/27/11 22:46	5
Ammonia as N	0.030		0.020	0.0090	mg/L as N			10/25/11 14:18	1
Phenolics, Total Recoverable	ND		10.0	5.0	ug/L		11/03/11 22:47	11/05/11 09:33	1
Chromium, hexavalent	ND		10.0	5.0	ug/L			10/18/11 20:59	1

Client Sample ID: AP-MW-7B

Date Collected: 10/18/11 13:05
Date Received: 10/18/11 15:10

Lab Sample ID: 480-11387-4
Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	0.00033	mg/L		10/19/11 09:20	10/19/11 17:37	1
Chromium	0.0026	J	0.0040	0.00087	mg/L		10/19/11 09:20	10/19/11 17:37	1

Client Sample ID: AP-MW-7B

Date Collected: 10/18/11 13:05
Date Received: 10/18/11 15:10

Lab Sample ID: 480-11387-4
Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.095		0.050	0.019	mg/L		10/19/11 09:20	10/19/11 17:37	1
Lead	ND		0.0050	0.0030	mg/L		10/19/11 09:20	10/19/11 17:37	1
Magnesium	8.3		0.20	0.043	mg/L		10/19/11 09:20	10/19/11 17:37	1
Manganese	0.037		0.0030	0.00030	mg/L		10/19/11 09:20	10/19/11 17:37	1
Selenium	ND		0.015	0.0087	mg/L		10/19/11 09:20	10/19/11 17:37	1
Sodium	54.1		1.0	0.32	mg/L		10/19/11 09:20	10/19/11 17:37	1
Thallium	ND		0.020	0.010	mg/L		10/19/11 09:20	10/19/11 17:37	1
Zinc	0.0023	J	0.010	0.0017	mg/L		10/19/11 09:20	10/19/11 17:37	1

Method: 6010B - Metals (Custom List)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	4960	B	100	4.7	ug/L		10/21/11 08:25	10/21/11 23:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	30.4		2.0	0.35	mg/L			10/26/11 16:00	1
Ammonia as N	0.66		0.020	0.0090	mg/L as N			10/25/11 14:21	1
Phenolics, Total Recoverable	11.1		10.0	5.0	ug/L		11/03/11 22:54	11/05/11 09:33	1
Chromium, hexavalent	ND		10.0	5.0	ug/L			10/18/11 21:02	1

Client Sample ID: AP-GW-DUP-01

Date Collected: 10/18/11 00:00
Date Received: 10/18/11 15:10

Lab Sample ID: 480-11387-5
Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	0.00033	mg/L		10/19/11 09:20	10/19/11 17:39	1
Chromium	0.77		0.0040	0.00087	mg/L		10/19/11 09:20	10/19/11 17:39	1
Iron	ND		0.050	0.019	mg/L		10/19/11 09:20	10/19/11 17:39	1
Lead	ND		0.0050	0.0030	mg/L		10/19/11 09:20	10/19/11 17:39	1
Magnesium	ND		0.20	0.043	mg/L		10/19/11 09:20	10/19/11 17:39	1
Manganese	ND		0.0030	0.00030	mg/L		10/19/11 09:20	10/19/11 17:39	1
Selenium	0.011	J	0.015	0.0087	mg/L		10/19/11 09:20	10/19/11 17:39	1
Sodium	39.8		1.0	0.32	mg/L		10/19/11 09:20	10/19/11 17:39	1
Thallium	ND		0.020	0.010	mg/L		10/19/11 09:20	10/19/11 17:39	1
Zinc	0.0021	J	0.010	0.0017	mg/L		10/19/11 09:20	10/19/11 17:39	1

Method: 6010B - Metals (Custom List)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	496	B	100	4.7	ug/L		10/21/11 08:25	10/21/11 23:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	21.6		2.0	0.35	mg/L			10/27/11 22:56	1
Ammonia as N	1.6		0.020	0.0090	mg/L as N			10/25/11 14:22	1
Phenolics, Total Recoverable	10		10.0	5.0	ug/L		11/03/11 23:02	11/05/11 09:42	1
Chromium, hexavalent	925		50.0	25.0	ug/L			10/18/11 21:35	5

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Client Sample ID: AP-RB-01

Date Collected: 10/18/11 14:10
Date Received: 10/18/11 15:10

Lab Sample ID: 480-11387-6

Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	0.00033	mg/L		10/19/11 09:20	10/19/11 17:41	1
Chromium	ND		0.0040	0.00087	mg/L		10/19/11 09:20	10/19/11 17:41	1
Iron	ND		0.050	0.019	mg/L		10/19/11 09:20	10/19/11 17:41	1
Lead	ND		0.0050	0.0030	mg/L		10/19/11 09:20	10/19/11 17:41	1
Magnesium	**1.3**		0.20	0.043	mg/L		10/19/11 09:20	10/19/11 17:41	1
Manganese	ND		0.0030	0.00030	mg/L		10/19/11 09:20	10/19/11 17:41	1
Selenium	ND		0.015	0.0087	mg/L		10/19/11 09:20	10/19/11 17:41	1
Sodium	**6.8**		1.0	0.32	mg/L		10/19/11 09:20	10/19/11 17:41	1
Thallium	ND		0.020	0.010	mg/L		10/19/11 09:20	10/19/11 17:41	1
Zinc	**0.0026**	**J**	0.010	0.0017	mg/L		10/19/11 09:20	10/19/11 17:41	1

Method: 6010B - Metals (Custom List)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**3890**	**B**	100	4.7	ug/L		10/21/11 08:25	10/21/11 23:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**6.5**		2.0	0.35	mg/L			10/26/11 16:21	1
Ammonia as N	ND		0.020	0.0090	mg/L as N			10/25/11 14:23	1
Phenolics, Total Recoverable	**5.2**	**J**	10.0	5.0	ug/L		11/03/11 23:10	11/05/11 09:42	1
Chromium, hexavalent	**5.6**	**J**	10.0	5.0	ug/L			10/18/11 21:09	1

Client Sample ID: AP-SWB-01

Date Collected: 10/18/11 14:00
Date Received: 10/18/11 15:10

Lab Sample ID: 480-11387-7

Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	0.00033	mg/L		10/19/11 09:20	10/19/11 17:43	1
Chromium	ND		0.0040	0.00087	mg/L		10/19/11 09:20	10/19/11 17:43	1
Iron	ND		0.050	0.019	mg/L		10/19/11 09:20	10/19/11 17:43	1
Lead	ND		0.0050	0.0030	mg/L		10/19/11 09:20	10/19/11 17:43	1
Magnesium	**1.3**		0.20	0.043	mg/L		10/19/11 09:20	10/19/11 17:43	1
Manganese	ND		0.0030	0.00030	mg/L		10/19/11 09:20	10/19/11 17:43	1
Selenium	ND		0.015	0.0087	mg/L		10/19/11 09:20	10/19/11 17:43	1
Sodium	**6.7**		1.0	0.32	mg/L		10/19/11 09:20	10/19/11 17:43	1
Thallium	ND		0.020	0.010	mg/L		10/19/11 09:20	10/19/11 17:43	1
Zinc	**0.0022**	**J**	0.010	0.0017	mg/L		10/19/11 09:20	10/19/11 17:43	1

Method: 6010B - Metals (Custom List)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**3780**	**B**	100	4.7	ug/L		10/21/11 08:25	10/21/11 23:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**6.4**		2.0	0.35	mg/L			10/26/11 16:31	1
Ammonia as N	ND		0.020	0.0090	mg/L as N			10/25/11 14:24	1
Phenolics, Total Recoverable	**5.4**	**J**	10.0	5.0	ug/L		11/03/11 23:18	11/05/11 10:00	1
Chromium, hexavalent	**5.6**	**J**	10.0	5.0	ug/L			10/18/11 21:25	1

Surrogate Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		12DCE	BFB	TOL						
Lab Sample ID	Client Sample ID	(72-130)	(69-121)	(70-123)						
480-11355-7	AP-SS-01/EWE-01	107	99	100						
480-11355-8	TRIP BLANK	107	98	100						
LCS 480-37153/4	Lab Control Sample	103	101	100						
MB 480-37153/5	Method Blank	103	99	99						

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-37153/5
Matrix: Water
Analysis Batch: 37153

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.59	ug/L			10/25/11 16:13	1
Trichloroethene	ND		5.0	0.60	ug/L			10/25/11 16:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*72 - 130*		*10/25/11 16:13*	*1*
4-Bromofluorobenzene (Surr)	*99*		*69 - 121*		*10/25/11 16:13*	*1*
Toluene-d8 (Surr)	*99*		*70 - 123*		*10/25/11 16:13*	*1*

Lab Sample ID: LCS 480-37153/4
Matrix: Water
Analysis Batch: 37153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	20.0	20.0		ug/L		100	73 - 128
Trichloroethene	20.0	19.4		ug/L		97	67 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*72 - 130*
4-Bromofluorobenzene (Surr)	*101*		*69 - 121*
Toluene-d8 (Surr)	*100*		*70 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-35922/1-A
Matrix: Water
Analysis Batch: 36071

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35922

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	0.00033	mg/L		10/18/11 11:00	10/18/11 19:30	1
Chromium	ND		0.0040	0.00087	mg/L		10/18/11 11:00	10/18/11 19:30	1
Iron	ND		0.050	0.019	mg/L		10/18/11 11:00	10/18/11 19:30	1
Lead	ND		0.0050	0.0030	mg/L		10/18/11 11:00	10/18/11 19:30	1
Magnesium	ND		0.20	0.043	mg/L		10/18/11 11:00	10/18/11 19:30	1
Manganese	ND		0.0030	0.00030	mg/L		10/18/11 11:00	10/18/11 19:30	1
Selenium	ND		0.015	0.0087	mg/L		10/18/11 11:00	10/18/11 19:30	1
Sodium	ND		1.0	0.32	mg/L		10/18/11 11:00	10/18/11 19:30	1
Thallium	ND		0.020	0.010	mg/L		10/18/11 11:00	10/18/11 19:30	1
Zinc	ND		0.010	0.0017	mg/L		10/18/11 11:00	10/18/11 19:30	1

Lab Sample ID: LCS 480-35922/2-A
Matrix: Water
Analysis Batch: 36071

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35922

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.200	0.189		mg/L		94	85 - 115
Chromium	0.200	0.194		mg/L		97	85 - 115
Iron	10.0	9.44		mg/L		94	85 - 115
Lead	0.200	0.185		mg/L		93	85 - 115
Magnesium	10.0	9.70		mg/L		97	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-35922/2-A
Matrix: Water
Analysis Batch: 36071

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35922

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.200	0.194		mg/L		97	85 - 115
Selenium	0.200	0.192		mg/L		96	85 - 115
Sodium	10.0	9.79		mg/L		98	85 - 115
Thallium	0.200	0.189		mg/L		94	85 - 115
Zinc	0.200	0.206		mg/L		103	85 - 115

Lab Sample ID: 480-11355-1 MS
Matrix: Water
Analysis Batch: 36071

Client Sample ID: AP-MW-3B
Prep Type: Total/NA
Prep Batch: 35922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	ND		0.200	0.191		mg/L		96	70 - 130
Chromium	ND		0.200	0.195		mg/L		98	70 - 130
Iron	0.042	J	10.0	9.23		mg/L		92	70 - 130
Lead	ND		0.200	0.187		mg/L		94	70 - 130
Magnesium	5.8		10.0	15.31		mg/L		95	70 - 130
Manganese	0.0059		0.200	0.198		mg/L		96	70 - 130
Selenium	ND		0.200	0.197		mg/L		98	70 - 130
Sodium	54.4		10.0	63.27	4	mg/L		89	70 - 130
Thallium	ND		0.200	0.190		mg/L		95	70 - 130
Zinc	0.0069	J	0.200	0.214		mg/L		104	70 - 130

Lab Sample ID: 480-11355-1 MSD
Matrix: Water
Analysis Batch: 36071

Client Sample ID: AP-MW-3B
Prep Type: Total/NA
Prep Batch: 35922

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	ND		0.200	0.193		mg/L		97	70 - 130	1	20
Chromium	ND		0.200	0.196		mg/L		98	70 - 130	0	20
Iron	0.042	J	10.0	9.38		mg/L		93	70 - 130	2	20
Lead	ND		0.200	0.191		mg/L		96	70 - 130	2	20
Magnesium	5.8		10.0	15.58		mg/L		97	70 - 130	2	20
Manganese	0.0059		0.200	0.200		mg/L		97	70 - 130	1	20
Selenium	ND		0.200	0.198		mg/L		99	70 - 130	1	20
Sodium	54.4		10.0	65.63	4	mg/L		112	70 - 130	4	20
Thallium	ND		0.200	0.193		mg/L		96	70 - 130	1	20
Zinc	0.0069	J	0.200	0.216		mg/L		105	70 - 130	1	20

Lab Sample ID: MB 480-35923/1-A
Matrix: Water
Analysis Batch: 36308

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35923

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		2.0	0.50	ug/L		10/18/11 11:00	10/19/11 22:21	1
Cadmium	ND		0.0010	0.00033	mg/L		10/18/11 11:00	10/19/11 22:21	1
Chromium	ND		0.0040	0.00087	mg/L		10/18/11 11:00	10/19/11 22:21	1
Copper	ND		10.0	1.5	ug/L		10/18/11 11:00	10/19/11 22:21	1
Iron	ND		0.050	0.019	mg/L		10/18/11 11:00	10/19/11 22:21	1
Lead	ND		0.0050	0.0030	mg/L		10/18/11 11:00	10/19/11 22:21	1
Magnesium	ND		0.20	0.043	mg/L		10/18/11 11:00	10/19/11 22:21	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 480-35923/1-A
Matrix: Water
Analysis Batch: 36308

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35923

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	ND		10.0	1.3	ug/L		10/18/11 11:00	10/19/11 22:21	1
Manganese	ND		0.0030	0.00030	mg/L		10/18/11 11:00	10/19/11 22:21	1
Selenium	ND		0.015	0.0087	mg/L		10/18/11 11:00	10/19/11 22:21	1
Sodium	ND		1.0	0.32	mg/L		10/18/11 11:00	10/19/11 22:21	1
Thallium	ND		0.020	0.010	mg/L		10/18/11 11:00	10/19/11 22:21	1
Zinc	ND		0.010	0.0017	mg/L		10/18/11 11:00	10/19/11 22:21	1

Lab Sample ID: LCS 480-35923/2-A
Matrix: Water
Analysis Batch: 36308

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	200	213.4		ug/L		107	85 - 115
Cadmium	0.200	0.194		mg/L		97	85 - 115
Chromium	0.200	0.198		mg/L		99	85 - 115
Copper	200	201.3		ug/L		101	85 - 115
Iron	10.0	10.97		mg/L		110	85 - 115
Lead	0.200	0.191		mg/L		96	85 - 115
Magnesium	10.0	10.30		mg/L		103	85 - 115
Nickel	200	214.1		ug/L		107	85 - 115
Manganese	0.200	0.212		mg/L		106	85 - 115
Selenium	0.200	0.205		mg/L		103	85 - 115
Sodium	10.0	10.11		mg/L		101	85 - 115
Thallium	0.200	0.193		mg/L		97	85 - 115
Zinc	0.200	0.219		mg/L		110	85 - 115

Lab Sample ID: 480-11355-3 MS
Matrix: Water
Analysis Batch: 36308

Client Sample ID: AP-MW-5B
Prep Type: Total/NA
Prep Batch: 35923

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.035		0.200	0.244		mg/L		104	70 - 130
Cadmium	0.00034	J	0.200	0.194		mg/L		97	70 - 130
Chromium	0.0039	J	0.200	0.198		mg/L		97	70 - 130
Copper	ND		0.200	0.198		mg/L		99	70 - 130
Iron	0.60		10.0	11.51		mg/L		109	70 - 130
Lead	ND		0.200	0.188		mg/L		94	70 - 130
Magnesium	82.3		10.0	91.51	4	mg/L		92	70 - 130
Nickel	ND		0.200	0.215		mg/L		108	70 - 130
Manganese	0.021		0.200	0.225		mg/L		102	70 - 130
Selenium	ND		0.200	0.205		mg/L		103	70 - 130
Sodium	31.2		10.0	41.54		mg/L		103	70 - 130
Thallium	ND		0.200	0.191		mg/L		96	70 - 130
Zinc	0.025		0.200	0.235		mg/L		105	70 - 130

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 480-11355-3 MSD
Matrix: Water
Analysis Batch: 36308

Client Sample ID: AP-MW-5B
Prep Type: Total/NA
Prep Batch: 35923

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	0.035		0.200	0.243		mg/L		104	70 - 130	0	20
Cadmium	0.00034	J	0.200	0.193		mg/L		96	70 - 130	1	20
Chromium	0.0039	J	0.200	0.196		mg/L		96	70 - 130	1	20
Copper	ND		0.200	0.195		mg/L		97	70 - 130	2	20
Iron	0.60		10.0	11.51		mg/L		109	70 - 130	0	20
Lead	ND		0.200	0.189		mg/L		94	70 - 130	0	20
Magnesium	82.3		10.0	93.04	4	mg/L		107	70 - 130	2	20
Nickel	ND		0.200	0.215		mg/L		108	70 - 130	0	20
Manganese	0.021		0.200	0.224		mg/L		102	70 - 130	0	20
Selenium	ND		0.200	0.203		mg/L		102	70 - 130	1	20
Sodium	31.2		10.0	42.06		mg/L		108	70 - 130	1	20
Thallium	ND		0.200	0.190		mg/L		95	70 - 130	1	20
Zinc	0.025		0.200	0.236		mg/L		106	70 - 130	0	20

Lab Sample ID: MB 480-36075/1-A
Matrix: Water
Analysis Batch: 36315

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 36075

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	0.00033	mg/L		10/19/11 09:20	10/19/11 17:11	1
Chromium	ND		0.0040	0.00087	mg/L		10/19/11 09:20	10/19/11 17:11	1
Iron	ND		0.050	0.019	mg/L		10/19/11 09:20	10/19/11 17:11	1
Lead	ND		0.0050	0.0030	mg/L		10/19/11 09:20	10/19/11 17:11	1
Magnesium	ND		0.20	0.043	mg/L		10/19/11 09:20	10/19/11 17:11	1
Manganese	ND		0.0030	0.00030	mg/L		10/19/11 09:20	10/19/11 17:11	1
Selenium	ND		0.015	0.0087	mg/L		10/19/11 09:20	10/19/11 17:11	1
Sodium	ND		1.0	0.32	mg/L		10/19/11 09:20	10/19/11 17:11	1
Thallium	ND		0.020	0.010	mg/L		10/19/11 09:20	10/19/11 17:11	1
Zinc	ND		0.010	0.0017	mg/L		10/19/11 09:20	10/19/11 17:11	1

Lab Sample ID: LCS 480-36075/2-A
Matrix: Water
Analysis Batch: 36315

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 36075

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.200	0.201		mg/L		100	85 - 115
Chromium	0.200	0.204		mg/L		102	85 - 115
Iron	10.0	10.40		mg/L		104	85 - 115
Lead	0.200	0.194		mg/L		97	85 - 115
Magnesium	10.0	10.16		mg/L		102	85 - 115
Manganese	0.200	0.206		mg/L		103	85 - 115
Selenium	0.200	0.199		mg/L		99	85 - 115
Sodium	10.0	9.88		mg/L		99	85 - 115
Thallium	0.200	0.198		mg/L		99	85 - 115
Zinc	0.200	0.215		mg/L		107	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 480-11387-3 MS
Matrix: Water
Analysis Batch: 36315

Client Sample ID: AP-MW-6B
Prep Type: Total/NA
Prep Batch: 36075

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	ND		0.200	0.208		mg/L		104	70 - 130
Chromium	ND		0.200	0.200		mg/L		100	70 - 130
Iron	0.28		10.0	10.66		mg/L		104	70 - 130
Lead	ND		0.200	0.201		mg/L		100	70 - 130
Magnesium	73.1		10.0	82.36	4	mg/L		93	70 - 130
Manganese	0.14		0.200	0.346		mg/L		101	70 - 130
Selenium	ND		0.200	0.214		mg/L		107	70 - 130
Sodium	76.8		10.0	86.50	4	mg/L		96	70 - 130
Thallium	ND		0.200	0.199		mg/L		99	70 - 130
Zinc	0.0020	J	0.200	0.215		mg/L		107	70 - 130

Lab Sample ID: 480-11387-3 MSD
Matrix: Water
Analysis Batch: 36315

Client Sample ID: AP-MW-6B
Prep Type: Total/NA
Prep Batch: 36075

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	ND		0.200	0.205		mg/L		103	70 - 130	2	20
Chromium	ND		0.200	0.201		mg/L		101	70 - 130	1	20
Iron	0.28		10.0	10.57		mg/L		103	70 - 130	1	20
Lead	ND		0.200	0.197		mg/L		98	70 - 130	2	20
Magnesium	73.1		10.0	81.75	4	mg/L		87	70 - 130	1	20
Manganese	0.14		0.200	0.344		mg/L		100	70 - 130	1	20
Selenium	ND		0.200	0.207		mg/L		104	70 - 130	3	20
Sodium	76.8		10.0	86.05	4	mg/L		92	70 - 130	1	20
Thallium	ND		0.200	0.196		mg/L		98	70 - 130	1	20
Zinc	0.0020	J	0.200	0.213		mg/L		105	70 - 130	1	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 480-35978/1-A
Matrix: Water
Analysis Batch: 36906

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35978

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		1.0	0.44	ug/L		10/19/11 07:40	10/22/11 14:45	1
Thallium	ND		0.20	0.0080	ug/L		10/19/11 07:40	10/22/11 14:45	1

Lab Sample ID: LCS 480-35978/2-A
Matrix: Water
Analysis Batch: 36906

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35978

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	20.0	22.78		ug/L		114	85 - 115
Thallium	20.0	22.12		ug/L		111	85 - 115

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 480-11355-7 MS
Matrix: Water
Analysis Batch: 36906

Client Sample ID: AP-SS-01/EWE-01
Prep Type: Total/NA
Prep Batch: 35978

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	0.66	J	20.0	21.47		ug/L		104	70 - 130

Lab Sample ID: 480-11355-7 MS
Matrix: Water
Analysis Batch: 37043

Client Sample ID: AP-SS-01/EWE-01
Prep Type: Total/NA
Prep Batch: 35978

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	0.025	J	20.0	18.32		ug/L		91	70 - 130

Lab Sample ID: 480-11355-7 MSD
Matrix: Water
Analysis Batch: 36906

Client Sample ID: AP-SS-01/EWE-01
Prep Type: Total/NA
Prep Batch: 35978

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium	0.66	J	20.0	21.44		ug/L		104	70 - 130	0	20

Lab Sample ID: 480-11355-7 MSD
Matrix: Water
Analysis Batch: 37043

Client Sample ID: AP-SS-01/EWE-01
Prep Type: Total/NA
Prep Batch: 35978

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Thallium	0.025	J	20.0	17.80		ug/L		89	70 - 130	3	20

Method: 6010B - Metals (Custom List)

Lab Sample ID: MB 200-27168/1-A
Matrix: Water
Analysis Batch: 27300

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 27168

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	19.55	J	100	4.7	ug/L		10/21/11 08:15	10/22/11 00:15	1

Lab Sample ID: LCS 200-27168/2-A
Matrix: Water
Analysis Batch: 27300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 27168

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silicon	1000	912.5		ug/L		91	80 - 120

Lab Sample ID: MB 200-27170/1-A
Matrix: Water
Analysis Batch: 27297

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 27170

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	14.14	J	100	4.7	ug/L		10/21/11 08:25	10/21/11 23:17	1

Method: 6010B - Metals (Custom List) (Continued)

Lab Sample ID: LCS 200-27170/2-A
Matrix: Water
Analysis Batch: 27297

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 27170

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silicon	1000	943.0		ug/L		94	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-37018/100
Matrix: Water
Analysis Batch: 37018

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		2.0	0.35	mg/L			10/26/11 09:56	1

Lab Sample ID: LCS 480-37018/99
Matrix: Water
Analysis Batch: 37018

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	20.60		mg/L		103	90 - 110

Lab Sample ID: 480-11355-7 MS
Matrix: Water
Analysis Batch: 37018

Client Sample ID: AP-SS-01/EWE-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	24.5		25.0	51.40		mg/L		108	75 - 125

Lab Sample ID: MB 480-37020/124
Matrix: Water
Analysis Batch: 37020

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		2.0	0.35	mg/L			10/26/11 13:59	1

Lab Sample ID: LCS 480-37020/123
Matrix: Water
Analysis Batch: 37020

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	20.80		mg/L		104	90 - 110

Lab Sample ID: 480-11387-7 MS
Matrix: Water
Analysis Batch: 37020

Client Sample ID: AP-SWB-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	6.4		25.0	33.80		mg/L		110	75 - 125

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 480-11387-7 MSD — **Client Sample ID: AP-SWB-01**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 37020

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	6.4		25.0	33.90		mg/L		110	75 - 125	0	20

Lab Sample ID: MB 480-37441/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 37441

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		2.0	0.35	mg/L			10/27/11 17:53	1

Lab Sample ID: LCS 480-37441/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 37441

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	20.10		mg/L		101	90 - 110

Lab Sample ID: 480-11355-3 MS — **Client Sample ID: AP-MW-5B**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 37441

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	150		50.0	201.2	E	mg/L		102	75 - 125

Lab Sample ID: 480-11355-3 MSD — **Client Sample ID: AP-MW-5B**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 37441

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	150		50.0	203.4	E	mg/L		107	75 - 125	1	20

Lab Sample ID: MB 480-37444/28 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 37444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		2.0	0.35	mg/L			10/27/11 21:56	1

Lab Sample ID: LCS 480-37444/27 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 37444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	20.10		mg/L		101	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-37197/51
Matrix: Water
Analysis Batch: 37197

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.020	0.0090	mg/L as N			10/25/11 13:43	1

Lab Sample ID: MB 480-37197/75
Matrix: Water
Analysis Batch: 37197

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.020	0.0090	mg/L as N			10/25/11 14:06	1

Lab Sample ID: LCS 480-37197/52
Matrix: Water
Analysis Batch: 37197

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	1.00	1.04		mg/L as N		104	90 - 110

Lab Sample ID: LCS 480-37197/76
Matrix: Water
Analysis Batch: 37197

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	1.00	1.05		mg/L as N		105	90 - 110

Lab Sample ID: 480-11387-3 MS
Matrix: Water
Analysis Batch: 37197

Client Sample ID: AP-MW-6B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.030		0.200	0.456	F	mg/L as N		213	54 - 150

Lab Sample ID: 480-11387-3 MSD
Matrix: Water
Analysis Batch: 37197

Client Sample ID: AP-MW-6B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.030		0.200	0.463	F	mg/L as N		216	54 - 150	1	20

Lab Sample ID: MB 480-37440/3
Matrix: Water
Analysis Batch: 37440

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.020	0.0090	mg/L as N			10/26/11 16:01	1

Lab Sample ID: LCS 480-37440/4
Matrix: Water
Analysis Batch: 37440

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	1.00	1.06		mg/L as N		106	90 - 110

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 480-37151/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 37705 — **Prep Batch: 37151**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		0.20	0.15	mg/L as N		10/25/11 12:25	10/27/11 15:57	1

Lab Sample ID: LCS 480-37151/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 37705 — **Prep Batch: 37151**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Kjeldahl Nitrogen	2.50	2.47		mg/L as N		99	90 - 110

Method: 353.2 - Nitrogen, Nitrite

Lab Sample ID: MB 480-36045/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 36045

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.050	0.020	mg/L			10/19/11 00:58	1

Lab Sample ID: LCS 480-36045/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 36045

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	1.50	1.60		mg/L		107	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-37853/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 37853

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0	5.0	mg/L			10/28/11 12:23	1

Lab Sample ID: LCS 480-37853/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 37853

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	25.0	24.71		mg/L		99	90 - 110

Method: 420.4 - Phenolics, Total Recoverable

Lab Sample ID: MB 480-38811/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 38892 — **Prep Batch: 38811**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		10.0	5.0	ug/L		11/03/11 16:22	11/03/11 17:02	1

Method: 420.4 - Phenolics, Total Recoverable (Continued)

Lab Sample ID: LCS 480-38811/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 38892 — **Prep Batch: 38811**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	100	101.6		ug/L		102	90 - 110

Lab Sample ID: MB 480-38815/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 38892 — **Prep Batch: 38815**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		10.0	5.0	ug/L		11/03/11 16:26	11/03/11 17:02	1

Lab Sample ID: LCS 480-38815/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 38892 — **Prep Batch: 38815**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	100	107.6		ug/L		108	90 - 110

Lab Sample ID: MB 480-38856/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 39103 — **Prep Batch: 38856**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		10.0	5.0	ug/L		11/03/11 21:45	11/05/11 08:35	1

Lab Sample ID: LCS 480-38856/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 39103 — **Prep Batch: 38856**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	100	106.2		ug/L		106	90 - 110

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 480-35972/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 35972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		10.0	5.0	ug/L			10/18/11 12:00	1

Lab Sample ID: LCS 480-35972/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 35972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	50.0	48.73		ug/L		97	85 - 115

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: 480-11355-7 MS
Matrix: Water
Analysis Batch: 35972

Client Sample ID: AP-SS-01/EWE-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	ND		50.0	44.81		ug/L		90	85 - 115

Lab Sample ID: 480-11355-2 DU
Matrix: Water
Analysis Batch: 35972

Client Sample ID: AP-MW-4B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	76.2		74.22		ug/L		3	15

Lab Sample ID: 480-11355-4 DU
Matrix: Water
Analysis Batch: 35972

Client Sample ID: AP-MW-8B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	76.2		73.24		ug/L		4	15

Lab Sample ID: MB 480-36056/3
Matrix: Water
Analysis Batch: 36056

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		10.0	5.0	ug/L			10/18/11 20:46	1

Lab Sample ID: LCS 480-36056/4
Matrix: Water
Analysis Batch: 36056

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	50.0	54.61		ug/L		109	85 - 115

Lab Sample ID: 480-11387-6 MS
Matrix: Water
Analysis Batch: 36056

Client Sample ID: AP-RB-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	5.6	J	50.0	64.41	F	ug/L		118	85 - 115

Lab Sample ID: 480-11387-7 DU
Matrix: Water
Analysis Batch: 36056

Client Sample ID: AP-SWB-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	5.6	J	6.57	J	ug/L		16	15

Method: 9040B - pH

Lab Sample ID: LCS 480-36041/1
Matrix: Water
Analysis Batch: 36041

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.020		SU		100	99 - 101

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 480-36361/1
Matrix: Water
Analysis Batch: 36361

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10.0	4.0	mg/L			10/20/11 11:50	1

Lab Sample ID: LCS 480-36361/2
Matrix: Water
Analysis Batch: 36361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	502	483.0		mg/L		96	85 - 115

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-36509/1
Matrix: Water
Analysis Batch: 36509

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			10/21/11 01:23	1

Lab Sample ID: LCS 480-36509/2
Matrix: Water
Analysis Batch: 36509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	304	299.6		mg/L		99	88 - 110

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-36051/1 USB
Matrix: Water
Analysis Batch: 36051

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			10/18/11 13:59	1

Lab Sample ID: LCS 480-36051/2
Matrix: Water
Analysis Batch: 36051

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biochemical Oxygen Demand	198	203.4		mg/L		103	85 - 115

GC/MS VOA

Analysis Batch: 37153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	624	
480-11355-8	TRIP BLANK	Total/NA	Water	624	
LCS 480-37153/4	Lab Control Sample	Total/NA	Water	624	
MB 480-37153/5	Method Blank	Total/NA	Water	624	

Metals

Prep Batch: 27168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-1	AP-MW-3B	Total/NA	Water	3010A	
480-11355-2	AP-MW-4B	Total/NA	Water	3010A	
480-11355-3	AP-MW-5B	Total/NA	Water	3010A	
480-11355-4	AP-MW-8B	Total/NA	Water	3010A	
480-11355-5	AP-SS-03	Total/NA	Water	3010A	
480-11355-6	AP-SS-02	Total/NA	Water	3010A	
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	3010A	
LCS 200-27168/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 200-27168/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 27170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11387-1	AP-MW-1B	Total/NA	Water	3010A	
480-11387-2	AP-MW-2B	Total/NA	Water	3010A	
480-11387-3	AP-MW-6B	Total/NA	Water	3010A	
480-11387-4	AP-MW-7B	Total/NA	Water	3010A	
480-11387-5	AP-GW-DUP-01	Total/NA	Water	3010A	
480-11387-6	AP-RB-01	Total/NA	Water	3010A	
480-11387-7	AP-SWB-01	Total/NA	Water	3010A	
LCS 200-27170/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 200-27170/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 27297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11387-1	AP-MW-1B	Total/NA	Water	6010B	27170
480-11387-2	AP-MW-2B	Total/NA	Water	6010B	27170
480-11387-3	AP-MW-6B	Total/NA	Water	6010B	27170
480-11387-4	AP-MW-7B	Total/NA	Water	6010B	27170
480-11387-5	AP-GW-DUP-01	Total/NA	Water	6010B	27170
480-11387-6	AP-RB-01	Total/NA	Water	6010B	27170
480-11387-7	AP-SWB-01	Total/NA	Water	6010B	27170
LCS 200-27170/2-A	Lab Control Sample	Total/NA	Water	6010B	27170
MB 200-27170/1-A	Method Blank	Total/NA	Water	6010B	27170

Analysis Batch: 27300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-1	AP-MW-3B	Total/NA	Water	6010B	27168
480-11355-2	AP-MW-4B	Total/NA	Water	6010B	27168
480-11355-3	AP-MW-5B	Total/NA	Water	6010B	27168
480-11355-4	AP-MW-8B	Total/NA	Water	6010B	27168
480-11355-5	AP-SS-03	Total/NA	Water	6010B	27168
480-11355-6	AP-SS-02	Total/NA	Water	6010B	27168
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	6010B	27168

Metals (Continued)

Analysis Batch: 27300 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 200-27168/2-A	Lab Control Sample	Total/NA	Water	6010B	27168
MB 200-27168/1-A	Method Blank	Total/NA	Water	6010B	27168

Prep Batch: 35922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-1	AP-MW-3B	Total/NA	Water	200.7	
480-11355-1 MS	AP-MW-3B	Total/NA	Water	200.7	
480-11355-1 MSD	AP-MW-3B	Total/NA	Water	200.7	
LCS 480-35922/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-35922/1-A	Method Blank	Total/NA	Water	200.7	

Prep Batch: 35923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-2	AP-MW-4B	Total/NA	Water	200.7	
480-11355-3	AP-MW-5B	Total/NA	Water	200.7	
480-11355-3 MS	AP-MW-5B	Total/NA	Water	200.7	
480-11355-3 MSD	AP-MW-5B	Total/NA	Water	200.7	
480-11355-4	AP-MW-8B	Total/NA	Water	200.7	
480-11355-5	AP-SS-03	Total/NA	Water	200.7	
480-11355-6	AP-SS-02	Total/NA	Water	200.7	
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	200.7	
LCS 480-35923/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-35923/1-A	Method Blank	Total/NA	Water	200.7	

Prep Batch: 35978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	200.8	
480-11355-7 MS	AP-SS-01/EWE-01	Total/NA	Water	200.8	
480-11355-7 MSD	AP-SS-01/EWE-01	Total/NA	Water	200.8	
LCS 480-35978/2-A	Lab Control Sample	Total/NA	Water	200.8	
MB 480-35978/1-A	Method Blank	Total/NA	Water	200.8	

Analysis Batch: 36071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-1	AP-MW-3B	Total/NA	Water	200.7 Rev 4.4	35922
480-11355-1 MS	AP-MW-3B	Total/NA	Water	200.7 Rev 4.4	35922
480-11355-1 MSD	AP-MW-3B	Total/NA	Water	200.7 Rev 4.4	35922
LCS 480-35922/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	35922
MB 480-35922/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	35922

Prep Batch: 36075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11387-1	AP-MW-1B	Total/NA	Water	200.7	
480-11387-2	AP-MW-2B	Total/NA	Water	200.7	
480-11387-3	AP-MW-6B	Total/NA	Water	200.7	
480-11387-3 MS	AP-MW-6B	Total/NA	Water	200.7	
480-11387-3 MSD	AP-MW-6B	Total/NA	Water	200.7	
480-11387-4	AP-MW-7B	Total/NA	Water	200.7	
480-11387-5	AP-GW-DUP-01	Total/NA	Water	200.7	
480-11387-6	AP-RB-01	Total/NA	Water	200.7	
480-11387-7	AP-SWB-01	Total/NA	Water	200.7	
LCS 480-36075/2-A	Lab Control Sample	Total/NA	Water	200.7	

Metals (Continued)

Prep Batch: 36075 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-36075/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 36308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-2	AP-MW-4B	Total/NA	Water	200.7 Rev 4.4	35923
480-11355-3	AP-MW-5B	Total/NA	Water	200.7 Rev 4.4	35923
480-11355-3 MS	AP-MW-5B	Total/NA	Water	200.7 Rev 4.4	35923
480-11355-3 MSD	AP-MW-5B	Total/NA	Water	200.7 Rev 4.4	35923
480-11355-4	AP-MW-8B	Total/NA	Water	200.7 Rev 4.4	35923
480-11355-5	AP-SS-03	Total/NA	Water	200.7 Rev 4.4	35923
480-11355-6	AP-SS-02	Total/NA	Water	200.7 Rev 4.4	35923
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	200.7 Rev 4.4	35923
LCS 480-35923/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	35923
MB 480-35923/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	35923

Analysis Batch: 36315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11387-1	AP-MW-1B	Total/NA	Water	200.7 Rev 4.4	36075
480-11387-2	AP-MW-2B	Total/NA	Water	200.7 Rev 4.4	36075
480-11387-3	AP-MW-6B	Total/NA	Water	200.7 Rev 4.4	36075
480-11387-3 MS	AP-MW-6B	Total/NA	Water	200.7 Rev 4.4	36075
480-11387-3 MSD	AP-MW-6B	Total/NA	Water	200.7 Rev 4.4	36075
480-11387-4	AP-MW-7B	Total/NA	Water	200.7 Rev 4.4	36075
480-11387-5	AP-GW-DUP-01	Total/NA	Water	200.7 Rev 4.4	36075
480-11387-6	AP-RB-01	Total/NA	Water	200.7 Rev 4.4	36075
480-11387-7	AP-SWB-01	Total/NA	Water	200.7 Rev 4.4	36075
LCS 480-36075/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	36075
MB 480-36075/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	36075

Analysis Batch: 36906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	200.8	35978
480-11355-7 MS	AP-SS-01/EWE-01	Total/NA	Water	200.8	35978
480-11355-7 MSD	AP-SS-01/EWE-01	Total/NA	Water	200.8	35978
LCS 480-35978/2-A	Lab Control Sample	Total/NA	Water	200.8	35978
MB 480-35978/1-A	Method Blank	Total/NA	Water	200.8	35978

Analysis Batch: 37043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	200.8	35978
480-11355-7 MS	AP-SS-01/EWE-01	Total/NA	Water	200.8	35978
480-11355-7 MSD	AP-SS-01/EWE-01	Total/NA	Water	200.8	35978

General Chemistry

Analysis Batch: 35972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-1	AP-MW-3B	Total/NA	Water	7196A	
480-11355-2	AP-MW-4B	Total/NA	Water	7196A	
480-11355-2 DU	AP-MW-4B	Total/NA	Water	7196A	
480-11355-3	AP-MW-5B	Total/NA	Water	7196A	
480-11355-4	AP-MW-8B	Total/NA	Water	7196A	

General Chemistry (Continued)

Analysis Batch: 35972 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-4 DU	AP-MW-8B	Total/NA	Water	7196A	
480-11355-5	AP-SS-03	Total/NA	Water	7196A	
480-11355-6	AP-SS-02	Total/NA	Water	7196A	
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	7196A	
480-11355-7 MS	AP-SS-01/EWE-01	Total/NA	Water	7196A	
LCS 480-35972/4	Lab Control Sample	Total/NA	Water	7196A	
MB 480-35972/3	Method Blank	Total/NA	Water	7196A	

Analysis Batch: 36041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	9040B	
LCS 480-36041/1	Lab Control Sample	Total/NA	Water	9040B	

Analysis Batch: 36045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	353.2	
LCS 480-36045/4	Lab Control Sample	Total/NA	Water	353.2	
MB 480-36045/3	Method Blank	Total/NA	Water	353.2	

Analysis Batch: 36051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	SM 5210B	
LCS 480-36051/2	Lab Control Sample	Total/NA	Water	SM 5210B	
USB 480-36051/1 USB	Method Blank	Total/NA	Water	SM 5210B	

Analysis Batch: 36052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	SM 4500 O G	

Analysis Batch: 36056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11387-1	AP-MW-1B	Total/NA	Water	7196A	
480-11387-2	AP-MW-2B	Total/NA	Water	7196A	
480-11387-3	AP-MW-6B	Total/NA	Water	7196A	
480-11387-4	AP-MW-7B	Total/NA	Water	7196A	
480-11387-5	AP-GW-DUP-01	Total/NA	Water	7196A	
480-11387-6	AP-RB-01	Total/NA	Water	7196A	
480-11387-6 MS	AP-RB-01	Total/NA	Water	7196A	
480-11387-7	AP-SWB-01	Total/NA	Water	7196A	
480-11387-7 DU	AP-SWB-01	Total/NA	Water	7196A	
LCS 480-36056/4	Lab Control Sample	Total/NA	Water	7196A	
MB 480-36056/3	Method Blank	Total/NA	Water	7196A	

Analysis Batch: 36361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	SM 2540C	
LCS 480-36361/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 480-36361/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 36509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	SM 2540D	

General Chemistry (Continued)

Analysis Batch: 36509 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-36509/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-36509/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 36746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	353.2	

Analysis Batch: 37018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-1	AP-MW-3B	Total/NA	Water	300.0	
480-11355-5	AP-SS-03	Total/NA	Water	300.0	
480-11355-6	AP-SS-02	Total/NA	Water	300.0	
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	300.0	
480-11355-7 MS	AP-SS-01/EWE-01	Total/NA	Water	300.0	
LCS 480-37018/99	Lab Control Sample	Total/NA	Water	300.0	
MB 480-37018/100	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 37020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11387-4	AP-MW-7B	Total/NA	Water	300.0	
480-11387-6	AP-RB-01	Total/NA	Water	300.0	
480-11387-7	AP-SWB-01	Total/NA	Water	300.0	
480-11387-7 MS	AP-SWB-01	Total/NA	Water	300.0	
480-11387-7 MSD	AP-SWB-01	Total/NA	Water	300.0	
LCS 480-37020/123	Lab Control Sample	Total/NA	Water	300.0	
MB 480-37020/124	Method Blank	Total/NA	Water	300.0	

Prep Batch: 37151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	351.2	
LCS 480-37151/2-A	Lab Control Sample	Total/NA	Water	351.2	
MB 480-37151/1-A	Method Blank	Total/NA	Water	351.2	

Analysis Batch: 37197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-1	AP-MW-3B	Total/NA	Water	350.1	
480-11355-2	AP-MW-4B	Total/NA	Water	350.1	
480-11355-3	AP-MW-5B	Total/NA	Water	350.1	
480-11355-4	AP-MW-8B	Total/NA	Water	350.1	
480-11355-5	AP-SS-03	Total/NA	Water	350.1	
480-11355-6	AP-SS-02	Total/NA	Water	350.1	
480-11387-1	AP-MW-1B	Total/NA	Water	350.1	
480-11387-2	AP-MW-2B	Total/NA	Water	350.1	
480-11387-3	AP-MW-6B	Total/NA	Water	350.1	
480-11387-3 MS	AP-MW-6B	Total/NA	Water	350.1	
480-11387-3 MSD	AP-MW-6B	Total/NA	Water	350.1	
480-11387-4	AP-MW-7B	Total/NA	Water	350.1	
480-11387-5	AP-GW-DUP-01	Total/NA	Water	350.1	
480-11387-6	AP-RB-01	Total/NA	Water	350.1	
480-11387-7	AP-SWB-01	Total/NA	Water	350.1	
LCS 480-37197/52	Lab Control Sample	Total/NA	Water	350.1	
LCS 480-37197/76	Lab Control Sample	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 37197 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-37197/51	Method Blank	Total/NA	Water	350.1	
MB 480-37197/75	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 37440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	350.1	
LCS 480-37440/4	Lab Control Sample	Total/NA	Water	350.1	
MB 480-37440/3	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 37441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-2	AP-MW-4B	Total/NA	Water	300.0	
480-11355-3	AP-MW-5B	Total/NA	Water	300.0	
480-11355-3 MS	AP-MW-5B	Total/NA	Water	300.0	
480-11355-3 MSD	AP-MW-5B	Total/NA	Water	300.0	
LCS 480-37441/3	Lab Control Sample	Total/NA	Water	300.0	
MB 480-37441/4	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 37444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-4	AP-MW-8B	Total/NA	Water	300.0	
480-11387-1	AP-MW-1B	Total/NA	Water	300.0	
480-11387-2	AP-MW-2B	Total/NA	Water	300.0	
480-11387-3	AP-MW-6B	Total/NA	Water	300.0	
480-11387-5	AP-GW-DUP-01	Total/NA	Water	300.0	
LCS 480-37444/27	Lab Control Sample	Total/NA	Water	300.0	
MB 480-37444/28	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 37705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	351.2	37151
LCS 480-37151/2-A	Lab Control Sample	Total/NA	Water	351.2	37151
MB 480-37151/1-A	Method Blank	Total/NA	Water	351.2	37151

Analysis Batch: 37853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	410.4	
LCS 480-37853/4	Lab Control Sample	Total/NA	Water	410.4	
MB 480-37853/3	Method Blank	Total/NA	Water	410.4	

Prep Batch: 38811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-1	AP-MW-3B	Total/NA	Water	Distill/Phenol	
480-11355-2	AP-MW-4B	Total/NA	Water	Distill/Phenol	
480-11355-3	AP-MW-5B	Total/NA	Water	Distill/Phenol	
LCS 480-38811/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
MB 480-38811/1-A	Method Blank	Total/NA	Water	Distill/Phenol	

Prep Batch: 38815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-4	AP-MW-8B	Total/NA	Water	Distill/Phenol	
480-11355-5	AP-SS-03	Total/NA	Water	Distill/Phenol	

General Chemistry (Continued)

Prep Batch: 38815 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-6	AP-SS-02	Total/NA	Water	Distill/Phenol	
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	Distill/Phenol	
LCS 480-38815/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
MB 480-38815/1-A	Method Blank	Total/NA	Water	Distill/Phenol	

Prep Batch: 38856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11387-1	AP-MW-1B	Total/NA	Water	Distill/Phenol	
480-11387-2	AP-MW-2B	Total/NA	Water	Distill/Phenol	
480-11387-3	AP-MW-6B	Total/NA	Water	Distill/Phenol	
480-11387-4	AP-MW-7B	Total/NA	Water	Distill/Phenol	
480-11387-5	AP-GW-DUP-01	Total/NA	Water	Distill/Phenol	
480-11387-6	AP-RB-01	Total/NA	Water	Distill/Phenol	
480-11387-7	AP-SWB-01	Total/NA	Water	Distill/Phenol	
LCS 480-38856/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
MB 480-38856/1-A	Method Blank	Total/NA	Water	Distill/Phenol	

Analysis Batch: 38892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11355-1	AP-MW-3B	Total/NA	Water	420.4	38811
480-11355-2	AP-MW-4B	Total/NA	Water	420.4	38811
480-11355-3	AP-MW-5B	Total/NA	Water	420.4	38811
480-11355-4	AP-MW-8B	Total/NA	Water	420.4	38815
480-11355-5	AP-SS-03	Total/NA	Water	420.4	38815
480-11355-6	AP-SS-02	Total/NA	Water	420.4	38815
480-11355-7	AP-SS-01/EWE-01	Total/NA	Water	420.4	38815
LCS 480-38811/2-A	Lab Control Sample	Total/NA	Water	420.4	38811
LCS 480-38815/2-A	Lab Control Sample	Total/NA	Water	420.4	38815
MB 480-38811/1-A	Method Blank	Total/NA	Water	420.4	38811
MB 480-38815/1-A	Method Blank	Total/NA	Water	420.4	38815

Analysis Batch: 39103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-11387-1	AP-MW-1B	Total/NA	Water	420.4	38856
480-11387-2	AP-MW-2B	Total/NA	Water	420.4	38856
480-11387-3	AP-MW-6B	Total/NA	Water	420.4	38856
480-11387-4	AP-MW-7B	Total/NA	Water	420.4	38856
480-11387-5	AP-GW-DUP-01	Total/NA	Water	420.4	38856
480-11387-6	AP-RB-01	Total/NA	Water	420.4	38856
480-11387-7	AP-SWB-01	Total/NA	Water	420.4	38856
LCS 480-38856/2-A	Lab Control Sample	Total/NA	Water	420.4	38856
MB 480-38856/1-A	Method Blank	Total/NA	Water	420.4	38856

Lab Chronicle

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Client Sample ID: AP-MW-3B

Lab Sample ID: 480-11355-1

Date Collected: 10/17/11 12:10

Matrix: Water

Date Received: 10/17/11 17:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			27168	10/21/11 08:15	ALS	TAL BUR
Total/NA	Analysis	6010B		1	27300	10/22/11 00:26	BL	TAL BUR
Total/NA	Prep	200.7			35922	10/18/11 11:00	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	36071	10/18/11 20:24	LH	TAL BUF
Total/NA	Analysis	7196A		1	35972	10/18/11 12:00	JS	TAL BUF
Total/NA	Analysis	300.0		1	37018	10/26/11 10:06	RMM	TAL BUF
Total/NA	Analysis	350.1		1	37197	10/25/11 13:58	KS	TAL BUF
Total/NA	Prep	Distill/Phenol			38811	11/03/11 16:22	AP	TAL BUF
Total/NA	Analysis	420.4		1	38892	11/03/11 18:49	PN	TAL BUF

Client Sample ID: AP-MW-4B

Lab Sample ID: 480-11355-2

Date Collected: 10/17/11 12:30

Matrix: Water

Date Received: 10/17/11 17:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			27168	10/21/11 08:15	ALS	TAL BUR
Total/NA	Analysis	6010B		1	27300	10/22/11 00:31	BL	TAL BUR
Total/NA	Prep	200.7			35923	10/18/11 11:00	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	36308	10/19/11 22:38	JRK	TAL BUF
Total/NA	Analysis	7196A		1	35972	10/18/11 12:00	JS	TAL BUF
Total/NA	Analysis	350.1		1	37197	10/25/11 13:59	KS	TAL BUF
Total/NA	Analysis	300.0		2	37441	10/27/11 20:45	RMM	TAL BUF
Total/NA	Prep	Distill/Phenol			38811	11/03/11 16:22	AP	TAL BUF
Total/NA	Analysis	420.4		1	38892	11/03/11 18:49	PN	TAL BUF

Client Sample ID: AP-MW-5B

Lab Sample ID: 480-11355-3

Date Collected: 10/17/11 12:50

Matrix: Water

Date Received: 10/17/11 17:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			27168	10/21/11 08:15	ALS	TAL BUR
Total/NA	Analysis	6010B		1	27300	10/22/11 00:36	BL	TAL BUR
Total/NA	Prep	200.7			35923	10/18/11 11:00	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	36308	10/19/11 22:40	JRK	TAL BUF
Total/NA	Analysis	7196A		1	35972	10/18/11 12:00	JS	TAL BUF
Total/NA	Analysis	350.1		1	37197	10/25/11 14:00	KS	TAL BUF
Total/NA	Analysis	300.0		2	37441	10/27/11 20:55	RMM	TAL BUF
Total/NA	Prep	Distill/Phenol			38811	11/03/11 16:22	AP	TAL BUF
Total/NA	Analysis	420.4		1	38892	11/03/11 18:49	PN	TAL BUF

Lab Chronicle

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Client Sample ID: AP-MW-8B

Lab Sample ID: 480-11355-4

Date Collected: 10/17/11 13:10
Matrix: Water
Date Received: 10/17/11 17:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			27168	10/21/11 08:15	ALS	TAL BUR
Total/NA	Analysis	6010B		1	27300	10/22/11 00:41	BL	TAL BUR
Total/NA	Prep	200.7			35923	10/18/11 11:00	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	36308	10/19/11 22:55	JRK	TAL BUF
Total/NA	Analysis	7196A		1	35972	10/18/11 12:00	JS	TAL BUF
Total/NA	Analysis	350.1		1	37197	10/25/11 14:01	KS	TAL BUF
Total/NA	Analysis	300.0		5	37444	10/27/11 22:06	RMM	TAL BUF
Total/NA	Prep	Distill/Phenol			38815	11/03/11 16:26	AP	TAL BUF
Total/NA	Analysis	420.4		1	38892	11/03/11 18:58	PN	TAL BUF

Client Sample ID: AP-SS-03

Lab Sample ID: 480-11355-5

Date Collected: 10/17/11 14:30
Matrix: Water
Date Received: 10/17/11 17:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			27168	10/21/11 08:15	ALS	TAL BUR
Total/NA	Analysis	6010B		1	27300	10/22/11 00:47	BL	TAL BUR
Total/NA	Prep	200.7			35923	10/18/11 11:00	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	36308	10/19/11 22:57	JRK	TAL BUF
Total/NA	Analysis	7196A		1	35972	10/18/11 12:00	JS	TAL BUF
Total/NA	Analysis	300.0		1	37018	10/26/11 10:46	RMM	TAL BUF
Total/NA	Analysis	350.1		1	37197	10/25/11 14:02	KS	TAL BUF
Total/NA	Prep	Distill/Phenol			38815	11/03/11 16:26	AP	TAL BUF
Total/NA	Analysis	420.4		1	38892	11/03/11 18:58	PN	TAL BUF

Client Sample ID: AP-SS-02

Lab Sample ID: 480-11355-6

Date Collected: 10/17/11 14:50
Matrix: Water
Date Received: 10/17/11 17:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			27168	10/21/11 08:15	ALS	TAL BUR
Total/NA	Analysis	6010B		1	27300	10/22/11 00:52	BL	TAL BUR
Total/NA	Prep	200.7			35923	10/18/11 11:00	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	36308	10/19/11 23:00	JRK	TAL BUF
Total/NA	Analysis	7196A		1	35972	10/18/11 12:00	JS	TAL BUF
Total/NA	Analysis	300.0		1	37018	10/26/11 10:56	RMM	TAL BUF
Total/NA	Analysis	350.1		1	37197	10/25/11 14:03	KS	TAL BUF
Total/NA	Prep	Distill/Phenol			38815	11/03/11 16:26	AP	TAL BUF
Total/NA	Analysis	420.4		1	38892	11/03/11 18:58	PN	TAL BUF

Client Sample ID: AP-SS-01/EWE-01

Lab Sample ID: 480-11355-7

Date Collected: 10/17/11 15:10

Matrix: Water

Date Received: 10/17/11 17:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	37153	10/26/11 00:46	TRB	TAL BUF
Total/NA	Prep	3010A			27168	10/21/11 08:15	ALS	TAL BUR
Total/NA	Analysis	6010B		1	27300	10/22/11 00:57	BL	TAL BUR
Total/NA	Prep	200.7			35923	10/18/11 11:00	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	36308	10/19/11 23:02	JRK	TAL BUF
Total/NA	Prep	200.8			35978	10/19/11 07:40	JM	TAL BUF
Total/NA	Analysis	200.8		1	36906	10/22/11 16:17	MM	TAL BUF
Total/NA	Analysis	200.8		1	37043	10/24/11 17:56	MM	TAL BUF
Total/NA	Analysis	7196A		1	35972	10/18/11 12:00	JS	TAL BUF
Total/NA	Analysis	9040B		1	36041	10/19/11 00:08	ES	TAL BUF
Total/NA	Analysis	353.2		1	36045	10/19/11 01:04	ES	TAL BUF
Total/NA	Analysis	SM 5210B		1	36051	10/18/11 13:59	ML	TAL BUF
Total/NA	Analysis	SM 4500 O G		1	36052	10/18/11 23:37	ML	TAL BUF
Total/NA	Analysis	SM 2540C		1	36361	10/20/11 14:26	AP	TAL BUF
Total/NA	Analysis	SM 2540D		1	36509	10/21/11 01:45	KS	TAL BUF
Total/NA	Analysis	353.2		1	36746	10/19/11 00:57	RL	TAL BUF
Total/NA	Analysis	300.0		1	37018	10/26/11 11:07	RMM	TAL BUF
Total/NA	Analysis	350.1		1	37440	10/26/11 16:19	KS	TAL BUF
Total/NA	Prep	351.2			37151	10/25/11 12:25	PN	TAL BUF
Total/NA	Analysis	351.2		1	37705	10/27/11 18:34	PN	TAL BUF
Total/NA	Analysis	410.4		1	37853	10/28/11 12:23	KS	TAL BUF
Total/NA	Prep	Distill/Phenol			38815	11/03/11 16:26	AP	TAL BUF
Total/NA	Analysis	420.4		1	38892	11/03/11 18:58	PN	TAL BUF

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-11355-8

Date Collected: 10/17/11 00:00

Matrix: Water

Date Received: 10/17/11 17:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	37153	10/26/11 01:08	TRB	TAL BUF

Client Sample ID: AP-MW-1B

Lab Sample ID: 480-11387-1

Date Collected: 10/18/11 11:55

Matrix: Water

Date Received: 10/18/11 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			27170	10/21/11 08:25	ALS	TAL BUR
Total/NA	Analysis	6010B		1	27297	10/21/11 23:28	BL	TAL BUR
Total/NA	Prep	200.7			36075	10/19/11 09:20	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	36315	10/19/11 17:17	LH	TAL BUF
Total/NA	Analysis	7196A		1	36056	10/18/11 20:53	KS	TAL BUF
Total/NA	Analysis	350.1		1	37197	10/25/11 14:14	KS	TAL BUF
Total/NA	Analysis	300.0		2	37444	10/27/11 22:26	RMM	TAL BUF

Lab Chronicle

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Client Sample ID: AP-MW-1B

Lab Sample ID: 480-11387-1

Date Collected: 10/18/11 11:55
Matrix: Water
Date Received: 10/18/11 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Distill/Phenol			38856	11/03/11 22:31	KS	TAL BUF
Total/NA	Analysis	420.4		1	39103	11/05/11 09:33	PN	TAL BUF

Client Sample ID: AP-MW-2B

Lab Sample ID: 480-11387-2

Date Collected: 10/18/11 10:25
Matrix: Water
Date Received: 10/18/11 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			27170	10/21/11 08:25	ALS	TAL BUR
Total/NA	Analysis	6010B		1	27297	10/21/11 23:33	BL	TAL BUR
Total/NA	Prep	200.7			36075	10/19/11 09:20	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	36315	10/19/11 17:20	LH	TAL BUF
Total/NA	Analysis	7196A		2	36056	10/18/11 21:22	KS	TAL BUF
Total/NA	Analysis	350.1		1	37197	10/25/11 14:15	KS	TAL BUF
Total/NA	Analysis	300.0		1	37444	10/27/11 22:36	RMM	TAL BUF
Total/NA	Prep	Distill/Phenol			38856	11/03/11 22:39	KS	TAL BUF
Total/NA	Analysis	420.4		1	39103	11/05/11 09:33	PN	TAL BUF

Client Sample ID: AP-MW-6B

Lab Sample ID: 480-11387-3

Date Collected: 10/18/11 09:10
Matrix: Water
Date Received: 10/18/11 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			27170	10/21/11 08:25	ALS	TAL BUR
Total/NA	Analysis	6010B		1	27297	10/21/11 23:38	BL	TAL BUR
Total/NA	Prep	200.7			36075	10/19/11 09:20	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	36315	10/19/11 17:22	LH	TAL BUF
Total/NA	Analysis	7196A		1	36056	10/18/11 20:59	KS	TAL BUF
Total/NA	Analysis	350.1		1	37197	10/25/11 14:18	KS	TAL BUF
Total/NA	Analysis	300.0		5	37444	10/27/11 22:46	RMM	TAL BUF
Total/NA	Prep	Distill/Phenol			38856	11/03/11 22:47	KS	TAL BUF
Total/NA	Analysis	420.4		1	39103	11/05/11 09:33	PN	TAL BUF

Client Sample ID: AP-MW-7B

Lab Sample ID: 480-11387-4

Date Collected: 10/18/11 13:05
Matrix: Water
Date Received: 10/18/11 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			27170	10/21/11 08:25	ALS	TAL BUR
Total/NA	Analysis	6010B		1	27297	10/21/11 23:44	BL	TAL BUR
Total/NA	Prep	200.7			36075	10/19/11 09:20	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	36315	10/19/11 17:37	LH	TAL BUF
Total/NA	Analysis	7196A		1	36056	10/18/11 21:02	KS	TAL BUF
Total/NA	Analysis	300.0		1	37020	10/26/11 16:00	RMM	TAL BUF

Client Sample ID: AP-MW-7B

Lab Sample ID: 480-11387-4

Date Collected: 10/18/11 13:05

Matrix: Water

Date Received: 10/18/11 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	37197	10/25/11 14:21	KS	TAL BUF
Total/NA	Prep	Distill/Phenol			38856	11/03/11 22:54	KS	TAL BUF
Total/NA	Analysis	420.4		1	39103	11/05/11 09:33	PN	TAL BUF

Client Sample ID: AP-GW-DUP-01

Lab Sample ID: 480-11387-5

Date Collected: 10/18/11 00:00

Matrix: Water

Date Received: 10/18/11 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			27170	10/21/11 08:25	ALS	TAL BUR
Total/NA	Analysis	6010B		1	27297	10/21/11 23:49	BL	TAL BUR
Total/NA	Prep	200.7			36075	10/19/11 09:20	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	36315	10/19/11 17:39	LH	TAL BUF
Total/NA	Analysis	7196A		5	36056	10/18/11 21:35	KS	TAL BUF
Total/NA	Analysis	350.1		1	37197	10/25/11 14:22	KS	TAL BUF
Total/NA	Analysis	300.0		1	37444	10/27/11 22:56	RMM	TAL BUF
Total/NA	Prep	Distill/Phenol			38856	11/03/11 23:02	KS	TAL BUF
Total/NA	Analysis	420.4		1	39103	11/05/11 09:42	PN	TAL BUF

Client Sample ID: AP-RB-01

Lab Sample ID: 480-11387-6

Date Collected: 10/18/11 14:10

Matrix: Water

Date Received: 10/18/11 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			27170	10/21/11 08:25	ALS	TAL BUR
Total/NA	Analysis	6010B		1	27297	10/21/11 23:54	BL	TAL BUR
Total/NA	Prep	200.7			36075	10/19/11 09:20	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	36315	10/19/11 17:41	LH	TAL BUF
Total/NA	Analysis	7196A		1	36056	10/18/11 21:09	KS	TAL BUF
Total/NA	Analysis	300.0		1	37020	10/26/11 16:21	RMM	TAL BUF
Total/NA	Analysis	350.1		1	37197	10/25/11 14:23	KS	TAL BUF
Total/NA	Prep	Distill/Phenol			38856	11/03/11 23:10	KS	TAL BUF
Total/NA	Analysis	420.4		1	39103	11/05/11 09:42	PN	TAL BUF

Client Sample ID: AP-SWB-01

Lab Sample ID: 480-11387-7

Date Collected: 10/18/11 14:00

Matrix: Water

Date Received: 10/18/11 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			27170	10/21/11 08:25	ALS	TAL BUR
Total/NA	Analysis	6010B		1	27297	10/21/11 23:59	BL	TAL BUR
Total/NA	Prep	200.7			36075	10/19/11 09:20	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	36315	10/19/11 17:43	LH	TAL BUF
Total/NA	Analysis	7196A		1	36056	10/18/11 21:25	KS	TAL BUF

Lab Chronicle

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Client Sample ID: AP-SWB-01
Date Collected: 10/18/11 14:00
Date Received: 10/18/11 15:10

Lab Sample ID: 480-11387-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	37020	10/26/11 16:31	RMM	TAL BUF
Total/NA	Analysis	350.1		1	37197	10/25/11 14:24	KS	TAL BUF
Total/NA	Prep	Distill/Phenol			38856	11/03/11 23:18	KS	TAL BUF
Total/NA	Analysis	420.4		1	39103	11/05/11 10:00	PN	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Certification Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Buffalo	Arkansas	State Program	6	88-0686
TestAmerica Buffalo	California	NELAC	9	1169CA
TestAmerica Buffalo	Connecticut	State Program	1	PH-0568
TestAmerica Buffalo	Florida	NELAC	4	E87672
TestAmerica Buffalo	Georgia	Georgia EPD	4	N/A
TestAmerica Buffalo	Georgia	State Program	4	956
TestAmerica Buffalo	Illinois	NELAC	5	100325 / 200003
TestAmerica Buffalo	Iowa	State Program	7	374
TestAmerica Buffalo	Kansas	NELAC	7	E-10187
TestAmerica Buffalo	Kentucky	Kentucky UST	4	30
TestAmerica Buffalo	Kentucky	State Program	4	90029
TestAmerica Buffalo	Louisiana	NELAC	6	02031
TestAmerica Buffalo	Maine	State Program	1	NY0044
TestAmerica Buffalo	Maryland	State Program	3	294
TestAmerica Buffalo	Massachusetts	State Program	1	M-NY044
TestAmerica Buffalo	Michigan	State Program	5	9937
TestAmerica Buffalo	Minnesota	NELAC	5	036-999-337
TestAmerica Buffalo	New Hampshire	NELAC	1	2337
TestAmerica Buffalo	New Hampshire	NELAC	1	68-00281
TestAmerica Buffalo	New Jersey	NELAC	2	NY455
TestAmerica Buffalo	New York	NELAC	2	10026
TestAmerica Buffalo	North Dakota	State Program	8	R-176
TestAmerica Buffalo	Oklahoma	State Program	6	9421
TestAmerica Buffalo	Oregon	NELAC	10	NY200003
TestAmerica Buffalo	Pennsylvania	NELAC	3	68-00281
TestAmerica Buffalo	Tennessee	State Program	4	TN02970
TestAmerica Buffalo	Texas	NELAC	6	T104704412-08-TX
TestAmerica Buffalo	USDA	USDA		P330-08-00242
TestAmerica Buffalo	Virginia	NELAC Secondary AB	3	460185
TestAmerica Buffalo	Virginia	State Program	3	278
TestAmerica Buffalo	Washington	State Program	10	C1677
TestAmerica Buffalo	Wisconsin	State Program	5	998310390
TestAmerica Burlington	ACLASS	DoD ELAP		ADE-1492
TestAmerica Burlington	Connecticut	State Program	1	PH-0751
TestAmerica Burlington	Delaware	Delaware DNREC	3	NA
TestAmerica Burlington	Florida	NELAC Secondary AB	4	E87467
TestAmerica Burlington	Louisiana	NELAC Secondary AB	6	176292
TestAmerica Burlington	Maine	State Program	1	VT00008
TestAmerica Burlington	Minnesota	State Program	5	050-999-436
TestAmerica Burlington	New Hampshire	NELAC	1	200610
TestAmerica Burlington	New Jersey	NELAC	2	VT972
TestAmerica Burlington	New York	NELAC	2	10391
TestAmerica Burlington	Pennsylvania	NELAC	3	68-00489
TestAmerica Burlington	Rhode Island	State Program	1	LAO00298
TestAmerica Burlington	USDA	USDA		P330-11-00093
TestAmerica Burlington	Vermont	State Program	1	VT-4000

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
200.8	Metals (ICP/MS)	EPA	TAL BUF
6010B	Metals (Custom List)	SW846	TAL BUR
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL BUF
353.2	Nitrogen, Nitrite	MCAWW	TAL BUF
353.2	Nitrate	EPA	TAL BUF
410.4	COD	MCAWW	TAL BUF
420.4	Phenolics, Total Recoverable	MCAWW	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL BUF
9040B	pH	SW846	TAL BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 O G	Oxygen, Dissolved	SM	TAL BUF
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-11355-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-11355-1	AP-MW-3B	Water	10/17/11 12:10	10/17/11 17:05
480-11355-2	AP-MW-4B	Water	10/17/11 12:30	10/17/11 17:05
480-11355-3	AP-MW-5B	Water	10/17/11 12:50	10/17/11 17:05
480-11355-4	AP-MW-8B	Water	10/17/11 13:10	10/17/11 17:05
480-11355-5	AP-SS-03	Water	10/17/11 14:30	10/17/11 17:05
480-11355-6	AP-SS-02	Water	10/17/11 14:50	10/17/11 17:05
480-11355-7	AP-SS-01/EWE-01	Water	10/17/11 15:10	10/17/11 17:05
480-11355-8	TRIP BLANK	Water	10/17/11 00:00	10/17/11 17:05
480-11387-1	AP-MW-1B	Water	10/18/11 11:55	10/18/11 15:10
480-11387-2	AP-MW-2B	Water	10/18/11 10:25	10/18/11 15:10
480-11387-3	AP-MW-6B	Water	10/18/11 09:10	10/18/11 15:10
480-11387-4	AP-MW-7B	Water	10/18/11 13:05	10/18/11 15:10
480-11387-5	AP-GW-DUP-01	Water	10/18/11 00:00	10/18/11 15:10
480-11387-6	AP-RB-01	Water	10/18/11 14:10	10/18/11 15:10
480-11387-7	AP-SWB-01	Water	10/18/11 14:00	10/18/11 15:10

Login Sample Receipt Checklist

Client: Greenstar Environmental Solutions, LLC

Job Number: 480-11355-1

Login Number: 11355

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	False	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Greenstar Environmental Solutions, LLC

Job Number: 480-11355-1

Login Number: 11355
List Number: 1
Creator: Marion, Greg T

List Source: TestAmerica Burlington
List Creation: 10/20/11 04:28 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	False	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	792773
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	16.2ºC IR GUN ID 96/CF=0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Greenstar Environmental Solutions, LLC

Job Number: 480-11355-1

Login Number: 11387

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	False	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Greenstar Environmental Solutions, LLC

Job Number: 480-11355-1

Login Number: 11387
List Number: 1
Creator: Marion, Greg T

List Source: TestAmerica Burlington
List Creation: 10/20/11 04:37 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	792773
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	16.2ºC IR GUN ID 96/CF=0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Attachment E

Landfill Cap Inspection Checklists
March, June, September and November 2011

LANDFILL CAP INSPECTION CHECKLIST
AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Personnel:	Bruce Vinal
Date:	3/16/11 1st Quarter Inspection
Weather:	Sunny 40 degrees

1. **Inspection of ground surface for exposure of geotextile cover (cap erosion):**
   None noted.

2. **Inspection of ground surface for differential settlement resulting in soil cracking or ponded water:** None noted.

3. **Identification of stressed vegetation:**
   Re-seeded areas around T-7 are still not yet established. Several areas of sod on the Northern slope of T-7 have been damaged as a result of snow removal

4. **Identification of seeps, rooted vegetation (trees), and/or animal burrows:**
   None observed.

5. **Identification of deteriorating equipment (i.e., monitoring wells, fencing, or drainage structures):**
   The two new piezometers wells still require Safety Blue paint. The door to the T-1 shed is inadequate in keeping out small rodents. In the past, rodents were responsible for chewing through wiring of monitoring equipment. Rat baits have been used with success. With O&M visits limited to once a month we aren't able to clean out the dead mice decompose before next visit. One of the tanks containing liquid flocculent in the "Lab Shed" is leaking. The leak is confined to the secondary containment vessel. These containers are no longer in use and should be removed

6. **Inspection of stormwater drainage swales for erosion, sloughing, or flow-through:**
   Blockage of flow at Southwest corner of property where road crosses swale to T-1 shed. Blockage cleared and pipes under road able to handle the high flow rate.

7. **Inspection of east side of the landfill (Niagara Mohawk Power Corporation parcel) along the intermittent stream for the presence of erosion or sloughing:**
   None observed.

8. **Inspection of access roads:**
   Numerous areas of the access roads have been gouged by snowplows and will require repair.

LANDFILL CAP INSPECTION CHECKLIST
AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Personnel:	Bruce Vinal
Date:	6/16/11 2nd Quarter inspection
Weather:	Sunny 90 degrees

1. **Inspection of ground surface for exposure of geotextile cover (cap erosion):** None noted.

2. **Inspection of ground surface for differential settlement resulting in soil cracking or ponded water:** None noted

3. **Identification of stressed vegetation:** Re-seeded areas around T-7 are well established and appear to be doing well. Areas on the Northern slope of T-7 closest to the entry gate were damaged during snow removal. This does not affect the integrity of T-7 berm but should be repaired as it hinders lawn mowing.

4. **Identification of seeps, rooted vegetation (trees), and/or animal burrows:** None noted

5. **Identification of deteriorating equipment (i.e., monitoring wells, fencing, or drainage structures):** Influent line cleanout vault in the Southwest corner closest to the T-1 shed has been hit by a snowplow and knocked out of square, lid does not close completely. New piezometers still need to be painted. The leaking liquid flocculent containers in the Lab shed will be removed. The door to the T-1 shed still has a gap that allows rodents to gain access.

6. **Inspection of stormwater drainage swales for erosion, sloughing, or flow-through:** The area where the discharge swale leaves the site has backed up with a combination of organic matter and iron sediment causing the water to be diverted to the east. Blockage has been cleaned out by hand and correct flow restored.

7. **Inspection of east side of the landfill (Niagara Mohawk Power Corporation parcel) along the intermittent stream for the presence of erosion or sloughing:** None noted.

8. **Inspection of access roads:** The roads around the site perimeter are overgrown with weeds, but will be cleared during cap mowing. The road to the T-8 shed has significant settling in the area where the new T-7 outlet pipe was installed.

LANDFILL CAP INSPECTION CHECKLIST
AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Personnel:	Bruce Vinal
Date:	9/11/11 3rd Quarter Inspection
Weather:	Sunny 80 degrees

1. **Inspection of ground surface for exposure of geotextile cover (cap erosion):**
   None noted.

2. **Inspection of ground surface for differential settlement resulting in soil cracking or ponded water:** The areas above the trench where the new T-7 outfall pipe was installed have settled substantially. No ponding was observed, but the situation creates maintenance issues

3. **Identification of stressed vegetation:** Vegetation site-wide is thriving.

4. **Identification of seeps, rooted vegetation (trees), and/or animal burrows:**
   None noted.

5. **Identification of deteriorating equipment (i.e., monitoring wells, fencing, or drainage structures):** New monitoring wells have been painted with safety blue paint and reflective markers have been added to aid in visibility during cap mowing. Leaking flocculent tanks were no longer needed and have been removed, the remaining chemical has been transferred to drums and needs to be disposed of. Cleanout enclosure in the SW corner still requires repair/replacement. Entrance doors to all the sheds are not tight enough to keep rodents out, in the winter months we are virtually overrun with mice in the sheds.

6. **Inspection of stormwater drainage swales for erosion, sloughing, or flow-through:**
   The end of the effluent swale is choked with organic material, the surface water sampling pool are for sample ID AP-SW-01 is nonexistent. This area should be cleaned and dug out to facilitate clean sample collection.

7. **Inspection of east side of the landfill (Niagara Mohawk Power Corporation parcel) along the intermittent stream for the presence of erosion or sloughing:**
   None noted.

8. **Inspection of access roads:** All access roads, as well as the areas around the treatment system are overgrown. Mowing and weeding scheduled for Q4 will resolve these issues.

LANDFILL CAP INSPECTION CHECKLIST
AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Personnel:	Bruce Vinal
Date:	11/12/11 4th Quarter Inspection
Weather:	Sunny 45 degrees

1. **Inspection of ground surface for exposure of geotextile cover (cap erosion):** None noted.

2. **Inspection of ground surface for differential settlement resulting in soil cracking or ponded water:** The entire length of the trench where the new outlet pipe was installed on T-7 has settled and needs to be addressed. Crushed gravel should be added in the road area and topsoil should be added, raked and seeded in the grass areas.

3. **Identification of stressed vegetation:** None noted.

4. **Identification of seeps, rooted vegetation (trees), and/or animal burrows:** Cap mowing has been completed. There are some areas along the Northeast fence line that were missed.

5. **Identification of deteriorating equipment (i.e., monitoring wells, fencing, or drainage structures):** Cleanout enclosure in the SW corner still requires repair/replacement, the box is out of square and will not close correctly. Entrance doors to all the sheds are not tight enough to keep rodents out, in the winter months rodents can overrun the sheds.

6. **Inspection of stormwater drainage swales for erosion, sloughing, or flow-through:** Effluent swale is choked with organic matter left over from cap mowing, and iron sediment has started to become an issue. The area at the point where the water leaves the site is plugging up and tends to backup along the Southern road. Swale needs to be cleaned out and re-defined. The new outfall line from T-7 is prone to clogging from organic matter within the pond, frequent cleaning is required.

7. **Inspection of east side of the landfill (Niagara Mohawk Power Corporation parcel) along the intermittent stream for the presence of erosion or sloughing:** None noted.

8. **Inspection of access roads:** With the exception of the issue noted in #2, all roads are in acceptable condition.

Attachment F

Laboratory Analytical Results for GCTS Discharge Sampling February and September 2011

TABLE 2 SUMMARY OF QUARTERLY GCTS DISCHARGE SAMPLING 1 JANUARY AND 31 DECEMBER 2011, AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Parameter	12 February 2011	16 June 2011	9 September 2011	18 October 2011	New York State Department of Environmental Conservation Discharge Criteria
pH	7.67	7.79	7.95	7.69	6-8
Total suspended solids	**18.8**	<4.0U	**22.8**	**32.8**	10 mg/L
Dissolved Oxygen	**9.5**	**7.4**	6.6	5.3	7 mg/L
Ammonia as N	1.4	<0.020U	<0.020U	<9.2U	9.2 mg/L
Total Kjeldahl nitrogen	2.4	0.28	0.21	0.41	Monitor (mg/L)
Total Recoverable Phenolics	<0.010U	<0.010U	0.0065J	<0.010U	0.008 mg/L
Biochemical oxygen demand	<2.0U	<2.0U	<2.0U	<2.0U	5.0 mg/L
1,1-Dichloroethane	<5U	<5U	<5U	<5U	5.0 µg/L
Trichloroethene	<5U	<5U	<5U	<5U	5.0 µg/L
Nickel	0.0033J	0.0019J	0.0019J	0.0013J	0.07 mg/L
Copper	0.0015J	<0.010U	<0.010U	<0.010U	0.0147 mg/L
Barium	0.253	0.21	0.216	0.195	2 mg/L
Total chromium	0.0048	0.0016J	0.0013J	0.0010J	0.1 mg/L
Hexavalent chromium	<0.010U	<0.010U	0.0090J	<0.010U	0.011 mg/L
Iron	0.0508	0.036J	0.142	0.0942	0.3 mg/L
Selenium	**0.005**	<0.015U	0.00089J	0.00066J	0.0046 mg/L
Thallium	0.000018J	<0.20U	<0.00020U	0.000025J	0.004 mg/L
Zinc	<0.010U	<0.010U	<0.010U	0.0036J	0.115 mg/L
Nitrate as N	1.0	0.53	0.69	0.69	Monitor (mg/L-N)
Nitrite as N	<0.050U	<0.050U	<0.050U	<0.050U	Monitor (mg/L-N)
Chemical oxygen demand	<10U	<10U	8.0J	13.3	40 mg/L
Total dissolved solids	1020	622	531	655	Monitor (mg/L)

Values in bold exceeded discharge guidance values.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-1601-1
Client Project/Site: Greenstar Environmental Solutions, LLC
Sampling Event: Quarterly Discharge Monitoring

For:
Greenstar Environmental Solutions, LLC
6 Gellatly Drive
Wappingers Falls, New York 12590

Attn: Charles E. McLeod, Jr.

Jennifer M. Byrnes

Authorized for release by:
2/28/2011 12:45 PM
Jennifer Byrnes
Project Administrator
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Designee for

Peggy Gray-Erdmann
Project Manager II
peggy.gray-erdmann@testamericainc.com

LINKS

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Results relate only to the items tested and the sample(s) as received by the laboratory. The test results in this report meet all 2003 NELAC requirements for accredited parameters, exceptions are noted in this report. Pursuant to NELAC, this report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Table of Contents

Qualifier Definition/Glossary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-1601-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F	MS or MSD exceeds the control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Glossary	Glossary Description
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.

Job ID: 480-1601-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-1601-1

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

General Chemistry
Method(s) 350.1: The method blank for preparation batch 5470 contained ammonia above the reporting limit (RL). The associated sample(s) contained detects for this analyte at concentrations greater than 10X the value found in the method blank; therefore, re-analysis of samples was not performed. AP-EWE-01 (480-1601-1)

Method(s) 351.2: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 5655 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria. (480-1601-1 MS)

Method(s) SM 4500 O G: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: AP-EWE-01 (480-1601-1)

No other analytical or quality issues were noted.

Detection Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-1601-1

Client Sample ID: AP-EWE-01 — Lab Sample ID: 480-1601-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	253		2.0	0.50	ug/L	1		200.7 Rev 4.4	Total/NA
Chromium	4.8		4.0	0.87	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.5	J	10.0	1.5	ug/L	1		200.7 Rev 4.4	Total/NA
Iron	50.8		50.0	19.3	ug/L	1		200.7 Rev 4.4	Total/NA
Nickel	3.3	J	10.0	1.3	ug/L	1		200.7 Rev 4.4	Total/NA
Selenium	5.0		1.0	0.44	ug/L	1		200.8	Total/NA
Thallium	0.018	J	0.20	0.0080	ug/L	1		200.8	Total/NA
Ammonia	1.4	B	0.020	0.0090	mg/L as N	1		350.1	Total/NA
Total Kjeldahl Nitrogen	2.4		0.20	0.15	mg/L as N	1		351.2	Total/NA
Nitrate as N	1.0		0.050	0.011	mg/L	1		353.2	Total/NA
Total Dissolved Solids	1020		10.0	4.0	mg/L	1		SM 2540C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	7.67	H	0.100	0.100	SU	1		9040B	Total/NA
Total Suspended Solids	18.8		4.0	4.0	mg/L	1		SM 2540D	Total/NA
Oxygen, Dissolved	9.5	H	0.050	0.050	mg/L	1		SM 4500 O G	Total/NA

Client Sample ID: Trip blank — Lab Sample ID: 480-1601-2

No Detections.

Client Sample ID: AP-EWE-01

Lab Sample ID: 480-1601-1

Date Collected: 02/12/11 13:00

Matrix: Water

Date Received: 02/12/11 14:00

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.59	ug/L			02/14/11 16:24	1
Trichloroethene	ND		5.0	0.60	ug/L			02/14/11 16:24	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*72 - 130*		*02/14/11 16:24*	*1*
4-Bromofluorobenzene (Surr)	*102*		*69 - 121*		*02/14/11 16:24*	*1*
Toluene-d8 (Surr)	*103*		*70 - 123*		*02/14/11 16:24*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**253**		2.0	0.50	ug/L		02/15/11 08:10	02/15/11 20:47	1
Chromium	**4.8**		4.0	0.87	ug/L		02/15/11 08:10	02/15/11 20:47	1
Copper	**1.5**	**J**	10.0	1.5	ug/L		02/15/11 08:10	02/15/11 20:47	1
Iron	**50.8**		50.0	19.3	ug/L		02/15/11 08:10	02/15/11 20:47	1
Nickel	**3.3**	**J**	10.0	1.3	ug/L		02/15/11 08:10	02/15/11 20:47	1
Zinc	ND		10.0	1.7	ug/L		02/15/11 08:10	02/15/11 20:47	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**5.0**		1.0	0.44	ug/L		02/15/11 08:20	02/15/11 18:41	1
Thallium	**0.018**	**J**	0.20	0.0080	ug/L		02/15/11 08:20	02/15/11 18:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**1.4**	**B**	0.020	0.0090	mg/L as N			02/14/11 12:27	1
Total Kjeldahl Nitrogen	**2.4**		0.20	0.15	mg/L as N		02/15/11 08:40	02/16/11 09:57	1
Nitrate as N	**1.0**		0.050	0.011	mg/L			02/17/11 11:47	1
Nitrite as N	ND		0.050	0.020	mg/L			02/12/11 15:44	1
Chemical Oxygen Demand	ND		10.0	5.0	mg/L			02/15/11 18:11	1
Phenolics, Total Recoverable	ND		10.0	5.0	ug/L		02/15/11 15:55	02/16/11 15:49	1
Cr (VI)	ND		0.010	0.0050	mg/L			02/12/11 14:30	1
Total Dissolved Solids	**1020**		10.0	4.0	mg/L			02/16/11 10:53	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			02/12/11 12:30	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.67**	**H**	0.100	0.100	SU			02/14/11 21:27	1
Total Suspended Solids	**18.8**		4.0	4.0	mg/L			02/16/11 10:59	1
Oxygen, Dissolved	**9.5**	**H**	0.050	0.050	mg/L			02/13/11 12:05	1

Client Sample ID: Trip blank

Lab Sample ID: 480-1601-2

Date Collected: 02/12/11 00:00

Matrix: Water

Date Received: 02/12/11 14:00

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.59	ug/L			02/14/11 16:50	1
Trichloroethene	ND		5.0	0.60	ug/L			02/14/11 16:50	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*72 - 130*		*02/14/11 16:50*	*1*
4-Bromofluorobenzene (Surr)	*102*		*69 - 121*		*02/14/11 16:50*	*1*
Toluene-d8 (Surr)	*102*		*70 - 123*		*02/14/11 16:50*	*1*

Surrogate Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-1601-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(72-130)	(69-121)	(70-123)
480-1601-1	AP-EWE-01	100	102	103
480-1601-2	Trip blank	101	102	102
LCS 480-5428/4	LCS 480-5428/4	104	101	103
MB 480-5428/5	MB 480-5428/5	103	103	101

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-5428/5
Matrix: Water
Analysis Batch: 5428

Client Sample ID: MB 480-5428/5
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.59	ug/L			02/14/11 11:30	1
Trichloroethene	ND		5.0	0.60	ug/L			02/14/11 11:30	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*72 - 130*		*02/14/11 11:30*	*1*
4-Bromofluorobenzene (Surr)	*103*		*69 - 121*		*02/14/11 11:30*	*1*
Toluene-d8 (Surr)	*101*		*70 - 123*		*02/14/11 11:30*	*1*

Lab Sample ID: LCS 480-5428/4
Matrix: Water
Analysis Batch: 5428

Client Sample ID: LCS 480-5428/4
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
1,1-Dichloroethane	20.0	20.8		ug/L		104	73 - 128
Trichloroethene	20.0	19.1		ug/L		96	67 - 134

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*72 - 130*
4-Bromofluorobenzene (Surr)	*101*		*69 - 121*
Toluene-d8 (Surr)	*103*		*70 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-5493/1-A
Matrix: Water
Analysis Batch: 5638

Client Sample ID: MB 480-5493/1-A
Prep Type: Total/NA
Prep Batch: 5493

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		2.0	0.50	ug/L		02/15/11 08:10	02/15/11 19:41	1
Chromium	ND		4.0	0.87	ug/L		02/15/11 08:10	02/15/11 19:41	1
Copper	ND		10.0	1.5	ug/L		02/15/11 08:10	02/15/11 19:41	1
Iron	ND		50.0	19.3	ug/L		02/15/11 08:10	02/15/11 19:41	1
Nickel	ND		10.0	1.3	ug/L		02/15/11 08:10	02/15/11 19:41	1
Zinc	ND		10.0	1.7	ug/L		02/15/11 08:10	02/15/11 19:41	1

Lab Sample ID: LCS 480-5493/2-A
Matrix: Water
Analysis Batch: 5638

Client Sample ID: LCS 480-5493/2-A
Prep Type: Total/NA
Prep Batch: 5493

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Barium	200	200.6		ug/L		100	85 - 115
Chromium	200	203.2		ug/L		102	85 - 115
Copper	200	213.5		ug/L		107	85 - 115
Iron	10000	9763		ug/L		98	85 - 115
Nickel	200	202.2		ug/L		101	85 - 115
Zinc	200	197.9		ug/L		99	85 - 115

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 480-5494/1-A
Matrix: Water
Analysis Batch: 5773

Client Sample ID: MB 480-5494/1-A
Prep Type: Total/NA
Prep Batch: 5494

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		1.0	0.44	ug/L		02/15/11 08:20	02/15/11 16:14	1
Thallium	ND		0.20	0.0080	ug/L		02/15/11 08:20	02/15/11 16:14	1

Lab Sample ID: LCS 480-5494/2-A
Matrix: Water
Analysis Batch: 5773

Client Sample ID: LCS 480-5494/2-A
Prep Type: Total/NA
Prep Batch: 5494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Selenium	20.0	19.38		ug/L		97	85 - 115
Thallium	20.0	21.25		ug/L		106	85 - 115

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-5470/99
Matrix: Water
Analysis Batch: 5470

Client Sample ID: MB 480-5470/99
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.0208		0.020	0.0090	mg/L as N			02/14/11 12:09	1

Lab Sample ID: LCS 480-5470/100
Matrix: Water
Analysis Batch: 5470

Client Sample ID: LCS 480-5470/100
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Ammonia	1.00	1.00		mg/L as N		100	90 - 110

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 480-5530/2-A
Matrix: Water
Analysis Batch: 5655

Client Sample ID: MB 480-5530/2-A
Prep Type: Total/NA
Prep Batch: 5530

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		0.20	0.15	mg/L as N		02/15/11 08:40	02/16/11 09:10	1

Lab Sample ID: LCS 480-5530/3-A
Matrix: Water
Analysis Batch: 5655

Client Sample ID: LCS 480-5530/3-A
Prep Type: Total/NA
Prep Batch: 5530

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Total Kjeldahl Nitrogen	2.50	2.59		mg/L as N		104	90 - 110

Lab Sample ID: 480-1601-1 MS
Matrix: Water
Analysis Batch: 5655

Client Sample ID: AP-EWE-01
Prep Type: Total/NA
Prep Batch: 5530

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec	% Rec. Limits
Total Kjeldahl Nitrogen	2.4		1.00	4.03	F	mg/L as N		163	72 - 127

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: 480-1601-1 DU
Matrix: Water
Analysis Batch: 5655

Client Sample ID: AP-EWE-01
Prep Type: Total/NA
Prep Batch: 5530

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Kjeldahl Nitrogen	2.4		2.71		mg/L as N		12	20

Method: 353.2 - Nitrogen, Nitrite

Lab Sample ID: MB 480-5392/3
Matrix: Water
Analysis Batch: 5392

Client Sample ID: MB 480-5392/3
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.050	0.020	mg/L			02/12/11 15:39	1

Lab Sample ID: LCS 480-5392/4
Matrix: Water
Analysis Batch: 5392

Client Sample ID: LCS 480-5392/4
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Nitrite as N	1.50	1.60		mg/L		107	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-5582/3
Matrix: Water
Analysis Batch: 5582

Client Sample ID: MB 480-5582/3
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0	5.0	mg/L			02/15/11 16:48	1

Lab Sample ID: LCS 480-5582/4
Matrix: Water
Analysis Batch: 5582

Client Sample ID: LCS 480-5582/4
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Chemical Oxygen Demand	25.0	25.43		mg/L		102	90 - 110

Method: 420.4 - Phenolics, Total Recoverable

Lab Sample ID: MB 480-5584/1-A
Matrix: Water
Analysis Batch: 5700

Client Sample ID: MB 480-5584/1-A
Prep Type: Total/NA
Prep Batch: 5584

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		10.0	5.0	ug/L		02/15/11 15:55	02/16/11 14:46	1

Lab Sample ID: LCS 480-5584/2-A
Matrix: Water
Analysis Batch: 5700

Client Sample ID: LCS 480-5584/2-A
Prep Type: Total/NA
Prep Batch: 5584

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Phenolics, Total Recoverable	100	98.75		ug/L		99	90 - 110

Method: 420.4 - Phenolics, Total Recoverable (Continued)

Lab Sample ID: 480-1601-1 DU
Matrix: Water
Analysis Batch: 5700

Client Sample ID: AP-EWE-01
Prep Type: Total/NA
Prep Batch: 5584

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Phenolics, Total Recoverable	ND			5.11	J	ug/L				NC	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 480-5405/3
Matrix: Water
Analysis Batch: 5405

Client Sample ID: MB 480-5405/3
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0050	mg/L			02/12/11 13:30	1

Lab Sample ID: LCS 480-5405/4
Matrix: Water
Analysis Batch: 5405

Client Sample ID: LCS 480-5405/4
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Cr (VI)			0.0500	0.0530		mg/L		106	85 - 115		

Method: 9040B - pH

Lab Sample ID: 480-1601-1 DU
Matrix: Water
Analysis Batch: 5518

Client Sample ID: AP-EWE-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.67	H		7.690		SU				0.3	5

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 480-5664/1
Matrix: Water
Analysis Batch: 5664

Client Sample ID: MB 480-5664/1
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10.0	4.0	mg/L			02/16/11 10:53	1

Lab Sample ID: LCS 480-5664/2
Matrix: Water
Analysis Batch: 5664

Client Sample ID: LCS 480-5664/2
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Total Dissolved Solids			500	532.0		mg/L		106	85 - 115		

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-5667/1
Matrix: Water
Analysis Batch: 5667

Client Sample ID: MB 480-5667/1
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			02/16/11 10:59	1

Lab Sample ID: LCS 480-5667/2
Matrix: Water
Analysis Batch: 5667

Client Sample ID: LCS 480-5667/2
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Total Suspended Solids	203	183.2		mg/L		90	88 - 110

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-5399/1 MB
Matrix: Water
Analysis Batch: 5399

Client Sample ID: USB 480-5399/1
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			02/12/11 12:30	1

Lab Sample ID: LCS 480-5399/2
Matrix: Water
Analysis Batch: 5399

Client Sample ID: LCS 480-5399/2
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Biochemical Oxygen Demand	198	182.6		mg/L		92	85 - 115

GC/MS VOA

Analysis Batch: 5428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-1601-1	AP-EWE-01	Total/NA	Water	624	
480-1601-2	Trip blank	Total/NA	Water	624	
LCS 480-5428/4	LCS 480-5428/4	Total/NA	Water	624	
MB 480-5428/5	MB 480-5428/5	Total/NA	Water	624	

Metals

Prep Batch: 5493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-5493/1-A	MB 480-5493/1-A	Total/NA	Water	200.7	
LCS 480-5493/2-A	LCS 480-5493/2-A	Total/NA	Water	200.7	
480-1601-1	AP-EWE-01	Total/NA	Water	200.7	

Prep Batch: 5494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-5494/1-A	MB 480-5494/1-A	Total/NA	Water	200.8	
LCS 480-5494/2-A	LCS 480-5494/2-A	Total/NA	Water	200.8	
480-1601-1	AP-EWE-01	Total/NA	Water	200.8	

Analysis Batch: 5638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-5493/1-A	MB 480-5493/1-A	Total/NA	Water	200.7 Rev 4.4	5493
LCS 480-5493/2-A	LCS 480-5493/2-A	Total/NA	Water	200.7 Rev 4.4	5493
480-1601-1	AP-EWE-01	Total/NA	Water	200.7 Rev 4.4	5493

Analysis Batch: 5773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-5494/1-A	MB 480-5494/1-A	Total/NA	Water	200.8	5494
LCS 480-5494/2-A	LCS 480-5494/2-A	Total/NA	Water	200.8	5494
480-1601-1	AP-EWE-01	Total/NA	Water	200.8	5494

General Chemistry

Analysis Batch: 5392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-5392/3	MB 480-5392/3	Total/NA	Water	353.2	
LCS 480-5392/4	LCS 480-5392/4	Total/NA	Water	353.2	
480-1601-1	AP-EWE-01	Total/NA	Water	353.2	

Analysis Batch: 5399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
USB 480-5399/1 MB	USB 480-5399/1	Total/NA	Water	SM 5210B	
LCS 480-5399/2	LCS 480-5399/2	Total/NA	Water	SM 5210B	
480-1601-1	AP-EWE-01	Total/NA	Water	SM 5210B	

Analysis Batch: 5400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-1601-1	AP-EWE-01	Total/NA	Water	SM 4500 O G	

Analysis Batch: 5405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-5405/3	MB 480-5405/3	Total/NA	Water	7196A	

General Chemistry (Continued)

Analysis Batch: 5405 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-5405/4	LCS 480-5405/4	Total/NA	Water	7196A	
480-1601-1	AP-EWE-01	Total/NA	Water	7196A	

Analysis Batch: 5470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-5470/100	LCS 480-5470/100	Total/NA	Water	350.1	
480-1601-1	AP-EWE-01	Total/NA	Water	350.1	
MB 480-5470/99	MB 480-5470/99	Total/NA	Water	350.1	

Analysis Batch: 5518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-5518/1	LCS 480-5518/1	Total/NA	Water	9040B	
480-1601-1	AP-EWE-01	Total/NA	Water	9040B	
480-1601-1 DU	AP-EWE-01	Total/NA	Water	9040B	

Prep Batch: 5530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-1601-1	AP-EWE-01	Total/NA	Water	351.2	
480-1601-1 DU	AP-EWE-01	Total/NA	Water	351.2	
480-1601-1 MS	AP-EWE-01	Total/NA	Water	351.2	
MB 480-5530/2-A	MB 480-5530/2-A	Total/NA	Water	351.2	
LCS 480-5530/3-A	LCS 480-5530/3-A	Total/NA	Water	351.2	

Analysis Batch: 5582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-1601-1	AP-EWE-01	Total/NA	Water	410.4	
MB 480-5582/3	MB 480-5582/3	Total/NA	Water	410.4	
LCS 480-5582/4	LCS 480-5582/4	Total/NA	Water	410.4	

Prep Batch: 5584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-5584/1-A	MB 480-5584/1-A	Total/NA	Water	Distill/Phenol	
LCS 480-5584/2-A	LCS 480-5584/2-A	Total/NA	Water	Distill/Phenol	
480-1601-1	AP-EWE-01	Total/NA	Water	Distill/Phenol	
480-1601-1 DU	AP-EWE-01	Total/NA	Water	Distill/Phenol	

Analysis Batch: 5655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-1601-1	AP-EWE-01	Total/NA	Water	351.2	5530
480-1601-1 DU	AP-EWE-01	Total/NA	Water	351.2	5530
480-1601-1 MS	AP-EWE-01	Total/NA	Water	351.2	5530
MB 480-5530/2-A	MB 480-5530/2-A	Total/NA	Water	351.2	5530
LCS 480-5530/3-A	LCS 480-5530/3-A	Total/NA	Water	351.2	5530

Analysis Batch: 5664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-5664/1	MB 480-5664/1	Total/NA	Water	SM 2540C	
480-1601-1	AP-EWE-01	Total/NA	Water	SM 2540C	
LCS 480-5664/2	LCS 480-5664/2	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 5667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-5667/1	MB 480-5667/1	Total/NA	Water	SM 2540D	
LCS 480-5667/2	LCS 480-5667/2	Total/NA	Water	SM 2540D	
480-1601-1	AP-EWE-01	Total/NA	Water	SM 2540D	

Analysis Batch: 5700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-1601-1	AP-EWE-01	Total/NA	Water	420.4	5584
480-1601-1 DU	AP-EWE-01	Total/NA	Water	420.4	5584
MB 480-5584/1-A	MB 480-5584/1-A	Total/NA	Water	420.4	5584
LCS 480-5584/2-A	LCS 480-5584/2-A	Total/NA	Water	420.4	5584

Analysis Batch: 5780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-1601-1	AP-EWE-01	Total/NA	Water	353.2	

Lab Chronicle

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-1601-1

Client Sample ID: AP-EWE-01

Date Collected: 02/12/11 13:00
Date Received: 02/12/11 14:00

Lab Sample ID: 480-1601-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5428	02/14/11 16:24	TRB	TestAmerica Buffalo
Total/NA	Prep	200.7			5493	02/15/11 08:10	MM	TestAmerica Buffalo
Total/NA	Analysis	200.7 Rev 4.4		1	5638	02/15/11 20:47	MM	TestAmerica Buffalo
Total/NA	Prep	200.8			5494	02/15/11 08:20	MM	TestAmerica Buffalo
Total/NA	Analysis	200.8		1	5773	02/15/11 18:41	DN	TestAmerica Buffalo
Total/NA	Analysis	353.2		1	5392	02/12/11 15:44	RF	TestAmerica Buffalo
Total/NA	Analysis	SM 5210B		1	5399	02/12/11 12:30	AP	TestAmerica Buffalo
Total/NA	Analysis	SM 4500 O G		1	5400	02/13/11 12:05	AP	TestAmerica Buffalo
Total/NA	Analysis	7196A		1	5405	02/12/11 14:30	AP	TestAmerica Buffalo
Total/NA	Analysis	350.1		1	5470	02/14/11 12:27	JE	TestAmerica Buffalo
Total/NA	Analysis	9040B		1	5518	02/14/11 21:27	RL	TestAmerica Buffalo
Total/NA	Analysis	410.4		1	5582	02/15/11 18:11	RL	TestAmerica Buffalo
Total/NA	Prep	351.2			5530	02/15/11 08:40	JM	TestAmerica Buffalo
Total/NA	Analysis	351.2		1	5655	02/16/11 09:57	JM	TestAmerica Buffalo
Total/NA	Analysis	SM 2540C		1	5664	02/16/11 10:53	KP	TestAmerica Buffalo
Total/NA	Analysis	SM 2540D		1	5667	02/16/11 10:59	KP	TestAmerica Buffalo
Total/NA	Prep	Distill/Phenol			5584	02/15/11 15:55	JN	TestAmerica Buffalo
Total/NA	Analysis	420.4		1	5700	02/16/11 15:49	JR	TestAmerica Buffalo
Total/NA	Analysis	353.2		1	5780	02/17/11 11:47	RF	TestAmerica Buffalo

Client Sample ID: Trip blank

Date Collected: 02/12/11 00:00
Date Received: 02/12/11 14:00

Lab Sample ID: 480-1601-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5428	02/14/11 16:50	TRB	TestAmerica Buffalo

Certification Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-1601-1

Laboratory	Authority	Program	EPA Region	Certification ID	* Expiration Date
TestAmerica Buffalo		USDA		P330-08-00242	11/25/11
TestAmerica Buffalo	Arkansas	State Program	6	88-0686	07/06/11
TestAmerica Buffalo	California	NELAC	9	1169CA	09/30/11
TestAmerica Buffalo	Connecticut	State Program	1	PH-0568	09/30/12
TestAmerica Buffalo	Florida	NELAC	4	E87672	06/30/11
TestAmerica Buffalo	Georgia	Georgia EPD	4	N/A	03/31/11
TestAmerica Buffalo	Georgia	State Program	4	956	04/01/10
TestAmerica Buffalo	Illinois	NELAC	5	100325 / 200003	09/30/11
TestAmerica Buffalo	Iowa	State Program	7	374	03/01/11
TestAmerica Buffalo	Kentucky	Kentucky UST	4	30	04/12/12
TestAmerica Buffalo	Kentucky	State Program	4	90029	12/31/11
TestAmerica Buffalo	Louisiana	NELAC	6	02031	06/30/11
TestAmerica Buffalo	Maine	State Program	1	NY0044	12/04/12
TestAmerica Buffalo	Maryland	State Program	3	294	03/31/11
TestAmerica Buffalo	Massachusetts	State Program	1	M-NY044	06/30/11
TestAmerica Buffalo	Michigan	State Program	5	9937	04/01/11
TestAmerica Buffalo	Minnesota	NELAC	5	036-999-337	12/31/11
TestAmerica Buffalo	New Hampshire	NELAC	1	68-00281	11/17/11
TestAmerica Buffalo	New Hampshire	NELAC	1	2337	09/11/11
TestAmerica Buffalo	New Jersey	NELAC	2	NY455	06/30/11
TestAmerica Buffalo	New York	NELAC	2	10026	04/01/11
TestAmerica Buffalo	North Dakota	State Program	8	R-176	03/31/11
TestAmerica Buffalo	Oklahoma	State Program	6	9421	09/30/11
TestAmerica Buffalo	Oregon	NELAC	10	NY200003	06/10/11
TestAmerica Buffalo	Pennsylvania	NELAC	3	68-00281	07/31/11
TestAmerica Buffalo	Tennessee	State Program	4	TN02970	03/31/11
TestAmerica Buffalo	Texas	NELAC	6	T104704412-08-TX	07/31/11
TestAmerica Buffalo	Virginia	State Program	3	278	06/30/11
TestAmerica Buffalo	Washington	State Program	10	C1677	02/10/12
TestAmerica Buffalo	West Virginia	West Virginia DEP	3	252	09/30/11
TestAmerica Buffalo	Wisconsin	State Program	5	998310390	08/31/11

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.
* Any expired certifications in this list are currently pending renewal and are considered valid.

Method Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-1601-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
200.8	Metals (ICP/MS)	EPA	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL BUF
353.2	Nitrogen, Nitrite	MCAWW	TAL BUF
353.2	Nitrate	EPA	TAL BUF
410.4	COD	MCAWW	TAL BUF
420.4	Phenolics, Total Recoverable	MCAWW	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL BUF
9040B	pH	SW846	TAL BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 O G	Oxygen, Dissolved	SM	TAL BUF
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-1601-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-1601-1	AP-EWE-01	Water	02/12/11 13:00	02/12/11 14:00
480-1601-2	Trip blank	Water	02/12/11 00:00	02/12/11 14:00

Login Sample Receipt Checklist

Client: Greenstar Environmental Solutions, LLC

Job Number: 480-1601-1

Login Number: 1601
List Number: 1
Creator: Rabb, Mike

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	Greenstar
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	True	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-9607-1
Client Project/Site: Greenstar Environmental Solutions, LLC

For:
Greenstar Environmental Solutions, LLC
6 Gellatly Drive
Wappingers Falls, New York 12590

Attn: Charles E. McLeod, Jr.

Peggy Gray-Erdmann

Authorized for release by:
09/26/2011 12:04:51 PM

Peggy Gray-Erdmann
Project Manager II
peggy.gray-erdmann@testamericainc.com

LINKS

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Results relate only to the items tested and the sample(s) as received by the laboratory. The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Table of Contents

Definitions/Glossary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-9607-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit (Dioxin)
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or method detection limit if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-9607-1

Job ID: 480-9607-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-9607-1

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

General Chemistry
Method(s) SM 5210B: For batch 30859 the dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L.

No other analytical or quality issues were noted.

Detection Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-9607-1

Client Sample ID: AP-EWE-01 — Lab Sample ID: 480-9607-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	216		2.0	0.50	ug/L	1		200.7 Rev 4.4	Total/NA
Chromium	1.3	J	4.0	0.87	ug/L	1		200.7 Rev 4.4	Total/NA
Iron	142		50.0	19.3	ug/L	1		200.7 Rev 4.4	Total/NA
Nickel	1.9	J	10.0	1.3	ug/L	1		200.7 Rev 4.4	Total/NA
Selenium	0.89	J	1.0	0.44	ug/L	1		200.8	Total/NA
Total Kjeldahl Nitrogen	0.21		0.20	0.15	mg/L as N	1		351.2	Total/NA
Nitrate as N	0.69		0.050	0.011	mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	8.0	J	10.0	5.0	mg/L	1		410.4	Total/NA
Phenolics, Total Recoverable	6.5	J	10.0	5.0	ug/L	1		420.4	Total/NA
Chromium, hexavalent	9.0	J	10.0	5.0	ug/L	1		7196A	Total/NA
Total Dissolved Solids	531		10.0	4.0	mg/L	1		SM 2540C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	7.95		0.100	0.100	SU	1		9040B	Total/NA
Total Suspended Solids	22.8		4.0	4.0	mg/L	1		SM 2540D	Total/NA
Oxygen, Dissolved	6.6	H	0.050	0.050	mg/L	1		SM 4500 O G	Total/NA

Client Sample ID: trip blank — Lab Sample ID: 480-9607-2

No Detections

Client Sample ID: AP-EWE-01

Date Collected: 09/10/11 09:20
Date Received: 09/10/11 10:07

Lab Sample ID: 480-9607-1

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.59	ug/L			09/13/11 19:04	1
Trichloroethene	ND		5.0	0.60	ug/L			09/13/11 19:04	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*72 - 130*		*09/13/11 19:04*	*1*
4-Bromofluorobenzene (Surr)	*88*		*69 - 121*		*09/13/11 19:04*	*1*
Toluene-d8 (Surr)	*112*		*70 - 123*		*09/13/11 19:04*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**216**		2.0	0.50	ug/L		09/13/11 08:10	09/13/11 15:37	1
Chromium	**1.3**	**J**	4.0	0.87	ug/L		09/13/11 08:10	09/13/11 15:37	1
Copper	ND		10.0	1.5	ug/L		09/13/11 08:10	09/13/11 15:37	1
Iron	**142**		50.0	19.3	ug/L		09/13/11 08:10	09/13/11 15:37	1
Nickel	**1.9**	**J**	10.0	1.3	ug/L		09/13/11 08:10	09/13/11 15:37	1
Zinc	ND		10.0	1.7	ug/L		09/13/11 08:10	09/13/11 15:37	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**0.89**	**J**	1.0	0.44	ug/L		09/13/11 08:30	09/13/11 20:21	1
Thallium	ND		0.20	0.0080	ug/L		09/13/11 08:30	09/13/11 20:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.020	0.0090	mg/L as N			09/14/11 13:32	1
Total Kjeldahl Nitrogen	**0.21**		0.20	0.15	mg/L as N		09/15/11 09:30	09/16/11 11:13	1
Nitrate as N	**0.69**		0.050	0.011	mg/L			09/10/11 16:50	1
Nitrite as N	ND		0.050	0.020	mg/L			09/10/11 16:21	1
Chemical Oxygen Demand	**8.0**	**J**	10.0	5.0	mg/L			09/13/11 12:15	1
Phenolics, Total Recoverable	**6.5**	**J**	10.0	5.0	ug/L		09/12/11 18:38	09/13/11 09:50	1
Chromium, hexavalent	**9.0**	**J**	10.0	5.0	ug/L			09/10/11 16:43	1
Total Dissolved Solids	**531**		10.0	4.0	mg/L			09/13/11 22:37	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			09/10/11 10:42	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.95**		0.100	0.100	SU			09/10/11 19:46	1
Total Suspended Solids	**22.8**		4.0	4.0	mg/L			09/12/11 22:33	1
Oxygen, Dissolved	**6.6**	**H**	0.050	0.050	mg/L			09/10/11 19:48	1

Client Sample ID: trip blank

Date Collected: 09/10/11 00:00
Date Received: 09/10/11 10:07

Lab Sample ID: 480-9607-2

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.59	ug/L			09/13/11 19:30	1
Trichloroethene	ND		5.0	0.60	ug/L			09/13/11 19:30	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*72 - 130*		*09/13/11 19:30*	*1*
4-Bromofluorobenzene (Surr)	*89*		*69 - 121*		*09/13/11 19:30*	*1*

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-9607-1

Client Sample ID: trip blank
Date Collected: 09/10/11 00:00
Date Received: 09/10/11 10:07

Lab Sample ID: 480-9607-2
Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	110		70 - 123		09/13/11 19:30	1

Surrogate Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-9607-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	BFB	TOL
Lab Sample ID	Client Sample ID	(72-130)	(69-121)	(70-123)
480-9607-1	AP-EWE-01	76	88	112
480-9607-2	trip blank	84	89	110
LCS 480-30957/4	Lab Control Sample	111	93	109
MB 480-30957/5	Method Blank	113	96	107

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-30957/5
Matrix: Water
Analysis Batch: 30957

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.59	ug/L			09/13/11 11:39	1
Trichloroethene	ND		5.0	0.60	ug/L			09/13/11 11:39	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*72 - 130*		*09/13/11 11:39*	*1*
4-Bromofluorobenzene (Surr)	*96*		*69 - 121*		*09/13/11 11:39*	*1*
Toluene-d8 (Surr)	*107*		*70 - 123*		*09/13/11 11:39*	*1*

Lab Sample ID: LCS 480-30957/4
Matrix: Water
Analysis Batch: 30957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
1,1-Dichloroethane			20.0	19.2		ug/L		96	73 - 128		
Trichloroethene			20.0	19.1		ug/L		96	67 - 134		

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*72 - 130*
4-Bromofluorobenzene (Surr)	*93*		*69 - 121*
Toluene-d8 (Surr)	*109*		*70 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-30907/1-A
Matrix: Water
Analysis Batch: 31166

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 30907

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		2.0	0.50	ug/L		09/13/11 08:10	09/13/11 15:04	1
Chromium	ND		4.0	0.87	ug/L		09/13/11 08:10	09/13/11 15:04	1
Copper	ND		10.0	1.5	ug/L		09/13/11 08:10	09/13/11 15:04	1
Iron	ND		50.0	19.3	ug/L		09/13/11 08:10	09/13/11 15:04	1
Nickel	ND		10.0	1.3	ug/L		09/13/11 08:10	09/13/11 15:04	1
Zinc	ND		10.0	1.7	ug/L		09/13/11 08:10	09/13/11 15:04	1

Lab Sample ID: LCS 480-30907/2-A
Matrix: Water
Analysis Batch: 31166

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 30907

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Barium			200	204.8		ug/L		102	85 - 115		
Chromium			200	204.1		ug/L		102	85 - 115		
Copper			200	206.4		ug/L		103	85 - 115		
Iron			10000	10180		ug/L		102	85 - 115		
Nickel			200	203.1		ug/L		102	85 - 115		
Zinc			200	200.4		ug/L		100	85 - 115		

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 480-30915/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31205 — **Prep Batch: 30915**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		1.0	0.44	ug/L		09/13/11 08:30	09/13/11 19:00	1
Thallium	ND		0.20	0.0080	ug/L		09/13/11 08:30	09/13/11 19:00	1

Lab Sample ID: LCS 480-30915/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31205 — **Prep Batch: 30915**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Selenium	20.0	20.16		ug/L		101	85 - 115
Thallium	20.0	19.39		ug/L		97	85 - 115

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-31264/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31264

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.020	0.0090	mg/L as N			09/14/11 13:03	1

Lab Sample ID: LCS 480-31264/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31264

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Ammonia as N	1.00	0.953		mg/L as N		95	90 - 110

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 480-31477/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31628 — **Prep Batch: 31477**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		0.20	0.15	mg/L as N		09/15/11 09:30	09/16/11 09:58	1

Lab Sample ID: LCS 480-31477/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31628 — **Prep Batch: 31477**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Total Kjeldahl Nitrogen	2.50	2.35		mg/L as N		94	90 - 110

Method: 353.2 - Nitrogen, Nitrite

Lab Sample ID: MB 480-30742/3
Matrix: Water
Analysis Batch: 30742

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.050	0.020	mg/L			09/10/11 16:19	1

Lab Sample ID: LCS 480-30742/4
Matrix: Water
Analysis Batch: 30742

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Nitrite as N	1.50	1.41		mg/L		94	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 480-31115/51
Matrix: Water
Analysis Batch: 31115

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0	5.0	mg/L			09/13/11 12:15	1

Lab Sample ID: LCS 480-31115/52
Matrix: Water
Analysis Batch: 31115

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Chemical Oxygen Demand	25.0	23.77		mg/L		95	90 - 110

Method: 420.4 - Phenolics, Total Recoverable

Lab Sample ID: MB 480-30939/1-A
Matrix: Water
Analysis Batch: 31022

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 30939

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		10.0	5.0	ug/L		09/12/11 17:55	09/13/11 07:23	1

Lab Sample ID: LCS 480-30939/2-A
Matrix: Water
Analysis Batch: 31022

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 30939

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Phenolics, Total Recoverable	100	107.8		ug/L		108	90 - 110

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 480-30748/3
Matrix: Water
Analysis Batch: 30748

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		10.0	5.0	ug/L			09/10/11 16:42	1

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCS 480-30748/4
Matrix: Water
Analysis Batch: 30748

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Chromium, hexavalent	50.0	56.00		ug/L		112	85 - 115

Lab Sample ID: 480-9607-1 MS
Matrix: Water
Analysis Batch: 30748

Client Sample ID: AP-EWE-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec	% Rec. Limits
Chromium, hexavalent	9.0	J	50.0	58.00		ug/L		98	85 - 115

Lab Sample ID: 480-9607-1 DU
Matrix: Water
Analysis Batch: 30748

Client Sample ID: AP-EWE-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	9.0	J	7.00	J	ug/L		25	15

Method: 9040B - pH

Lab Sample ID: LCS 480-30877/1
Matrix: Water
Analysis Batch: 30877

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
pH	7.00	7.030		SU		100	99 - 101

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 480-31116/1
Matrix: Water
Analysis Batch: 31116

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10.0	4.0	mg/L			09/13/11 22:30	1

Lab Sample ID: LCS 480-31116/2
Matrix: Water
Analysis Batch: 31116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Total Dissolved Solids	501	486.0		mg/L		97	85 - 115

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-30902/1
Matrix: Water
Analysis Batch: 30902

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			09/12/11 22:18	1

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-9607-1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 480-30902/2
Matrix: Water
Analysis Batch: 30902

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Total Suspended Solids	232	230.8		mg/L		99	88 - 110

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-30859/1 USB
Matrix: Water
Analysis Batch: 30859

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			09/10/11 10:42	1

Lab Sample ID: LCS 480-30859/2
Matrix: Water
Analysis Batch: 30859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Biochemical Oxygen Demand	198	169.6		mg/L		86	85 - 115

GC/MS VOA

Analysis Batch: 30957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	624	
480-9607-2	trip blank	Total/NA	Water	624	
LCS 480-30957/4	Lab Control Sample	Total/NA	Water	624	
MB 480-30957/5	Method Blank	Total/NA	Water	624	

Metals

Prep Batch: 30907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	200.7	
LCS 480-30907/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-30907/1-A	Method Blank	Total/NA	Water	200.7	

Prep Batch: 30915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	200.8	
LCS 480-30915/2-A	Lab Control Sample	Total/NA	Water	200.8	
MB 480-30915/1-A	Method Blank	Total/NA	Water	200.8	

Analysis Batch: 31166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	200.7 Rev 4.4	30907
LCS 480-30907/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	30907
MB 480-30907/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	30907

Analysis Batch: 31205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	200.8	30915
LCS 480-30915/2-A	Lab Control Sample	Total/NA	Water	200.8	30915
MB 480-30915/1-A	Method Blank	Total/NA	Water	200.8	30915

General Chemistry

Analysis Batch: 30742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	353.2	
LCS 480-30742/4	Lab Control Sample	Total/NA	Water	353.2	
MB 480-30742/3	Method Blank	Total/NA	Water	353.2	

Analysis Batch: 30748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	7196A	
480-9607-1 DU	AP-EWE-01	Total/NA	Water	7196A	
480-9607-1 MS	AP-EWE-01	Total/NA	Water	7196A	
LCS 480-30748/4	Lab Control Sample	Total/NA	Water	7196A	
MB 480-30748/3	Method Blank	Total/NA	Water	7196A	

Analysis Batch: 30859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	SM 5210B	
LCS 480-30859/2	Lab Control Sample	Total/NA	Water	SM 5210B	
USB 480-30859/1 USB	Method Blank	Total/NA	Water	SM 5210B	

General Chemistry (Continued)

Analysis Batch: 30863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	SM 4500 O G	

Analysis Batch: 30877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	9040B	
LCS 480-30877/1	Lab Control Sample	Total/NA	Water	9040B	

Analysis Batch: 30902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	SM 2540D	
LCS 480-30902/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-30902/1	Method Blank	Total/NA	Water	SM 2540D	

Prep Batch: 30939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	Distill/Phenol	
LCS 480-30939/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
MB 480-30939/1-A	Method Blank	Total/NA	Water	Distill/Phenol	

Analysis Batch: 31022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	420.4	30939
LCS 480-30939/2-A	Lab Control Sample	Total/NA	Water	420.4	30939
MB 480-30939/1-A	Method Blank	Total/NA	Water	420.4	30939

Analysis Batch: 31115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	410.4	
LCS 480-31115/52	Lab Control Sample	Total/NA	Water	410.4	
MB 480-31115/51	Method Blank	Total/NA	Water	410.4	

Analysis Batch: 31116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	SM 2540C	
LCS 480-31116/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 480-31116/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 31264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	350.1	
LCS 480-31264/4	Lab Control Sample	Total/NA	Water	350.1	
MB 480-31264/3	Method Blank	Total/NA	Water	350.1	

Prep Batch: 31477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	351.2	
LCS 480-31477/2-A	Lab Control Sample	Total/NA	Water	351.2	
MB 480-31477/1-A	Method Blank	Total/NA	Water	351.2	

Analysis Batch: 31628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	351.2	31477

General Chemistry (Continued)

Analysis Batch: 31628 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-31477/2-A	Lab Control Sample	Total/NA	Water	351.2	31477
MB 480-31477/1-A	Method Blank	Total/NA	Water	351.2	31477

Analysis Batch: 31962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9607-1	AP-EWE-01	Total/NA	Water	353.2	

Lab Chronicle

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-9607-1

Client Sample ID: AP-EWE-01

Lab Sample ID: 480-9607-1

Date Collected: 09/10/11 09:20

Matrix: Water

Date Received: 09/10/11 10:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	30957	09/13/11 19:04	TRB	TAL BUF
Total/NA	Prep	200.7			30907	09/13/11 08:10	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	31166	09/13/11 15:37	LH	TAL BUF
Total/NA	Prep	200.8			30915	09/13/11 08:30	JM	TAL BUF
Total/NA	Analysis	200.8		1	31205	09/13/11 20:21	JRK	TAL BUF
Total/NA	Analysis	353.2		1	30742	09/10/11 16:21	JR	TAL BUF
Total/NA	Analysis	7196A		1	30748	09/10/11 16:43	KS	TAL BUF
Total/NA	Analysis	SM 5210B		1	30859	09/10/11 10:42	AP	TAL BUF
Total/NA	Analysis	SM 4500 O G		1	30863	09/10/11 19:48	AP	TAL BUF
Total/NA	Analysis	9040B		1	30877	09/10/11 19:46	ES	TAL BUF
Total/NA	Analysis	SM 2540D		1	30902	09/12/11 22:33	KS	TAL BUF
Total/NA	Prep	Distill/Phenol			30939	09/12/11 18:38	KS	TAL BUF
Total/NA	Analysis	420.4		1	31022	09/13/11 09:50	PN	TAL BUF
Total/NA	Analysis	410.4		1	31115	09/13/11 12:15	JS	TAL BUF
Total/NA	Analysis	SM 2540C		1	31116	09/13/11 22:37	KS	TAL BUF
Total/NA	Analysis	350.1		1	31264	09/14/11 13:32	KS	TAL BUF
Total/NA	Prep	351.2			31477	09/15/11 09:30	PN	TAL BUF
Total/NA	Analysis	351.2		1	31628	09/16/11 11:13	JS	TAL BUF
Total/NA	Analysis	353.2		1	31962	09/10/11 16:50	JR	TAL BUF

Client Sample ID: trip blank

Lab Sample ID: 480-9607-2

Date Collected: 09/10/11 00:00

Matrix: Water

Date Received: 09/10/11 10:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	30957	09/13/11 19:30	TRB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-9607-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Buffalo	Arkansas	State Program	6	88-0686
TestAmerica Buffalo	California	NELAC	9	1169CA
TestAmerica Buffalo	Connecticut	State Program	1	PH-0568
TestAmerica Buffalo	Florida	NELAC	4	E87672
TestAmerica Buffalo	Georgia	Georgia EPD	4	N/A
TestAmerica Buffalo	Georgia	State Program	4	956
TestAmerica Buffalo	Illinois	NELAC	5	100325 / 200003
TestAmerica Buffalo	Iowa	State Program	7	374
TestAmerica Buffalo	Kansas	NELAC	7	E-10187
TestAmerica Buffalo	Kentucky	Kentucky UST	4	30
TestAmerica Buffalo	Kentucky	State Program	4	90029
TestAmerica Buffalo	Louisiana	NELAC	6	02031
TestAmerica Buffalo	Maine	State Program	1	NY0044
TestAmerica Buffalo	Maryland	State Program	3	294
TestAmerica Buffalo	Massachusetts	State Program	1	M-NY044
TestAmerica Buffalo	Michigan	State Program	5	9937
TestAmerica Buffalo	Minnesota	NELAC	5	036-999-337
TestAmerica Buffalo	New Hampshire	NELAC	1	68-00281
TestAmerica Buffalo	New Hampshire	NELAC	1	2337
TestAmerica Buffalo	New Jersey	NELAC	2	NY455
TestAmerica Buffalo	New York	NELAC	2	10026
TestAmerica Buffalo	North Dakota	State Program	8	R-176
TestAmerica Buffalo	Oklahoma	State Program	6	9421
TestAmerica Buffalo	Oregon	NELAC	10	NY200003
TestAmerica Buffalo	Pennsylvania	NELAC	3	68-00281
TestAmerica Buffalo	Tennessee	State Program	4	TN02970
TestAmerica Buffalo	Texas	NELAC	6	T104704412-08-TX
TestAmerica Buffalo	USDA	USDA		P330-08-00242
TestAmerica Buffalo	Virginia	NELAC Secondary AB	3	460185
TestAmerica Buffalo	Virginia	State Program	3	278
TestAmerica Buffalo	Washington	State Program	10	C1677
TestAmerica Buffalo	West Virginia	West Virginia DEP	3	252
TestAmerica Buffalo	Wisconsin	State Program	5	998310390

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-9607-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
200.8	Metals (ICP/MS)	EPA	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL BUF
353.2	Nitrogen, Nitrite	MCAWW	TAL BUF
353.2	Nitrate	EPA	TAL BUF
410.4	COD	MCAWW	TAL BUF
420.4	Phenolics, Total Recoverable	MCAWW	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL BUF
9040B	pH	SW846	TAL BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 O G	Oxygen, Dissolved	SM	TAL BUF
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Greenstar Environmental Solutions, LLC
Project/Site: Greenstar Environmental Solutions, LLC

TestAmerica Job ID: 480-9607-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-9607-1	AP-EWE-01	Water	09/10/11 09:20	09/10/11 10:07
480-9607-2	trip blank	Water	09/10/11 00:00	09/10/11 10:07

Login Sample Receipt Checklist

Client: Greenstar Environmental Solutions, LLC

Job Number: 480-9607-1

Login Number: 9607

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	Not in contact with samples
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	False	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Attachment G

Monthly Operation and Maintenance Details
January – December 2011

1. INTRODUCTION

This report presents a summary of the ongoing operation and maintenance activities for the Airco Parcel, Niagara Falls, New York, from 1 January to 31 December 2011. It includes a summary of ongoing operations, system repairs, corrective actions, improvements, and an evaluation of the groundwater collection and treatment system (GCTS) performance.

2. ROUTINE OPERATION AND MAINTENANCE

Comparing the discharge flow rates to the discharge value, the system exceeded the 36,000 gallons per day (gpd) total flow on 27 and 28 December 2011. The system flow rates were adjusted to lower the flow rate to within the specified range. During this report period, the overall system average flow rate was 16.2 gallons per minute (gpm).

Table 2 of the Annual Monitoring Event Letter Report provides a summary of the quarterly effluent analytical data from the February, June, September and October 2011 quarterly GCTS discharge sampling events. Routine operation and maintenance was completed throughout the monitoring period. Field tasks included system checks, data collection, and field analysis of treatment water at various stages of the treatment process, transducer cleanings, and general site maintenance.

3. SYSTEM OPERATIONS AND EFFICIENCY

During this monitoring period, 8,534,220 gal of groundwater were treated and discharged to the stormwater swale adjacent to the engineered wetlands. The system average flow rate was 16.2 gpm during the reporting period. The treatment system was operational for 99.94 percent of the reporting period. The emergency overflow pond (T8) was utilized while the tank and line cleaning was performed during the reporting period, and during response to alarm conditions. The system was temporarily shut off and the T-8 emergency overflow pond utilized during the system cleaning and during the CO_2 tank system failure. No known releases to the environment occurred during the reporting period.

The completed System Monitoring Checklists are provided in Attachment G.1. Monthly GCTS flow calculations are provided in Attachment G.2. During the reporting period, an estimated 1.9 pounds (lb) of total chromium was treated by the GCTS, of which an estimated 1.5 lb was hexavalent chromium. These values are based on the total gallons treated and the average influent and effluent concentrations observed from the monthly field sampling.

3.1 SYNOPSIS OF THE BI-ANNUAL ACTIVITIES

January 2011

The system was operational for all 31 days in January. No alarm conditions were reported during the month of January. No scheduled or unscheduled shut downs or system bypasses occurred. The following details the activities which were performed during January:

- 24 January 2011 – Routine site visit. Cleaned and calibrated pH probes in T3B and T6B. Crossover pipes in T3A cleaned to remove calcium deposits. Southwest corner iced over an inaccessible for chromium field measurements. Gauged onsite wells with Mike Hinton from NYSDEC.

February 2011

The system was operational for all 28 days in February. No alarm conditions were reported during the month of February. No scheduled or unscheduled shut downs or system bypasses occurred. The following details the activities which were performed during February:

- 12 February 2011 – Routine site visit. Cleaned and calibrated pH probes in T3B and T6B. Crack repaired on suction line for P1-B. Installed shelves in T-1 shed. First quarter effluent sampling completed during visit.

March 2011

The system was operational for all 31 days in March. No alarm conditions were reported during the month of March. No scheduled or unscheduled shut downs or system bypasses occurred. The following details the activities which were performed during March:

- 16 March 2011 – Routine site visit. Clean and calibrated all pH probes. Replaced P-6B pump with a rebuilt pump. Tightened camera pole at T-1. First quarter engineers inspection completed during visit.

April 2011

The system was operational for all 30 days in April. No alarm conditions were reported during the month of April. No scheduled or unscheduled shut downs or system bypasses occurred. The following details the activities which were performed during April:

- 4 April 2011 – Routine site visit. Cleaned and calibrated all pH probes. Acid injection performed at leachate collection system. Observed the fence on the North side of the property needs repair, clips have come undone. Vault closest to T-1 was hit by snow plow, straightened as well as possible.

May 2011

The system was operational for all 31 days in May. No alarm conditions were reported during the month of May. No scheduled or unscheduled shut downs or system bypasses occurred. The following details the activities which were performed during May:

- 16 May 2011 – Routine site visit. Cleaned and calibrated all pH probes. T3A crossover pipes cleaned to remove calcium deposits. Damaged fence on North side of property repaired. Calcium buildup on the end of T3A inlet pipe cleared. Sprayed herbicide around treatment system tanks to reduce weed growth.

June 2011

The system was operational for all 30 days in June. No alarm conditions were reported during the month of June. No scheduled or unscheduled shut downs or system bypasses occurred. The following details the activities which were performed during June:

- 16 June 2011 – Routine site visit. Cleaned and calibrated all pH probes. Clean pressure transducer in T8. Vegetation around T7 too long to cut with push mower. Quarterly sampling and Engineers inspection completed during site visit.

July 2011

The system was operational for all 31 days in July. No alarm conditions were reported during the month of July. No scheduled or unscheduled shut downs or system bypasses occurred. The following details the activities which were performed during July:

- 8 July 2010 – Routine site visit. Cleaned and calibrated all pH probes.

August 2011

The system was operational for all 31 days in August. No alarm conditions were reported during the month of August. No scheduled or unscheduled shut downs or system bypasses occurred. The following details the activities which were performed during August:

- 1 August 2011 – Routine site visit. Clean and calibrate all pH probes.

September 2011

The system was operational for all 30 days in September. No alarm conditions were reported during the month of September. No scheduled or unscheduled shut downs or system bypasses occurred. The following details the activities which were performed during September:

- 9 September 2011 – Routine site visit. Clean and calibrate all pH probes. Generator shut down while being repaired. Engineers inspection completed during site visit.

October 2011

The system was operational for 31 days in October. One alarm condition was reported during the month of October. A T7 low and high level condition occurred due to the pressure transmitter shorting out. Mobilization to the site was combined with a routine site visit. No scheduled or unscheduled shut downs. Leachate pumped into the T8 overflow pond during system cleaning. The following details the activities which were performed during October:

- 19 October 2011 – Routine site visit combined with system cleaning and Annual Groundwater Sampling Event. Cleaned and calibrated all pH probes. T3A tanks cleaned. Acid injecting into the leachate collection trench. P6B was determined to be failing and was replaced and sent out to be rebuilt. Replaced pressure transmitters in T7 and T8, which were damaged due the inundation of junction box. Junction box raised to avoid future water damaged. Cracked CO_2 diffuser in first tank of T3A replaced. Repairs made to bad PLC computer. Groundwater samples collected at MW-01B through MW-08B SS-01, SS-02 and SS-03 as part of annual and bi-annual sampling events. Drilling for extraction well initiated as part of the pilot study.

November 2011

The system was operational for 30 days in November. One alarm condition was reported during the month of November. A T6B high level alarm condition was reported. Mobilization to the site was combined with a routine site visit. No scheduled or unscheduled shut downs or system bypasses occurred. The following details the activities which were performed during November:

- 12 November 2011 – Routine site visit. Cleaned and calibrated all pH probes. Cleared organic obstructions from T7 outlet pipe. Field testing indicated elevated chromium concentrations in sample collected at SW corner, Laboratory closed, unable to get confirmatory samples analyzed.

December 2011

The system was operational for 31 days in December. No alarm conditions were reported during the month of December. No scheduled or unscheduled shut downs. Leachate pumped to the T8 pond while replacing P3B pump. The following details the activities which were performed during December:

- 2 December 2011 – Mobilization for emergency response to P3B pump. Pump rate at P3B decreased. Pump replaced with new pump. Monthly inspection performed while onsite. Cleaned and calibrated all pH probes. Replaced check valve in T6B. Elevated concentrations of chromium indicated in field testing of water sample from SW corner. Confirmatory samples sent to laboratory; and results came back nondetect for hex chrome.
- 5 December 2011 – Environmental contractor mobilized for pilot study upgrades. Submersible pump installed in extraction well, new PLC installed at extraction well, effluent line from extraction well tied into the treatment system.

4. MODIFICATIONS/IMPROVEMENTS AND RECOMMENDATIONS

4.1 SYSTEM MODIFICATION/IMPROVEMENTS

In December 2011, modifications to the GCTS outlined in a Proposal for Data Collection for Alternate Remedial Strategy dated 11 October 2011 were completed. As part of the proposal, one extraction well was installed through the landfill into weathered bedrock and fitted with a 4-in. diameter variable speed submersible pump capable of yielding at least 10 gpm. This installation is part of a pilot study to evaluate whether dewatering the upper portion of bedrock can prevent leachate generation. The extraction well was installed through the low permeability cap and geosynthetic liner which was repaired and sealed after the installation was complete to prevent precipitation from entering the waste above. The discharge line for extraction well EW-1 was connected to the existing piping network for groundwater to be pumped to the GCTS. To allow this pump to run throughout the year the new extraction well was tied into the existing control system. Permanent piping, wiring and pump controls were run to the EW-1 location.

Electrical wiring was run in the existing buried conduits that supply power to the T-1 shed. Power for the submersible pump was run from the T-1 shed to a new NEMA 3R control panel that was mounted on the exterior of a small (3 ft by 3 ft) concrete vault. The vault was installed to cover the well head to permit winter operation. A control panel was constructed to contain a Modicon PLC which is linked to the existing Modicon control system via an Ethernet radio, consistent with the existing radio network utilized at the site. A variable frequency drive (VFD) used to control the pump was mounted in the wellhead control panel, along with a small heater to keep control systems at operating temperature during the winter. The VFD will be used in conjunction with a pressure transducer placed in EW-1 to maintain a constant head drawdown within the well. A connection was made in the existing line running from the T1 shed to the T3 settling tanks to convey the extracted water from EW-1 to the treatment system, and the line was re-buried. The 2-in. line from the new extraction well was connected to the 3-inch force main prior to it entering the T-8 valve control shed.

The following site maintenance activities were performed to address deficiencies noted during the engineering inspections:

- The stick-up casings of piezometers installed as part of the pilot study were painted with safety blue paint and reflective markers added.
- Stored flocculent at the site is no longer needed, and was properly disposed.
- Area around T-7 reseeded, and vegetation established.
- Dam built around T-7 pipe of course gravel, to prevent organic matter from clogging outfall pipe.
- Mowing of landfill cap completed.

5. PROJECTED OPERATION AND MAINTENACE

5.1 JANUARY – DECEMBER 2012

During the 2012 annual reporting period, Greenstar anticipates performing routine operation and maintenance activities. Routine activities during the reporting period will include routine cleaning and calibration, pump replacements, and other activities as required. Emergency response to alarm conditions will be responded to as required.

6. SYSTEM MONITORING

6.1 ENVIRONMENTAL SAMPLING

Routine system sampling with field analysis will continue on an as needed basis to ensure chromium removal efficiency is maintained and no short circuiting is occurring in the zero valence iron beds. Quarterly discharge samples are anticipated to be collected in March, June, September, and December 2012 from the GCTS to monitor the NYSDEC discharge permit guidelines. The annual groundwater monitoring event is anticipated to occur in September 2012. Monthly effluent samples from the EW-1 will be collected as part of the data collection required to evaluate potential remediation alternatives for the site.

Attachment G.1

Airco Parcel Monthly System Monitoring Checklists January – December 2011

GCTS DATA RECORDING SHEET
AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Date: 1/24/11	**Project No.: 1046**	**Greenstar Personnel:** Bruce Vinal
Weather: Overcast 10 degrees		
READING		*ITEM*
235		Carbon Dioxide Storage Tank Pressure (220-235 psi)
5,900		Carbon Dioxide Tank Liquid Level
3.4		T1 Water Level
AUTO/CYCLING		Pump P1A Running Status ON/OFF
AUTO/CYCLING		Pump P1BA Running Status ON/OFF
616.2		T3A Water Elevation
6.4		T3B pH Reading
613.3		T3B Water Level
AUTO/CYCLING		Pump 3B Operational Status ON/OFF
612.5		T5 Water Level
AUTO/CYCLING		Pump 5 Operational Status ON/OFF
616.1		T6A Water Elevation
6.5		T6B pH
613.8		T6B Water Level
AUTO/CYCLING		Pump 6B Operational Status ON/OFF
615.5		T7 Water Level Reading
6.6		T7 pH
3.5		T8 Water Elevation
31,403,154		Flow Meter Reading
18.2		Average System Flow
35.9		Generator Run Hours
READING	*Standard*	*LOCATION/PARAMETER*
0.001	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromium
0.125	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
ND	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.012	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
ND	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
0.018	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
N/A	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
N/A	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
pH READING		*SAMPLE LOCATION*
6.16		Calcium Settling Pond Effluent (T3)
6.40		Iron Settling Pond Effluent (T6)
6.54		Engineered Wetland Effluent (T7)
N/A		Southwest Corner Effluent (SS-1)
Notes: Clean and calibrated all pH probes. Cleaned crossover pipes in T-3A. SW Corner inaccessible to sample. Gauged wells in surrounding area with Mike Hinton.		

GCTS DATA RECORDING SHEET
AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Date: 2/12/11	**Project No.: 1046**	**Greenstar Personnel:** Bruce Vinal
Weather: Sun 30 Degrees		
READING		*ITEM*
235		Carbon Dioxide Storage Tank Pressure (220-235 psi)
8,100		Carbon Dioxide Tank Liquid Level
2.8		T1 Water Level
AUTO/CYCLING		Pump P1A Running Status ON/OFF
AUTO/CYCLING		Pump P1BA Running Status ON/OFF
616.2		T3A Water Elevation
6.3		T3B pH Reading
613.6		T3B Water Level
AUTO/CYCLING		Pump 3B Operational Status ON/OFF
611.0		T5 Water Level
AUTO/CYCLING		Pump 5 Operational Status ON/OFF
616.2		T6A Water Elevation
6.5		T6B pH
613.0		T6B Water Level
AUTO/CYCLING		Pump 6B Operational Status ON/OFF
615.6		T7 Water Level Reading
6.6		T7 pH
3.3		T8 Water Elevation
31,915,704		Flow Meter Reading
17.1		Average System Flow
36.4		Generator Run Hours
READING	*Standard*	*LOCATION/PARAMETER*
0.029	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromium
0.018	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
0.008	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.061	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
ND	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
0.042	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.066	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.012	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
pH READING		*SAMPLE LOCATION*
6.32		Calcium Settling Pond Effluent (T3)
6.45		Iron Settling Pond Effluent (T6)
6.54		Engineered Wetland Effluent (T7)
6.98		Southwest Corner Effluent (SS-1)
Notes: Cleaned and calibrated all pH probes. Repaired cracked suction line on P-1B. Installed shelves in T-1. Completed quarterly discharge sampling at SW corner.		

GCTS DATA RECORDING SHEET
AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Date: 3/16/11	**Project No.: 1046**	**Greenstar Personnel:** Bruce Vinal
Weather: Sun 40 degrees		
READING		*ITEM*
234		Carbon Dioxide Storage Tank Pressure (220-235 psi)
7,000		Carbon Dioxide Tank Liquid Level
3.2		T1 Water Level
AUTO/CYCLING		Pump P1A Running Status ON/OFF
AUTO/CYCLING		Pump P1BA Running Status ON/OFF
616.2		T3A Water Elevation
6.2		T3B pH Reading
614.3		T3B Water Level
AUTO/CYCLING		Pump 3B Operational Status ON/OFF
612.3		T5 Water Level
AUTO/CYCLING		Pump 5 Operational Status ON/OFF
616.1		T6A Water Elevation
6.3		T6B pH
614.1		T6B Water Level
AUTO/CYCLING		Pump 6B Operational Status ON/OFF
615.5		T7 Water Level Reading
6.6		T7 pH
2.0		T8 Water Elevation
32,552,542		Flow Meter Reading
18.7		Average System Flow
37.2		Generator Run Hours
READING	*Standard*	*LOCATION/PARAMETER*
0.075	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromium
0.084	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
0.021	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.001	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
ND	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
0.001	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.010	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.019	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
pH READING		*SAMPLE LOCATION*
6.23		Calcium Settling Pond Effluent (T3)
6.33		Iron Settling Pond Effluent (T6)
6.75		Engineered Wetland Effluent (T7)
7.55		Southwest Corner Effluent (SS-1)
Notes: Cleaned and calibrated all pH probes. Completed Q1 engineering inspections. Replace P-6B pump with a rebuilt pump. Cleaned T-1 shed to remove dead mice and associated stench. Tightened camera pole at T-1.		

GCTS DATA RECORDING SHEET
AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Date: 4/12/11	**Project No.: 1046**	**Greenstar Personnel:** Bruce Vinal
Weather: Sun 50 Degrees		
READING		*ITEM*
235		Carbon Dioxide Storage Tank Pressure (220-235 psi)
7800		Carbon Dioxide Tank Liquid Level
2.8		T1 Water Level
AUTO/CYCLING		Pump P1A Running Status ON/OFF
AUTO/CYCLING		Pump P1BA Running Status ON/OFF
616.2		T3A Water Elevation
6.3		T3B pH Reading
613.4		T3B Water Level
AUTO/CYCLING		Pump 3B Operational Status ON/OFF
611.4		T5 Water Level
AUTO/CYCLING		Pump 5 Operational Status ON/OFF
616.2		T6A Water Elevation
6.5		T6B pH
613.7		T6B Water Level
AUTO/CYCLING		Pump 6B Operational Status ON/OFF
615.5		T7 Water Level Reading
6.7		T7 pH
1.9		T8 Water Elevation
33,330,752		Flow Meter Reading
18.6		Average System Flow
38.1		Generator Run Hours
READING	*Standard*	*LOCATION/PARAMETER*
0.029	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromium
0.164	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
0.073	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.004	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
ND	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
0.056	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.008	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.044	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
pH READING		*SAMPLE LOCATION*
6.34		Calcium Settling Pond Effluent (T3)
6.38		Iron Settling Pond Effluent (T6)
6.77		Engineered Wetland Effluent (T7)
6.96		Southwest Corner Effluent (SS-1)
Notes: Replace pH Probe in T-3B. Cleaned and calibrated remaining PH Probes. Fence to the North needs repair (clips came undone). Acid injected into leachate collection trench. Vault closest to T-1 was hit by snow plow, may be able to straighten.		

GCTS DATA RECORDING SHEET
AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Date: 5/16/11	**Project No.: 1046**	**Greenstar Personnel:** Bruce Vinal
Weather: Rain 40 degrees		
READING		*ITEM*
234		Carbon Dioxide Storage Tank Pressure (220-235 psi)
11,200		Carbon Dioxide Tank Liquid Level
3.2		T1 Water Level
AUTO/CYCLING		Pump P1A Running Status ON/OFF
AUTO/CYCLING		Pump P1BA Running Status ON/OFF
616.2		T3A Water Elevation
6.2		T3B pH Reading
613.8		T3B Water Level
AUTO/CYCLING		Pump 3B Operational Status ON/OFF
611.8		T5 Water Level
AUTO/CYCLING		Pump 5 Operational Status ON/OFF
616.3		T6A Water Elevation
6.3		T6B pH
613.3		T6B Water Level
AUTO/CYCLING		Pump 6B Operational Status ON/OFF
615.5		T7 Water Level Reading
6.6		T7 pH
2.2		T8 Water Elevation
34,267,796		Flow Meter Reading
12.1		Average System Flow
39.0		Generator Run Hours
READING	*Standard*	*LOCATION/PARAMETER*
0.105	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromium
0.091	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
0.051	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.002	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
ND	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
ND	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.008	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.020	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
pH READING		*SAMPLE LOCATION*
6.20		Calcium Settling Pond Effluent (T3)
6.31		Iron Settling Pond Effluent (T6)
6.81		Engineered Wetland Effluent (T7)
7.15		Southwest Corner Effluent (SS-1)
Notes: Cleaned and calibrated all pH probes. Clean T-3 crossover pipes. Fence to the North has been repaired. Cleared calcium buildup at T-3 inlet pipe. Sprayed Ground Clear around tanks to reduce weed growth.		

GCTS DATA RECORDING SHEET
AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Date: 6/16/11	**Project No.: 1046**	**Greenstar Personnel:** Bruce Vinal
Weather: Sun 90 degrees		
READING		*ITEM*
232		Carbon Dioxide Storage Tank Pressure (220-235 psi)
3,800		Carbon Dioxide Tank Liquid Level
2.6		T1 Water Level
AUTO/CYCLING		Pump P1A Running Status ON/OFF
AUTO/CYCLING		Pump P1BA Running Status ON/OFF
616.2		T3A Water Elevation
6.3		T3B pH Reading
613.0		T3B Water Level
AUTO/CYCLING		Pump 3B Operational Status ON/OFF
612.8		T5 Water Level
AUTO/CYCLING		Pump 5 Operational Status ON/OFF
616.2		T6A Water Elevation
6.4		T6B pH
614.3		T6B Water Level
AUTO/CYCLING		Pump 6B Operational Status ON/OFF
615.6		T7 Water Level Reading
6.3		T7 pH
1.4		T8 Water Elevation
35,122,635		Flow Meter Reading
19.1		Average System Flow
40.1		Generator Run Hours
READING	*Standard*	*LOCATION/PARAMETER*
0.073	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromium
0.080	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
ND	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.004	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
0.002	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
0.006	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.009	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.020	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
pH READING		*SAMPLE LOCATION*
6.05		Calcium Settling Pond Effluent (T3)
6.34		Iron Settling Pond Effluent (T6)
6.56		Engineered Wetland Effluent (T7)
6.82		Southwest Corner Effluent (SS-1)
Notes: Cleaned and calibrated all pH probes. Cleaned T-8 pressure transducer. Vegetation around T-7 to overgrown to cut with push mower. Biannual surface water sampling completed. Engineering inspection of landfill cap completed.		

GCTS DATA RECORDING SHEET
AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Date: 8/1/11	**Project No.: 1046**	**Greenstar Personnel:** Bruce Vinal
Weather: Sun 80 degrees		
READING		*ITEM*
229		Carbon Dioxide Storage Tank Pressure (220-235 psi)
6700		Carbon Dioxide Tank Liquid Level
3.4		T1 Water Level
AUTO/CYCLING		Pump P1A Running Status ON/OFF
AUTO/CYCLING		Pump P1BA Running Status ON/OFF
616.1		T3A Water Elevation
6.2		T3B pH Reading
613.5		T3B Water Level
AUTO/CYCLING		Pump 3B Operational Status ON/OFF
612.9		T5 Water Level
AUTO/CYCLING		Pump 5 Operational Status ON/OFF
616.2		T6A Water Elevation
6.5		T6B pH
614.0		T6B Water Level
AUTO/CYCLING		Pump 6B Operational Status ON/OFF
615.5		T7 Water Level Reading
6.3		T7 pH
1.0		T8 Water Elevation
36,265,304		Flow Meter Reading
15.8		Average System Flow
		Generator Run Hours
READING	*Standard*	*LOCATION/PARAMETER*
0.007	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromium
0.017	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
0.008	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.032	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
0.002	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
0.006	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.009	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.021	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
pH READING		*SAMPLE LOCATION*
6.24		Calcium Settling Pond Effluent (T3)
6.30		Iron Settling Pond Effluent (T6)
6.39		Engineered Wetland Effluent (T7)
7.27		Southwest Corner Effluent (SS-1)
Notes: Cleaned and calibrated all pH probes.		

GCTS DATA RECORDING SHEET
AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Date: 9/11/11	**Project No.: 1046**	**Greenstar Personnel:** Bruce Vinal
Weather: Sun 80 degrees		
READING		*ITEM*
231		Carbon Dioxide Storage Tank Pressure (220-235 psi)
4.100		Carbon Dioxide Tank Liquid Level
3.2		T1 Water Level
AUTO/CYCLING		Pump P1A Running Status ON/OFF
AUTO/CYCLING		Pump P1BA Running Status ON/OFF
616.2		T3A Water Elevation
6.1		T3B pH Reading
614.1		T3B Water Level
AUTO/CYCLING		Pump 3B Operational Status ON/OFF
612.9		T5 Water Level
AUTO/CYCLING		Pump 5 Operational Status ON/OFF
616.2		T6A Water Elevation
6.5		T6B pH
613.3		T6B Water Level
AUTO/CYCLING		Pump 6B Operational Status ON/OFF
615.6		T7 Water Level Reading
6.4		T7 pH
1.3		T8 Water Elevation
37,014,944		Flow Meter Reading
8.9		Average System Flow
42		Generator Run Hours
READING	*Standard*	*LOCATION/PARAMETER*
0.091	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromium
0.100	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
0.082	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.079	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
0.001	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
0.058	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.009	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.059	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
pH READING		*SAMPLE LOCATION*
6.02		Calcium Settling Pond Effluent (T3)
6.27		Iron Settling Pond Effluent (T6)
6.77		Engineered Wetland Effluent (T7)
7.27		Southwest Corner Effluent (SS-1)
Notes: Cleaned and calibrated pH probes. Painted new wells. Generator shut down while being repaired. Engineering Inspection of landfill cap completed.		

GCTS DATA RECORDING SHEET
AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Date: 10/19/11	**Project No.: 1046**	**Greenstar Personnel:** Chip McLeod/Nate Maier
Weather: Cloudy, 50 degrees, windy		
READING		*ITEM*
233		Carbon Dioxide Storage Tank Pressure (220-235 psi)
6,831		Carbon Dioxide Tank Liquid Level
598.6 (Switched to Feet msl)		T1 Water Level
AUTO/CYCLING		Pump P1A Running Status ON/OFF
AUTO/CYCLING		Pump P1BA Running Status ON/OFF
616.3		T3A Water Elevation
6.4		T3B pH Reading
612.8		T3B Water Level
AUTO/CYCLING		Pump 3B Operational Status ON/OFF
613.4		T5 Water Level
AUTO/CYCLING		Pump 5 Operational Status ON/OFF
616.2		T6A Water Elevation
6.3		T6B pH
613.7		T6B Water Level
AUTO/CYCLING		Pump 6B Operational Status ON/OFF
616.0		T7 Water Level Reading
6.7		T7 pH
1.3		T8 Water Elevation
37,544,016		Flow Meter Reading
10		Average System Flow
42		Generator Run Hours
READING	*Standard*	*LOCATION/PARAMETER*
0.117 mg/l	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromium
0.092 mg/l	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
0.053 mg/l	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.041 mg/l	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
0.056 mg/l	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
0.072 mg/l	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.016 mg/l	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.078 mg/l	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
pH READING		*SAMPLE LOCATION*
6.27		Calcium Settling Pond Effluent (T3)
6.25		Iron Settling Pond Effluent (T6)
6.52		Engineered Wetland Effluent (T7)
6.90		Southwest Corner Effluent (SS-1)

Notes: System cleaning of tanks and lines. Acid injection of collection trench. Replaced P6 and sent out pump to be rebuilt. Replaced pressure transmitters in T7 and T8 and raised the junction box to avoid future water damage. Repairs to PLC and CO2 diffusers. Cleaned and Calibrated pH probes. Started drilling for EW for pump test.

GCTS DATA RECORDING SHEET
AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Date: 11/12/11	**Project No.: 1046**	**Greenstar Personnel:** Bruce Vinal
Weather:		
READING		*ITEM*
232		Carbon Dioxide Storage Tank Pressure (220-235 psi)
6,800		Carbon Dioxide Tank Liquid Level
598.7		T1 Water Level
AUTO/CYCLING 55 gpm		Pump P1A Running Status ON/OFF
AUTO/CYCLING 54 gpm		Pump P1BA Running Status ON/OFF
616.2		T3A Water Elevation
6.6		T3B pH Reading
613.2		T3B Water Level
AUTO/CYCLING		Pump 3B Operational Status ON/OFF
612.4		T5 Water Level
AUTO/CYCLING		Pump 5 Operational Status ON/OFF
616.3		T6A Water Elevation
6.7		T6B pH
613.4		T6B Water Level
AUTO/CYCLING		Pump 6B Operational Status ON/OFF
616.0		T7 Water Level Reading
6.8		T7 pH
2.0		T8 Water Elevation
38,010,860		Flow Meter Reading
15.4		Average System Flow
42.8		Generator Run Hours
READING	*Standard*	*LOCATION/PARAMETER*
0.107	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromium
0.128	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
0.014	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.005	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
0.077	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
0.064	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.118	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.064	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
pH READING		*SAMPLE LOCATION*
6.34		Calcium Settling Pond Effluent (T3)
6.56		Iron Settling Pond Effluent (T6)
6.73		Engineered Wetland Effluent (T7)
6.97		Southwest Corner Effluent (SS-1)
Notes: Winterized GCTS. Turn on heaters in sheds. Completed Q4 Engineering inspection of landfill cap. Cleaned and calibrated all pH probes. Cleared organic obstructions from T7 outlet pipe. High readings found in field tests, unable to analyze confirmatory samples, lab closed. Internet batteries charged at 14.3 volts		

GCTS DATA RECORDING SHEET
AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Date: 12/2/11	**Project No.: 1047.001**	**Greenstar Personnel: Nate Maier**
Weather: Sleet, 34 degrees		
READING		*ITEM*
232		Carbon Dioxide Storage Tank Pressure (220-235 psi)
6418		Carbon Dioxide Tank Liquid Level
598.8		T1 Water Level
AUTO/CYCLING		Pump P1A Running Status ON/OFF
AUTO/CYCLING		Pump P1BA Running Status ON/OFF
616.3		T3A Water Elevation
6.9		T3B pH Reading
613.0		T3B Water Level
AUTO/CYCLING		Pump 3B Operational Status ON/OFF
612.8		T5 Water Level
AUTO/CYCLING		Pump 5 Operational Status ON/OFF
613.5		T6A Water Elevation
6.1		T6B pH
613.8		T6B Water Level
AUTO/CYCLING		Pump 6B Operational Status ON/OFF
616.8		T7 Water Level Reading
6.9		T7 pH
2.5		T8 Water Elevation
38457140		Flow Meter Reading
16 GPM		Average System Flow
43.0		Generator Run Hours
READING	*Standard*	*LOCATION/PARAMETER*
0.131	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromium
0.124	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
0.058	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.039	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
0.040	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
0.015	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.165	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.052	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
pH READING		*SAMPLE LOCATION*
6.63		Calcium Settling Pond Effluent (T3)
6.16		Iron Settling Pond Effluent (T6)
6.96		Engineered Wetland Effluent (T7)
6.99		Southwest Corner Effluent (SS-1)
Notes: Mobilization for emergency response to T3B pump. Pump replaced. Clean and calibrated all pH probes. Replaced check valve in T6B. High readings found in chromium field testing for SW corner. Confirmatory samples came back nondetect from lab.		

Attachment G.2

Airco Parcel GCTS
Monthly Flow Calculations
January – December 2011

Monthly Flow Calculations
January 2011

Date	Maximum Flow (gpm)	Average Flow Rate (gpm)	Total Daily Flow (Gal)	Total Gallons To Date (Gal)	Run Time (hours)	Run Time (minutes)
1/1/2011	37	22.1	31,840	30,809,088	24	0
1/2/2011	36	18.0	25,970	30,835,058	24	0
1/3/2011	36	17.9	25,764	30,860,822	24	0
1/4/2011	36	18.1	26,024	30,886,846	24	0
1/5/2011	36	18.0	25,936	30,912,782	24	0
1/6/2011	36	18.1	26,044	30,938,826	24	0
1/7/2011	36	18.2	26,228	30,965,054	24	0
1/8/2011	36	18.0	25,962	30,991,016	24	0
1/9/2011	36	17.8	25,668	31,016,684	24	0
1/10/2011	36	17.7	25,542	31,042,226	24	0
1/11/2011	36	18.2	26,166	31,068,392	24	0
1/12/2011	36	18.4	26,554	31,094,946	24	0
1/13/2011	35	17.8	25,698	31,120,644	24	0
1/14/2011	35	18.1	25,996	31,146,640	24	0
1/15/2011	35	18.2	26,200	31,172,840	24	0
1/16/2011	35	18.2	26,170	31,199,010	24	0
1/17/2011	35	18.1	26,022	31,225,032	24	0
1/18/2011	35	18.7	26,858	31,251,890	24	0
1/19/2011	35	18.7	26,888	31,278,778	24	0
1/20/2011	35	18.7	26,860	31,305,638	24	0
1/21/2011	35	18.6	26,768	31,332,406	24	0
1/22/2011	35	18.4	26,460	31,358,866	24	0
1/23/2011	35	18.1	26,028	31,384,894	24	0
1/24/2011	35	18.9	27,212	31,412,106	24	0
1/25/2011	35	20.3	29,282	31,441,388	24	0
1/26/2011	35	19.9	28,644	31,470,032	24	0
1/27/2011	35	19.6	28,194	31,498,226	24	0
1/28/2011	35	19.5	28,094	31,526,320	24	0
1/29/2011	35	19.5	28,096	31,554,416	24	0
1/30/2011	35	19.9	28,688	31,583,104	24	0
1/31/2011	35	20.9	30,162	31,613,266	24	0
	37	**18.7**	**836,018**	**31,613,266**	**31**	**100%**
	Daily Maximum (GPM)	Monitoring Period Average (GPM)	Monitoring Period Total (GAL)	Cumulative Total (GAL)	Runtime (Days)	Operational Percentage

Monthly Flow Calculations
February 2011

Date	Maximum Flow (gpm)	Average Flow Rate (gpm)	Total Daily Flow (Gal)	Total Gallons To Date (Gal)	Run Time (hours)	Run Time (minutes)
2/1/2011	34	18.7	26,958	31,640,224	24	0
2/2/2011	34	18.8	27,050	31,667,274	24	0
2/3/2011	34	18.4	26,522	31,693,796	24	0
2/4/2011	34	18.4	26,518	31,720,314	24	0
2/5/2011	34	18.4	26,522	31,746,836	24	0
2/6/2011	34	17.9	25,840	31,772,676	24	0
2/7/2011	34	18.3	26,386	31,799,062	24	0
2/8/2011	34	18.2	26,228	31,825,290	24	0
2/9/2011	33	17.3	24,912	31,850,202	24	0
2/10/2011	33	17.2	24,808	31,875,010	24	0
2/11/2011	33	17.2	24,702	31,899,712	24	0
2/12/2011	33	17.1	24,568	31,924,280	24	0
2/13/2011	33	17.3	24,844	31,949,124	24	0
2/14/2011	34	19.8	28,462	31,977,586	24	0
2/15/2011	33	17.6	25,354	32,002,940	24	0
2/16/2011	33	17.1	24,666	32,027,606	24	0
2/17/2011	33	20.4	29,318	32,056,924	24	0
2/18/2011	33	21.0	30,258	32,087,182	24	0
2/19/2011	32	13.8	19,880	32,107,062	24	0
2/20/2011	32	13.4	19,258	32,126,320	24	0
2/21/2011	32	14.8	21,312	32,147,632	24	0
2/22/2011	32	15.2	21,940	32,169,572	24	0
2/23/2011	32	15.8	22,752	32,192,324	24	0
2/24/2011	32	15.7	22,546	32,214,870	24	0
2/25/2011	32	15.9	22,922	32,237,792	24	0
2/26/2011	32	16.0	22,988	32,260,780	24	0
2/27/2011	31	16.3	23,510	32,284,290	24	0
2/28/2011	32	21.4	30,836	32,315,126	24	0
	34	**17.4**	**701,860**	**32,315,126**	**28**	**100%**
	Daily Maximum (GPM)	Monitoring Period Average (GPM)	Monitoring Period Total (GAL)	Cumulative Total (GAL)	Runtime (Days)	Operational Percentage

Monthly Flow Calculations
March 2011

Date	Maximum Flow (gpm)	Average Flow Rate (gpm)	Total Daily Flow (Gal)	Total Gallons To Date (Gal)	Run Time (hours)	Run Time (minutes)
3/1/2011	32	9.4	13,596	32,328,722	24	0
3/2/2011	31	5.1	7,410	32,336,132	24	0
3/3/2011	31	1.6	2,256	32,338,388	24	0
3/4/2011	31	9.5	13,628	32,352,016	24	0
3/5/2011	31	21.8	31,388	32,383,404	24	0
3/6/2011	31	12.4	17,896	32,401,300	24	0
3/7/2011	31	9.9	14,226	32,415,526	24	0
3/8/2011	31	8.3	11,996	32,427,522	24	0
3/9/2011	31	8.7	12,538	32,440,060	24	0
3/10/2011	31	7.5	10,792	32,450,852	24	0
3/11/2011	31	3.5	5,022	32,455,874	24	0
3/12/2011	31	10.2	14,724	32,470,598	24	0
3/13/2011	31	16.9	24,392	32,494,990	24	0
3/14/2011	32	16.4	23,626	32,518,616	24	0
3/15/2011	39	17.0	24,450	32,543,066	24	0
3/16/2011	39	20.7	29,840	32,572,906	24	0
3/17/2011	39	21.5	30,948	32,603,854	24	0
3/18/2011	39	21.8	31,378	32,635,232	24	0
3/19/2011	39	21.0	30,202	32,665,434	24	0
3/20/2011	39	20.2	29,134	32,694,568	24	0
3/21/2011	39	20.5	29,542	32,724,110	24	0
3/22/2011	39	19.9	28,720	32,752,830	24	0
3/23/2011	39	19.9	28,620	32,781,450	24	0
3/24/2011	39	19.5	28,150	32,809,600	24	0
3/25/2011	39	19.7	28,372	32,837,972	24	0
3/26/2011	39	19.2	27,682	32,865,654	24	0
3/27/2011	39	19.5	28,138	32,893,792	24	0
3/28/2011	39	19.9	28,626	32,922,418	24	0
3/29/2011	39	19.5	28,080	32,950,498	24	0
3/30/2011	39	19.7	28,384	32,978,882	24	0
3/31/2011	39	19.7	28,300	33,007,182	24	0
	39	**15.5**	**692,056**	**33,007,182**	**31**	**100%**
	Daily Maximum (GPM)	Monitoring Period Average (GPM)	Monitoring Period Total (GAL)	Cumulative Total (GAL)	Runtime (Days)	Operational Percentage

Monthly Flow Calculations
April 2011

Date	Maximum Flow (gpm)	Average Flow Rate (gpm)	Total Daily Flow (Gal)	Total Gallons To Date (Gal)	Run Time (hours)	Run Time (minutes)
4/1/2011	39	19.7	28,416	33,035,598	24	0
4/2/2011	39	19.4	27,904	33,063,502	24	0
4/3/2011	39	19.6	28,268	33,091,770	24	0
4/4/2011	39	21.5	30,940	33,122,710	24	0
4/5/2011	39	19.7	28,298	33,151,008	24	0
4/6/2011	39	19.3	27,720	33,178,728	24	0
4/7/2011	39	19.6	28,240	33,206,968	24	0
4/8/2011	39	19.0	27,408	33,234,376	24	0
4/9/2011	39	18.9	27,242	33,261,618	24	0
4/10/2011	39	19.0	27,300	33,288,918	24	0
4/11/2011	39	19.0	27,420	33,316,338	24	0
4/12/2011	39	18.5	26,572	33,342,910	24	0
4/13/2011	39	19.4	27,996	33,370,906	24	0
4/14/2011	39	18.9	27,160	33,398,066	24	0
4/15/2011	39	18.5	26,638	33,424,704	24	0
4/16/2011	39	22.8	32,818	33,457,522	24	0
4/17/2011	39	19.6	28,216	33,485,738	24	0
4/18/2011	39	19.3	27,846	33,513,584	24	0
4/19/2011	39	19.3	27,726	33,541,310	24	0
4/20/2011	39	23.3	33,522	33,574,832	24	0
4/21/2011	39	19.0	27,300	33,602,132	24	0
4/22/2011	39	19.0	27,388	33,629,520	24	0
4/23/2011	39	20.6	29,612	33,659,132	24	0
4/24/2011	39	18.9	27,184	33,686,316	24	0
4/25/2011	39	21.3	30,604	33,716,920	24	0
4/26/2011	39	20.8	30,000	33,746,920	24	0
4/27/2011	38	20.0	28,848	33,775,768	24	0
4/28/2011	38	19.4	27,964	33,803,732	24	0
4/29/2011	38	19.1	27,436	33,831,168	24	0
4/30/2011	38	18.9	27,164	33,858,332	24	0
	39	**19.7**	**851,150**	**33,858,332**	**30**	**100%**
	Daily Maximum (GPM)	Monitoring Period Average (GPM)	Monitoring Period Total (GAL)	Cumulative Total (GAL)	Runtime (Days)	Operational Percentage

Monthly Flow Calculations
May 2011

Date	Maximum Flow (gpm)	Average Flow Rate (gpm)	Total Daily Flow (Gal)	Total Gallons To Date (Gal)	Run Time (hours)	Run Time (minutes)
5/1/2011	38	18.8	27,108	33,885,440	24	0
5/2/2011	38	19.1	27,556	33,912,996	24	0
5/3/2011	38	20.7	29,832	33,942,828	24	0
5/4/2011	38	19.3	27,840	33,970,668	24	0
5/5/2011	38	18.6	26,776	33,997,444	24	0
5/6/2011	38	18.5	26,684	34,024,128	24	0
5/7/2011	38	18.3	26,312	34,050,440	24	0
5/8/2011	38	18.3	26,412	34,076,852	24	0
5/9/2011	37	18.9	27,268	34,104,120	24	0
5/10/2011	37	19.4	27,880	34,132,000	24	0
5/11/2011	37	19.1	27,496	34,159,496	24	0
5/12/2011	37	19.2	27,660	34,187,156	24	0
5/13/2011	37	19.0	27,424	34,214,580	24	0
5/14/2011	37	13.9	20,072	34,234,652	24	0
5/15/2011	37	15.5	22,288	34,256,940	24	0
5/16/2011	37	14.1	20,276	34,277,216	24	0
5/17/2011	37	16.9	24,284	34,301,500	24	0
5/18/2011	37	22.1	31,760	34,333,260	24	0
5/19/2011	37	20.2	29,056	34,362,316	24	0
5/20/2011	36	20.9	30,028	34,392,344	24	0
5/21/2011	36	20.6	29,628	34,421,972	24	0
5/22/2011	36	20.3	29,176	34,451,148	24	0
5/23/2011	36	20.9	30,076	34,481,224	24	0
5/24/2011	36	20.7	29,848	34,511,072	24	0
5/25/2011	36	21.2	30,460	34,541,532	24	0
5/26/2011	39	22.2	31,944	34,573,476	24	0
5/27/2011	36	21.6	31,048	34,604,524	24	0
5/28/2011	39	20.8	29,944	34,634,468	24	0
5/29/2011	39	21.6	31,040	34,665,508	24	0
5/30/2011	35	16.8	24,240	34,689,748	24	0
5/31/2011	35	18.1	26,016	34,715,764	24	0
	39	**19.2**	**857,432**	**34,715,764**	**30**	**100%**
	Daily Maximum (GPM)	Monitoring Period Average (GPM)	Monitoring Period Total (GAL)	Cumulative Total (GAL)	Runtime (Days)	Operational Percentage

Monthly Flow Calculations
June 2011

Date	Maximum Flow (gpm)	Average Flow Rate (gpm)	Total Daily Flow (Gal)	Total Gallons To Date (Gal)	Run Time (hours)	Run Time (minutes)
6/1/2011	35	17.5	25,248	34,741,012	24	0
6/2/2011	38	17.4	25,068	34,766,080	24	0
6/3/2011	35	17.5	25,184	34,791,264	24	0
6/4/2011	35	17.9	25,760	34,817,024	24	0
6/5/2011	35	17.6	25,376	34,842,400	24	0
6/6/2011	39	17.5	25,244	34,867,644	24	0
6/7/2011	38	7.8	11,220	34,878,864	24	0
6/8/2011	36	8.9	12,852	34,891,716	24	0
6/9/2011	36	21.6	31,116	34,922,832	24	0
6/10/2011	37	20.5	29,540	34,952,372	24	0
6/11/2011	36	20.3	29,256	34,981,628	24	0
6/12/2011	37	20.0	28,812	35,010,440	24	0
6/13/2011	36	20.3	29,200	35,039,640	24	0
6/14/2011	35	20.1	28,896	35,068,536	24	0
6/15/2011	35	19.5	28,056	35,096,592	24	0
6/16/2011	35	19.0	27,348	35,123,940	24	0
6/17/2011	34	18.0	25,884	35,149,824	24	0
6/18/2011	34	17.8	25,620	35,175,444	24	0
6/19/2011	34	17.7	25,424	35,200,868	24	0
6/20/2011	34	17.6	25,368	35,226,236	24	0
6/21/2011	34	17.5	25,244	35,251,480	24	0
6/22/2011	34	19.1	27,556	35,279,036	24	0
6/23/2011	34	18.5	26,648	35,305,684	24	0
6/24/2011	34	17.8	25,572	35,331,256	24	0
6/25/2011	34	17.5	25,160	35,356,416	24	0
6/26/2011	34	17.3	24,920	35,381,336	24	0
6/27/2011	34	17.3	24,940	35,406,276	24	0
6/28/2011	34	17.2	24,704	35,430,980	24	0
6/29/2011	34	17.1	24,668	35,455,648	24	0
6/30/2011	34	17.0	24,536	35,480,184	24	0
	39	**17.7**	**764,420**	**35,480,184**	**30**	**100%**
	Daily Maximum (GPM)	Monitoring Period Average (GPM)	Monitoring Period Total (GAL)	Cumulative Total (GAL)	Runtime (Days)	Operational Percentage

Monthly Flow Calculations
July 2011

Date	Maximum Flow (gpm)	Average Flow Rate (gpm)	Total Daily Flow (Gal)	Total Gallons To Date (Gal)	Run Time (hours)	Run Time (minutes)
7/1/2011	34	16.7	23,976	35,504,160	24	0
7/2/2011	34	16.3	23,436	35,527,596	24	0
7/3/2011	34	17.9	25,792	35,553,388	24	0
7/4/2011	34	18.6	26,732	35,580,120	24	0
7/5/2011	33	18.5	26,620	35,606,740	24	0
7/6/2011	33	18.5	26,672	35,633,412	24	0
7/7/2011	33	17.5	25,200	35,658,612	24	0
7/8/2011	33	18.9	27,232	35,685,844	24	0
7/9/2011	33	18.7	26,880	35,712,724	24	0
7/10/2011	33	18.6	26,836	35,739,560	24	0
7/11/2011	33	18.5	26,596	35,766,156	24	0
7/12/2011	33	18.4	26,492	35,792,648	24	0
7/13/2011	33	18.2	26,264	35,818,912	24	0
7/14/2011	33	18.0	25,984	35,844,896	24	0
7/15/2011	33	17.8	25,672	35,870,568	24	0
7/16/2011	33	17.6	25,404	35,895,972	24	0
7/17/2011	33	17.4	25,020	35,920,992	24	0
7/18/2011	33	17.4	25,108	35,946,100	24	0
7/19/2011	33	17.3	24,856	35,970,956	24	0
7/20/2011	33	17.2	24,764	35,995,720	24	0
7/21/2011	33	17.0	24,536	36,020,256	24	0
7/22/2011	33	16.8	24,240	36,044,496	24	0
7/23/2011	33	16.7	24,040	36,068,536	24	0
7/24/2011	33	16.8	24,128	36,092,664	24	0
7/25/2011	33	16.5	23,732	36,116,396	24	0
7/26/2011	33	16.0	23,104	36,139,500	24	0
7/27/2011	33	16.0	23,052	36,162,552	24	0
7/28/2011	33	16.0	22,988	36,185,540	24	0
7/29/2011	33	16.4	23,576	36,209,116	24	0
7/30/2011	33	15.6	22,404	36,231,520	24	0
7/31/2011	33	15.7	22,636	36,254,156	24	0
	34	**17.3**	**773,972**	**36,254,156**	**30**	**100%**
	Daily Maximum (GPM)	Monitoring Period Average (GPM)	Monitoring Period Total (GAL)	Cumulative Total (GAL)	Runtime (Days)	Operational Percentage

Monthly Flow Calculations
August 2011

Date	Maximum Flow (gpm)	Average Flow Rate (gpm)	Total Daily Flow (Gal)	Total Gallons To Date (Gal)	Run Time (hours)	Run Time (minutes)
8/1/2011	33	14.4	20,756	36,274,912	24	0
8/2/2011	32	13.2	19,052	36,293,964	24	0
8/3/2011	33	13.4	19,292	36,313,256	24	0
8/4/2011	33	13.0	18,784	36,332,040	24	0
8/5/2011	33	13.1	18,832	36,350,872	24	0
8/6/2011	32	13.1	18,824	36,369,696	24	0
8/7/2011	32	15.5	22,332	36,392,028	24	0
8/8/2011	32	17.3	24,872	36,416,900	24	0
8/9/2011	32	17.2	24,748	36,441,648	24	0
8/10/2011	32	17.4	25,020	36,466,668	24	0
8/11/2011	33	17.3	24,972	36,491,640	24	0
8/12/2011	33	17.3	24,896	36,516,536	24	0
8/13/2011	32	16.9	24,296	36,540,832	24	0
8/14/2011	32	16.7	24,012	36,564,844	24	0
8/15/2011	32	16.5	23,696	36,588,540	24	0
8/16/2011	32	16.1	23,208	36,611,748	24	0
8/17/2011	32	15.9	22,868	36,634,616	24	0
8/18/2011	32	15.7	22,540	36,657,156	24	0
8/19/2011	32	15.4	22,164	36,679,320	24	0
8/20/2011	32	15.1	21,728	36,701,048	24	0
8/21/2011	32	15.7	22,596	36,723,644	24	0
8/22/2011	32	15.0	21,568	36,745,212	24	0
8/23/2011	32	14.7	21,144	36,766,356	24	0
8/24/2011	32	14.6	21,060	36,787,416	24	0
8/25/2011	32	14.1	20,372	36,807,788	24	0
8/26/2011	32	13.3	19,112	36,826,900	24	0
8/27/2011	32	13.0	18,692	36,845,592	24	0
8/28/2011	32	12.4	17,908	36,863,500	24	0
8/29/2011	32	12.0	17,340	36,880,840	24	0
8/30/2011	32	11.8	17,048	36,897,888	24	0
8/31/2011	32	11.6	16,664	36,914,552	24	0
	33	**14.8**	**660,396**	**36,914,552**	**31**	**100%**
	Daily Maximum (GPM)	Monitoring Period Average (GPM)	Monitoring Period Total (GAL)	Cumulative Total (GAL)	Runtime (Days)	Operational Percentage

Monthly Flow Calculations
September 2011

Date	Maximum Flow (gpm)	Average Flow Rate (gpm)	Total Daily Flow (Gal)	Total Gallons To Date (Gal)	Run Time (hours)	Run Time (minutes)
9/1/2011	32	11.3	16,212	36,930,764	24	0
9/2/2011	32	10.7	15,388	36,946,152	24	0
9/3/2011	32	10.1	14,608	36,960,760	24	0
9/4/2011	32	10.2	14,696	36,975,456	24	0
9/5/2011	32	9.3	13,428	36,988,884	24	0
9/6/2011	32	8.7	12,504	37,001,388	24	0
9/7/2011	32	8.3	12,000	37,013,388	24	0
9/8/2011	32	8.4	12,118	37,025,506	24	0
9/9/2011	32	8.4	12,118	37,037,624	24	0
9/10/2011	32	8.4	12,118	37,049,742	24	0
9/11/2011	32	8.4	12,118	37,061,860	24	0
9/12/2011	31	8.4	12,118	37,073,978	24	0
9/13/2011	31	8.4	12,118	37,086,096	24	0
9/14/2011	31	8.4	12,118	37,098,214	24	0
9/15/2011	31	8.4	12,118	37,110,332	24	0
9/16/2011	31	7.9	11,428	37,121,760	24	0
9/17/2011	31	8.1	11,596	37,133,356	24	0
9/18/2011	31	7.9	11,304	37,144,660	24	0
9/19/2011	31	8.4	12,112	37,156,772	24	0
9/20/2011	31	8.5	12,280	37,169,052	24	0
9/21/2011	31	8.6	12,388	37,181,440	24	0
9/22/2011	31	8.4	12,108	37,193,548	24	0
9/23/2011	31	10.3	14,896	37,208,444	24	0
9/24/2011	31	9.0	12,952	37,221,396	24	0
9/25/2011	31	9.2	13,228	37,234,624	24	0
9/26/2011	30	9.4	13,500	37,248,124	24	0
9/27/2011	30	10.7	15,348	37,263,472	24	0
9/28/2011	30	10.7	15,444	37,278,916	24	0
9/29/2011	30	3.8	5,512	37,284,428	24	0
9/30/2011	30	9.1	13,044	37,297,472	24	0
	32	**8.9**	**382,920**	**37,297,472**	**30**	**100%**
	Daily Maximum (GPM)	Monitoring Period Average (GPM)	Monitoring Period Total (GAL)	Cumulative Total (GAL)	Runtime (Days)	Operational Percentage

Monthly Flow Calculations
October 2011

Date	Maximum Flow (gpm)	Average Flow Rate (gpm)	Total Daily Flow (Gal)	Total Gallons To Date (Gal)	Run Time (hours)	Run Time (minutes)
10/1/2011	30	8.4	12,064	37,309,536	24	0
10/2/2011	30	8.8	12,676	37,322,212	24	0
10/3/2011	30	9.0	12,944	37,335,156	24	0
10/4/2011	30	11.2	16,072	37,351,228	24	0
10/5/2011	30	10.1	14,560	37,365,788	24	0
10/6/2011	30	9.8	14,132	37,379,920	24	0
10/7/2011	29	10.1	14,472	37,394,392	24	0
10/8/2011	29	10.2	14,736	37,409,128	24	0
10/9/2011	29	10.7	15,476	37,424,604	24	0
10/10/2011	29	10.8	15,504	37,440,108	24	0
10/11/2011	29	11.1	16,028	37,456,136	24	0
10/12/2011	29	11.9	17,072	37,473,208	24	0
10/13/2011	29	12.4	17,784	37,490,992	24	0
10/14/2011	29	12.3	17,676	37,508,668	24	0
10/15/2011	30	18.1	26,080	37,534,748	24	0
10/16/2011*	0	0.0	0	0	24	0
10/17/2011*	0	0.0	0	0	24	0
10/18/2011	36	2.5	3,612	37,538,360	24	0
10/19/2011	36	9.4	13,476	37,551,836	24	0
10/20/2011	37	14.9	21,436	37,573,272	24	0
10/21/2011	37	11.7	16,820	37,590,092	24	0
10/22/2011	37	11.6	16,740	37,606,832	24	0
10/23/2011	36	12.1	17,396	37,624,228	24	0
10/24/2011	36	12.4	17,828	37,642,056	24	0
10/25/2011	36	12.5	18,024	37,660,080	24	0
10/26/2011	36	14.7	21,212	37,681,292	24	0
10/27/2011	36	14.4	20,804	37,702,096	24	0
10/28/2011	36	13.9	20,028	37,722,124	24	0
10/29/2011	36	14.4	20,748	37,742,872	24	0
10/30/2011	36	14.4	20,780	37,763,652	24	0
10/31/2011	36	14.8	21,244	37,784,896	24	0
	37	**10.9**	**487,424**	**37,784,896**	**31**	**100%**
	Daily Maximum (GPM)	Monitoring Period Average (GPM)	Monitoring Period Total (GAL)	Cumulative Total (GAL)	Runtime (Days)	Operational Percentage

*System bypass using T-8 for system Cleaning

Monthly Flow Calculations
November 2011

Date	Maximum Flow (gpm)	Average Flow Rate (gpm)	Total Daily Flow (Gal)	Total Gallons To Date (Gal)	Run Time (hours)	Run Time (minutes)
11/1/2011	36	14.8	21,316	37,806,212	24	0
11/2/2011	36	15.0	21,572	37,827,784	24	0
11/3/2011	36	14.9	21,496	37,849,280	24	0
11/4/2011	36	14.6	20,968	37,870,248	24	0
11/5/2011	36	14.7	21,136	37,891,384	24	0
11/6/2011	36	5.5	7,908	37,899,292	19	1
11/7/2011	36	5.7	8,172	37,907,464	24	0
11/8/2011	36	16.5	23,776	37,931,240	24	0
11/9/2011	36	16.0	23,092	37,954,332	24	0
11/10/2011	36	15.5	22,388	37,976,720	24	0
11/11/2011	36	15.3	22,024	37,998,744	24	0
11/12/2011	36	15.7	22,536	38,021,280	24	0
11/13/2011	36	15.2	21,956	38,043,236	24	0
11/14/2011	36	15.6	22,520	38,065,756	24	0
11/15/2011	36	15.2	21,884	38,087,640	24	0
11/16/2011	36	15.1	21,756	38,109,396	24	0
11/17/2011	36	14.9	21,520	38,130,916	24	0
11/18/2011	36	14.8	21,268	38,152,184	24	0
11/19/2011	36	14.7	21,156	38,173,340	24	0
11/20/2011	36	14.4	20,696	38,194,036	24	0
11/21/2011	36	14.3	20,612	38,214,648	24	0
11/22/2011	36	14.6	21,000	38,235,648	24	0
11/23/2011	36	18.6	26,840	38,262,488	24	0
11/24/2011	41	15.4	22,228	38,284,716	24	0
11/25/2011	36	15.3	22,080	38,306,796	24	0
11/26/2011	37	15.3	22,008	38,328,804	24	0
11/27/2011	41	15.8	22,708	38,351,512	24	0
11/28/2011	40	17.2	24,700	38,376,212	24	0
11/29/2011	36	19.5	28,120	38,404,332	24	0
11/30/2011	36	16.3	23,456	38,427,788	24	0
	41	**14.4**	**642,892**	**38,427,788**	**30**	**99.4%**
	Daily Maximum (GPM)	Monitoring Period Average (GPM)	Monitoring Period Total (GAL)	Cumulative Total (GAL)	Runtime (Days)	Operational Percentage

Monthly Flow Calculations
December 2011

Date	Maximum Flow (gpm)	Average Flow Rate (gpm)	Total Daily Flow (Gal)	Total Gallons To Date (Gal)	Run Time (hours)	Run Time (minutes)
12/1/2011	36	13.4	19,332	38,447,120	24	0
12/2/2011	36	17.0	24,536	38,471,656	24	0
12/3/2011	36	16.9	24,404	38,496,060	24	0
12/4/2011	36	17.7	25,420	38,521,480	24	0
12/5/2011	36	17.7	25,468	38,546,948	24	0
12/6/2011	37	14.4	20,676	38,567,624	24	0
12/7/2011	39	22.5	32,384	38,600,008	24	0
12/8/2011	36	20.9	30,052	38,630,060	24	0
12/9/2011	36	22.3	32,180	38,662,240	24	0
12/10/2011	36	19.7	28,436	38,690,676	24	0
12/11/2011	36	18.3	26,292	38,716,968	24	0
12/12/2011	38	18.7	26,960	38,743,928	24	0
12/13/2011	36	12.0	17,232	38,761,160	24	0
12/14/2011	38	12.0	17,232	38,778,392	24	0
12/15/2011	39	22.3	32,172	38,810,564	24	0
12/16/2011	36	19.1	27,496	38,838,060	24	0
12/17/2011	36	19.2	27,708	38,865,768	24	0
12/18/2011	36	19.2	27,664	38,893,432	24	0
12/19/2011	39	19.0	27,364	38,920,796	24	0
12/20/2011	39	15.8	22,704	38,943,500	24	0
12/21/2011	39	19.5	28,028	38,971,528	24	0
12/22/2011	37	18.9	27,208	38,998,736	24	0
12/23/2011	40	21.3	30,696	39,029,432	24	0
12/24/2011	39	24.3	34,920	39,064,352	24	0
12/25/2011	38	24.8	35,728	39,100,080	24	0
12/26/2011	40	24.3	35,060	39,135,140	24	0
12/27/2011	39	25.7	36,976	39,172,116	24	0
12/28/2011	36	25.1	36,080	39,208,196	24	0
12/29/2011	36	23.7	34,068	39,242,264	24	0
12/30/2011	36	23.8	34,220	39,276,484	24	0
12/31/2011	36	24.3	34,984	39,311,468	24	0
	40	**19.6**	**883,680**	**39,311,468**	**31**	**100%**
	Daily Maximum (GPM)	Monitoring Period Average (GPM)	Monitoring Period Total (GAL)	Cumulative Total (GAL)	Runtime (Days)	Operational Percentage