# Bi-Annual 2009 Monitoring Event Letter Report for Site No. 932001 Airco Properties, Inc., Airco Parcel Niagara Falls, New York

Prepared for

Linde North America, Inc. 575 Mountain Avenue Murray Hill, New Jersey 07974

Prepared by



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> May 2010 Revision: 0 Project No.: 150C265.1038



31 May 2010

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

RE: Bi-Annual 2009 Monitoring Event Letter Report, Site No. 932001, Airco Properties Inc., Airco Parcel, Niagara Falls, New York Greenstar Project No.: 150C265.1038

Dear Mr. Thiesse:

Greenstar Environmental Solutions, LLC (Greenstar) is pleased to provide the second 2009 Bi-Annual Monitoring Event Letter Report summarizing the operation and maintenance activities at the Airco Parcel (Site) for the period 1 July 2009 to 31 December 2009. The post-closure monitoring and facility maintenance program was initiated at the Airco Parcel located in Niagara Falls, New York, 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 Bi-Annual Monitoring Event Letter Report is to summarize the analytical results of the second bi-annual 2009 groundwater monitoring event that was conducted in August 2009, and to summarize operations and maintenance activities conducted at the Site from July through December 2009.

#### **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)<sup>1</sup>, environmental monitoring points will 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 documents 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)<sup>2</sup>, was re-evaluated and revised based on the data collected at the site so that the monitoring plan is more focused to address site-specific issues that were identified during the first five years of post-closure monitoring.

<sup>1.</sup> 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.

<sup>2.</sup> 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 completed:

- Environmental monitoring points are being maintained and sampled during the post-closure period.
- Bi-annual summary reports are submitted to the New York State Department of Environmental Conservation (NYSDEC) Division of Solid and Hazardous Materials, Region 9; the New York State Department of Health in Albany, New York; Linde, Inc.; and the document repository located at the Town of Niagara Town's 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 bi-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).



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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)<sup>3</sup>. During construction of the capping system a relief pipe system was installed to allow perched water to exit from under the cap without causing slope instability. Flow monitoring and quarterly sampling were initiated as part of post-closure operations and facility maintenance. The data collected since December 2000 indicated that the leachate was actually shallow groundwater discharging to surface water, groundwater discharge was seasonal, and elevated hexavalent chromium ( $Cr^{6+}$ ) concentrations and pH in groundwater remained in excess of the ambient water quality criteria after mixing with surface water.

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.

#### MONITORING EVENT FIELD ACTIVITIES

The Bi-Annual Monitoring Event was completed 24 - 25 August 2009. The sections below provide a summary of data collected as part of this sampling event.

#### Monitoring Well Gauging

The site monitoring wells, Figure 2, were gauged on 24 August 2009 prior to sampling. Gauging data are summarized in the table below:

Monitoring Well	Depth to Water (ft btoc)	Well Elevation (ft AMSL)	Water Elevation (ft AMSL)
MW-1B	10.86	617.77	606.91
MW-2B	11.87	615.88	604.01
MW-3B	8.65	611.22	602.57
MW-4B	7.95	606.68	598.73
MW-5B	6.47	605.48	599.01
MW-6B	4.01	603.47	599.46
MW-7B	10.42	609.48	599.06
MW-8B	5.30	611.62	606.32
	Below top of casing.		
AMSL =	Above mean sea level	•	

Figure 3 shows the inferred groundwater flow direction at the site, based on the August 2009 gauging data.

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



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### LABORATORY ANALYSIS

All 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 25 August 2009. Eight groundwater samples were collected from the site monitoring wells. Monitoring wells MW-3B, MW-4B, MW-5B, MW-6B 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, 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.

#### **Surface Water Sampling**

Surface water samples were collected from the drainage swales in the southwest corner. These 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. Copies of the laboratory analytical results data sheets for groundwater and surface water sampling are included in Attachment D.

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



### Metals

Unfiltered metals samples were collected from the 8 monitoring wells. 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 0.173 mg/L (MW-8B) to 0.777 mg/L (MW-2B).
- Hexavalent chromium was detected in excess of the NYSDEC AWQS in MW-2B and MW-4B at concentrations of 0.233 mg/L and 0.212mg/L, respectively.
- Iron was detected in excess of the NYSDEC AWQS in MW-4B, MW-6B, and MW-8B at concentrations ranging from 0.311 mg/L (MW-8B) to 0.676 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 51.1 mg/L (MW-4B) to 85 mg/L (MW-5B).
- Manganese was detected in excess of the NYSDEC AWQS in MW-1B at a concentration of 0.808 mg/L.
- Selenium was detected in excess of the NYSDEC AWQS in MW-8B at a concentration of 0.0401 mg/L.
- Sodium was detected in excess of the NYSDEC AWQS in all 8 monitoring wells at concentrations ranging from 27.2 mg/L (MW-5B) to 113 mg/L (MW-1B).

Unfiltered metals samples were collected from 3 surface water locations. No metals were detected at concentration above the NYSDEC AWQS for Class D surface waters

#### 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 included the following:

- Sulfate was detected in excess of the NYSDEC AWQS in MW-6B at a concentration of 350 mg/L.
- pH measurements were measured outside the NYSDEC AWQS of 6.5-8.5 standard pH units in monitoring wells MW-2B (12.67), MW-3B (9.55), MW-6B (8.75) and MW-7B (9.71)

## LANDFILL INSPECTION

Quarterly landfill cap inspections during the report period were conducted on 25 August and 7 November 2009. 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 noted deficiencies identified during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters were addressed during the report period. No action items remain at this time.



#### GCTS OPERATIONS AND MAINTENANCE MONITORING ACTIVITIES

Routine operations and maintenance of the GCTS is preformed during site visits twice per month. 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 (July – December 2009)

The GCTS was operated throughout the 6-month period of 1 July - 31 December 2009. 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 4,416 hours (100 percent) at an average flow rate of 15.7 gallons per minute (gpm). The GCTS sampling occurred bi-weekly during the operation period. Samples were collected at various locations within the system to evaluate treatment system performance and compliance with discharge criteria. Bi-weekly 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<sup>®</sup> spectrophotometer. The HACH DR4000<sup>®</sup> 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 engineered wetland discharge samples were analyzed in the field, and separate quarterly samples were also 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, two separate occasions noted elevated levels of hexavalent chromium in the surface water where it exits the site in the southwest corner. In both instances, additional grab samples were collected and sent to Test America in Amherst, NY to confirm the presence of hexavalent chromium. In both cases, the laboratory results were non-detect.

Field sampling results for total and hexavalent chromium can be found in Table 1, and results of the quarterly engineered wetland discharge samples can be found in Table 2. Analytical results for the quarterly discharge sampling noted that no constituents exceeded the NYSDEC discharge guidance values for the August or November 2009 discharge sampling. The full set of laboratory analytical data for the GCTS discharge sampling can be found in Attachment F.

Greenstar completed a full system cleaning off all process lines, tanks, the engineered wetland, and the drainage swale. The engineered wetland and drainage swale had become overgrown with vegetation and contained significant iron sediment deposits which was reducing retention time and impacting treatment system performance. In total, 365 tons of sediment, vegetation, and stone form the drainage swales was removed and disposed of. New stone was transported to the site to repair the drainage swales in areas where the stone was excavated in an effort to remove the iron deposits.



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#### **GCTS Modifications (July – December 2009)**

No major modifications to the GCTS were performed during the report period. Site activities were limited to routine operations and maintenance, including repairs to pumps, VFDs, and pH probes, and the routine system cleaning, and repairs as noted in the engineering inspections. All of which were conducted in October 2009. Attachment G summarizes monthly operation and maintenance details for the period July through December 2009, 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 Bi-Annual 2009 Monitoring Event Letter Report, please do not hesitate to contact the undersigned at (845) 223-9944.

Sincerely,

GREENSTAR ENVIRONMENTAL SOLUTIONS

LIE. MENR

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

Peter Mary

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 JULY – 31 DECEMBER 2009, AIRCO PARCEL, NIAGARA FALLS, NEW YORK

	Chromiun	n Tank 3B	Iron T	ank 6B	Engineere	d Wetland	Southwest Corner	
	Total	Hexavalent	Total	Hexavalent	Total	Hexavalent	Total	Hexavalent
Date	Chromium	Chromium	Chromium	Chromium	Chromium	Chromium	Chromium	Chromium
7/9/09	115µg/L	100µg/L	27µg/L	1µg/L	<6Uµg/L	12µg/L	25µg/L	9µg/L
7/21/09	136µg/L	50µg/L	30µg/L	<3Uµg/L	4µg/L	3µg/L	18µg/L	15µg/L*
8/10/09	95µg/L	93µg/L	29µg/L	<3Uµg/L	<6Uµg/L	<3Uµg/L	16µg/L	11µg/L
8/19/09	119µg/L	75µg/L	19µg/L	<3Uµg/L	<6Uµg/L	<3Uµg/L	14µg/L	6µg/L
9/1/09	108µg/L	106µg/L	2µg/L	<3Uµg/L	<6Uµg/L	<3Uµg/L	10µg/L	8µg/L
9/17/09	105µg/L	38µg/L	10µg/L	<3Uµg/L	<6Uµg/L	<3Uµg/L	12µg/L	5µg/L
10/3/09	108µg/L	41µg/L	13µg/L	<3Uµg/L	<6Uµg/L	<3Uµg/L	18µg/L	6µg/L
10/23/09	114µg/L	8µg/L	19µg/L	<3Uµg/L	6µg/L	<3Uµg/L	19µg/L	14µg/L*
11/7/09	109µg/L	56µg/L	39µg/L	<3Uµg/L	23µg/L	5µg/L	18µg/L	20µg/L**
11/17/09	131µg/L	59µg/L	23µg/L	<3Uµg/L	12µg/L	2µg/L	10µg/L	7µg/L
12/12/09	86µg/L	13µg/L	28µg/L	<3Uµg/L	26µg/L	6µg/L	19µg/L	9µg/L
12/28/09	75µg/L	144µg/L	50µg/L	3µg/L	30µg/L	<3Uµg/L	NS-Ice	NS-Ice
NOTE N	IC - Not Cor						-	

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.

\*Confirmation sample collected and analyzed by Test America, Buffalo, NY. Both confirmation samples indicated compliance with SPDES discharge values.

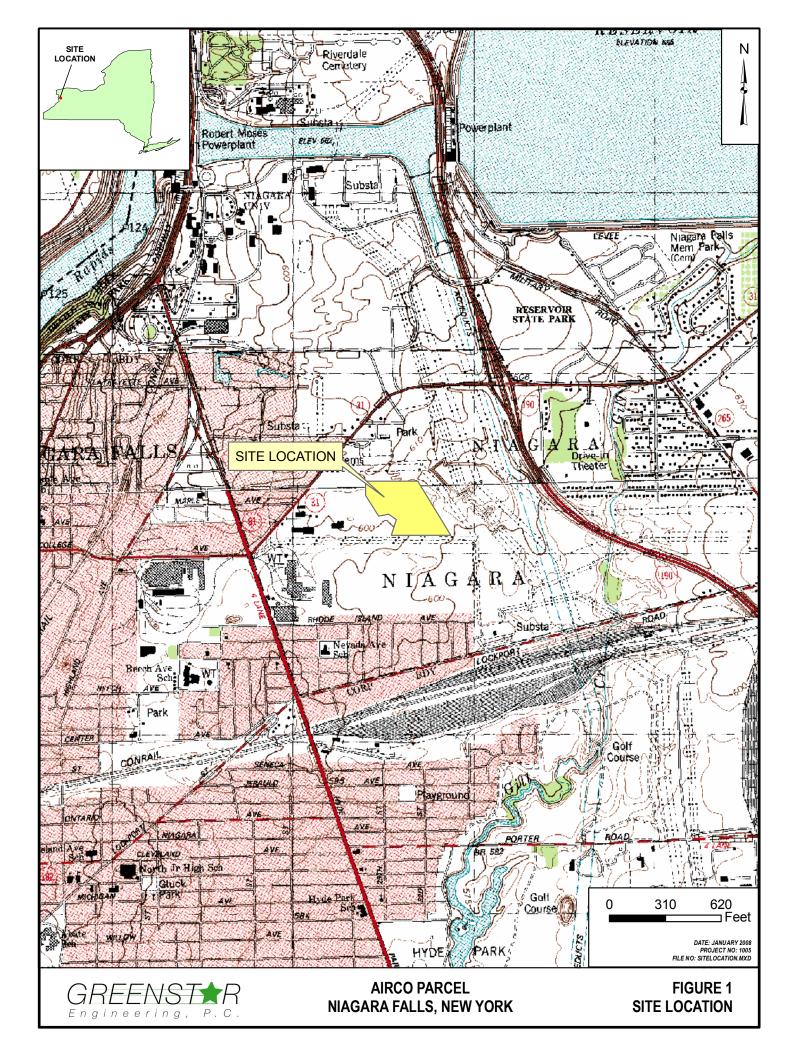
\*\*Unable to collect confirmation sample for laboratory analysis. System check completed on a Sunday and the laboratory was closed.

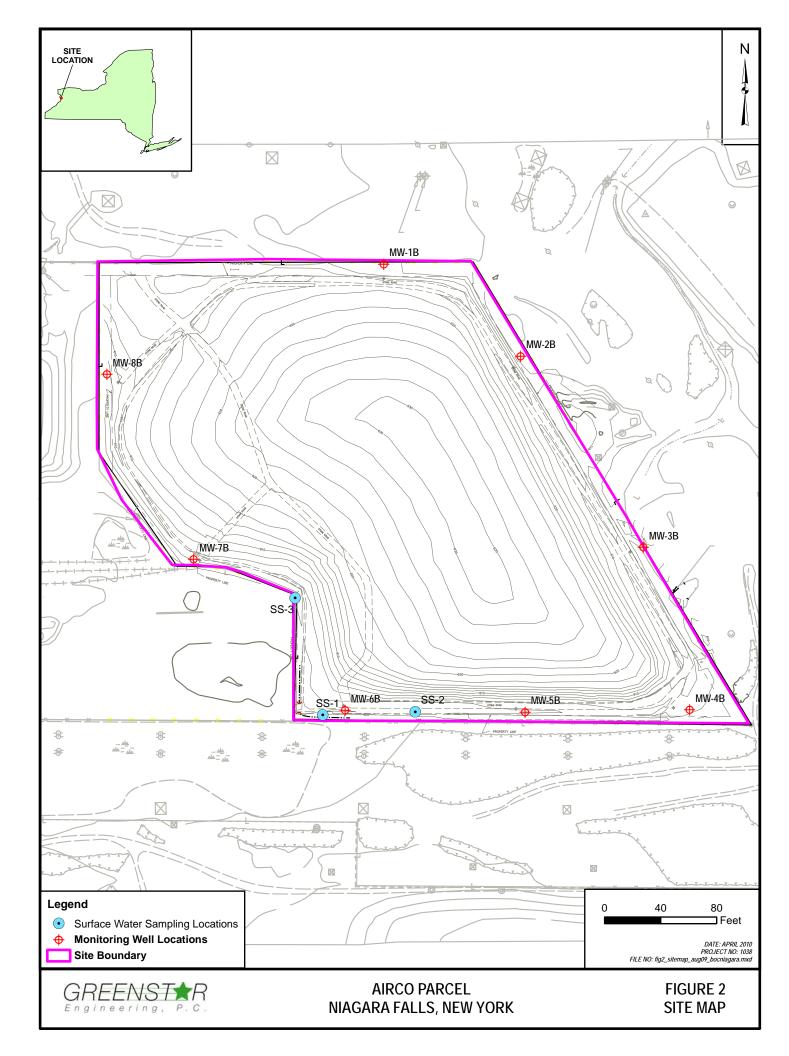
Field samples analyzed using a HACH DR4000<sup>®</sup> Spectrophotometer.

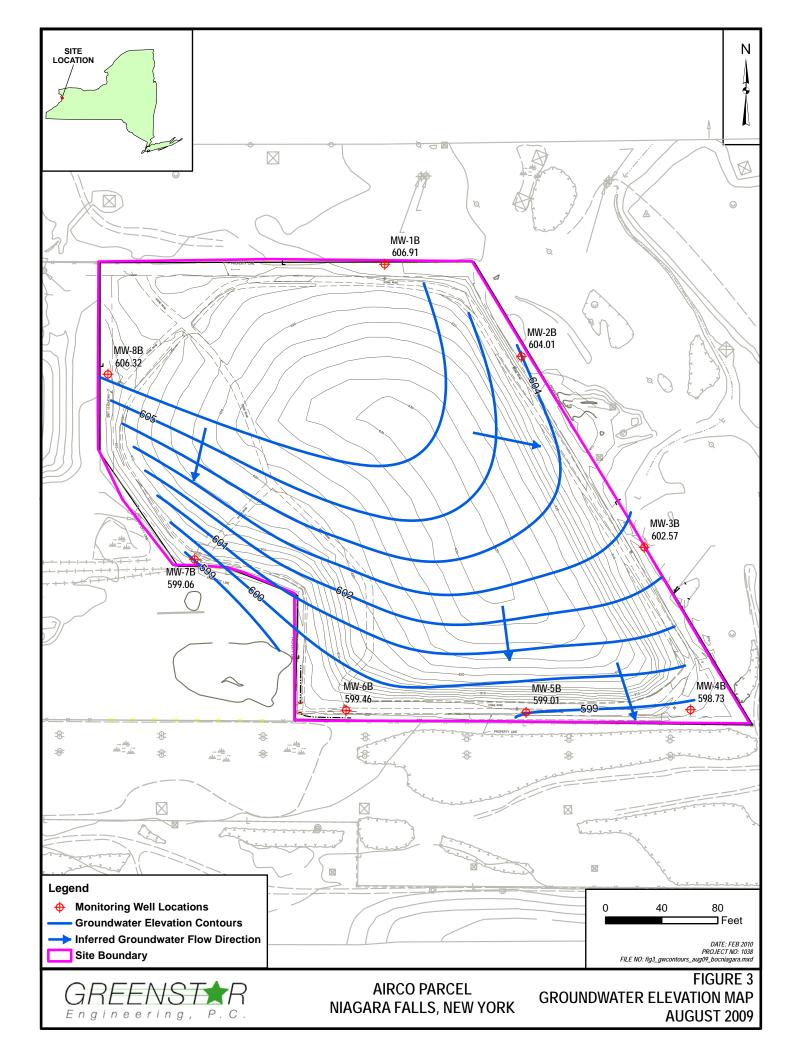
Hach Methods 8023 for Hexavalent Chromium and Hach Method 8084 for Total Chromium.

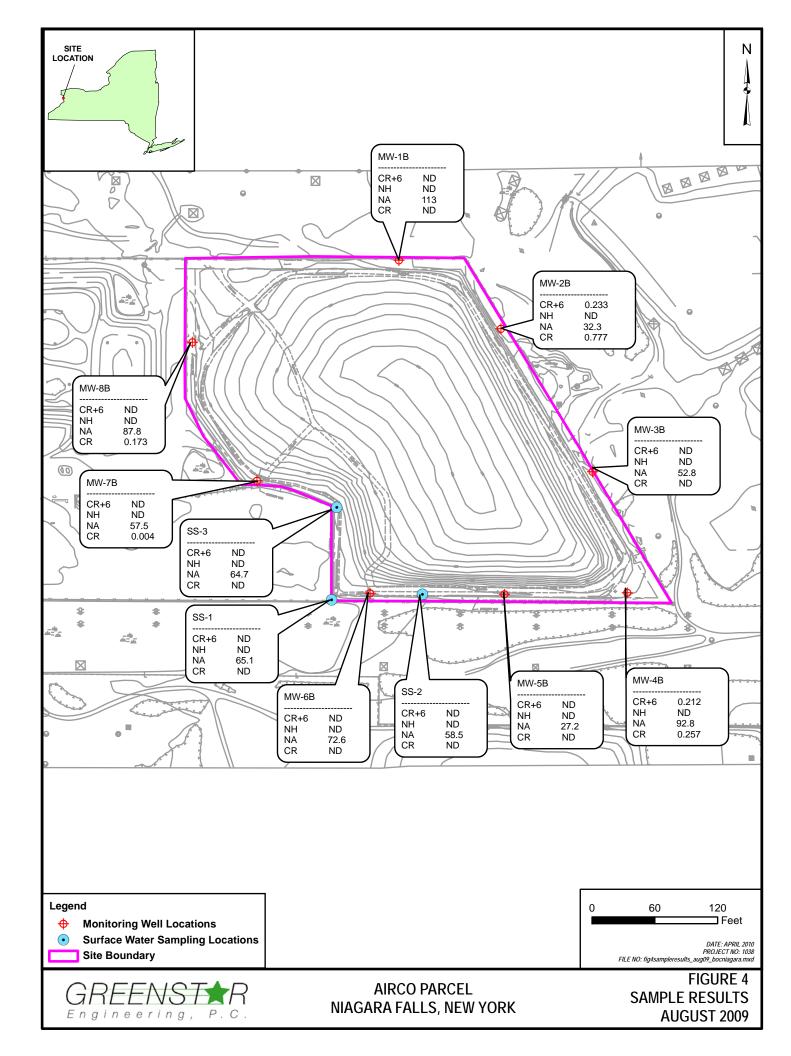
#### TABLE 2 SUMMARY OF QUARTERLY GCTS DISCHARGE SAMPLING 10 AUGUST AND 16 NOVEMBER 2009, AIRCO PARCEL, NIAGARA FALLS, NEW YORK

			New York State Department of Environmental Conservation
Parameter	10 August 2009	16 November 2009	Discharge Criteria
pH	7.80	7.88	6-8 s.u.
Total suspended solids	<10U	<10U	10 mg/L
Dissolved Oxygen	10.4	8.72	7 mg/L
Ammonia as N	<9.2U	<9.2U	9.2 mg/L
Total Kjeldahl nitrogen	<1.0U	<1.0U	Monitor (mg/L)
Total Recoverable Phenolics	<0.008U	<0.008U	.008 mg/L
Biochemical oxygen demand	<5U	<5U	5.0 mg/L
1,1-Dichloroethane	<5U	<5U	5.0 μg/L
Trichloroethene	<5U	<5U	5.0 μg/L
Nickel	<0.07U	<0.07U	0.07 mg/L
Copper	<0.0147U	<0.0147U	0.0147 mg/L
Barium	<2U	<2U	2 mg/L
Total chromium	<0.1U	<0.1U	0.1 mg/L
Hexavalent chromium	<0.011U	<0.011U	0.011 mg/L
Iron	<0.3U	<0.3U	0.3 mg/L
Selenium	<0.0046U	<0.0046U	0.0046 mg/L
Thallium	<0.004U	<0.004U	0.004 mg/L
Zinc	<0.115U	<0.115U	0.115 mg/L
Nitrate as N	1.17	<0.05U	Monitor (mg/L-N)
Nitrite as N	<0.05U	2.30	Monitor (mg/L-N)
Chemical oxygen demand	<40U	<40U	40 mg/L
Total dissolved solids	591	657	Monitor (mg/L)









# Attachment A

Summary of Analytical Results Groundwater and Surface Water Samples August 2009

#### ATTACHMENT A SUMMARY OF ANALYTICAL RESULTS OF SURFACE WATER AND GROUNDWATER SAMPLES COLLECTED IN AUGUST 2009, AIRCO PARCEL, NIAGARA FALLS, NEW YORK

#### Groundwater

#### Baseline Metals by EPA Method 200.7 (mg/L)

Total (Unfiltered)

		MW-1B	MW-1B	MW-2B	MW-3B	MW-4B	MW-5B	MW-6B	MW-7B	MW-8B
			(Dup)							
Analyte	AWQS									
Cadmium	0.005	(<0.001U)								
Chromium	0.05	(<0.004U)	(<0.004U)	0.777	(<0.004U)	0.257	(<0.004U)	(<0.004U)	0.004	0.173
Chromium, Hexavalent	0.05	(<0.011U)	(<0.011U)	0.233	(<0.011U)	0.212	(<0.011U)	(<0.011U)	(<0.011U)	(<0.011U)
Iron	0.3	0.119	0.123	(<0.05U)	(<0.05U)	0.676	0.226	0.415	0.081	0.311
Lead	0.025	(<0.005U)								
Magnesium	35*	65.5	64.4	(<0.2U)	8.6	51.1	85	75.7	10	71.1
Manganese	0.3	0.808	0.815	(<0.003U)	0.0117	0.0108	0.0081	0.156	0.0309	0.134
Selenium	0.01	(<0.015U)	0.0401							
Silica		6.99	6.6	0.395J	6.51	11.4	10.1	5.86	4.71	7.51
Sodium	20	113	111	32.3	52.8	92.8	27.2	72.6	57.5	87.8
Thallium	0.0005*	(<0.02U)								
Zinc	2*	0.627	0.627	(<0.01U)	(<0.01U)	0.0132	0.0347	(<0.01U)	(<0.01U)	0.0845

#### Water Quality Parameters (mg/L)

		MW-1B	MW-1B (Dup)	MW-2B	MW-3B	MW-4B	MW-5B	MW-6B	MW-7B	MW-8B
Analyte	AWQS									
Ammonia (expressed as N)	2	(<9.2U)	(<9.2U)	(<9.2U)	(<9.2U)	(<9.2U)	(<9.2U)	(<9.2U)	(<9.2U)	(<9.2U)
Phenolics	0.001	(<0.008U)	(<0.008U)	(<0.008U)	(<0.008U)	(<0.008U)	(<0.008U)	(<0.008U)	(<0.008U)	(<0.008U)
Sulfate	250	238	234	22J	67.2J	156	145	350	37.2J	237

# **Surface Water**

### Baseline Metals by EPA Method 200.7 (mg/L) Total (Unfiltered)

		SS-01	SS-02	SS-03
Analyte	AWQS			
Cadmium		(<0.001U)	(<0.001U)	(<0.001U)
Chromium		(<0.004U)	(<0.004U)	(<0.004U)
Chromium, Hexavalent	0.016	(<0.011U)	(<0.011U)	(<0.011U)
Iron	0.3	0.073	0.153	(<0.05U)
Lead		(<0.005U)	(<0.005U)	(<0.005U)
Magnesium		1.47	5.02	1.16
Manganese		0.0072	0.0658	(<0.003U)
Selenium	0.0046	(<0.015U)	(<0.015U)	(<0.015U)
Silica		1.1	2.6	1.11
Sodium		65.1	58.5	64.7
Thallium	0.02	(<0.02U)	(<0.02U)	(<0.02U)
Zinc		(<0.01U)	(<0.01U)	(<0.01U)

#### Water Quality Parameters (mg/L)

		SS-01	SS-02	SS-03
Analyte	AWQS			
Ammonia (expressed as N)		(<9.2U)	(<9.2U)	(<9.2U)
Phenolics		(<0.008U)	(<0.008U)	(<0.008U)
Sulfate		(<10U)	12.5J	(<10U)

# QA/QC

# Baseline Metals by EPA Method 200.7 (mg/L)

# Total (Unfiltered)

		RB-01	SWB-01
Analyte	AWQS		
Cadmium		(<0.001U)	(<0.001U)
Chromium		(<0.004U)	(<0.004U)
Chromium, Hexavalent		(<0.011U)	(<0.011U)
Iron		(<0.05U)	(<0.05U)
Lead		(<0.005U)	(<0.005U)
Magnesium		0.954	0.966
Manganese		0.0053	0.0056
Selenium		(<0.015U)	(<0.015U)
Silica		2.16	2.13
Sodium		(<1U)	(<1U)
Thallium		(<0.02U)	(<0.02U)
Zinc		0.0112	(<0.01U)

#### Water Quality Parameters (mg/L)

		RB-01	SWB-01
Analyte	AWQS		
Ammonia (expressed as N)		(<9.2U)	(<9.2U)
Phenolics		(<0.008U)	(<0.008U)
Sulfate		(<10U)	(<10U)

	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).< td=""></u).<>					
J	= Estimated concentration.						
Results s Water Q	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						
Amm	Ammonia (expressed as Nitrogen) $=$ EPA 350.2						
Phene	Phenolics $=$ EPA 420.2						
Silica		= EPA 6010					
Sulfa	te	= EPA 375.3					

# Attachment B

Well Gauging, Purging, and Sampling Forms August 2009



Well I.D.:	Personnel:	Client:
AP-MW1B	S. Bazilus/B. Vinal	Linde North America, Inc.
Location:	Well Condition:	Weather:
Niagara Falls	Locked	Mostly Sunny, 80°
Sounding Method:	Gauge Date:	Measurement Ref:
WLI	8/24/2009	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
UP	14:10	2"

Purge Date:	Purge Time:	
8/25/2009	8:12	
Purge Method:	Greenstar Personnel:	
Low-Flow	SB/BV	

Well Volume						
A. Well Depth (ft): D. Well Volume (ft3): Depth/Height of Top of PVC:						
27.83	0.37	N/A				
B. Depth to Water (ft):	E. Well Volume (L)	Pump Type:				
10.86	10.48	Peristaltic				
C. Liquid Depth (ft) (A-B):		Pump Designation:				
16.97		N/A				

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	рН (pH units)	Conduct. (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temp. (° C)	ORP (mv)
8:15	11.25	0.4	0.15	7.46	0.871	149	0.00	12.3	211
8:20	11.25	1	0.20	7.65	0.853	107	0.00	12.9	153
8:25	11.28	2	0.20	7.85	0.847	124	0.00	12.3	72
8:30	11.30	3	0.20	7.97	0.841	161	0.00	12.5	37
8:35	11.31	4	0.20	8.01	0.841	178	0.00	12.5	24
8:40	11.35	5	0.20	8.05	0.842	166	0.00	12.2	16
8:45	11.38	6	0.20	8.05	0.840	52	0.00	12.3	12
8:50	11.40	7	0.20	8.06	0.836	78	0.00	12.3	8
8:55	11.41	8	0.20	8.06	0.836	101	0.00	12.4	7
9:00	11.40	9	0.20	8.07	0.833	88	0.00	12.4	6
9:05	11.40	10	0.20	8.07	0.832	98	0.00	12.4	4

Total Quantity of Water Removed:	10 L	Sampling Time:	9:15
Samplers:	SB/BV	Split Sample With:	AP-DUP-01
Sampling Date:	25-Aug-09	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

AP-DUP-01 collected from AP-MW-1B.



Well I.D.:	Personnel:	Client:		
AP-MW2B	S. Bazilus/B. Vinal	Linde North America, Inc.		
Location:	Well Condition:	Weather:		
Niagara Falls	Locked	Mostly Sunny, 80°		
Sounding Method:	Gauge Date:	Measurement Ref:		
WLI	8/24/2009	TOC		
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):		
UP	14:20	2"		

Purge Date:	Purge Time:
8/25/2009	9:40
Purge Method:	Greenstar Personnel:
Low-Flow	SB/BV

Well Volume							
A. Well Depth (ft):	A. Well Depth (ft): D. Well Volume (ft3): Depth/Height of Top of PVC:						
27.31	0.34	N/A					
B. Depth to Water (ft):	E. Well Volume (L):	Pump Type:					
11.87	9.53	Peristaltic					
C. Liquid Depth (ft) (A-B):		Pump Designation:					
15.44		N/A					

	Water Quality Parameters								
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	рН (pH units)	Conduct. (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temp. (° C)	ORP (mv)
9:52	12.08	2	0.30	12.38	6.44	157	7.90	13.2	-114
9:55	12.09	3	0.30	12.45	6.59	110	1.27	13.5	-134
9:59	12.09	4	0.30	12.44	5.68	88	1.09	13.8	-134
10:02	12.09	5	0.30	12.52	5.51	74	1.62	13.8	-133
10:05	12.09	6	0.30	12.57	5.47	65	1.98	13.7	-134
10:09	12.09	7	0.30	12.61	5.42	49	2.21	13.8	-135
10:13	12.10	8	0.25	12.65	5.37	54	2.33	13.8	-135
10:17	12.11	9	0.25	12.67	5.35	47	2.38	13.7	-135

Total Quantity of Water Removed:	9 L	Sampling Time:	10:20
Samplers:	SB/BV	Split Sample With:	N/A
Sampling Date:	25-Aug-09	Sample Type:	Grab

#### COMMENTS AND OBSERVATIONS:

Kink in well casing; consider repairing.

pH probe was acting up /malfunctioning at start of purging; re-callibration seems to have solved issue.



Well I.D.:	Personnel:	Client:		
AP-MW3B	S. Bazilus/B. Vinal	Linde North America, Inc.		
Location:	Well Condition:	Weather:		
Niagara Falls	Locked	Mostly Sunny, 80°		
Sounding Method: Gauge Date:		Measurement Ref:		
WLI	8/24/2009	TOC		
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):		
UP	14:25	2"		

Purge Date:	Purge Time:
8/24/2009	14:28
Purge Method:	Greenstar Personnel:
Hand Bail	SB/BV

Well Volume							
A. Well Depth (ft):	A. Well Depth (ft): D. Well Volume (ft3): Depth/Height of Top of PVC:						
18.41	0.21	N/A					
B. Depth to Water (ft):	E. Well Volume (L):	Pump Type:					
8.65	6.03	Poly Bailer					
C. Liquid Depth (ft) (A-B):		Pump Designation:					
9.76		N/A					

	Water Quality Parameters								
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	рН (pH units)	Conduct. (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temp. (° C)	ORP (mv)
14:28	8.65	1	N/A	8.61	0.334	96.0	10.92	15.30	105
14:40	Dry	10.5	N/A	9.55	0.326	132.0	11.71	12.90	-38
10:50	8.72	N/A	N/A	10.88	0.25	95.0	10.84	17.40	86

Total Quantity of Water Removed:	10.5 L	Sampling Time:	10:55
Samplers:	SB/BV	Split Sample With:	N/A
Sampling Date:	25-Aug-09	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

Well purged dry and sampled the following day.



Well I.D.:	Personnel:	Client:
AP-MW4B	S. Bazilus/B. Vinal	Linde North America, Inc.
Location:	Well Condition:	Weather:
Niagara Falls	Locked	Mostly Sunny, 80°
Sounding Method:	Gauge Date:	Measurement Ref:
WLI	8/24/2009	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
UP	14:49	2"

Purge Date:	Purge Time:
8/24/2009	14:50
Purge Method:	Greenstar Personnel:
Hand Bail	SB/BV

Well Volume						
A. Well Depth (ft):	D. Well Volume (ft3):	Depth/Height of Top of PVC:				
15.08	0.16	N/A				
B. Depth to Water (ft):	E. Well Volume (L):	Pump Type:				
7.95	4.40	Poly Bailer				
C. Liquid Depth (ft) (A-B):		Pump Designation:				
7.13		N/A				

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	рН (pH units)	Conduct. (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temp. (° C)	ORP (mv)
14:51	7.95	1	N/A	8.66	0.567	109	10.24	16.0	80
15:00	Dry	7	N/A	8.14	0.642	> 999	11.13	13.4	98
11:05	7.98	N/A	N/A	9.23	0.504	118	11.22	17.6	120

Total Quantity of Water Removed:	7 L	Sampling Time:	11:10
Samplers:	SB/BV	Split Sample With:	N/A
Sampling Date:	25-Aug-09	Sample Type:	Grab
COMMENTS AND OBSERVATIONS:	Well purged dry a	and sampled the following day.	



Well I.D.:	Personnel:	Client:
AP-MW5B	S. Bazilus/B. Vinal	Linde North America, Inc.
Location:	Well Condition:	Weather:
Niagara Falls	Locked	Mostly Sunny, 80°
Sounding Method:	Gauge Date:	Measurement Ref:
WLI	8/24/2009	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
UP	15:05	2"

Purge Date:	Purge Time:
8/24/2009	15:10
Purge Method:	Greenstar Personnel:
Hand Bail	SB/BV

Well Volume						
A. Well Depth (ft):	D. Well Volume (ft3):	Depth/Height of Top of PVC:				
14.22	0.17	N/A				
B. Depth to Water (ft):	E. Well Volume (L):	Pump Type:				
6.47	4.78	Poly Bailer				
C. Liquid Depth (ft) (A-B):		Pump Designation:				
7.75		N/A				

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	рН (pH units)	Conduct. (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temp. (° C)	ORP (mv)
15:10	6.47	1	N/A	7.61	0.640	24.9	9.16	19.5	111
15:17	Dry	6.5	N/A	7.63	0.723	867.0	10.89	15.3	108
11:20	6.51	N/A	N/A	8.61	0.548	78.0	9.83	20.1	149

Total Quantity of Water Removed:	6.5 L	Sampling Time:	11:25
Samplers:	SB/BV	Split Sample With:	N/A
Sampling Date:	25-Aug-09	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

Well purged dry and sampled the following day.



Well I.D.:	Personnel:	Client:
AP-MW6B	S. Bazilus/B. Vinal	Linde North America, Inc.
Location:	Well Condition:	Weather:
Niagara Falls	Locked	Mostly Sunny, 80°
Sounding Method:	Gauge Date:	Measurement Ref:
WLI	8/24/2009	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
UP	15:22	2"

Purge Date:	Purge Time:	
8/25/2009	11:50	
Purge Method:	Greenstar Personnel:	
Low-Flow	SB/BV	

Well Volume				
A. Well Depth (ft):	D. Well Volume (ft3):	Depth/Height of Top of PVC:		
23.02	0.41	N/A		
B. Depth to Water (ft):	E. Well Volume (L):	Pump Type:		
4.01	11.74	Peristaltic		
C. Liquid Depth (ft) (A-B):		Pump Designation:		
19.01		N/A		

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	рН (pH units)	Conduct. (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temp. (° C)	ORP (mv)
11:54	6.06	1	0.20	8.75	1.38	100	0.00	16.2	-101
11:59	7.24	2	0.20	8.56	1.38	61	0.00	16.1	-110
12:04	8.45	3	0.20	8.61	1.38	31	0.00	16.3	-114
12:09	9.20	4	0.20	8.68	1.38	30	0.00	15.7	-116
12:14	10.22	5	0.20	8.71	1.38	12	0.00	15.7	-118
12:19	11.00	6	0.20	8.66	1.38	7	0.00	15.7	-120
12:24	11.75	7	0.20	8.75	1.38	10	0.00	15.4	-120

Total Quantity of Water Removed:	7 L	Sampling Time:	12:30
Samplers:	SB/BV	Split Sample With:	N/A
Sampling Date:	25-Aug-09	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:



Well I.D.:	Personnel:	Client:
AP-MW7B	S. Bazilus/B. Vinal	Linde North America, Inc.
Location:	Well Condition:	Weather:
Niagara Falls	Locked	Mostly Sunny, 80°
Sounding Method:	Gauge Date:	Measurement Ref:
WLI	8/24/2009	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
UP	15:28	2"

Purge Date:	Purge Time:	
8/25/2009	13:20	
Purge Method:	Greenstar Personnel:	
Low-Flow	SB/BV	

Well Volume				
A. Well Depth (ft):	D. Well Volume (ft3):	Depth/Height of Top of PVC:		
21.79	0.25	N/A		
B. Depth to Water (ft):	E. Well Volume (L):	Pump Type:		
10.42	7.02	Peristaltic		
C. Liquid Depth (ft) (A-B):		Pump Designation:		
11.37		N/A		

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	рН (pH units)	Conduct. (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temp. (° C)	ORP (mv)
13:25	12.85	1	0.20	9.28	0.199	18.0	1.05	18.7	10
13:30	13.90	2	0.20	9.24	0.199	15.0	0.89	18.4	5
13:35	15.08	3	0.20	9.31	0.198	10.0	0.77	18.0	-17
13:40	15.98	4	0.20	9.32	0.192	5.0	0.78	19.0	-19
13:45	16.80	5	0.20	9.52	0.192	3.0	0.73	19.5	-28
13:50	17.40	6	0.20	9.66	0.193	4.0	0.62	19.4	-46
13:55	18.05	7	0.20	9.71	0.193	11.0	0.68	18.5	-62

Total Quantity of Water Removed:	7 L	Sampling Time:	14:00
Samplers:	SB/BV	Split Sample With:	N/A
Sampling Date:	25-Aug-09	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

All WQ parameters didn't fully stabilize before sample was collected (well was

in danger of running dry).

FOR NEXT SAMPLING EVENT: Consider hand bailing dry and sampling following day.



Well I.D.:	Personnel:	Client:
AP-MW8B	S. Bazilus/B. Vinal	Linde North America, Inc.
Location:	Well Condition:	Weather:
Niagara Falls	Locked	Mostly Sunny, 80°
Sounding Method: Gauge Date:		Measurement Ref:
WLI	8/24/2009	TOC
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in):
UP	15:36	2"

Purge Date:	Purge Time:	
8/24/2009	15:38	
Purge Method:	Greenstar Personnel:	
Hand Bail	SB/BV	

Well Volume				
A. Well Depth (ft):	D. Well Volume (ft3):	Depth/Height of Top of PVC:		
15.51	0.22	N/A		
B. Depth to Water (ft):	E. Well Volume (L):	Pump Type:		
5.30	6.30	Poly Bailer		
C. Liquid Depth (ft) (A-B):		Pump Designation:		
10.21		N/A		

				Water Qual	ity Parame	eters			
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	рН (pH units)	Conduct. (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temp. (° C)	ORP (mv)
15:38	5.30	1	N/A	7.58	0.766	46	9.18	19.7	123
15:45	Dry	8	N/A	7.65	0.869	619	11.33	15.5	116
14:30	5.36	N/A	N/A	8.50	0.66	57	9.83	18.8	135

Total Quantity of Water Removed:	8 L	Sampling Time:	14:35
Samplers:	SB/BV	Split Sample With:	N/A
Sampling Date:	25-Aug-09	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:

Well purged dry and sampled the following day.

# Attachment C

**Chain-of-Custody Records** 

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		Chain of Custody Number	Page 2. of 2		Second Party	conditions of Receipt										(A fee may be assessed if samples are relained kinger than 1 month)		Dela Tima S125205 1557 Data Tima	Deta	14116		
<b>TestAmerica</b>	THE LEADER IN ENVIRONMENTAL TESTING	08/25/09	ር ዓቲ ለፍ	Analysis (Attach list if more space is needed)	14 14 14	19 19	HAL WY +27 SL	XXXXXX	XXXXXX							Archive For Months		hy y - 2no		(	ビイメ	
Temperature on Receipt	ari Yes 🗆 No 🗹	Project Manager Chip McLEDd	e Number (Alea Code)/Fax 34 5 - 2 2 3 -	Las compet	Carrier/Waybiil Number	Matrix Containers & Presenvatives		00 X 1 1 2 2	1510 Z 1 1 1 1 1 1				<del>╶┤╻╹╹╹╹╹╹╹╹╹╹</del>			Cample Disposal	CC Requirements (Specify)	Date Tuna I. Received By	Date Tune 3 Received By		SHART HOLD & (2	the Sample: PINK - Freig Copy
Chain of		EENSTAR ENG	IL DOWE	ANDORMONAL Fail < 104 1259 D	Project Number and Location (Slate) AIRCO - SEMI ANNUAL GW MINITAM		Sample I.D. No. and Description (Containans for each sample mey be combined on one line)	AP-RB-01 Delising 1500	AP-SWB-01 11/16	-					<b>→</b>	a) <b>maade 🗌 Skin</b> Im <b>ta</b> nit 🛄 Paison B	Tum Ancured Time Required C 24 Hours 1 48 Hours 1 7 Deys 1 14 Deys 🗙 21 Deys	1. Fakimumishar Ar	3 Ratheninknest Bu		COMMANIE & HEX CHRUME - SHART HOLD	DISTRIBUTION: WHATE - Refumed to Clean with Heront, Canada - Slays with

Chain of	Temperature on Receipt	on Receip! —	··	<u><b>TestAmericc</b></u>	neri	ß		
	Drinking Water?	Yes 🗆		THE LEADER IN ENVIRONMENTAL TESTING	VIRONMENTAL	TESTING		
Creen star Environmental	Project Manager	JRK			Dele 0-09	60	Chain of Custody Number 110805	
Y Dr.	(845)	Telephone Number (Area Code)/Fax Number (845) 223 - 9944	u Number [		Lab Mumber	-	Page of	
Wypringer. Falls AVY	Sile Confact Chip P	m 2 co 2 m	) Contact	* E	Analysis (Attach list if more space is needed)	st if (ed)		
Project Name and Locality (State)	14	Vurniber			¥.44₹ ₩	700 1-11 55		tions/
Contractionations Distance No. Quarterly Discharge Monitaria		Matrix	Containers & Preservatives	5401	1/21 0 NOM	$\frac{1}{4}$	Conditions of Receipt	eceipt
동문	Date Time	99940447) 2005 2005	HOWN RWZ HOFN COH RONH RONH	1 44 2008 24 P	1202 102 102	-2) 0 0 0 1	HA 1	
AP-EWE-01 8-10-09	15:00					• • • • • • • • • • • • • • • • • • •		
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Possible Hazard identification C Non-Hazard D Filemmetrie C Skih Imiliant D Poiscon B	🗌 Unknown		disposal By Lab	Archive For	Monthe Jun	96 may be asse per than 1 mont	(A foe may be assessed if samples are retained kunser than 1 month)	
s Rectrined C 48 Hours [] 7 Deys [ 14 Deys	8		OC Requirements (Specify)	(pecify)				
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2. Relimpuished By	Date	Time	2. Received By		1 1 A A A A	S	1	
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Contraction	_			0,00	h		ļ	ļ
DISTRIBUTION: W141E - Returned to Client with Report, CANARY - Saya with the Samole:		PINK - Field CON		7,7			SAME WIY	ĺ

Chain of Custody Bacord	Temperature on Receipr	<u>TestAmerica</u>	
	Drinking Water? Yes 🔲 No 🔩	THE LEADER IN ENVIRONMENTAL TESTING	
Creenstar Environmental	Project Manager	11-16-09 Chain of Custody Number	34
 	Telephone Number (Area CooglyFax Number (245) 223-9944		of
Wappingers Falls NY 12590	Sile Contract Chilo McLead	Analysis (Attach list if more space is needed)	
	Carrier Waytun Number	4 5 5 5 1-4 55	tarctions/
Carinect Purchase Onter Outer No. Quarterly Discharge Monitoring	Methix Containers & Preservethas		of Receipt
	Tomo Alexandre Solar Alexandre Sol Alexandre Solar Alexandre S	AR FILLE VISION	
APENE-01 9-10-01 1	1 4 3 1 2		
>			
Possible Hazard Identification	Sample Okposel Urknown Dehum To Client Disposel By Lab	(A fee may be assessed if sumples are retained a sumples are retained a sumple for	imed
Turn Around Time Required			
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2. Reinquiched By	Lare 2. Padawadey	Daris 1 1 Tim	Line and Lin
3. Rolinquieleci By	Dale Time 3 Received By		Ē
Comments			
DISTRIBUTION: Witit£ - Returned to Client with Report: CAWARIY - Stays with the Semple: PiNK - Field Copy	ith the Semple: PINK - Field Copy		

# Attachment D

Laboratory Analytical Results for Groundwater and Surface Water Sampling August 2009



# Analytical Report

Work Order: RSH0748

Project Description Semi-Annual GW Monitoring

For:

Charles E. McLeod, Jr.

Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

e.

Jason Kacalski Project Manager jason.kacalski@testamericainc.com Tuesday, September 15, 2009 Revision: 1

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exception to NELAP requirements are noted in this report. Persuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project manager who has signed this report.



THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

Project: Semi-Annual GW Monitoring Project Number: GES

# TestAmerica Buffalo Current Certifications

#### As of 1/27/2009

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP C WA, R CRA	E87672
Georgia*	SDWA, NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana *	NELAP C WA, R CRA	2031
Maine	SDWA, CWA	N Y0044
Maryland	SDWA	294
Massachusetts	SD WA, C WA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP, SD WA, C WA, RC RA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA,CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
Texas *	NELAP C WA, R CRA	T104704412-08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SD WA	278
Washington*	NELAP CWA,RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	C WA, RC RA	252

\*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accre ditation is required or available. Any exceptions to NELAP requirements are noted in this report.



THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSH0748

Project: Semi-Annual GW Monitoring Project Number: GES Received: 08/25/09 Reported: 09/15/09 13:44

#### **Case Narrative**

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

There are pertinent documents appended to this report, 37 pages, are included and are an integral part of this report. Reproduction of this analytical report is permitted only in its entirety. This report shall not be reproduced except in full without the written approval of the laboratory.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.



THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental Solutions, LLC	Work Order: RSH0748	Received:	08/25/09
6 Gellatly Drive		Reported:	09/15/09 13:44
Wappinger Falls, NY 12590	Project: Semi-Annual GW Monitoring Project Number: GES		

The requested project specific reporting limits listed below were less than lab standard quantitation limits but greater than or equal to the lab MDL. It must be noted that results reported below lab standard quantitation limits (PQL) may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

SpecificMethod	Analyte	<u>Units</u>	Client RL	Lab PQL
420.4	Phenolics, Total Recoverable	ug/L	8.0	10.0



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6 Gellatly Drive	
Wappinger Falls, NY 12590	

Work Order: RSH0748

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#### DATA QUALIFIERS AND DEFINITIONS

- B Analyte was detected in the associated Method Blank.
- **D08** Dilution required due to high concentration of target analyte(s)
- J Sample result is greater than the MDL but below the CRDL
- M7 The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
- M8 The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
- **NR** Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

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#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

Project: Semi-Annual GW Monitoring Project Number: GES

			Executive	Summar	y - Detect	tions				
	Sample	Data				Dil	Date	Lab		
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method
Sample ID: RSH0748-01	(AP-MW-1B	- Water)			Sam	pled: 08/	Rec	Recvd: 08/25/09 15:55		
Total Metals by EPA 200	0 Series Meth	<u>nods</u>								
Iron	0.119		0.0500	NR	mg/L	1.00	08/28/09 17:20	AMH	9H27048	200.7
Magnesium	65.5		0.200	NR	mg/L	1.00	08/28/09 17:20	AMH	9H27048	200.7
Manganese	0.808		0.0030	NR	mg/L	1.00	08/28/09 17:20	AMH	9H27048	200.7
Sodium	113		1.0	NR	mg/L	1.00	08/28/09 17:20	AMH	9H27048	200.7
Zinc	0.627		0.0100	NR	mg/L	1.00	08/28/09 17:20	AMH	9H27048	200.7
Anions by EPA Method	300.0									
Sulfate	238	D08	10.0	NR	mg/L	5.00	09/11/09 20:48	BWM	9114029	300
Metals (ICP)										
Si	6990		2500	250	ug/L	5.00	09/09/09 16:36	NP	30912	6010B
Sample ID: RSH0748-02	(AP-MW-2B	- Water)			Sam	pled: 08/	/25/09 10:20	Rec	vd: 08/25/09	15:55
Total Metals by EPA 200	0 Series Meth	<u>nods</u>								
Chromium	0.777		0.0040	NR	mg/L	1.00	08/28/09 17:25	AMH	9H27048	200.7
Sodium	32.3		1.0	NR	mg/L	1.00	08/28/09 17:25	AMH	9H27048	200.7
General Chemistry Para	ameters									
Chromium, Hexavalent	233		11.0	NR	ug/L	1.00	08/25/09 22:47	JFR	9H25066	7196A
Anions by EPA Method	300.0									
Sulfate	22.0		10.0	NR	mg/L	1.00	09/11/09 20:58	BWM	9114029	300
Metals (ICP)										
Si	395	J	500	50.0	ug/L	1.00	09/09/09 18:56	NP	30912	6010B
Sample ID: RSH0748-03	(AP-MW-3B	- Water)			Sam	pled: 08/	/25/09 10:55	Rec	vd: 08/25/09	15:55
Total Metals by EPA 200	0 Series Meth	nods								
Magnesium	8.60		0.200	NR	mg/L	1.00	08/28/09 17:30	AMH	9H27048	200.7
Manganese	0.0117		0.0030	NR	mg/L	1.00	08/28/09 17:30	AMH	9H27048	200.7
Sodium	52.8		1.0	NR	mg/L	1.00	08/28/09 17:30	AMH	9H27048	200.7
Anions by EPA Method	<u>300.0</u>									
Sulfate	67.2		10.0	NR	mg/L	1.00	09/11/09 21:08	BWM	9114029	300
Metals (ICP)										
Si	6510		2500	250	ug/L	5.00	09/09/09 18:37	NP	30958	6010B
Sample ID: RSH0748-04	(AP-MW-4B	- Water)			Sam	pled: 08/	/25/09 11:10	Rec	vd: 08/25/09	15:55
Total Metals by EPA 200		<u>nods</u>								
Chromium	0.257		0.0040	NR	mg/L	1.00	08/28/09 18:07	AMH		200.7
Iron	0.676		0.0500	NR	mg/L	1.00	08/28/09 18:07	AMH	9H27048	200.7
Magnesium	51.1		0.200	NR	mg/L	1.00	08/28/09 18:07	AMH	9H27048	200.7
Manganese	0.0108		0.0030	NR	mg/L	1.00	08/28/09 18:07	AMH		200.7
Sodium	92.8		1.0	NR	mg/L	1.00	08/28/09 18:07		9H27048	200.7
Zinc	0.0132		0.0100	NR	mg/L	1.00	08/28/09 18:07	AMH	9H27048	200.7
T (A ) D (C )										

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Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

Project: Semi-Annual GW Monitoring Project Number: GES

		I	Executive	Summar	y - Detect	ions				
Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSH0748-04	(AP-MW-4B	- Water) - cont			Sam	pled: 08/	/25/09 11:10	Rec	vd: 08/25/09	9 15:55
General Chemistry Para	meters									
Chromium, Hexavalent	212		11.0	NR	ug/L	1.00	08/25/09 22:47	JFR	9H25066	7196A
Anions by EPA Method	300.0									
Sulfate	156	D08	10.0	NR	mg/L	5.00	09/11/09 21:18	BWM	9114029	300
<u>Metals (ICP)</u>										
Si	11400		2500	250	ug/L	5.00	09/09/09 18:43	NP	30958	6010B
ample ID: RSH0748-05	(AP-MW-5B	- Water)			Sam	pled: 08/	25/09 11:25	Rec	vd: 08/25/09	9 15:55
otal Metals by EPA 200	) Series Meth	nods								
ron	0.226		0.0500	NR	mg/L	1.00	08/28/09 18:12	АМН	9H27048	200.7
/lagnesium	85.0		0.200	NR	mg/L	1.00	08/28/09 18:12		9H27048	200.7
langanese	0.0081		0.0030	NR	mg/L	1.00	08/28/09 18:12		9H27048	200.7
Sodium	27.2		1.0	NR	mg/L	1.00	08/28/09 18:12			200.7
linc	0.0347		0.0100	NR	mg/L	1.00	08/28/09 18:12			200.7
Anions by EPA Method	300.0									
Sulfate	145	D08	10.0	NR	mg/L	2.00	09/11/09 21:58	BWM	9114029	300
<u>letals (ICP)</u>										
ii	10100		2500	250	ug/L	5.00	09/09/09 18:49	NP	30958	6010B
ample ID: RSH0748-06	(AP-MW-6B	- Water)			Sam	pled: 08/	25/09 12:30	Rec	vd: 08/25/09	9 15:55
Fotal Metals by EPA 200	) Series Meth	nods								
ron	0.415		0.0500	NR	mg/L	1.00	08/28/09 18:17	AMH	9H27048	200.7
Magnesium	75.7		0.200	NR	mg/L	1.00	08/28/09 18:17		9H27048	200.7
Manganese	0.156		0.0030	NR	mg/L	1.00	08/28/09 18:17		9H27048	200.7
Sodium	72.6		1.0	NR	mg/L	1.00	08/28/09 18:17			200.7
Anions by EPA Method	300.0									
Sulfate	350	D08	10.0	NR	mg/L	5.00	09/11/09 22:09	BWM	9114029	300
Metals (ICP)										
6i	5860		500	50.0	ug/L	1.00	09/11/09 14:48	NP	31040	6010B
ample ID: RSH0748-07	(AP-MW-7B	- Water)			Sam	pled: 08/	25/09 14:00	Rec	vd: 08/25/09	9 15:55
otal Metals by EPA 200	) Series Meth	<u>nods</u>								
Chromium	0.0040		0.0040	NR	mg/L	1.00	08/28/09 18:22		9H27048	200.7
ron	0.0809		0.0500	NR	mg/L	1.00	08/28/09 18:22	AMH	9H27048	200.7
lagnesium	10.0		0.200	NR	mg/L	1.00	08/28/09 18:22	AMH	9H27048	200.7
langanese	0.0309		0.0030	NR	mg/L	1.00	08/28/09 18:22		9H27048	200.7
Sodium	57.5		1.0	NR	mg/L	1.00	08/28/09 18:22		9H27048	200.7
Anions by EPA Method	300.0									
Sulfate	37.2		10.0	NR	mg/L	1.00	09/11/09 22:19	BWM	9114029	300
Metals (ICP)										

<sup>&</sup>lt;u>Metals (ICP)</u>

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Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

Project: Semi-Annual GW Monitoring Project Number: GES

		E	Executive	Summar	y - Detect	tions					
Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method	
Sample ID: RSH0748-07 (	AP-MW-7B	- Water) - cont			Sam	pled: 08/	/25/09 14:00	Recy	/d: 08/25/09	9 15:55	
Si	4710	,	500	50.0	ug/L	1.00	09/11/09 15:03	NP	31040	6010B	
Sample ID: RSH0748-08 (	AP-MW-8B	- Water)			Sam	Sampled: 08/25/09 14:35 Recvd: 08/25/0					
Total Metals by EPA 200	Series Meth	hods									
Chromium	0.173		0.0040	NR	mg/L	1.00	08/28/09 18:27	AMH	9H27048	200.7	
Iron	0.311		0.0500	NR	mg/L	1.00	08/28/09 18:27	AMH	9H27048	200.7	
Magnesium	71.1		0.200	NR	mg/L	1.00	08/28/09 18:27	AMH	9H27048	200.7	
Manganese	0.134		0.0030	NR	mg/L	1.00	08/28/09 18:27	AMH	9H27048	200.7	
Selenium	0.0401		0.0150	NR	mg/L	1.00	08/28/09 18:27	AMH	9H27048	200.7	
Sodium	87.8		1.0	NR	mg/L	1.00	08/28/09 18:27	AMH	9H27048	200.7	
Zinc	0.0845		0.0100	NR	mg/L	1.00	08/28/09 18:27		9H27048	200.7	
Anions by EPA Method	<u>300.0</u>										
Sulfate	237	D08	10.0	NR	mg/L	5.00	09/11/09 22:29	BWM	9114029	300	
<u>Metals (ICP)</u>											
Si	7510		500	50.0	ug/L	1.00	09/11/09 15:08	NP	31040	6010B	
Sample ID: RSH0748-09 (AP-MW-DUP-01 - Water)					Sam	pled: 08/	25/09	Recy	/d: 08/25/09	9 15:55	
Total Metals by EPA 200	Series Meth	hods									
Iron	0.123		0.0500	NR	mg/L	1.00	08/28/09 18:32		9H27048	200.7	
Magnesium	64.4		0.200	NR	mg/L	1.00	08/28/09 18:32		9H27048	200.7	
Manganese	0.815		0.0030	NR	mg/L	1.00	08/28/09 18:32	AMH	9H27048	200.7	
Sodium	111		1.0	NR	mg/L	1.00	08/28/09 18:32	AMH	9H27048	200.7	
Zinc	0.627		0.0100	NR	mg/L	1.00	08/28/09 18:32	AMH	9H27048	200.7	
Anions by EPA Method 3											
Sulfate	234	D08	10.0	NR	mg/L	5.00	09/11/09 22:39	BWM	9114029	300	
<u>Metals (ICP)</u>											
Si	6600		500	50.0	ug/L	1.00	09/11/09 15:14	NP	31040	6010B	
Sample ID: RSH0748-10 (	(AP-SS-01 - )	Water)			Sam	pled: 08/	25/09 12:00	Recy	/d: 08/25/09	9 15:55	
Total Metals by EPA 200		hods	0.0500			4.00	00/00/00 10 00		01107040	000 -	
Iron	0.0733		0.0500	NR	mg/L	1.00	08/28/09 18:38		9H27048	200.7	
Magnesium	1.47		0.200	NR	mg/L	1.00	08/28/09 18:38		9H27048	200.7	
Manganese	0.0072		0.0030	NR	mg/L	1.00	08/28/09 18:38		9H27048	200.7	
Sodium	65.1		1.0	NR	mg/L	1.00	08/28/09 18:38	AMH	9H27048	200.7	
<u>Metals (ICP)</u>	4400		500	50.0		4 00	00/11/00 45:00		24040	00405	
Si	1100		500	50.0	ug/L	1.00	09/11/09 15:20	NP	31040	6010B	
Sample ID: RSH0748-11 (					Sam	pled: 08/	25/09 12:10	Recy	/d: 08/25/09	9 15:55	
Total Metals by EPA 200		hods	0.0500			1 00	00/20/00 40.40		0107040	200 7	
Iron	0.153		0.0500	NR	mg/L	1.00	08/28/09 18:43		9H27048	200.7	
Magnesium	5.02		0.200	NR	mg/L	1.00	08/28/09 18:43		9H27048	200.7	
Manganese	0.0658		0.0030	NR	mg/L	1.00	08/28/09 18:43	AMH	9H27048	200.7	

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Received: 08/25/09 Reported: 09/15/09 13:44

		E	Executive	Summar	y - Detect	tions				
	Sample	Data				Dil	Date	Lab		
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method
Sample ID: RSH0748-	-11 (AP-SS-02 - V	Vater) - cont.			Sam	pled: 08/	25/09 12:10	Recvd: 08/25/09 15:55		
Total Metals by EPA	200 Series Meth	ods - cont.								
Sodium	58.5		1.0	NR	mg/L	1.00	08/28/09 18:43	AMH	9H27048	200.7
Anions by EPA Meth	<u>od 300.0</u>									
Sulfate	12.5		10.0	NR	mg/L	1.00	09/05/09 22:28	BWM	9108056	300
<u>Metals (ICP)</u>										
Si	2600		500	50.0	ug/L	1.00	09/11/09 15:26	NP	31040	6010B
Sample ID: RSH0748-	-12 (AP-SS-03 - V	Vater)			Sam	pled: 08/	25/09 12:20	Rec	vd: 08/25/0	9 15:55
Total Metals by EPA	200 Series Meth	<u>ods</u>								
Magnesium	1.16		0.200	NR	mg/L	1.00	08/28/09 18:48	AMH	9H27048	200.7
Sodium	64.7		1.0	NR	mg/L	1.00	08/28/09 18:48	AMH	9H27048	200.7
<u>Metals (ICP)</u>										
Si	1110		500	50.0	ug/L	1.00	09/11/09 15:43	NP	31040	6010B
Sample ID: RSH0748-	-13 (AP-RB-01 - \	Nater)			Sampled: 08/25/09 15:00			Recvd: 08/25/09 15:55		
Total Metals by EPA	200 Series Meth	<u>ods</u>								
Magnesium	0.954		0.200	NR	mg/L	1.00	08/28/09 19:04	AMH	9H27048	200.7
Manganese	0.0053		0.0030	NR	mg/L	1.00	08/28/09 19:04	AMH	9H27048	200.7
Zinc	0.0112		0.0100	NR	mg/L	1.00	08/28/09 19:04	AMH	9H27048	200.7
<u>Metals (ICP)</u>										
Si	2160		500	50.0	ug/L	1.00	09/11/09 15:49	NP	31040	6010B
Sample ID: RSH0748-	-14 (AP-SWB-01	- Water)			Sam	pled: 08/	25/09 15:10	Rec	vd: 08/25/0	9 15:55
Total Metals by EPA	200 Series Meth	<u>ods</u>								
Magnesium	0.966		0.200	NR	mg/L	1.00	08/28/09 19:09	AMH	9H27048	200.7
Manganese	0.0056		0.0030	NR	mg/L	1.00	08/28/09 19:09	AMH	9H27048	200.7
<u>Metals (ICP)</u>										
Si	2130		500	50.0	ug/L	1.00	09/11/09 15:54	NP	31040	6010B

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Work Order: RSH0748

Project: Semi-Annual GW Monitoring Project Number: GES Received: 08/25/09 Reported: 09/15/09 13:44

#### Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
AP-MW-1B	RSH0748-01	Water	08/25/09 09:15	08/25/09 15:55	
AP-MW-2B	RSH0748-02	Water	08/25/09 10:20	08/25/09 15:55	
AP-MW-3B	RSH0748-03	Water	08/25/09 10:55	08/25/09 15:55	
AP-MW-4B	RSH0748-04	Water	08/25/09 11:10	08/25/09 15:55	
AP-MW-5B	RSH0748-05	Water	08/25/09 11:25	08/25/09 15:55	
AP-MW-6B	RSH0748-06	Water	08/25/09 12:30	08/25/09 15:55	
AP-MW-7B	RSH0748-07	Water	08/25/09 14:00	08/25/09 15:55	
AP-MW-8B	RSH0748-08	Water	08/25/09 14:35	08/25/09 15:55	
AP-MW-DUP-01	RSH0748-09	Water	08/25/09	08/25/09 15:55	
AP-SS-01	RSH0748-10	Water	08/25/09 12:00	08/25/09 15:55	
AP-SS-02	RSH0748-11	Water	08/25/09 12:10	08/25/09 15:55	
AP-SS-03	RSH0748-12	Water	08/25/09 12:20	08/25/09 15:55	
AP-RB-01	RSH0748-13	Water	08/25/09 15:00	08/25/09 15:55	
AP-SWB-01	RSH0748-14	Water	08/25/09 15:10	08/25/09 15:55	

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Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

Analytical Report											
	Sample	Data				Dil	Date	Lab			
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method	
Sample ID: RSH0748-01	(AP-MW-1B -	Water)			Samp	Sampled: 08/25/09 09:15				9 15:55	
Total Metals by EPA 200	) Series Meth	lods									
Cadmium	ND		0.0010	NR	mg/L	1.00	08/28/09 17:20	AMH	9H27048	200.7	
Chromium	ND		0.0040	NR	mg/L	1.00	08/28/09 17:20	AMH	9H27048	200.7	
Iron	0.119		0.0500	NR	mg/L	1.00	08/28/09 17:20	AMH	9H27048	200.7	
Lead	ND		0.0050	NR	mg/L	1.00	08/28/09 17:20	AMH	9H27048	200.7	
Magnesium	65.5		0.200	NR	mg/L	1.00	08/28/09 17:20	AMH	9H27048	200.7	
Manganese	0.808		0.0030	NR	mg/L	1.00	08/28/09 17:20	AMH	9H27048	200.7	
Selenium	ND		0.0150	NR	mg/L	1.00	08/28/09 17:20	AMH	9H27048	200.7	
Sodium	113		1.0	NR	mg/L	1.00	08/28/09 17:20	AMH	9H27048	200.7	
Thallium	ND		0.0200	NR	mg/L	1.00	08/28/09 17:20	AMH	9H27048	200.7	
Zinc	0.627		0.0100	NR	mg/L	1.00	08/28/09 17:20	AMH	9H27048	200.7	
General Chemistry Para	meters										
Ammonia as N	ND		9.20	NR	mg/L as N	1.00	08/26/09 13:21	RMM	9H26029	350.1	
Chromium, Hexavalent	ND		11.0	NR	ug/L	1.00	08/25/09 22:47	JFR	9H25066	7196A	
Phenolics, Total Recoverable	ND		8.0	NR	ug/L	1.00	09/04/09 09:46	JMM	9103003	420.4	
Anions by EPA Method 300.0											
Sulfate	238	D08	10.0	NR	mg/L	5.00	09/11/09 20:48	BWM	9114029	300	
Metals (ICP)											
Si	6990		2500	250	ug/L	5.00	09/09/09 16:36	NP	30912	6010B	

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Received: 08/25/09 Reported: 09/15/09 13:44

			Ar	nalytical	Report						
	Sample	Data				Dil	Date	Lab			
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method	
Sample ID: RSH0748-02	(AP-MW-2B -	Water)			Samp	led: 08/	25/09 10:20	Recy	Recvd: 08/25/09 15:55		
Total Metals by EPA 200	Series Meth	ods									
Cadmium	ND		0.0010	NR	mg/L	1.00	08/28/09 17:25	AMH	9H27048	200.7	
Chromium	0.777		0.0040	NR	mg/L	1.00	08/28/09 17:25	AMH	9H27048	200.7	
Iron	ND		0.0500	NR	mg/L	1.00	08/28/09 17:25	AMH	9H27048	200.7	
Lead	ND		0.0050	NR	mg/L	1.00	08/28/09 17:25	AMH	9H27048	200.7	
Magnesium	ND		0.200	NR	mg/L	1.00	08/28/09 17:25	AMH	9H27048	200.7	
Manganese	ND		0.0030	NR	mg/L	1.00	08/28/09 17:25	AMH	9H27048	200.7	
Selenium	ND		0.0150	NR	mg/L	1.00	08/28/09 17:25	AMH	9H27048	200.7	
Sodium	32.3		1.0	NR	mg/L	1.00	08/28/09 17:25	AMH	9H27048	200.7	
Thallium	ND		0.0200	NR	mg/L	1.00	08/28/09 17:25	AMH	9H27048	200.7	
Zinc	ND		0.0100	NR	mg/L	1.00	08/28/09 17:25	AMH	9H27048	200.7	
General Chemistry Para	meters										
Ammonia as N	ND		9.20	NR	mg/L as N	1.00	08/26/09 13:22	RMM	9H26029	350.1	
Chromium, Hexavalent	233		11.0	NR	ug/L	1.00	08/25/09 22:47	JFR	9H25066	7196A	
Phenolics, Total	ND		8.0	NR	ug/L	1.00	09/04/09 09:46	JMM	9103003	420.4	
Recoverable											
Anions by EPA Method	<u>300.0</u>										
Sulfate	22.0		10.0	NR	mg/L	1.00	09/11/09 20:58	BWM	9114029	300	
Metals (ICP)											
Si	395	J	500	50.0	ug/L	1.00	09/09/09 18:56	NP	30912	6010B	

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

Analytical Report											
	Sample	Data				Dil	Date	Lab			
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method	
Sample ID: RSH0748-03	(AP-MW-3B -	Water)			Sampled: 08/25/09 10:55			Recvd: 08/25/09 15:55			
Total Metals by EPA 200	) Series Meth	lods									
Cadmium	ND		0.0010	NR	mg/L	1.00	08/28/09 17:30	AMH	9H27048	200.7	
Chromium	ND		0.0040	NR	mg/L	1.00	08/28/09 17:30	AMH	9H27048	200.7	
Iron	ND		0.0500	NR	mg/L	1.00	08/28/09 17:30	AMH	9H27048	200.7	
Lead	ND		0.0050	NR	mg/L	1.00	08/28/09 17:30	AMH	9H27048	200.7	
Magnesium	8.60		0.200	NR	mg/L	1.00	08/28/09 17:30	AMH	9H27048	200.7	
Manganese	0.0117		0.0030	NR	mg/L	1.00	08/28/09 17:30	AMH	9H27048	200.7	
Selenium	ND		0.0150	NR	mg/L	1.00	08/28/09 17:30	AMH	9H27048	200.7	
Sodium	52.8		1.0	NR	mg/L	1.00	08/28/09 17:30	AMH	9H27048	200.7	
Thallium	ND		0.0200	NR	mg/L	1.00	08/28/09 17:30	AMH	9H27048	200.7	
Zinc	ND		0.0100	NR	mg/L	1.00	08/28/09 17:30	AMH	9H27048	200.7	
General Chemistry Para	meters										
Ammonia as N	ND		9.20	NR	mg/L as N	1.00	08/26/09 13:23	RMM	9H26029	350.1	
Chromium, Hexavalent	ND		11.0	NR	ug/L	1.00	08/25/09 22:47	JFR	9H25066	7196A	
Phenolics, Total	ND		8.0	NR	ug/L	1.00	09/04/09 09:46	JMM	9103003	420.4	
Recoverable					Ū						
Anions by EPA Method	<u>300.0</u>										
Sulfate	67.2		10.0	NR	mg/L	1.00	09/11/09 21:08	BWM	9114029	300	
Metals (ICP)											
Si	6510		2500	250	ug/L	5.00	09/09/09 18:37	NP	30958	6010B	

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

			Ar	nalytical	Report					
	Sample	Data				Dil	Date	Lab		
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method
Sample ID: RSH0748-04	(AP-MW-4B -	Water)			Samp	led: 08/	25/09 11:10	Recvd: 08/25/09 15:55		
Total Metals by EPA 200	Series Meth	<u>iods</u>								
Cadmium	ND		0.0010	NR	mg/L	1.00	08/28/09 18:07	AMH	9H27048	200.7
Chromium	0.257		0.0040	NR	mg/L	1.00	08/28/09 18:07	AMH	9H27048	200.7
Iron	0.676		0.0500	NR	mg/L	1.00	08/28/09 18:07	AMH	9H27048	200.7
Lead	ND		0.0050	NR	mg/L	1.00	08/28/09 18:07	AMH	9H27048	200.7
Magnesium	51.1		0.200	NR	mg/L	1.00	08/28/09 18:07	AMH	9H27048	200.7
Manganese	0.0108		0.0030	NR	mg/L	1.00	08/28/09 18:07	AMH	9H27048	200.7
Selenium	ND		0.0150	NR	mg/L	1.00	08/28/09 18:07	AMH	9H27048	200.7
Sodium	92.8		1.0	NR	mg/L	1.00	08/28/09 18:07	AMH	9H27048	200.7
Thallium	ND		0.0200	NR	mg/L	1.00	08/28/09 18:07	AMH	9H27048	200.7
Zinc	0.0132		0.0100	NR	mg/L	1.00	08/28/09 18:07	AMH	9H27048	200.7
General Chemistry Para	meters									
Ammonia as N	ND		9.20	NR	mg/L as N	1.00	08/26/09 13:28	RMM	9H26031	350.1
Chromium, Hexavalent	212		11.0	NR	ug/L	1.00	08/25/09 22:47	JFR	9H25066	7196A
Phenolics, Total	ND		8.0	NR	ug/L	1.00	09/04/09 09:46	JMM	9103003	420.4
Recoverable					Ū					
Anions by EPA Method 300.0										
Sulfate	156	D08	10.0	NR	mg/L	5.00	09/11/09 21:18	BWM	9114029	300
Metals (ICP)										
Si	11400		2500	250	ug/L	5.00	09/09/09 18:43	NP	30958	6010B

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

			Ar	nalytical	Report					
	Sample	Data				Dil	Date	Lab		
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method
Sample ID: RSH0748-05	(AP-MW-5B -	·Water)			Samp	led: 08/	25/09 11:25	Recv	/d: 08/25/0	9 15:55
Total Metals by EPA 200	Series Meth	<u>iods</u>								
Cadmium	ND		0.0010	NR	mg/L	1.00	08/28/09 18:12	AMH	9H27048	200.7
Chromium	ND		0.0040	NR	mg/L	1.00	08/28/09 18:12	AMH	9H27048	200.7
Iron	0.226		0.0500	NR	mg/L	1.00	08/28/09 18:12	AMH	9H27048	200.7
Lead	ND		0.0050	NR	mg/L	1.00	08/28/09 18:12	AMH	9H27048	200.7
Magnesium	85.0		0.200	NR	mg/L	1.00	08/28/09 18:12	AMH	9H27048	200.7
Manganese	0.0081		0.0030	NR	mg/L	1.00	08/28/09 18:12	AMH	9H27048	200.7
Selenium	ND		0.0150	NR	mg/L	1.00	08/28/09 18:12	AMH	9H27048	200.7
Sodium	27.2		1.0	NR	mg/L	1.00	08/28/09 18:12	AMH	9H27048	200.7
Thallium	ND		0.0200	NR	mg/L	1.00	08/28/09 18:12	AMH	9H27048	200.7
Zinc	0.0347		0.0100	NR	mg/L	1.00	08/28/09 18:12	AMH	9H27048	200.7
General Chemistry Para	meters									
Ammonia as N	ND		9.20	NR	mg/L as N	1.00	08/26/09 13:29	RMM	9H26031	350.1
Chromium, Hexavalent	ND		11.0	NR	ug/L	1.00	08/25/09 22:47	JFR	9H25066	7196A
Phenolics, Total	ND		8.0	NR	ug/L	1.00	09/04/09 09:46	JMM	9103003	420.4
Recoverable					Ū					
Anions by EPA Method	<u>300.0</u>									
Sulfate	145	D08	10.0	NR	mg/L	2.00	09/11/09 21:58	BWM	9114029	300
Metals (ICP)										
Si	10100		2500	250	ug/L	5.00	09/09/09 18:49	NP	30958	6010B

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

			Ar	nalytical	Report					
	Sample	Data				Dil	Date	Lab		
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method
Sample ID: RSH0748-06	(AP-MW-6B -	Water)			Samp	led: 08/	/25/09 12:30	Recy	/d: 08/25/0	9 15:55
Total Metals by EPA 200	) Series Meth	ods								
Cadmium	ND		0.0010	NR	mg/L	1.00	08/28/09 18:17	AMH	9H27048	200.7
Chromium	ND		0.0040	NR	mg/L	1.00	08/28/09 18:17	AMH	9H27048	200.7
Iron	0.415		0.0500	NR	mg/L	1.00	08/28/09 18:17	AMH	9H27048	200.7
Lead	ND		0.0050	NR	mg/L	1.00	08/28/09 18:17	AMH	9H27048	200.7
Magnesium	75.7		0.200	NR	mg/L	1.00	08/28/09 18:17	AMH	9H27048	200.7
Manganese	0.156		0.0030	NR	mg/L	1.00	08/28/09 18:17	AMH	9H27048	200.7
Selenium	ND		0.0150	NR	mg/L	1.00	08/28/09 18:17	AMH	9H27048	200.7
Sodium	72.6		1.0	NR	mg/L	1.00	08/28/09 18:17	AMH	9H27048	200.7
Thallium	ND		0.0200	NR	mg/L	1.00	08/28/09 18:17	AMH	9H27048	200.7
Zinc	ND		0.0100	NR	mg/L	1.00	08/28/09 18:17	AMH	9H27048	200.7
General Chemistry Para	meters									
Ammonia as N	ND		9.20	NR	mg/L as N	1.00	08/26/09 13:30	RMM	9H26031	350.1
Chromium, Hexavalent	ND		11.0	NR	ug/L	1.00	08/25/09 22:47	JFR	9H25066	7196A
Phenolics, Total Recoverable	ND		8.0	NR	ug/L	1.00	09/04/09 09:54	JMM	9103003	420.4
Anions by EPA Method	<u>300.0</u>									
Sulfate	350	D08	10.0	NR	mg/L	5.00	09/11/09 22:09	BWM	9114029	300
Metals (ICP)										
Si	5860		500	50.0	ug/L	1.00	09/11/09 14:48	NP	31040	6010B

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

			Ar	nalytical	Report					
	Sample	Data				Dil	Date	Lab		
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method
Sample ID: RSH0748-07	Water)			Samp	led: 08/	25/09 14:00	Recv	/d: 08/25/0	9 15:55	
Total Metals by EPA 200	Series Meth	lods								
Cadmium	ND		0.0010	NR	mg/L	1.00	08/28/09 18:22	AMH	9H27048	200.7
Chromium	0.0040		0.0040	NR	mg/L	1.00	08/28/09 18:22	AMH	9H27048	200.7
Iron	0.0809		0.0500	NR	mg/L	1.00	08/28/09 18:22	AMH	9H27048	200.7
Lead	ND		0.0050	NR	mg/L	1.00	08/28/09 18:22	AMH	9H27048	200.7
Magnesium	10.0		0.200	NR	mg/L	1.00	08/28/09 18:22	AMH	9H27048	200.7
Manganese	0.0309		0.0030	NR	mg/L	1.00	08/28/09 18:22	AMH	9H27048	200.7
Selenium	ND		0.0150	NR	mg/L	1.00	08/28/09 18:22	AMH	9H27048	200.7
Sodium	57.5		1.0	NR	mg/L	1.00	08/28/09 18:22	AMH	9H27048	200.7
Thallium	ND		0.0200	NR	mg/L	1.00	08/28/09 18:22	AMH	9H27048	200.7
Zinc	ND		0.0100	NR	mg/L	1.00	08/28/09 18:22	AMH	9H27048	200.7
General Chemistry Para	meters									
Ammonia as N	ND		9.20	NR	mg/L as N	1.00	08/26/09 13:31	RMM	9H26031	350.1
Chromium, Hexavalent	ND		11.0	NR	ug/L	1.00	08/25/09 22:47	JFR	9H25066	7196A
Phenolics, Total Recoverable	ND		8.0	NR	ug/L	1.00	09/04/09 09:54	JMM	9103003	420.4
Anions by EPA Method	<u>300.0</u>									
Sulfate	37.2		10.0	NR	mg/L	1.00	09/11/09 22:19	BWM	9114029	300
Metals (ICP)										
Si	4710		500	50.0	ug/L	1.00	09/11/09 15:03	NP	31040	6010B

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

			Ar	nalytical	Report					
	Sample	Data				Dil	Date	Lab		
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method
Sample ID: RSH0748-08			Samp	led: 08/	25/09 14:35	Recvd: 08/25/09 15:55				
Total Metals by EPA 200	) Series Meth	ods								
Cadmium	ND		0.0010	NR	mg/L	1.00	08/28/09 18:27	AMH	9H27048	200.7
Chromium	0.173		0.0040	NR	mg/L	1.00	08/28/09 18:27	AMH	9H27048	200.7
Iron	0.311		0.0500	NR	mg/L	1.00	08/28/09 18:27	AMH	9H27048	200.7
Lead	ND		0.0050	NR	mg/L	1.00	08/28/09 18:27	AMH	9H27048	200.7
Magnesium	71.1		0.200	NR	mg/L	1.00	08/28/09 18:27	AMH	9H27048	200.7
Manganese	0.134		0.0030	NR	mg/L	1.00	08/28/09 18:27	AMH	9H27048	200.7
Selenium	0.0401		0.0150	NR	mg/L	1.00	08/28/09 18:27	AMH	9H27048	200.7
Sodium	87.8		1.0	NR	mg/L	1.00	08/28/09 18:27	AMH	9H27048	200.7
Thallium	ND		0.0200	NR	mg/L	1.00	08/28/09 18:27	AMH	9H27048	200.7
Zinc	0.0845		0.0100	NR	mg/L	1.00	08/28/09 18:27	AMH	9H27048	200.7
General Chemistry Para	meters									
Ammonia as N	ND		9.20	NR	mg/L as N	1.00	08/26/09 13:32	RMM	9H26031	350.1
Chromium, Hexavalent	ND		11.0	NR	ug/L	1.00	08/25/09 22:47	JFR	9H25066	7196A
Phenolics, Total Recoverable	ND		8.0	NR	ug/L	1.00	09/04/09 09:54	JMM	9103003	420.4
Anions by EPA Method	<u>300.0</u>									
Sulfate	237	D08	10.0	NR	mg/L	5.00	09/11/09 22:29	BWM	9114029	300
Metals (ICP)										
Si	7510		500	50.0	ug/L	1.00	09/11/09 15:08	NP	31040	6010B

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

			Ar	nalytical	Report					
	Sample	Data				Dil	Date	Lab		
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method
Sample ID: RSH0748-09	(AP-MW-DUF	P-01 - Water)			Samp	led: 08/	25/09	Recy	/d: 08/25/0	9 15:55
Total Metals by EPA 200	) Series Meth	lods								
Cadmium	ND		0.0010	NR	mg/L	1.00	08/28/09 18:32	AMH	9H27048	200.7
Chromium	ND		0.0040	NR	mg/L	1.00	08/28/09 18:32	AMH	9H27048	200.7
Iron	0.123		0.0500	NR	mg/L	1.00	08/28/09 18:32	AMH	9H27048	200.7
Lead	ND		0.0050	NR	mg/L	1.00	08/28/09 18:32	AMH	9H27048	200.7
Magnesium	64.4		0.200	NR	mg/L	1.00	08/28/09 18:32	AMH	9H27048	200.7
Manganese	0.815		0.0030	NR	mg/L	1.00	08/28/09 18:32	AMH	9H27048	200.7
Selenium	ND		0.0150	NR	mg/L	1.00	08/28/09 18:32	AMH	9H27048	200.7
Sodium	111		1.0	NR	mg/L	1.00	08/28/09 18:32	AMH	9H27048	200.7
Thallium	ND		0.0200	NR	mg/L	1.00	08/28/09 18:32	AMH	9H27048	200.7
Zinc	0.627		0.0100	NR	mg/L	1.00	08/28/09 18:32	AMH	9H27048	200.7
General Chemistry Para	meters									
Ammonia as N	ND		9.20	NR	mg/L as N	1.00	08/26/09 13:33	RMM	9H26031	350.1
Chromium, Hexavalent	ND		11.0	NR	ug/L	1.00	08/25/09 22:47	JFR	9H25066	7196A
Phenolics, Total Recoverable	ND		8.0	NR	ug/L	1.00	09/04/09 09:54	JMM	9103003	420.4
Anions by EPA Method	<u>300.0</u>									
Sulfate	234	D08	10.0	NR	mg/L	5.00	09/11/09 22:39	BWM	9114029	300
Metals (ICP)										
Si	6600		500	50.0	ug/L	1.00	09/11/09 15:14	NP	31040	6010B

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

			Ar	nalytical	Report					
	Sample	Data				Dil	Date	Lab		
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method
Sample ID: RSH0748-10 (	Nater)			Samp	led: 08/	25/09 12:00	Recy	/d: 08/25/0	9 15:55	
Total Metals by EPA 200	Series Meth	lods								
Cadmium	ND		0.0010	NR	mg/L	1.00	08/28/09 18:38	AMH	9H27048	200.7
Chromium	ND		0.0040	NR	mg/L	1.00	08/28/09 18:38	AMH	9H27048	200.7
Iron	0.0733		0.0500	NR	mg/L	1.00	08/28/09 18:38	AMH	9H27048	200.7
Lead	ND		0.0050	NR	mg/L	1.00	08/28/09 18:38	AMH	9H27048	200.7
Magnesium	1.47		0.200	NR	mg/L	1.00	08/28/09 18:38	AMH	9H27048	200.7
Manganese	0.0072		0.0030	NR	mg/L	1.00	08/28/09 18:38	AMH	9H27048	200.7
Selenium	ND		0.0150	NR	mg/L	1.00	08/28/09 18:38	AMH	9H27048	200.7
Sodium	65.1		1.0	NR	mg/L	1.00	08/28/09 18:38	AMH	9H27048	200.7
Thallium	ND		0.0200	NR	mg/L	1.00	08/28/09 18:38	AMH	9H27048	200.7
Zinc	ND		0.0100	NR	mg/L	1.00	08/28/09 18:38	AMH	9H27048	200.7
General Chemistry Para	meters									
Ammonia as N	ND		9.20	NR	mg/L as N	1.00	08/26/09 13:34	RMM	9H26031	350.1
Chromium, Hexavalent	ND		11.0	NR	ug/L	1.00	08/25/09 22:47	JFR	9H25066	7196A
Phenolics, Total Recoverable	ND		8.0	NR	ug/L	1.00	09/04/09 09:37	JMM	9103003	420.4
Anions by EPA Method	<u>300.0</u>									
Sulfate	ND		10.0	NR	mg/L	1.00	09/11/09 22:49	BWM	9114029	300
<u>Metals (ICP)</u>										
Si	1100		500	50.0	ug/L	1.00	09/11/09 15:20	NP	31040	6010B

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

			Ar	nalytical	Report					
	Sample	Data				Dil	Date	Lab		
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method
Sample ID: RSH0748-11 (	Nater)			Samp	led: 08/	25/09 12:10	Recv	/d: 08/25/0	9 15:55	
<u>Total Metals by EPA 200</u>	Series Meth	<u>iods</u>								
Cadmium	ND		0.0010	NR	mg/L	1.00	08/28/09 18:43	AMH	9H27048	200.7
Chromium	ND		0.0040	NR	mg/L	1.00	08/28/09 18:43	AMH	9H27048	200.7
Iron	0.153		0.0500	NR	mg/L	1.00	08/28/09 18:43	AMH	9H27048	200.7
Lead	ND		0.0050	NR	mg/L	1.00	08/28/09 18:43	AMH	9H27048	200.7
Magnesium	5.02		0.200	NR	mg/L	1.00	08/28/09 18:43	AMH	9H27048	200.7
Manganese	0.0658		0.0030	NR	mg/L	1.00	08/28/09 18:43	AMH	9H27048	200.7
Selenium	ND		0.0150	NR	mg/L	1.00	08/28/09 18:43	AMH	9H27048	200.7
Sodium	58.5		1.0	NR	mg/L	1.00	08/28/09 18:43	AMH	9H27048	200.7
Thallium	ND		0.0200	NR	mg/L	1.00	08/28/09 18:43	AMH	9H27048	200.7
Zinc	ND		0.0100	NR	mg/L	1.00	08/28/09 18:43	AMH	9H27048	200.7
General Chemistry Para	meters									
Ammonia as N	ND		9.20	NR	mg/L as N	1.00	08/26/09 13:35	RMM	9H26031	350.1
Chromium, Hexavalent	ND		11.0	NR	ug/L	1.00	08/25/09 22:47	JFR	9H25066	7196A
Phenolics, Total Recoverable	ND		8.0	NR	ug/L	1.00	09/04/09 09:54	JMM	9103004	420.4
Anions by EPA Method	<u>300.0</u>									
Sulfate	12.5		10.0	NR	mg/L	1.00	09/05/09 22:28	BWM	9108056	300
Metals (ICP)										
Si	2600		500	50.0	ug/L	1.00	09/11/09 15:26	NP	31040	6010B

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

			Ar	nalytical	Report					
	Sample	Data				Dil	Date	Lab		
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method
Sample ID: RSH0748-12	Water)			Samp	led: 08/	25/09 12:20	Recy	/d: 08/25/0	9 15:55	
Total Metals by EPA 200	Series Meth	lods								
Cadmium	ND		0.0010	NR	mg/L	1.00	08/28/09 18:48	AMH	9H27048	200.7
Chromium	ND		0.0040	NR	mg/L	1.00	08/28/09 18:48	AMH	9H27048	200.7
Iron	ND		0.0500	NR	mg/L	1.00	08/28/09 18:48	AMH	9H27048	200.7
Lead	ND		0.0050	NR	mg/L	1.00	08/28/09 18:48	AMH	9H27048	200.7
Magnesium	1.16		0.200	NR	mg/L	1.00	08/28/09 18:48	AMH	9H27048	200.7
Manganese	ND		0.0030	NR	mg/L	1.00	08/28/09 18:48	AMH	9H27048	200.7
Selenium	ND		0.0150	NR	mg/L	1.00	08/28/09 18:48	AMH	9H27048	200.7
Sodium	64.7		1.0	NR	mg/L	1.00	08/28/09 18:48	AMH	9H27048	200.7
Thallium	ND		0.0200	NR	mg/L	1.00	08/28/09 18:48	AMH	9H27048	200.7
Zinc	ND		0.0100	NR	mg/L	1.00	08/28/09 18:48	AMH	9H27048	200.7
General Chemistry Para	meters									
Ammonia as N	ND		9.20	NR	mg/L as N	1.00	08/26/09 13:36	RMM	9H26031	350.1
Chromium, Hexavalent	ND		11.0	NR	ug/L	1.00	08/25/09 22:47	JFR	9H25066	7196A
Phenolics, Total Recoverable	ND		8.0	NR	ug/L	1.00	09/04/09 09:54	JMM	9103004	420.4
Anions by EPA Method	<u>300.0</u>									
Sulfate	ND		10.0	NR	mg/L	1.00	09/05/09 22:38	BWM	9108056	300
Metals (ICP)										
Si	1110		500	50.0	ug/L	1.00	09/11/09 15:43	NP	31040	6010B

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

			Ar	nalytical	Report					
	Sample	Data				Dil	Date	Lab		
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method
Sample ID: RSH0748-13	Water)			Samp	led: 08/	25/09 15:00	Recv	/d: 08/25/0	9 15:55	
Total Metals by EPA 200	) Series Meth	<u>nods</u>								
Cadmium	ND		0.0010	NR	mg/L	1.00	08/28/09 19:04	AMH	9H27048	200.7
Chromium	ND		0.0040	NR	mg/L	1.00	08/28/09 19:04	AMH	9H27048	200.7
Iron	ND		0.0500	NR	mg/L	1.00	08/28/09 19:04	AMH	9H27048	200.7
Lead	ND		0.0050	NR	mg/L	1.00	08/28/09 19:04	AMH	9H27048	200.7
Magnesium	0.954		0.200	NR	mg/L	1.00	08/28/09 19:04	AMH	9H27048	200.7
Manganese	0.0053		0.0030	NR	mg/L	1.00	08/28/09 19:04	AMH	9H27048	200.7
Selenium	ND		0.0150	NR	mg/L	1.00	08/28/09 19:04	AMH	9H27048	200.7
Sodium	ND		1.0	NR	mg/L	1.00	08/28/09 19:04	AMH	9H27048	200.7
Thallium	ND		0.0200	NR	mg/L	1.00	08/28/09 19:04	AMH	9H27048	200.7
Zinc	0.0112		0.0100	NR	mg/L	1.00	08/28/09 19:04	AMH	9H27048	200.7
General Chemistry Para	meters									
Ammonia as N	ND		9.20	NR	mg/L as N	1.00	08/26/09 13:37	RMM	9H26031	350.1
Chromium, Hexavalent	ND		11.0	NR	ug/L	1.00	08/25/09 22:47	JFR	9H25066	7196A
Phenolics, Total Recoverable	ND		8.0	NR	ug/L	1.00	09/04/09 10:03	JMM	9103004	420.4
Anions by EPA Method	<u>300.0</u>									
Sulfate	ND		10.0	NR	mg/L	1.00	09/05/09 22:48	BWM	9108056	300
Metals (ICP)										
Si	2160		500	50.0	ug/L	1.00	09/11/09 15:49	NP	31040	6010B

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

			Ar	nalytical	Report					
	Sample	Data				Dil	Date	Lab		
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method
Sample ID: RSH0748-14 (	- Water)			Samp	led: 08/	/25/09 15:10	Recy	/d: 08/25/0	9 15:55	
Total Metals by EPA 200	Series Meth	ods								
Cadmium	ND		0.0010	NR	mg/L	1.00	08/28/09 19:09	AMH	9H27048	200.7
Chromium	ND		0.0040	NR	mg/L	1.00	08/28/09 19:09	AMH	9H27048	200.7
Iron	ND		0.0500	NR	mg/L	1.00	08/28/09 19:09	AMH	9H27048	200.7
Lead	ND		0.0050	NR	mg/L	1.00	08/28/09 19:09	AMH	9H27048	200.7
Magnesium	0.966		0.200	NR	mg/L	1.00	08/28/09 19:09	AMH	9H27048	200.7
Manganese	0.0056		0.0030	NR	mg/L	1.00	08/28/09 19:09	AMH	9H27048	200.7
Selenium	ND		0.0150	NR	mg/L	1.00	08/28/09 19:09	AMH	9H27048	200.7
Sodium	ND		1.0	NR	mg/L	1.00	08/28/09 19:09	AMH	9H27048	200.7
Thallium	ND		0.0200	NR	mg/L	1.00	08/28/09 19:09	AMH	9H27048	200.7
Zinc	ND		0.0100	NR	mg/L	1.00	08/28/09 19:09	AMH	9H27048	200.7
General Chemistry Para	meters									
Ammonia as N	ND		9.20	NR	mg/L as N	1.00	08/26/09 13:40	RMM	9H26031	350.1
Chromium, Hexavalent	ND		11.0	NR	ug/L	1.00	08/25/09 22:47	JFR	9H25066	7196A
Phenolics, Total Recoverable	ND		8.0	NR	ug/L	1.00	09/04/09 10:03	JMM	9103004	420.4
Anions by EPA Method	<u>300.0</u>									
Sulfate	ND		10.0	NR	mg/L	1.00	09/05/09 22:59	BWM	9108056	300
Metals (ICP)										
Si	2130		500	50.0	ug/L	1.00	09/11/09 15:54	NP	31040	6010B

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

Project: Semi-Annual GW Monitoring Project Number: GES

			SAMPLE	EEXTR	ACTION	DATA			
Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
Anions by EPA Method 300.0							·		
300	9108056	RSH0748-11	5.00	mL	5.00	mL	09/05/09 22:08	BWM	Direct Injection - Anions
300	9108056	RSH0748-12	5.00	mL	5.00	mL	09/05/09 22:08	BWM	Direct Injection - Anions
300	9108056	RSH0748-13	5.00	mL	5.00	mL	09/05/09 22:08	BWM	Direct Injection - Anions
300	9108056	RSH0748-14	5.00	mL	5.00	mL	09/05/09 22:08	BWM	Direct Injection - Anions
300	9114029	RSH0748-01	5.00	mL	5.00	mL	09/11/09 19:37	BWM	Direct Injection - Anions
300	9114029	RSH0748-02	5.00	mL	5.00	mL	09/11/09 19:37	BWM	Direct Injection - Anions
300	9114029	RSH0748-03	5.00	mL	5.00	mL	09/11/09 19:37	BWM	Direct Injection - Anions
300	9114029	RSH0748-04	5.00	mL	5.00	mL	09/11/09 19:37	BWM	Direct Injection - Anions
300	9114029	RSH0748-05	5.00	mL	5.00	mL	09/11/09 19:37	BWM	Direct Injection - Anions
300	9114029	RSH0748-06	5.00	mL	5.00	mL	09/11/09 19:37	BWM	Direct Injection - Anions
300	9114029	RSH0748-07	5.00	mL	5.00	mL	09/11/09 19:37	BWM	Direct Injection - Anions
300	9114029	RSH0748-08	5.00	mL	5.00	mL	09/11/09 19:37	BWM	Direct Injection - Anions
300	9114029	RSH0748-09	5.00	mL	5.00	mL	09/11/09 19:37	BWM	Direct Injection - Anions
300	9114029	RSH0748-10	5.00	mL	5.00	mL	09/11/09 19:37	BWM	Direct Injection - Anions
General Chemistry Parameters									
350.1	9H26029	RSH0748-01	5.00	mL	5.00	mL	08/26/09 09:50	RMM	Ammonia
350.1	9H26029	RSH0748-02	5.00	mL	5.00	mL	08/26/09 09:50	RMM	Ammonia
350.1	9H26029	RSH0748-03	5.00	mL	5.00	mL	08/26/09 09:50	RMM	Ammonia
350.1	9H26031	RSH0748-04	5.00	mL	5.00	mL	08/26/09 09:52	RMM	Ammonia
350.1	9H26031	RSH0748-05	5.00	mL	5.00	mL	08/26/09 09:52	RMM	Ammonia
350.1	9H26031	RSH0748-06	5.00	mL	5.00	mL	08/26/09 09:52	RMM	Ammonia
350.1	9H26031	RSH0748-07	5.00	mL	5.00	mL	08/26/09 09:52	RMM	Ammonia
350.1	9H26031	RSH0748-08	5.00	mL	5.00	mL	08/26/09 09:52	RMM	Ammonia
350.1	9H26031	RSH0748-09	5.00	mL	5.00	mL	08/26/09 09:52	RMM	Ammonia
350.1	9H26031	RSH0748-10	5.00	mL	5.00	mL	08/26/09 09:52	RMM	Ammonia
350.1	9H26031	RSH0748-11	5.00	mL	5.00	mL	08/26/09 09:52	RMM	Ammonia
350.1	9H26031	RSH0748-12	5.00	mL	5.00	mL	08/26/09 09:52	RMM	Ammonia
350.1	9H26031	RSH0748-13	5.00	mL	5.00	mL	08/26/09 09:52	RMM	Ammonia
350.1	9H26031	RSH0748-14	5.00	mL	5.00	mL	08/26/09 09:52	RMM	Ammonia
420.4	9103003	RSH0748-01	50.00	mL	50.00	mL	09/03/09 00:36	JME	TRP Distillation
420.4	9103003	RSH0748-02	50.00	mL	50.00	mL	09/03/09 00:36	JME	TRP Distillation
420.4	9103003	RSH0748-03	50.00	mL	50.00	mL	09/03/09 00:36	JME	TRP Distillation
420.4	9103003	RSH0748-04	50.00	mL	50.00	mL	09/03/09 00:36	JME	TRP Distillation
420.4	9103003	RSH0748-05	50.00	mL	50.00	mL	09/03/09 00:36	JME	TRP Distillation
420.4	9103003	RSH0748-06	50.00	mL	50.00	mL	09/03/09 00:36	JME	TRP Distillation
420.4	9103003	RSH0748-07	50.00	mL	50.00	mL	09/03/09 00:36	JME	TRP Distillation

#### TestAmerica Buffalo

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THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0748

Project: Semi-Annual GW Monitoring Project Number: GES Received: 08/25/09 Reported: 09/15/09 13:44

	SAMPLE EXTRACTION DATA													
Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method					
420.4	9103003	RSH0748-08	50.00	mL	50.00	mL	09/03/09 00:36	JME	TRP Distillation					
420.4	9103003	RSH0748-09	50.00	mL	50.00	mL	09/03/09 00:36	JME	TRP Distillation					
420.4	9103003	RSH0748-10	50.00	mL	50.00	mL	09/03/09 00:36	JME	TRP Distillation					
420.4	9103004	RSH0748-11	50.00	mL	50.00	mL	09/03/09 00:38	JME	TRP Distillation					
420.4	9103004	RSH0748-12	50.00	mL	50.00	mL	09/03/09 00:38	JME	TRP Distillation					
420.4	9103004	RSH0748-13	50.00	mL	50.00	mL	09/03/09 00:38	JME	TRP Distillation					
420.4	9103004	RSH0748-14	50.00	mL	50.00	mL	09/03/09 00:38	JME	TRP Distillation					
7196A	9H25066	RSH0748-01	25.00	mL	25.00	mL	08/25/09 21:00	JFR	Hex Digestion					
7196A	9H25066	RSH0748-02	25.00	mL	25.00	mL	08/25/09 21:00	JFR	Hex Digestion					
7196A	9H25066	RSH0748-03	25.00	mL	25.00	mL	08/25/09 21:00	JFR	Hex Digestion					
7196A	9H25066	RSH0748-04	25.00	mL	25.00	mL	08/25/09 21:00	JFR	Hex Digestion					
7196A	9H25066	RSH0748-05	25.00	mL	25.00	mL	08/25/09 21:00	JFR	Hex Digestion					
7196A	9H25066	RSH0748-06	25.00	mL	25.00	mL	08/25/09 21:00	JFR	Hex Digestion					
7196A	9H25066	RSH0748-07	25.00	mL	25.00	mL	08/25/09 21:00	JFR	Hex Digestion					
7196A	9H25066	RSH0748-08	25.00	mL	25.00	mL	08/25/09 21:00	JFR	Hex Digestion					
7196A	9H25066	RSH0748-09	25.00	mL	25.00	mL	08/25/09 21:00	JFR	Hex Digestion					
7196A	9H25066	RSH0748-10	25.00	mL	25.00	mL	08/25/09 21:00	JFR	Hex Digestion					
7196A	9H25066	RSH0748-11	25.00	mL	25.00	mL	08/25/09 21:00	JFR	Hex Digestion					
7196A	9H25066	RSH0748-12	25.00	mL	25.00	mL	08/25/09 21:00	JFR	Hex Digestion					
7196A	9H25066	RSH0748-13	25.00	mL	25.00	mL	08/25/09 21:00	JFR	Hex Digestion					
7196A	9H25066	RSH0748-14	25.00	mL	25.00	mL	08/25/09 21:00	JFR	Hex Digestion					
Total Metals by EPA 200 S	Series Methods													
200.7	9H27048	RSH0748-01	50.00	mL	50.00	mL	08/28/09 10:00	MLD	3005A					
200.7	9H27048	RSH0748-02	50.00	mL	50.00	mL	08/28/09 10:00	MLD	3005A					
200.7	9H27048	RSH0748-03	50.00	mL	50.00	mL	08/28/09 10:00	MLD	3005A					
200.7	9H27048	RSH0748-04	50.00	mL	50.00	mL	08/28/09 10:00	MLD	3005A					
200.7	9H27048	RSH0748-05	50.00	mL	50.00	mL	08/28/09 10:00	MLD	3005A					
200.7	9H27048	RSH0748-06	50.00	mL	50.00	mL	08/28/09 10:00	MLD	3005A					
200.7	9H27048	RSH0748-07	50.00	mL	50.00	mL	08/28/09 10:00	MLD	3005A					
200.7	9H27048	RSH0748-08	50.00	mL	50.00	mL	08/28/09 10:00	MLD	3005A					
200.7	9H27048	RSH0748-09	50.00	mL	50.00	mL	08/28/09 10:00	MLD	3005A					
200.7	9H27048	RSH0748-10	50.00	mL	50.00	mL	08/28/09 10:00	MLD	3005A					
200.7	9H27048	RSH0748-11	50.00	mL	50.00	mL	08/28/09 10:00	MLD	3005A					
200.7	9H27048	RSH0748-12	50.00	mL	50.00	mL	08/28/09 10:00	MLD	3005A					
200.7	9H27048	RSH0748-13	50.00	mL	50.00	mL	08/28/09 10:00	MLD	3005A					
200.7	9H27048	RSH0748-14	50.00	mL	50.00	mL	08/28/09 10:00	MLD	3005A					

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THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

Project: Semi-Annual GW Monitoring Project Number: GES

LABORATORY QC DATA												
	Source	Spike					%	% REC	%	RPD	Data	
Analyte	Result	Level	RL	MDL	Units	Result	REC	Limits	RPD	Limit	Qualifiers	
Total Metals by EPA 20	00 Series Met	hods										
Blank Analyzed: 08/28/	09 (Lab Num	nber:9H27	048-BLK1, E	Batch: 9H27048	3)							
Cadmium			0.0010	NR	mg/L	ND						
Chromium			0.0040	NR	mg/L	ND						
Iron			0.0500	NR	mg/L	ND						
Lead			0.0050	NR	mg/L	ND						
Magnesium			0.200	NR	mg/L	ND						
Manganese			0.0030	NR	mg/L	ND					В	
Selenium			0.0150	NR	mg/L	ND						
Sodium			1.0	NR	mg/L	ND						
Thallium			0.0200	NR	mg/L	ND						
Zinc			0.0100	NR	mg/L	ND						
LCS Analyzed: 08/28/0	9 (Lab Numb	oer:9H270	48-BS1. Bate	ch: 9H27048)								
Cadmium	,	0.200	0.0010	, NR	mg/L	0.202	101	85-115				
Chromium		0.200	0.0040	NR	mg/L	0.203	101	85-115				
Iron		10.0	0.0500	NR	mg/L	9.87	99	85-115				
Lead		0.200	0.0050	NR	mg/L	0.203	101	85-115				
Magnesium		10.0	0.200	NR	mg/L	10.3	103	85-115				
Manganese		0.200	0.0030	NR	mg/L	0.201	100	85-115				
Selenium		0.200	0.0150	NR	mg/L	0.200	100	85-115				
Sodium		10.0	1.0	NR	mg/L	10.3	103	85-115				
Thallium		0.200	0.0200	NR	mg/L	0.202	101	85-115				
Zinc		0.200	0.0100	NR	mg/L	0.199	100	85-115				
Matrix Spike Analyzed QC Source Sample: RSH074		ab Numbe	er:9H27048-N	/IS1, Batch: 9H	27048)							
Cadmium	ND	0.200	0.0010	NR	mg/L	0.204	102	70-130				
Chromium	ND	0.200	0.0040	NR	mg/L	0.203	102	70-130				
Iron	0.0246	10.0	0.0500	NR	mg/L	9.98	100	70-130				
Lead	ND	0.200	0.0050	NR	mg/L	0.202	101	70-130				
Magnesium	8.60	10.0	0.200	NR	mg/L	19.0	104	70-130				
Manganese	0.0117	0.200	0.0030	NR	mg/L	0.215	102	70-130				
Selenium	ND	0.200	0.0150	NR	mg/L	0.204	102	70-130				
Sodium	52.8	10.0	1.0	NR	mg/L	64.0	111	70-130				
Thallium	ND	0.200	0.0200	NR	mg/L	0.207	103	70-130				
Zinc	0.00323	0.200	0.0100	NR	mg/L	0.204	100	70-130				
Matrix Spike Dup Anal QC Source Sample: RSH074	-	9 (Lab Nເ	umber:9H27(	)48-MSD1, Bat	ch: 9H27048)							
Cadmium	ND	0.200	0.0010	NR	mg/L	0.203	102	70-130	0.3	20		
Chromium	ND	0.200	0.0040	NR	mg/L	0.203	102	70-130	0.02	20		
TestAmerica Buffalo												
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THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0748

Received: 08/25/09 Reported: 09/15/09 13:44

LABORATORY QC DATA														
Analyte	Source Result	Spike Level	RL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers				
Total Metals by EPA 200	<u>NLO</u>	Linits		Linin	Quaimers									
Matrix Spike Dup Analyze QC Source Sample: RSH0748-0														
Iron	0.0246	10.0	0.0500	NR	mg/L	9.97	99	70-130	0.08	20				
Lead	ND	0.200	0.0050	NR	mg/L	0.204	102	70-130	0.8	20				
Magnesium	8.60	10.0	0.200	NR	mg/L	19.1	105	70-130	0.5	20				
Manganese	0.0117	0.200	0.0030	NR	mg/L	0.215	102	70-130	0.2	20				
Selenium	ND	0.200	0.0150	NR	mg/L	0.198	99	70-130	3	20				
Sodium	52.8	10.0	1.0	NR	mg/L	65.1	122	70-130	2	20				
Thallium	ND	0.200	0.0200	NR	mg/L	0.207	104	70-130	0.1	20				
Zinc	0.00323	0.200	0.0100	NR	mg/L	0.203	100	70-130	0.7	20				

THE LEADER IN ENVIRONMENTAL TESTING

Work Order: RSH0748

Project: Semi-Annual GW Monitoring Project Number: GES

LABORATORY QC DATA													
	Source	Spike	DI.				%	% REC	%	RPD	Data		
Analyte	Result	Level	RL	MDL	Units	Result	REC	Limits	RPD	Limit	Qualifiers		
General Chemistry Paran	lieters												
Blank Analyzed: 08/25/09	(Lab Num	nber:9H250	)66-BLK1, E	Batch: 9H2506	6)								
Chromium, Hexavalent			11.0	NR	ug/L	ND							
LCS Analyzed: 08/25/09	(Lab Numb	er:9H2506	6-BS1, Bat	ch: 9H25066)									
Chromium, Hexavalent		50.0	10.0	NR	ug/L	48.6	97	85-115					
Duplicate Analyzed: 08/2 QC Source Sample: RSH0748-7		Number:9F	125066-DUF	P1, Batch: 9H2	5066)								
Chromium, Hexavalent	ND		10.0	NR	ug/L	ND				20			
Matrix Spike Analyzed: 0 QC Source Sample: RSH0748-	-	ab Number	::9H25066-N	/IS1, Batch: 9F	125066)								
Chromium, Hexavalent	ND	50.0	10.0	NR	ug/L	63.0	126	75-120			M7		
General Chemistry Paran	neters												
Blank Analyzed: 08/26/09	(Lab Num	nber:9H260	)29-BLK1, E	Batch: 9H2602	9)								
Ammonia as N	·		9.20	NR	, mg/L as N	ND							
LCS Analyzed: 08/26/09	(I ab Numb	er:9H2602	9-BS1, Bat	ch: 9H26029)									
Ammonia as N	(_us ::u:::	0.750	0.020	NR	mg/L as N	0.754	101	90-110					
Duplicate Analyzed: 08/20 QC Source Sample: RSH0748-0	-	Number:9F	126029-DUF	P1, Batch: 9H2	6029)								
Ammonia as N	0.565		0.020	NR	mg/L as N	0.563			0.5	20			
Matrix Spike Analyzed: 08 QC Source Sample: RSH0748-0		ab Number	:9H26029-N	/IS1, Batch: 9F	126029)								
Ammonia as N	0.565	0.200	0.020	NR	mg/L as N	0.779	107	54-150					
General Chemistry Paran	notore				Ū								
General Chemistry Paran	<u>lleters</u>												
Blank Analyzed: 08/26/09	(Lab Num	nber:9H260	)31-BLK1, E	Batch: 9H2603	1)								
Ammonia as N			9.20	NR	mg/L as N	ND							
LCS Analyzed: 08/26/09	(Lab Numb	er:9H2603	1-BS1, Bate	ch: 9H26031)									
Ammonia as N		0.750	0.020	NR	mg/L as N	0.751	100	90-110					
General Chemistry Paran	neters												
Blank Analyzed: 09/04/09	(Lab Num	nber:910300	03-BLK1, B	atch: 9103003)									
Phenolics, Total Recoverable			8.00	NR	ug/L	ND							
LCS Analyzed: 09/04/09	(Lab Numb	er:9103003	B-BS1, Batc	h: 9l03003)									
TestAmerica Buffalo													
10 Hazelwood Drive Am	herst NV	14228 tol 1	716_601_26	00 fax 716_60 <sup>,</sup>	1_7991								
TO TRAZERWOOD DIIVE AIII	ncist, Ní		10-031-20	JU 10X / 10-09	-/ 331								

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THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental Solutions, LLC 6 Gellatly Drive	Work Order: RSH0748		Received: Reported:	08/25/09 09/15/09	
Wappinger Falls, NY 12590	Project: Semi-Annual GW Monitoring Project Number: GES				
Source Spike		%	% REC %	RPD	Data

	Source	Spike					%	% REC	% RPD	Data				
Analyte	Result	Level	RL	MDL	Units	Result	REC	Limits	RPD Limit	Qualifiers				
General Chemistry Para	meters													
LCS Analyzed: 09/04/09	(Lab Numb	er:9103003	3-BS1, Batc	h: 9l03003)										
Phenolics, Total Recoverable		765	40.0	NR	ug/L	678	89	75-125		D08				
Duplicate Analyzed: 09/04/09 (Lab Number:9I03003-DUP1, Batch: 9I03003) QC Source Sample: RSH0748-08														
Phenolics, Total Recoverable	ND		8.00	NR	ug/L	ND			20					
Matrix Spike Analyzed: ( QC Source Sample: RSH0748	•	ab Numbei	r:9103003-M	S1, Batch: 9103	003)									
Phenolics, Total Recoverable	ND	100	8.00	NR	ug/L	ND		60-143		M8				
General Chemistry Para	<u>meters</u>													
Blank Analyzed: 09/04/0	9 (Lab Num	nber:91030	04-BLK1, B	atch: 9103004)										
Phenolics, Total Recoverable			8.00	NR	ug/L	ND								
LCS Analyzed: 09/04/09	(Lab Numb	oer:9103004	4-BS1, Batc	h: 9l03004)										
Phenolics, Total Recoverable		765	40.0	NR	ug/L	687	90	75-125		D08				

THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental Solutions, LLC 6 Gellatly Drive	Work Order: RSH0748	Received: 08/25/09 Reported: 09/15/09 13:44
Wappinger Falls, NY 12590		

	Source	Spike					%	% REC	% RPD	Data				
Analyte	Result	Level	RL	MDL	Units	Result	REC	Limits	RPD Limit	Qualifiers				
Anions by EPA Method 30														
Blank Analyzed: 09/05/09 (Lab Number:9I08056-BLK1, Batch: 9I08056)														
Sulfate			10.0	NR	mg/L	ND								
LCS Analyzed: 09/05/09 (	Lab Numb	er:910805	6-BS1, Batc	h: 9l08056)										
Sulfate		20.0	2.00	NR	mg/L	20.4	102	90-110						
Anions by EPA Method 30	00.0													
Blank Analyzed: 09/11/09	(Lab Num	nber:9 140	29-BLK1, B	atch: 9I14029)										
Sulfate			10.0	NR	mg/L	ND								
LCS Analyzed: 09/11/09 (	Lab Numb	er:9l1402	9-BS1, Batc	h: 9l14029)										
Sulfate		20.0	2.00	NR	mg/L	20.2	101	90-110						
Matrix Spike Analyzed: 09 QC Source Sample: RSH0748-0	•	ab Numbe	r:9l14029-M	S1, Batch: 9I14	4029)									
Sulfate	156	125	10.0	NR	mg/L	278	98	75-125		D08				

THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental Solutions, LLC 6 Gellatly Drive	Work Order: RSH0748	Received: 08/25/09 Reported: 09/15/09 13:44
Wappinger Falls, NY 12590		

	Source	Spike					%	% REC	% RPD	Data				
Analyte	Result	Level	RL	MDL	Units	Result	REC	Limits	<b>RPD</b> Limit	Qualifiers				
Metals (ICP)														
Blank Analyzed: 09/09/09 (Lab Number:220-31021-43, Batch: 30912)														
Si			500	50.0	ug/L	109		-		J				
<u>Metals (ICP)</u>														
Blank Analyzed: 09/09/09	(Lab Num	ber:220-31	021-73, Ba	atch: 30958)										
Si			500	50.0	ug/L	99.6		-		J				
<u>Metals (ICP)</u>														
Blank Analyzed: 09/11/09	(Lab Num	ber:220-31	107-42, Ba	atch: 31040)										
Si			500	50.0	ug/L	75.3		-		J				

.

		Chain of Custody Number	Page 2. of 2		Second Party	conditions of Receipt									(A fee may be assessed if samples are relained kinger than 1 month)		Deiss Time Syll 25 Lorg 15 57 Date Time	Date Tume			
<b>TestAmerica</b>	THE LEADER IN ENVIRONMENTAL TESTING	08/25/09	ር ዓቲ ለፍ	Analysis (Attach list if more space is needed)	27	19 19	Hat WY +27 25 51	XXXXXX	XXXXXX						Archive For Months		the Same			64.81	
Temperature on Receipt	ari Yes 🗆 No 🗹	Project Manager Chip McLEDd	e Number (Alea Code)/Fax 34 5 - 2 2 3 -	Las compet	Carrier/Waybiil Number	Matrix Containers & Presenvatives		00 X 1 1 2 2	1510 Z 1 1 1 1 1 1				<del>╶┤╻╹╹╹╹╹╹╹╹╹╹</del>		Cample Disposal Unknown D Return To Client Cheposed By Lab	CC Requirements (Specify)	044 Time I. Received By	Date Tune 3. Received By	_	SHART HOLD & (	the Sample: MINK - Freid Copy
Chain of		EENSTAR ENG	IL DOWE	ANDORMONAL Fail < 104 1259 D	Project Number and Location (Slate) AIRCO - SEMI ANNUAL GW MINITAM		Sample I.D. No. and Description (Containans for each sample mey be combined on one line)	AP-RB-01 Delising 1500	AP-SWB-01 11/16	-					a) <b>maade 🗌 Stúr</b> In <b>tla</b> nt 🔲 Paison B	Tum Ancumot Time Required 🛄 24 Houra 🔤 48 Houra 🔤 7 Deys 🛄 14 Deys 🔂 21 Deys	1. Flakinquict/part/Fly	3. Railingungunger By		K HBX CHRIME - SHART HOLL	DISTRIBUTION: Whate - Monumed to Lugar with Hoport, Canada - Curve and



### ANALYTICAL REPORT

Job Number: 220-9976-1 SDG Number: Niagara Falls - RSH0748 Job Description: Greenstar Environmental - RSH0748

> For: TestAmerica Laboratories, Inc. 10 Hazelwood Drive Amherst, NY 14228-2298 Attention: Mr. Jason Kacalski

Approved for release. Patty A Mercure 9/14/2009 12:19 PM

Designee for Johanna Dubauskas Project Manager I johanna.dubauskas@testamericainc.com 09/14/2009

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458



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### Job Narrative 220-J9976-1

#### Comments

No additional comments.

#### Receipt

The following sample was received at the laboratory with no sample collection time documented on the chain of custody: RSH0748-09 (220-9976-9). As a result, a sample collection time of 12:00 a.m. on the date of collection has been used.

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

#### Metals

No analytical or quality issues were noted.

### **EXECUTIVE SUMMARY - Detections**

Client: TestAmerica Laboratories, Inc.

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
<b>220-9976-1</b> Si	RSH0748-01	6990	2500	ug/L	6010B
<b>220-9976-2</b> Si	RSH0748-02	395 J	500	ug/L	6010B
<b>220-9976-3</b> Si	RSH0748-03	6510	2500	ug/L	6010B
<b>220-9976-4</b> Si	RSH0748-04	11400	2500	ug/L	6010B
<b>220-9976-5</b> Si	RSH0748-05	10100	2500	ug/L	6010B
<b>220-9976-6</b> Si	RSH0748-06	5860	500	ug/L	6010B
<b>220-9976-7</b> Si	RSH0748-07	4710	500	ug/L	6010B
<b>220-9976-8</b> Si	RSH0748-08	7510	500	ug/L	6010B
<b>220-9976-9</b> Si	RSH0748-09	6600	500	ug/L	6010B
<b>220-9976-10</b> Si	RSH0748-10	1100	500	ug/L	6010B
<b>220-9976-11</b> Si	RSH0748-11	2600	500	ug/L	6010B

### **EXECUTIVE SUMMARY - Detections**

Client: TestAmerica Laboratories, Inc.

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method	
<b>220-9976-12</b> Si	RSH0748-12	1110	500	ug/L	6010B	
<b>220-9976-13</b> Si	RSH0748-13	2160	500	ug/L	6010B	
<b>220-9976-14</b> Si	RSH0748-14	2130	500	ug/L	6010B	

## **METHOD SUMMARY**

Client: TestAmerica Laboratories, Inc.

#### Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Description	Lab Location	Method	Preparation Method
Matrix Water			
Metals (ICP)	TAL CT	SW846 6010B	
Preparation, Total Metals	TAL CT		SW846 3010A

#### Lab References:

TAL CT = TestAmerica Connecticut

#### Method References:

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

## METHOD / ANALYST SUMMARY

Client: TestAmerica Laboratories, Inc.

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

MethodAnalystAnalyst IDSW8466010BPetronchak, NestorNP

## SAMPLE SUMMARY

Client: TestAmerica Laboratories, Inc.

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-9976-1	RSH0748-01	Water	08/25/2009 0915	08/27/2009 0929
220-9976-2	RSH0748-02	Water	08/25/2009 1020	08/27/2009 0929
220-9976-3	RSH0748-03	Water	08/25/2009 1055	08/27/2009 0929
220-9976-4	RSH0748-04	Water	08/25/2009 1110	08/27/2009 0929
220-9976-5	RSH0748-05	Water	08/25/2009 1125	08/27/2009 0929
220-9976-6	RSH0748-06	Water	08/25/2009 1230	08/27/2009 0929
220-9976-7	RSH0748-07	Water	08/25/2009 1400	08/27/2009 0929
220-9976-8	RSH0748-08	Water	08/25/2009 1435	08/27/2009 0929
220-9976-9	RSH0748-09	Water	08/25/2009 0000	08/27/2009 0929
220-9976-10	RSH0748-10	Water	08/25/2009 1200	08/27/2009 0929
220-9976-11	RSH0748-11	Water	08/25/2009 1210	08/27/2009 0929
220-9976-12	RSH0748-12	Water	08/25/2009 1220	08/27/2009 0929
220-9976-13	RSH0748-13	Water	08/25/2009 1500	08/27/2009 0929
220-9976-14	RSH0748-14	Water	08/25/2009 1510	08/27/2009 0929

# SAMPLE RESULTS

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Client Sample I	D: RSH0748-01					
Lab Sample ID: Client Matrix:	220-9976-1 Water				npled: 08/25/200 eived: 08/27/200	
		6010B Metals (ICP)	)			
Method: Preparation: Dilution: Date Analyzed: Date Prepared:	6010B 3010A 5.0 09/09/2009 1636 09/08/2009 1030	Analysis Batch: 220-31021 Prep Batch: 220-30912	Lab I Initia	ument ID: File ID: I Weight/Volume: Weight/Volume:	ICAP2 W090909 100 mL 50 mL	
Analyte		Result (ug/L)	Qualifier	MDL	RL	
Si		6990		250	2500	

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Client Sample I	D: RSH0748-02				
Lab Sample ID:	220-9976-2			Date San	npled: 08/25/2009 1020
Client Matrix:	Water			Date Rec	ceived: 08/27/2009 0929
		6010B Metals (ICP	)		
Method:	6010B	Analysis Batch: 220-31021	Instr	ument ID:	ICAP2
Preparation:	3010A	Prep Batch: 220-30912	Lab	File ID:	W090909
Dilution:	1.0		Initia	I Weight/Volume:	100 mL
Date Analyzed:	09/09/2009 1856		Fina	I Weight/Volume:	50 mL
Date Prepared:	09/08/2009 1030				
Analyte		Result (ug/L)	Qualifier	MDL	RL
Si		395	J	50.0	500

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Client Sample I	D: RSH0748-03				
Lab Sample ID:	220-9976-3			Date San	npled: 08/25/2009 10
Client Matrix:	Water			Date Rec	eived: 08/27/2009 092
		6010B Metals (ICP	)		
Method:	6010B	Analysis Batch: 220-31021	Instru	ument ID:	ICAP2
Preparation:	3010A	Prep Batch: 220-30958	Lab	File ID:	W090909
Dilution:	5.0		Initia	I Weight/Volume:	100 mL
Date Analyzed:	09/09/2009 1837		Final	Weight/Volume:	50 mL
Date Prepared:	09/09/2009 0949				
Analyte		Result (ug/L)	Qualifier	MDL	RL
Si		6510		250	2500

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Client Sample I	D: RSH0748-04					
Lab Sample ID: Client Matrix:	220-9976-4 Water				npled: 08/25/200 eived: 08/27/200	
		6010B Metals (ICP)	)			
Method: Preparation: Dilution: Date Analyzed: Date Prepared:	6010B 3010A 5.0 09/09/2009 1843 09/09/2009 0949	Analysis Batch: 220-31021 Prep Batch: 220-30958	Lab Initia	rument ID: File ID: al Weight/Volume: I Weight/Volume:	ICAP2 W090909 100 mL 50 mL	
Analyte		Result (ug/L)	Qualifier	MDL 250	RL	
Si		11400		250	2500	

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Client Sample I	D: RSH0748-05				
Lab Sample ID:	220-9976-5			Date San	npled: 08/25/2009 1125
Client Matrix:	Water			Date Rec	ceived: 08/27/2009 0929
		6010B Metals (ICP	)		
Method:	6010B	Analysis Batch: 220-31021	Instr	ument ID:	ICAP2
Preparation:	3010A	Prep Batch: 220-30958	Lab	File ID:	W090909
Dilution:	5.0		Initia	I Weight/Volume:	100 mL
Date Analyzed:	09/09/2009 1849		Fina	I Weight/Volume:	50 mL
Date Prepared:	09/09/2009 0949				
Analyte		Result (ug/L)	Qualifier	MDL	RL
Si		10100		250	2500

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Client Sample I	D: RSH0748-06					
Lab Sample ID: Client Matrix:	220-9976-6 Water				npled: 08/25/2009 eived: 08/27/2009	
		6010B Metals (ICP	)			
Method: Preparation: Dilution: Date Analyzed: Date Prepared:	6010B 3010A 1.0 09/11/2009 1448 09/10/2009 1130	Analysis Batch: 220-31107 Prep Batch: 220-31040	Lab Initia	ument ID: File ID: I Weight/Volume: Weight/Volume:	ICAP2 W091109 100 mL 50 mL	
Analyte		Result (ug/L)	Qualifier	MDL	RL	
Si		5860		50.0	500	

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Lab Sample ID: Client Matrix:	220-9976-7 Water				mpled: 08/25/2009 1400 ceived: 08/27/2009 0929	
		6010B Metals (ICP)	)			
Method: Preparation: Dilution: Date Analyzed: Date Prepared:	6010B 3010A 1.0 09/11/2009 1503 09/10/2009 1130	Analysis Batch: 220-31107 Prep Batch: 220-31040	Lab Initia	ument ID: File ID: al Weight/Volume: I Weight/Volume:	ICAP2 W091109 100 mL 50 mL	
Analyte		Result (ug/L)	Qualifier	MDL	RL	
Si		4710		50.0	500	

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Client Sample I	D: RSH0748-08					
Lab Sample ID: Client Matrix:	220-9976-8 Water				npled: 08/25/200 eived: 08/27/200	
		6010B Metals (ICP	)			
Method: Preparation: Dilution: Date Analyzed: Date Prepared:	6010B 3010A 1.0 09/11/2009 1508 09/10/2009 1130	Analysis Batch: 220-31107 Prep Batch: 220-31040	Lab I Initia	ument ID: File ID: I Weight/Volume: Weight/Volume:	ICAP2 W091109 100 mL 50 mL	
Analyte Si		Result (ug/L) 7510	Qualifier	MDL 50.0	RL 500	

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Client Sample I	D: RSH0748-09					
Lab Sample ID: Client Matrix:	220-9976-9 Water				mpled: 08/25/2009 0000 ceived: 08/27/2009 0929	
		6010B Metals (ICP	)			
Method:	6010B	Analysis Batch: 220-31107	Instr	ument ID:	ICAP2	
Preparation:	3010A	Prep Batch: 220-31040	Lab	File ID:	W091109	
Dilution:	1.0		Initia	I Weight/Volume:	100 mL	
Date Analyzed:	09/11/2009 1514		Final	Weight/Volume:	50 mL	
Date Prepared:	09/10/2009 1130					
Analyte		Result (ug/L)	Qualifier	MDL	RL	
Si		6600		50.0	500	

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Client Sample I	D: RSH0748-10				
Lab Sample ID: Client Matrix:	220-9976-10 Water				npled: 08/25/2009 1200 ceived: 08/27/2009 0929
		6010B Metals (ICP	)		
Method: Preparation: Dilution: Date Analyzed: Date Prepared:	6010B 3010A 1.0 09/11/2009 1520 09/10/2009 1130	Analysis Batch: 220-31107 Prep Batch: 220-31040	Lab Initia	ument ID: File ID: I Weight/Volume: I Weight/Volume:	ICAP2 W091109 100 mL 50 mL
Analyte		Result (ug/L)	Qualifier	MDL	RL
Si		1100		50.0	500

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Client Sample I	D: RSH0748-11					
Lab Sample ID: Client Matrix:	220-9976-11 Water				npled: 08/25/2009 ceived: 08/27/2009	
		6010B Metals (ICP	)			
Method: Preparation: Dilution: Date Analyzed: Date Prepared:	6010B 3010A 1.0 09/11/2009 1526 09/10/2009 1130	Analysis Batch: 220-31107 Prep Batch: 220-31040	Lab I Initia	ument ID: File ID: I Weight/Volume: Weight/Volume:	ICAP2 W091109 100 mL 50 mL	
Analyte Si		Result (ug/L) 2600	Qualifier	MDL 50.0	RL 500	

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Client Sample I	D: RSH0748-12					
Lab Sample ID: Client Matrix:	220-9976-12 Water		Date Sampled: 08/25/2009 1 Date Received: 08/27/2009 0			
		6010B Metals (ICP	)			
Method:	6010B	Analysis Batch: 220-31107	Insti	ument ID:	ICAP2	
Preparation:	3010A	Prep Batch: 220-31040	Lab File ID:		W091109	
Dilution:	1.0		Initial Weight/Volume: 100 mL			
Date Analyzed:	09/11/2009 1543		Fina	I Weight/Volume:	50 mL	
Date Prepared:	09/10/2009 1130					
Analyte		Result (ug/L)	Qualifier	MDL	RL	
Si		1110		50.0	500	

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Client Sample I	D: RSH0748-13				
Lab Sample ID: Client Matrix:	220-9976-13 Water			npled: 08/25/2009 1500 ceived: 08/27/2009 0929	
		6010B Metals (ICP	)		
Method: Preparation: Dilution:	6010B 3010A 1.0	Analysis Batch: 220-31107 Prep Batch: 220-31040	Lab Initia	ument ID: File ID: I Weight/Volume:	ICAP2 W091109 100 mL
Date Analyzed: Date Prepared:	09/11/2009 1549 09/10/2009 1130		Fina	l Weight/Volume:	50 mL
Analyte		Result (ug/L)	Qualifier	MDL	RL
Si		2160		50.0	500

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Client Sample ID: RSH0748-14				-	-	
Lab Sample ID: Client Matrix:	220-9976-14 Water				npled: 08/25/2009 18 ceived: 08/27/2009 09	
		6010B Metals (ICP	)			
Method: Preparation: Dilution: Date Analyzed: Date Prepared:	6010B 3010A 1.0 09/11/2009 1554 09/10/2009 1130	Analysis Batch: 220-31107 Prep Batch: 220-31040	, Lab File ID: Initial Weight/Volume: Final Weight/Volume:		ICAP2 W091109 100 mL 50 mL	
Analyte Si		Result (ug/L) 2130	Qualifier	MDL 50.0	RL 500	

## DATA REPORTING QUALIFIERS

Client: TestAmerica Laboratories, Inc.

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

Lab Section	Qualifier	Description
Metals		
	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.
	J	Sample result is greater than the MDL but below the CRDL

# **QUALITY CONTROL RESULTS**

Client: TestAmerica Laboratories, Inc.

## **QC Association Summary**

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
		Busis		Method	
Metals					
Prep Batch: 220-30861					
220-9972-A-8-F DU	Duplicate	E	Water		
220-9972-A-8-G MS	Matrix Spike	E	Water		
Prep Batch: 220-30912					
LCS 220-30912/2-A	Lab Control Sample	Т	Water	3010A	
MB 220-30912/1-A	Method Blank	Т	Water	3010A	
220-9969-D-5-B DU	Duplicate	Т	Water	3010A	
220-9969-D-5-C MS	Matrix Spike	Т	Water	3010A	
220-9969-D-5-D MSD	Matrix Spike Duplicate	Т	Water	3010A	
220-9976-1	RSH0748-01	Т	Water	3010A	
220-9976-2	RSH0748-02	т	Water	3010A	
Prep Batch: 220-30958					
LCS 220-30958/2-A	Lab Control Sample	т	Water	3010A	
MB 220-30958/1-A	Method Blank	Ť	Water	3010A 3010A	
220-9972-A-8-F DU	Duplicate	Ē	Water	3010A	220-30861
220-9972-A-8-G MS	Matrix Spike	E	Water	3010A	220-30861
220-9976-3	RSH0748-03	T	Water	3010A	220 00001
220-9976-4	RSH0748-04	Ť	Water	3010A	
220-9976-5	RSH0748-05	Ť	Water	3010A	
Analysia Batah 220 2102	4				
Analysis Batch:220-3102 LCS 220-30912/2-A	Lab Control Sample	т	Water	6010B	220-30912
MB 220-30912/1-A	Method Blank	Ť	Water	6010B	220-30912
LCS 220-30958/2-A	Lab Control Sample	Ť	Water	6010B	220-30958
MB 220-30958/1-A	Method Blank	Ť	Water	6010B	220-30958
220-9969-D-5-B DU	Duplicate	Ť	Water	6010B	220-30912
220-9969-D-5-C MS	Matrix Spike	Ť	Water	6010B	220-30912
220-9969-D-5-D MSD	Matrix Spike Duplicate	Ť	Water	6010B	220-30912
220-9972-A-8-F DU	Duplicate	Ē	Water	6010B	220-30958
220-9972-A-8-G MS	Matrix Spike	E	Water	6010B	220-30958
220-9976-1	RSH0748-01	T	Water	6010B	220-30912
220-9976-2	RSH0748-02	Ť	Water	6010B	220-30912
220-9976-3	RSH0748-03	T	Water	6010B	220-30958
220-9976-4	RSH0748-04	T	Water	6010B	220-30958
220-9976-5	RSH0748-05	Т	Water	6010B	220-30958

Client: TestAmerica Laboratories, Inc.

## **QC Association Summary**

		Report	<b>.</b>	•• •	
Lab Sample ID	Client Sample ID	Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 220-31040	D				
LCS 220-31040/2-A	Lab Control Sample	Т	Water	3010A	
MB 220-31040/1-A	Method Blank	Т	Water	3010A	
220-9976-6	RSH0748-06	Т	Water	3010A	
220-9976-7	RSH0748-07	Т	Water	3010A	
220-9976-8	RSH0748-08	Т	Water	3010A	
220-9976-9	RSH0748-09	Т	Water	3010A	
220-9976-10	RSH0748-10	Т	Water	3010A	
220-9976-11	RSH0748-11	Т	Water	3010A	
220-9976-12	RSH0748-12	Т	Water	3010A	
220-9976-13	RSH0748-13	Т	Water	3010A	
220-9976-14	RSH0748-14	Т	Water	3010A	
220-9983-D-1-D DU	Duplicate	Т	Water	3010A	
220-9983-D-1-E MS	Matrix Spike	Т	Water	3010A	
Analysis Batch:220-31	1107				
LCS 220-31040/2-A	Lab Control Sample	Т	Water	6010B	220-31040
MB 220-31040/1-A	Method Blank	Т	Water	6010B	220-31040
220-9976-6	RSH0748-06	Т	Water	6010B	220-31040
220-9976-7	RSH0748-07	Т	Water	6010B	220-31040
220-9976-8	RSH0748-08	Т	Water	6010B	220-31040
220-9976-9	RSH0748-09	Т	Water	6010B	220-31040
220-9976-10	RSH0748-10	Т	Water	6010B	220-31040
220-9976-11	RSH0748-11	Т	Water	6010B	220-31040
220-9976-12	RSH0748-12	Т	Water	6010B	220-31040
220-9976-13	RSH0748-13	Т	Water	6010B	220-31040
220-9976-14	RSH0748-14	Т	Water	6010B	220-31040
220-9983-D-1-D DU	Duplicate	Т	Water	6010B	220-31040
220-9983-D-1-E MS	Matrix Spike	Т	Water	6010B	220-31040

#### <u>Report Basis</u>

E = SPLP East

T = Total

**Quality Control Results** 

500

Client: TestAmerica Laboratories, Inc.

#### Method Blank - Batch: 220-30912

Si

Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748

#### Method: 6010B Preparation: 3010A

50.0

Lab Sample ID: MB 220-30912/1-A	Analysis Batch: 220-31021	Instrument ID: TJA Trace ICAP 61E2
Client Matrix: Water	Prep Batch: 220-30912	Lab File ID: W090909
Dilution: 1.0	Units: ug/L	Initial Weight/Volume: 100 mL
Date Analyzed: 09/09/2009 1407		Final Weight/Volume: 50 mL
Date Prepared: 09/08/2009 1030		
Analyte	Result	Qual MDL RL

J

109

Duplicate - Batch: 220-30912			Method: 6010 Preparation:		
Lab Sample ID:220-9969-D-5-B DUClient Matrix:WaterDilution:1.0Date Analyzed:09/09/2009 1518Date Prepared:09/08/2009 1030	Prep Batch: 220-30912 Units: ug/L 09 1518		Instrument ID: TJA Trace ICAP 61E2 Lab File ID: W090909 Initial Weight/Volume: 100 mL Final Weight/Volume: 50 mL		
Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Si	6330	6290	1	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### **Quality Control Results**

Job Number: 220-9976-1 Client: TestAmerica Laboratories, Inc. Sdg Number: Niagara Falls - RSH0748 Method Blank - Batch: 220-30958 Method: 6010B Preparation: 3010A Lab Sample ID: MB 220-30958/1-A Analysis Batch: 220-31021 Instrument ID: TJA Trace ICAP 61E2 Client Matrix: Water Prep Batch: 220-30958 Lab File ID: W090909 Dilution: 1.0 Units: ug/L Initial Weight/Volume: 100 mL Date Analyzed: 09/09/2009 1716 Final Weight/Volume: 50 mL Date Prepared: 09/09/2009 0949 Analyte Result Qual MDL RL Si 99.6 J 50.0 500

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual

Duplicate - Batch: 220-30958			Method: 6010 Preparation: SPLP East		
Lab Sample ID:220-9972-A-8-F DUClient Matrix:WaterDilution:1.0Date Analyzed:09/09/2009 1757Date Prepared:09/09/2009 0949	Analysis Batch: 220-31021 Prep Batch: 220-30958 Units: ug/L		Instrument ID: Lab File ID: Initial Weight/V Final Weight/Ve	W090909 olume: 100	mL
Date Leached: 09/03/2009 1620	Leachate Batch: 220-30867	l			
Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Si	1520	1440	5	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

## **Quality Control Results**

Client: TestAmerica Laboratories, Inc.				Job Number: 220-9976-1 Sdg Number: Niagara Falls - RSH0748			
Method Blank - Batch: 220-31040				nod: 6010B paration: 3010	A		
Lab Sample ID:MB 220-31040/1-AClient Matrix:WaterDilution:1.0Date Analyzed:09/11/2009 1408Date Prepared:09/10/2009 1130	Analysis Batch: 22 Prep Batch: 220-3 Units: ug/L	Lab F Initial	Instrument ID: TJA Trace ICAP 61E2 Lab File ID: W091109 Initial Weight/Volume: 100 mL Final Weight/Volume: 50 mL				
Analyte	Result	Qual		MDL	RL		
Si	75.3	J		50.0	500		
Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual	

#### Method: 6010B Preparation: 3010A

Lab Sample ID: 220-9983-D-1-D DU Client Matrix: Water Dilution: 1.0 Date Analyzed: 09/11/2009 1437 Date Prepared: 09/10/2009 1130	Analysis Batch: 220-31107 Prep Batch: 220-31040 Units: ug/L	7	Instrument ID: Lab File ID: Initial Weight/V Final Weight/Vo	W091109 olume: 100	mL
Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Si	6650	6570	1	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### SUBCONTRACT ORDER

**TestAmerica Buffalo** 

**RSH0748** 

9976

SENDING LABORATORY:	RECEIVING LABORATORY:
TestAmerica Buffalo	TestAmerica Connecticut
10 Hazelwood Drive	128 Long Hill Cross Road
Amherst, NY 14228	Shelton, CT 06484
Phone: 716-691-2600	Phone :(203) 944-1307
Fax: 716-691-7991	Fax: -
Project Manager: Jason Kacalski	Project Location: _UNKNOWN
Client: Greenstar Environmental Solutions, LLC	Receipt Temperature: <u>°C</u> Ice: Y / N

Report: Level 2 Report

Analysis	Units	Due	Expires	Interlab Price Su	urch	Comment	s	
Sample ID: RSH0748-01	) Water		Sampleo	d: 08/25/09 09:15				
SUB - 6010B Tot - Silicon	mg/L	09/16/09	02/21/10 09:1		0%	NONE,	1 11 17 1	
Containers Supplied:								
Sample ID: RSH0748-02	Water		Sampler	H. 09/25/00 40.20				
SUB - 6010B Tot - Silicon	mg/L	09/16/09	02/21/10 10:20	d: 08/25/09 10:20 0 \$30.00	0%	NONE,		
Containers Supplied:	0							
Sample ID: RSH0748-03	Water		Comolo	d. 00/02/00 40-EE				
SUB - 6010B Tot - Silicon	mg/L	09/16/09	02/21/10 10:5	d: 08/25/09 10:55 5 \$30.00	0%	NONE,		
Containers Supplied:								
Sample ID: RSH0748-04	Water		Sample	d: 08/25/09 11:10				<u>.</u>
SUB - 6010B Tot - Silicon	mg/L	09/16/09	02/21/10 11:1		0%	NONE,		
Containers Supplied:								
Sample ID: RSH0748-05	Water		Sample	d: 08/25/09 11:25				
SUB - 6010B Tot - Silicon	mg/L	09/16/09	02/21/10 11:2		0%	NONE,		
Containers Supplied:								
Sample ID: RSH0748-06	Water		Sample	d: 08/25/09 12:30				
SUB - 6010B Tot - Silicon	mg/L	09/16/09	02/21/10 12:3		0%	NONE,		22.38°C
Containers Supplied:								gun#1
								passed rad
and		strateg [7		Lelochu			<u> 121/09 929</u>	Screen
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•			_ Page 31	L of 35			09	/14/2009

Released By

Date/Time

Received By

Date/Time

Page 1 of 2

## SUBCONTRACT ORDER

TestAmerica Buffalo

9976

**RSH0748** 

Analysis	Units	Due	Expires	Interlab Price Su	ırch	Comments	
	~						
Sample ID: RSH0748-07	Water			1: 08/25/09 14:00			
SUB - 6010B Tot - Silicon	mg/L	09/16/09	02/21/10 14:00	\$30.00	0%	NONE,	
Containers Supplied:							
Sample ID: RSH0748-08	Water		Samplac	I: 08/25/09 14:35			
SUB - 6010B Tot - Silicon	mg/L	09/16/09	02/21/10 14:35		0%	NONE,	
Containers Supplied:	-						
Sample ID: RSH0748-09	Water						<b>.</b>
SUB - 6010B Tot - Silicon	mg/L	09/16/09	<u>Samplec</u> 02/21/10 00:00	<u>l: <b>08/25/09 00:00</b></u> ) \$30.00	0%	NONE,	
Containers Supplied:	mg/L	03/10/03	02/21/10 00.00	φου.ου	070	none,	
Sample ID: RSH0748-10							
	Water	00/40/00		1: 08/25/09 12:00	00/		
SUB - 6010B Tot - Silicon	mg/L	09/16/09	02/21/10 12:00	) \$30.00	0%	NONE,	
Containers Supplied:							
Sample ID: RSH0748-11	Water		Sampleo	1: 08/25/09 12:10			
SUB - 6010B Tot - Silicon	mg/L	09/16/09	02/21/10 12:10	) \$30.00	0%	NONE,	
Containers Supplied:							
Sample ID: RSH0748-12	Water						
SUB - 6010B Tot - Silicon	mg/L	09/16/09	Sampled 02/21/10 12:20	d: 08/25/09 12:20 0 \$30.00	0%	NONE,	
Containers Supplied:	тул	03/10/03	02/21/10 12:20	φου.ου	070	1011 <u>2</u> ,	
Sample ID: RSH0748-13	3) Water		Sampler	x 08/25/09 15:00			
SUB - 6010B Tot - Silicon	mg/L	09/16/09	02/21/10 15:00		0%	NONE,	
Containers Supplied:	U						
<u> </u>	<u> </u>						
Sample ID: RSH0748-14 (14	للے) Water	<u></u>	Sample	<u>d: 08/25/09 15:10</u>			
SUB - 6010B Tot - Silicon	mg/L	09/16/09	02/21/10 15:1	D \$30.00	0%	NONE,	
Containers Supplied:							

<b>FAMERICA CONNECTICUT</b>	SERVATIVE RECORD
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С Ш	ш Ж

Job Number: Client:

**Client Project:** 

Date	8/27/09													<b>}</b>					-			
Initials	R													7								
Preservative Lot Number	INA					-								7								
pH after Adjustment	MA	-												フ								
Adjustment (mLs)	(UPA	~ ~							_					<b>→</b>			1 2110	(ULC PF+				
Hd	22	12	(2	52	27	(2	27	22	(Z	Ć2	ÚZ	22	52	27				40 10/ ·				
Preservative	HN05													6								
Lab Number	0 -01/10 - 01		03	100	05	90	10	80				7 of		2					09	/14	200	09

estAmerica Form# SMF00207.CT

220-9976 workshara 8/27/09 1-44 1E	Date Time 9/8/04 1040 9/19/69 1040 9/10/09 1245
220-9776 Buffalo-workShard Date Received: <u>Sf27/69</u> Sample #s: <u>1-H</u> Locations: <u>91E</u>	Signature-Sample Return
	Reason H L L L L L L L L L L L L L L L L L L
	Time (616 (616 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1
	Date 9/8/09 9/09/09 0/10/09
onnecticut of-Custody Air: Water: /-/+	Signature-Sample Removal
TestAmerica - Connecticut         Internal Chain-of-Custody         Trip Blank:         QC:       Air:         FB:       Water:         Soil:       Water:	And the second

TestAmerica Form# SMF02300.CT

## Login Sample Receipt Check List

Client: TestAmerica Laboratories, Inc.

Job Number: 220-9976-1 SDG Number: Niagara Falls - RSH0748

#### List Source: TestAmerica Connecticut

#### Login Number: 9976 Creator: Blocker, Kristina List Number: 1

Question	T / F/ NA	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.	False	Samples do not require ice.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	22.38C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	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	
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	
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	
Is the Field Sampler's name present on COC?	False	Workshare
Sample Preservation Verified	True	

## Attachment E

Landfill Cap Inspection Checklists August and November 2009

## LANDFILL CAP INSPECTION CHECKLIST AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Personnel:	Bruce Vinal
Date:	3 <sup>rd</sup> Quarter Inspection (Aug 25, 2009)
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: Ponding water at first gate off of Witmer rd. and in road adjacent to GCTS. Walked this areas with Bob Broomfield of Ridgeway Env. Bid is being prepared for addressing this issue

## 3. Identification of stressed vegetation:

Vegetation in the disturbed areas of the southwest corner are not doing well. This area should have topsoil added and be re-seeded. Walked this areas with Bob Broomfield of Ridgeway Env. Bid is being prepared for addressing this issue

- 4. Identification of seeps, rooted vegetation (trees), and/or animal burrows: Weeds have begun to grow up around the GCTS tanks. Vegetation growing up around the solar panel and internet panel has been cut down with a weed whacker. Placement of geotextile and stone over this area are also in the bid by Ridgeway Env.
- 5. Identification of deteriorating equipment (i.e., monitoring wells, fencing, or drainage structures):

Wells need to be painted with safety blue paint. The concrete pad under the backup generator has begun to settle. Ridgeways bid will include sanding, priming, and 2 coats of safety blue paint on the wells as well as removing generator, leveling pad, and reinstallation

## 6. Inspection of stormwater drainage swales for erosion, sloughing, or flow-through:

Iron sediment has begun to accumulate in the swale conveying the GCTS discharge. Ridgeways bid will include removal, disposal, and replacement of impacted stone. Iron sediment in the T-7 "Cat tail pond" will be removed and disposed of by Ridgeway, this should alleviate the accumulation of iron in the swale

The newly configured GCTS swale in the southwest corner has an area about 50' long that has begun to slough. This is directly related to the lack of vegetation in this area. Ridgeways will correct this issue in conjunction with the cap mowing in Oct.

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:

Roads are in good shape. Vegetation is taking over the roads, but no need to use herbicides. Roads are still usable. Roads will be mowed and scarified in October.

## LANDFILL CAP INSPECTION CHECKLIST AIRCO PARCEL, NIAGARA FALLS, NEW YORK

Personnel:	Bruce Vinal					
Date:	4th Quarter Inspection (Nov 7 <sup>th</sup> 2009)					
Weather:	Overcast, 65 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:

The disturbed areas of the southwest corner have been grubbed, re-loamed, and hydro seeded. This area will be monitored throughout the growing season.

- 4. Identification of seeps, rooted vegetation (trees), and/or animal burrows: The cap was mowed during the first week of October. Weeds around the GCTS tanks have been removed. Growth around the solar panel/internet transmitter has been removed, a geo-textile has been spread over the area and covered with a layer of stone in an effort to reduce maintenance in this area. The T-7 iron settling pond has been cleaned, decaying organic matter and iron sediment have been removed.
- 5. Identification of deteriorating equipment (i.e., monitoring wells, fencing, or drainage structures):

Wells have been painted with safety blue paint. The concrete pad under the backup generator has been leveled.

- 6. Inspection of stormwater drainage swales for erosion, sloughing, or flow-through: Trap rock in swale conveying the GCTS discharge has been removed and replaced in areas of heavy iron deposits. Sloughing in the swale at the southwest corner has been repaired, impacted stone was removed and replaced. The replacement stone was placed thicker in the swale in an effort to eliminate future sloughing.
- 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:

Crushed gravel was added to several areas of the access roads. The area of ponding at the main gate was filled/re-graded as was the area adjacent to the treatment system. All roads were scarified to eliminate growth.

## Attachment F

Laboratory Analytical Results for GCTS Discharge Sampling August and November 2009



## Analytical Report

Work Order: RSH0236

Project Description Airco - Niagara Falls

For:

Charles E. McLeod, Jr.

Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

e.

Jason Kacalski Project Manager jason.kacalski@testamericainc.com

Wednesday, August 19, 2009

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exception to NELAP requirements are noted in this report. Persuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project manager who has signed this report.



THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSH0236

Project: Airco - Niagara Falls Project Number: NY5A9582 Received: 08/10/09 Reported: 08/19/09 09:16

## TestAmerica Buffalo Current Certifications

## As of 1/27/2009

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA, NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana *	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	N Y0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP, SD WA, C WA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA, CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
Texas *	NELAP CWA, RCRA	T104704412-08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SD WA	278
Washington*	NELAP CWA,RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA,RCRA	252

\*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accre ditation is required or available. Any exceptions to NELAP requirements are noted in this report.



Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSH0236

Project: Airco - Niagara Falls Project Number: NY5A9582 Received: 08/10/09 Reported: 08/19/09 09:16

#### **Case Narrative**

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

A pertinent document is appended to this report, 1 page, is included and is an integral part of this report.

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TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.

# <u>TestAmerica</u>

THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSH0236

Project: Airco - Niagara Falls Project Number: NY5A9582 Received: 08/10/09 Reported: 08/19/09 09:16

#### DATA QUALIFIERS AND DEFINITIONS

B Analyte was detected in the associated Method Blank.

**CF6** Results confirmed by reanalysis.

- **D08** Dilution required due to high concentration of target analyte(s)
- **HFT** The holding time for this test is immediate. It was analyzed in the laboratory as soon as possible after receipt.
- **NR** Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0236

Project: Airco - Niagara Falls Project Number: NY5A9582 Received: 08/10/09 Reported: 08/19/09 09:16

			Executive	Summa	ry - Detecti	ons				
Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSH0236-01	(AP-EWE-01	- Water)			Samp	led: 08/	10/09 15:00	Recv	/d: 08/10/0	9 15:45
General Chemistry Para	meters									
рН	8.00	HFT	0.100	NR	SU	1.00	08/10/09 19:36	JME	9H10082	9040
Oxygen, Dissolved	9.84	HFT	7.00	NR	mg/L	1.00	08/11/09 17:44	MDM	9H11074	4500-O G
Nitrate	0.504		0.050	NR	mg/L as N	1.00	08/11/09 11:05	JMM	9H11043	353.2
Total Dissolved Solids	248	CF6	4.0	NR	mg/L	1.00	08/11/09 16:05	AMP	9H11008	2540C
Total Kjeldahl Nitrogen	2.82		1.00	NR	mg/L as N	1.00	08/12/09 11:48	ZZZ	9H11009	351.2



#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0236

Project: Airco - Niagara Falls Project Number: NY5A9582 Received: 08/10/09 Reported: 08/19/09 09:16

### Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
AP-EWE-01	RSH0236-01	Water	08/10/09 15:00	08/10/09 15:45	
TRIP BLANK	RSH0236-02	Water	08/10/09	08/10/09 15:45	

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0236

Received: 08/10/09 Reported: 08/19/09 09:16

Project: Airco - Niagara Falls Project Number: NY5A9582

			Α	nalytical	Report					
	Sample	Data				Dil	Date	Lab		
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method
Sample ID: RSH0236-01	(AP-EWE-01	- Water)			Samp	led: 08	/10/09 15:00	Rec	vd: 08/10/0	9 15:45
Volatile Organic Compo	<u>unds</u>									
1,1-Dichloroethane	ND		5.0	0.59	ug/L	1.00	08/10/09 22:14	MF	9H10078	624
Trichloroethene	ND		5.0	0.60	ug/L	1.00	08/10/09 22:14	MF	9H10078	624
1,2-Dichloroethane-d4	98 %		Surr Limits:	(88-132%)			08/10/09 22:14	MF	9H10078	624
4-Bromofluorobenzene	96 %		Surr Limits:	(78-122%)			08/10/09 22:14	MF	9H10078	624
Toluene-d8	102 %		Surr Limits:	(87-110%)			08/10/09 22:14	MF	9H10078	624
Total Metals by EPA 200	Series Meth	<u>iods</u>								
Barium	ND		2000	NR	ug/L	1.00	08/16/09 03:53	AMH	9H11031	200.7
Chromium	ND		100	NR	ug/L	1.00	08/16/09 03:53	AMH	9H11031	200.7
Copper	ND		14.7	NR	ug/L	1.00	08/13/09 19:12	LMH	9H11031	200.7
Iron	ND		300	NR	ug/L	1.00	08/16/09 03:53	AMH	9H11031	200.7
Nickel	ND		70.0	NR	ug/L	1.00	08/16/09 03:53	AMH	9H11031	200.7
Zinc	ND		115	NR	ug/L	1.00	08/16/09 03:53	AMH	9H11031	200.7
Selenium	ND		4.6	NR	ug/L	1.00	08/12/09 21:00	AMH	9H11034	200.8
Thallium	ND		4.0	NR	ug/L	1.00	08/12/09 21:00	AMH	9H11034	200.8
General Chemistry Para	meters									
Ammonia as N	ND		9.20	NR	mg/L as N	1.00	08/11/09 11:18	RMM	9H11015	350.1
Biochemical Oxygen	ND		5.0	NR	mg/L	1.00	08/11/09 18:15	JFR	9H12002	5210B
Demand Chromium, Hexavalent	ND		11.0	NR	ug/L	1.00	08/10/09 19:20	JME	9H10083	7196A
Chemical Oxygen	ND		40.0	NR	mg/L	1.00	08/11/09 16:40		9H11060	410.4
Demand	ND		40.0		ing/L	1.00	00/11/00 10.40	MBM	01111000	-10.4
pH	8.00	HFT	0.100	NR	SU	1.00	08/10/09 19:36	JME	9H10082	9040
Oxygen, Dissolved	9.84	HFT	7.00	NR	mg/L	1.00	08/11/09 17:44	MDM	9H11074	4500-O G
Nitrate	0.504		0.050	NR	mg/L as N	1.00	08/11/09 11:05	JMM	9H11043	353.2
Nitrite	ND		0.05	NR	mg/L as N	1.00	08/11/09 11:00	jmm	9H11044	353.2
Phenolics, Total	ND		8.0	NR	ug/L	1.00	08/12/09 11:16	KLD	9H11028	420.4
Recoverable										
Total Dissolved Solids	248	CF6	4.0	NR	mg/L	1.00	08/11/09 16:05		9H11008	2540C
Total Suspended Solids	ND		10.0	NR	mg/L	1.00	08/11/09 14:55		9H11010	2540D
Total Kjeldahl Nitrogen	2.82		1.00	NR	mg/L as N	1.00	08/12/09 11:48	ZZZ	9H11009	351.2

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0236

Received: 08/10/09 Reported: 08/19/09 09:16

Project: Airco - Niagara Falls Project Number: NY5A9582

			Α	nalytical F	Report					
Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSH0236-02	(TRIP BLAN	K - Water)			Samı	oled: 08/	10/09	Recv	/d:	
Volatile Organic Compo	unds									
1,1-Dichloroethane	ND		5.0	0.59	ug/L	1.00	08/10/09 22:39	MF	9H10078	624
Trichloroethene	ND		5.0	0.60	ug/L	1.00	08/10/09 22:39	MF	9H10078	624
1,2-Dichloroethane-d4	100 %		Surr Limits:	(88-132%)			08/10/09 22:39	MF	9H10078	624
4-Bromofluorobenzene	93 %		Surr Limits:	(78-122%)			08/10/09 22:39	MF	9H10078	624
Toluene-d8	100 %		Surr Limits:	(87-110%)			08/10/09 22:39	MF	9H10078	624

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

#### Work Order: RSH0236

Project: Airco - Niagara Falls Project Number: NY5A9582 Received: 08/10/09 Reported: 08/19/09 09:16

			SAMPLE	EXTR	RACTION	DATA			
			Wt/Vol		Extract			Lab	
Parameter	Batch	Lab Number	Extracte	Units	Volume	Units	Date Prepared	Tech	Extraction Method
General Chemistry Parameters									
2540C	9H11008	RSH0236-01	100.00	mL	100.00	mL	08/11/09 16:05	AMP	No prep solids
2540D	9H11010	RSH0236-01	250.00	mL	250.00	mL	08/11/09 14:55	AMP	No prep solids
350.1	9H11015	RSH0236-01	5.00	mL	5.00	mL	08/11/09 09:35	RMM	No prep Ammonia
351.2	9H11009	RSH0236-01	25.00	mL	25.00	mL	08/11/09 08:30	JMM	TKN Digestion
353.2	9H11043	RSH0236-01	5.00	mL	5.00	mL	08/11/09 11:00	JMM	No prep Nitrate
353.2	9H11044	RSH0236-01	5.00	mL	5.00	mL	08/11/09 11:00	JMM	No prep Nitrite
410.4	9H11060	RSH0236-01	2.00	mL	2.00	mL	08/11/09 16:40	MDM	Chemical Oxygen Demand
420.4	9H11028	RSH0236-01	50.00	mL	50.00	mL	08/11/09 12:05	RJP	TRP Distillation
4500-O G	9H11074	RSH0236-01	1.00	mL	1.00	mL	08/11/09 17:44	MDM	Direct
5210B	9H12002	RSH0236-01	300.00	mL	300.00	mL	08/11/09 18:15	MDM	Biochemical Oxygen Demand
7196A	9H10083	RSH0236-01	25.00	mL	25.00	mL	08/10/09 19:20	JME	Hex Digestion
9040	9H10082	RSH0236-01	50.00	mL	50.00	mL	08/10/09 19:36	JME	No prep pH
Total Metals by EPA 200 Series I	Methods								
200.7	9H11031	RSH0236-01	50.00	mL	50.00	mL	08/12/09 08:45	MLD	3005A
200.8	9H11034	RSH0236-01	50.00	mL	50.00	mL	08/12/09 08:20	KCW	3020A
Volatile Organic Compounds									
624	9H10078	RSH0236-01	5.00	mL	5.00	mL	08/10/09 18:38	MAF	5030B MS
624	9H10078	RSH0236-02	5.00	mL	5.00	mL	08/10/09 18:38	MAF	5030B MS

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0236

Received: 08/10/09 Reported: 08/19/09 09:16

Project: Airco - Niagara Falls Project Number: NY5A9582

			L	ABORATORY	QC DATA					
	Source	Spike					%	% REC	% RPD	Data
Analyte	Result	Level	RL	MDL	Units	Result	REC	Limits	RPD Limit	Qualifiers
Volatile Organic Compou	nds_									
Blank Analyzed: 08/10/09	(Lab Num	iber:9H100	78-BLK1	, Batch: 9H10078)						
1,1-Dichloroethane			5.0	0.59	ug/L	ND				
Trichloroethene			5.0	0.60	ug/L	ND				
Surrogate: 1,2-Dichloroethane-d4					ug/L		100	88-132		
Surrogate: 4-Bromofluorobenzene					ug/L		95	78-122		
Surrogate: Toluene-d8					ug/L		103	87-110		
LCS Analyzed: 08/10/09 (	Lab Numb	er:9H1007	8-BS1, Ba	atch: 9H10078)						
1,1-Dichloroethane		20	5.0	0.59	ug/L	20.1	101	73-128		
Trichloroethene		20	5.0	0.60	ug/L	19.6	98	67-134		
Surrogate: 1.2-Dichloroethane-d4					ug/L		102	88-132		
Surrogate: 4-Bromofluorobenzene					ug/L		100	78-122		
Surrogate: Toluene-d8					ug/L		103	87-110		

THE LEADER IN ENVIRONMENTAL TESTING

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Work Order: RSH0236

Received: 08/10/09 Reported: 08/19/09 09:16

Project: Airco - Niagara Falls Project Number: NY5A9582

			L	ABORATORY Q	C DATA						
	Source	Spike					%	% REC	%	RPD	Data
Analyte	Result	Level	RL	MDL	Units	Result	REC	Limits	RPD	Limit	Qualifiers
Total Metals by EPA 200	Series Met	<u>hods</u>									
Blank Analyzed: 08/16/09	(Lab Num	ber:9H110	031-BLK1	, Batch: 9H11031)							
Barium			2.00	NR	ug/L	ND					
Chromium			4.00	NR	ug/L	ND					
Copper			10.0	NR	ug/L	ND					В
Iron			50.0	NR	ug/L	ND					В
Nickel			10.0	NR	ug/L	ND					
Zinc			10.0	NR	ug/L	ND					В
Blank Analyzed: 08/16/09	(Lab Num	ber:9H110	031-BLK2	, Batch: 9H11031)							
Chromium			4.00	NR	ug/L	ND					
Nickel			10.0	NR	ug/L	ND					
LCS Analyzed: 08/16/09(	(Lab Numb	er:9H1103	31-BS1, Ba	atch: 9H11031)							
Barium		200	2.00	NR	ug/L	198	99	85-115			
Chromium		200	4.00	NR	ug/L	199	100	85-115			
Copper		200	10.0	NR	ug/L	193	97	85-115			
Iron		10000	50.0	NR	ug/L	9850	98	85-115			
Nickel		200	10.0	NR	ug/L	195	97	85-115			
Zinc		200	10.0	NR	ug/L	200	100	85-115			
LCS Analyzed: 08/16/09 (	(Lab Numb	er:9H1103	31-BS2, Ba	atch: 9H11031)							
Chromium		200	4.00	NR	ug/L	199	100	85-115			
Nickel		200	10.0	NR	ug/L	195	97	85-115			
Total Metals by EPA 200	Series Met	<u>hods</u>									
Blank Analyzed: 08/12/09	(Lab Num	ber:9H110	034-BLK1	, Batch: 9H11034)							
Selenium			1.0	NR	ug/L	ND					
Thallium			0.2	NR	ug/L	ND					
LCS Analyzed: 08/12/09(	(Lab Numb	er:9H1103	4-BS1, Ba	atch: 9H11034)							
Selenium		20.0	1.0	NR	ug/L	20.5	103	85-115			
Thallium		20.0	0.2	NR	ug/L	21.2	106	85-115			

THE LEADER IN ENVIRONMENTAL TESTING

Work Order: RSH0236

Project: Airco - Niagara Falls Project Number: NY5A9582

			LÆ	BORATORY	QC DATA						
	Source	Spike					%	% REC	%	RPD	Data
Analyte	Result	Level	RL	MDL	Units	Result	REC	Limits	RPD	Limit	Qualifiers
General Chemistry Paran	neters										
LCS Analyzed: 08/10/09	(Lab Numb	oer:9H1008	2-BS1, Bat	tch: 9H10082)							
рH		7.00	NA	NR	SU	7.00	100	99.3-100.			
Duplicate Analyzed: 08/1 QC Source Sample: RSH0236-	-	Number:9H	I10082-DU	P1, Batch: 9H10	082)			8			
рН	8.00		NA	NR	SU	7.99			0.1		
General Chemistry Paran	<u>neters</u>										
Blank Analyzed: 08/10/09	) (Lab Num	nber:9H100	83-BLK1,	Batch: 9H10083)	)						
Chromium, Hexavalent			10.0	NR	ug/L	ND					
LCS Analyzed: 08/10/09	(Lab Numb	oer:9H1008	3-BS1, Bat	tch: 9H10083)							
Chromium, Hexavalent		50.0	10.0	NR	ug/L	53.7	107	85-115			
Duplicate Analyzed: 08/1 QC Source Sample: RSH0236-	-	Number:9H	I10083-DU	P1, Batch: 9H10	083)						
Chromium, Hexavalent	ND		10.0	NR	ug/L	ND				20	
Matrix Spike Analyzed: 0 QC Source Sample: RSH0236-		ab Number	:9H10083-	MS1, Batch: 9H1	0083)						
Chromium, Hexavalent	ND	50.0	10.0	NR	ug/L	57.1	114	75-120			
General Chemistry Paran	neters										
Blank Analyzed: 08/11/09	) (Lab Num	nber:9H110	08-BLK1,	Batch: 9H11008)							
Total Dissolved Solids			4.0	NR	mg/L	ND					
LCS Analyzed: 08/11/09	(Lab Numb	oer:9H1100	8-BS1, Bat	tch: 9H11008)							
Total Dissolved Solids		500	4.0	NR	mg/L	516	103	85-115			
Duplicate Analyzed: 08/1 QC Source Sample: RSH0236-	•	Number:9H	I11008-DU	P1, Batch: 9H11	008)						
Total Dissolved Solids	248		4.0	NR	mg/L	241			3	20	
Concret Chemiotry Dever	n o to vo										
General Chemistry Paran	neters										
Blank Analyzed: 08/12/09	) (Lab Num	nber:9H110	09-BLK1,	Batch: 9H11009)							
Total Kjeldahl Nitrogen			0.20	NR	mg/L as N	ND					
LCS Analyzed: 08/12/09	(Lab Numb	oer:9H1100	9-BS1, Bat	tch: 9H11009)							
Total Kjeldahl Nitrogen		2.50	0.20	NR	mg/L as N	2.49	100	90-110			
General Chemistry Paran	neters										

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THE LEADER IN ENVIRONMENTAL TESTING

### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSH0236

08/10/09 Received: Reported: 08/19/09 09:16

Project: Airco - Niagara Falls Project Number: NY5A9582

			LA	BORATOR	Y QC DATA					
	Source	Spike Level	RL	MDI			%	% REC	% RPD	Data
Analyte General Chemistry Paran	Result	Levei		MDL	Units	Result	REC	Limits	RPD Limit	Qualifier
Blank Analyzed: 08/11/09	(Lab Nun	nber:9H11			-					
Total Suspended Solids			4.0	NR	mg/L	ND				
LCS Analyzed: 08/11/09	(Lab Numb	per:9H110	10-BS1, Bate	ch: 9H11010)						
Total Suspended Solids		611	4.0	NR	mg/L	574	94	88-110		
Duplicate Analyzed: 08/1 QC Source Sample: RSH0236-0	-	Number:9	H11010-DUF	P1, Batch: 9H <sup>2</sup>	11010)					
Total Suspended Solids	ND		4.0	NR	mg/L	ND			15	
General Chemistry Paran	<u>neters</u>									
Blank Analyzed: 08/11/09	(Lab Nun	nber:9H11	015-BLK1, E	Batch: 9H1101	5)					
Ammonia as N			0.020	NR	mg/L as N	ND				
LCS Analyzed: 08/11/09	(Lab Numb	per:9H110 <sup>-</sup>	15-BS1, Bat	ch: 9H11015)						
Ammonia as N	-	0.750	0.020	NR	mg/L as N	0.777	104	90-110		
Duplicate Analyzed: 08/1 QC Source Sample: RSH0236-0	-	Number:9	H11015-DUF	P1, Batch: 9H <sup>2</sup>	11015)					
Ammonia as N	ND		0.020	NR	mg/L as N	ND			20	
Matrix Spike Analyzed: 04 QC Source Sample: RSH0236-0	-	ab Numbe	r:9H11015-N	/IS1, Batch: 9	H11015)					
Ammonia as N	ND	0.200	0.020	NR	mg/L as N	0.217	108	54-150		
General Chemistry Paran	<u>neters</u>									
Blank Analyzed: 08/12/09	(Lab Nun	nber:9H11	028-BLK1, E	Batch: 9H1102	28)					
Phenolics, Total Recoverable	,		10.0	NR	, ug/L	ND				
LCS Analyzed: 08/12/09	(Lab Numb	per:9H110	28-BS1, Bate	ch: 9H11028)						
Phenolics, Total Recoverable		517	50.0	NR	ug/L	511	99	75-125		D08
General Chemistry Paran	<u>neters</u>									
Blank Analyzed: 08/11/09	(Lab Nun	nber:9H11	043-BLK1, E	Batch: 9H1104	3)					
Nitrate			0.050	NR	mg/L as N	ND				
LCS Analyzed: 08/11/09	(Lab Numb	oer:9H1104	43-BS1, Bate	ch: 9H11043)						
Nitrate		1.50	0.050	NR	mg/L as N	1.45	97	90-110		
Duplicate Analyzed: 08/1 QC Source Sample: RSH0236-0	-	Number:9	H11043-DUF	P1, Batch: 9H <sup>2</sup>	11043)					
TestAmerica Buffalo										
10 Hazelwood Drive Am	herst, NY	14228 tel	716-691-26	00 fax 716-69	1-7991					
www.testamericainc.com	1								Page	13 of 14

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THE LEADER IN ENVIRONMENTAL TESTING

#### Work Order: RSH0236 Greenstar Environmental Solutions, LLC Received: 08/10/09 6 Gellatly Drive 08/19/09 09:16 Reported: Wappinger Falls, NY 12590 Project: Airco - Niagara Falls NY5A9582 Project Number: LABORATORY QC DATA Source Spike % % RPD % **REC** Data RL Result Level MDL Analyte Units Result REC Limits RPD Limit Qualifiers General Chemistry Parameters Duplicate Analyzed: 08/11/09 (Lab Number:9H11043-DUP1, Batch: 9H11043) QC Source Sample: RSH0236-01 0.504 Nitrate 0.050 NR mg/L as N 0.504 0.1 20 Matrix Spike Analyzed: 08/11/09 (Lab Number:9H11043-MS1, Batch: 9H11043) QC Source Sample: RSH0236-01 1.00 Nitrate 0.504 0.050 NR mg/L as N 1.40 90 77-123 **General Chemistry Parameters** Blank Analyzed: 08/11/09 (Lab Number:9H11044-BLK1, Batch: 9H11044) Nitrite 0.05 NR mg/L as N ND LCS Analyzed: 08/11/09 (Lab Number:9H11044-BS1, Batch: 9H11044) Nitrite 1.50 0.05 1.57 105 90-110 NR mg/L as N Matrix Spike Analyzed: 08/11/09 (Lab Number:9H11044-MS1, Batch: 9H11044) QC Source Sample: RSH0236-01 ND 1.00 Nitrite 0.05 NR 1.20 120 mg/L as N 61-147 **General Chemistry Parameters** Blank Analyzed: 08/11/09 (Lab Number:9H11060-BLK1, Batch: 9H11060) Chemical Oxygen 10.0 NR mg/L ND Demand LCS Analyzed: 08/11/09 (Lab Number:9H11060-BS1, Batch: 9H11060) 25.0 10.0 NR mg/L 26.7 107 90-110 Chemical Oxygen Demand **General Chemistry Parameters** Duplicate Analyzed: 08/11/09 (Lab Number:9H11074-DUP1, Batch: 9H11074) QC Source Sample: RSH0236-01 0.05 9.72 HFT Oxygen, Dissolved 984 NR 1 mg/L

**General Chemistry Parameters** 

Blank Analyzed: 08/11/09 (L	ab Number:9H120.	002-BLK1, E	Batch: 9H12002	)			
Biochemical Oxygen Demand		2.0	NR	mg/L	ND		
LCS Analyzed: 08/11/09 (Lal	b Number:9H1200	2-BS1, Bat	ch: 9H12002)				
Biochemical Oxygen Demand	198	2.0	NR	mg/L	204	103	85-115

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Chain of	Temperature on Receipt	on Receip!		<b>TestAmericc</b>	£ ⊀	eri	B			
	Drinking Water?	Yes 🗆	No	THE LEADER IN ENVIRONMENTAL TESTING	N ENVIRON	MENTAL	resting			
Creen star Environmental	Project Manager	JRK			ă.	Dele Dele 09	69	Chain of C	Chain of Custody Number 110805	
Y Dr.	Telepthone Numt (845) 26	Telephone Number (Area Code)/Fax Number (845) 223 - 9944	u Number [		La La	Lab Mumber	-	Page	o/	, ,
Wypringer. Falls ANY	Sile Contect	m 2 co 2 m	Contact		Analysi mora sp	Analysis (Attach list if more space is needed)	t if ed)			11
Project Name and Locality (State)	14	vumber			41	<u>}</u>	√0~ 1-# \$\$		nacial instructional	
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AP-EWE-01 8-10-09	15:00					/				
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Possible Hazard Identification C Non-Hazard C Filemmetrie C Skip Imlent C Poiscon B	🗌 Unknown		🗌 Diaposal By Lab	Archive For		Monthe tanc	Ne mey be as	sessed if sen ath)	(A foe mey be assessed if samples are retained kunser than 1 month)	
s Rectrined C 48 Hours [] 7 Deys [ 14 Deys	8		OC Requirements (Specify)	8						
1 2 Well		15:45	1. Hacayladdy	D (K)		H	104	Date Date	1/10 1/5H	$\langle \rangle$
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### Analytical Report

Work Order: RSK0770

Project Description Quarterly Discharge Monitoring

For:

Charles E. McLeod, Jr.

Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

and M. Equa

Jennifer Byrnes For Jason Kacalski Project Manager jennifer.byrnes@testamericainc.com Friday, December 11, 2009

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exception to NELAP requirements are noted in this report. Persuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project manager who has signed this report.



Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSK0770

Received: 11/16/09 Reported: 12/11/09 15:42

Project: Quarterly Discharge Monitoring Project Number: GES

# TestAmerica Buffalo Current Certifications

### As of 1/27/2009

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA, NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
lowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana *	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	N Y0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SD WA, C WA	233701
New Jersey*	NELAP, SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA, CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
Texas*	NELAP CWA, RCRA	T10470441208-TX
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SDWA	278
Washington*	NELAP CWA,RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA,RCRA	252

\*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.



Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSK0770

Received: 11/16/09 Reported: 12/11/09 15:42

Project: Quarterly Discharge Monitoring Project Number: GES

#### **CASE NARRATIVE**

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

There are pertinent documents appended to this report, 21 pages, are included and are an integral part of this report.

Reproduction of this analytical report is permitted only in its entirety. This report shall not be reproduced except in full without the written approval of the laboratory.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.



Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSK0770

Project: Quarterly Discharge Monitoring Project Number: GES Received: 11/16/09 Reported: 12/11/09 15:42

The requested project specific reporting limits listed below were less than lab standard quantitation limits but greater than or equal to the lab MDL. It must be noted that results reported below lab standard quantitation limits (PQL) may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

SpecificMethod	<u>Analyte</u>	<u>Units</u>	Client RL	Lab PQL
2540C	Total Dissolved Solids	mg/L	4.0	10.0
420.4	Phenolics, Total Recoverable	ug/L	8.0	10.0

THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSK0770

Received: 11/16/09 Reported: 12/11/09 15:42

Project: Quarterly Discharge Monitoring Project Number: GES

#### DATA QUALIFIERS AND DEFINITIONS

**B** Analyte was detected in the associated Method Blank.

**CF6** Results confirmed by reanalysis.

- **D08** Dilution required due to high concentration of target analyte(s)
- **HFT** The holding time for this test is immediate. It was analyzed in the laboratory as soon as possible after receipt.
- J Sample result is greater than the MDL but below the CRDL
- **NR** Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSK0770

Received: 11/16/09 Reported: 12/11/09 15:42

Executive Summary - Detections											
Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method	
Sample ID: RSK0770-01 (A	AP-EWE-01	- Water)			Samp	led: 11/	16/09 16:00	Recvd: 11/16/09 18:00			
Total Metals by EPA 200	Series Meth	<u>nods</u>									
Selenium	5.1		4.6	NR	ug/L	1.00	11/18/09 12:51	AMH	9K18013	200.8	
General Chemistry Paran	neters										
рН	7.55	HFT	0.100	NR	SU	1.00	11/16/09 22:55	JME	9K16123	9040	
Oxygen, Dissolved	8.61	HFT	7.00	NR	mg/L	1.00	11/16/09 22:21	JME	9K16121	4500-O G	
Nitrate	3.22	D08, CF6	0.100	NR	mg/L as N	2.00	11/17/09 16:38	JME	9K17118	353.2	
Nitrite	0.220		0.050	NR	mg/L as N	1.00	11/17/09 21:16	JME	9K18004	353.2	
Phenolics, Total Recoverable	8.2	В	8.0	NR	ug/L	1.00	11/19/09 11:27	JMM	9K17110	420.4	
Total Dissolved Solids	734		4.0	NR	mg/L	1.00	11/18/09 15:15	AMP	9K18015	2540C	
<u>Nitrogen, Total Kjeldahl</u>											
Nitrogen, Total Kjeldahl	0.25	J	0.50	0.050	mg/L	1.00	12/10/09 14:42	RN	34150	351.2	



Greenstar Environmental Solutions, LLC 6 Gellatly Drive	Work Order: RSK0770	Received: 11/16/09 Reported: 12/11/09 15:42
Wappinger Falls, NY 12590	Project: Quarterly Discharge Monitoring	
	Project Number: GES	

### Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
AP-EWE-01	RSK0770-01	Water	11/16/09 16:00	11/16/09 18:00	
TRIP BLANK	RSK0770-02	Water	11/16/09	11/16/09 18:00	

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSK0770

Received: 11/16/09 Reported: 12/11/09 15:42

Analytical Report										
	Sample	Data				Dil	Date	Lab		
Analyte	Result	Qualifiers	RL	MDL	Units	Fac	Analyzed	Tech	Batch	Method
Sample ID: RSK0770-01 (A	P-EWE-01	- Water)			Samp	led: 11/	/16/09 16:00	Rec	vd: 11/16/0	9 18:00
Volatile Organic Compour	<u>nds</u>									
1,1-Dichloroethane	ND		5.0	0.59	ug/L	1.00	11/18/09 07:08	TRB	9K17020	624
Trichloroethene	ND		5.0	0.60	ug/L	1.00	11/18/09 07:08	TRB	9K17020	624
1,2-Dichloroethane-d4	107 %		Surr Limits:	(88-132%)			11/18/09 07:08	TRB	9K17020	624
4-Bromofluorobenzene	96 %		Surr Limits:	(78-122%)			11/18/09 07:08	TRB	9K17020	624
Toluene-d8	99 %		Surr Limits:	(87-110%)			11/18/09 07:08	TRB	9K17020	624
Total Metals by EPA 200 S	Series Meth	<u>iods</u>								
Barium	ND		2000	NR	ug/L	1.00	11/18/09 21:47	DAN	9K17070	200.7
Chromium	ND		100	NR	ug/L	1.00	11/18/09 21:47	DAN	9K17070	200.7
Copper	ND		14.7	NR	ug/L	1.00	11/18/09 21:47	DAN	9K17070	200.7
Iron	ND		300	NR	ug/L	1.00	11/18/09 21:47	DAN	9K17070	200.7
Nickel	ND		70.0	NR	ug/L	1.00	11/18/09 21:47	DAN	9K17070	200.7
Zinc	ND		115	NR	ug/L	1.00	11/18/09 21:47	DAN	9K17070	200.7
Selenium	5.1		4.6	NR	ug/L	1.00	11/18/09 12:51	AMH	9K18013	200.8
Thallium	ND		4.0	NR	ug/L	1.00	11/18/09 12:51	AMH	9K18013	200.8
General Chemistry Param	eters									
Ammonia as N	ND		9.20	NR	mg/L as N	1.00	11/19/09 12:12	RMM	9K19032	350.1
Biochemical Oxygen	ND		5.0	NR	mg/L	1.00	11/17/09 15:58	JFR	9K17117	5210B
Demand										
Chromium, Hexavalent	ND		11.0	NR	ug/L	1.00	11/16/09 22:50	JME	9K16122	7196A
Chemical Oxygen Demand	ND		40.0	NR	mg/L	1.00	11/18/09 13:45	AMP	9K18061	410.4
pH	7.55	HFT	0.100	NR	SU	1.00	11/16/09 22:55	JME	9K16123	9040
Oxygen, Dissolved	8.61	HFT	7.00	NR	mg/L	1.00	11/16/09 22:21	JME	9K16121	4500-0 G
Nitrate	3.22	D08. CF6	0.100	NR	mg/L as N	2.00	11/17/09 16:38		9K17118	353.2
Nitrite	0.220	200, 01 0	0.050	NR	mg/L as N	1.00	11/17/09 21:16	JME	9K18004	353.2
Phenolics. Total	8.2	В	8.0	NR	ug/L	1.00	11/19/09 11:27		9K17110	420.4
Recoverable	0.2	D	0.0	1.11.1	49, L	1.00	1.1.10,000 11.21	5101101	5111110	720.7
Total Dissolved Solids	734		4.0	NR	mg/L	1.00	11/18/09 15:15	AMP	9K18015	2540C
Total Suspended Solids	ND		10.0	NR	mg/L	1.00	11/18/09 10:20	JMM	9K18014	2540D
<u>Nitrogen, Total Kjeldahl</u>										
Nitrogen, Total Kjeldahl	0.25	J	0.50	0.050	mg/L	1.00	12/10/09 14:42	RN	34150	351.2
		-								

THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

#### Work Order: RSK0770

Received: 11/16/09 Reported: 12/11/09 15:42

			Α	nalytical F	Report					
Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0770-02	(TRIP BLAN	K - Water)			Sam	oled: 11	16/09	Recv	/d: 11/16/09	ə 18:00
Volatile Organic Compo	ounds									
1,1-Dichloroethane	ND		5.0	0.59	ug/L	1.00	11/18/09 07:35	TRB	9K17020	624
Trichloroethene	ND		5.0	0.60	ug/L	1.00	11/18/09 07:35	TRB	9K17020	624
1,2-Dichloroethane-d4	106 %		Surr Limits:	(88-132%)			11/18/09 07:35	TRB	9K17020	624
4-Bromofluorobenzene	97 %		Surr Limits:	(78-122%)			11/18/09 07:35	TRB	9K17020	624
Toluene-d8	94 %		Surr Limits:	(87-110%)			11/18/09 07:35	TRB	9K17020	624

THE LEADER IN ENVIRONMENTAL TESTING

#### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

#### Work Order: RSK0770

Received: 11/16/09 Reported: 12/11/09 15:42

SAMPLE EXTRACTION DATA												
Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method			
General Chemistry Parameters												
2540C	9K18015	RSK0770-01	100.00	mL	100.00	mL	11/18/09 15:15	JMM	No prep solids			
2540D	9K18014	RSK0770-01	250.00	mL	250.00	mL	11/18/09 10:20	JMM	No prep solids			
350.1	9K19032	RSK0770-01	5.00	mL	5.00	mL	11/19/09 09:26	RMM	Ammonia			
353.2	9K17118	RSK0770-01	5.00	mL	5.00	mL	11/17/09 16:30	JME	No prep Nitrate			
353.2	9K18004	RSK0770-01	5.00	mL	5.00	mL	11/17/09 21:10	JME	No prep Nitrite			
410.4	9K18061	RSK0770-01	2.00	mL	2.00	mL	11/18/09 13:45	AMP	No prep Chemical Oxygen Demand			
420.4	9K17110	RSK0770-01	50.00	mL	50.00	mL	11/17/09 21:31	MDM	TRP Distillation			
4500-O G	9K16121	RSK0770-01	300.00	mL	300.00	mL	11/16/09 22:21	JME	No prep Biochemical Oxygen Demand			
5210B	9K17117	RSK0770-01	300.00	mL	300.00	mL	11/17/09 15:58	MDM	Biochemical Oxygen Demand			
7196A	9K16122	RSK0770-01	25.00	mL	25.00	mL	11/16/09 22:50	JME	Hex Digestion			
9040	9K16123	RSK0770-01	50.00	mL	50.00	mL	11/16/09 22:55	JME	No prep pH			
Total Metals by EPA 200 Series	<b>Nethods</b>											
200.7	9K17070	RSK0770-01	50.00	mL	50.00	mL	11/18/09 09:00	KCW	3005A			
200.8	9K18013	RSK0770-01	50.00	mL	50.00	mL	11/18/09 09:00	KCW	3020A			
Volatile Organic Compounds												
624	9K17020	RSK0770-01	5.00	mL	5.00	mL	11/17/09 12:45	TRB	5030B MS			
624	9K17020	RSK0770-02	5.00	mL	5.00	mL	11/17/09 12:45	TRB	5030B MS			

Greenstar Environmental S 6 Gellatly Drive	Solutions, LLC		Work Ore	der: RSK0770				Rece Repo		11/16/09 12/11/09 15:42	
Wappinger Falls, NY 1259	0		Project: ( Project N	Quarterly Discharg lumber: GES	• •			- 1 -			
			LA	BORATORY	QC DATA						
	Source	Spike					%	% REC	%	RPD	Data
Analyte	Result	Level	RL	MDL	Units	Result	REC	Limits	RPD	Limit	Qualifiers
Volatile Organic Compo	ounds										
Blank Analyzed: 11/17/0	09 (Lab Num	ber:9K17	020-BLK1,	Batch: 9K17020	))						
1,1-Dichloroethane			5.0	0.59	ug/L	ND					
Trichloroethene			5.0	0.60	ug/L	ND					
Surrogate: 1,2-Dichloroethane-d4					ug/L		110	88-132			
Surrogate: 4-Bromofluorobenzene					ug/L		101	78-122			
Surrogate: Toluene-d8					ug/L		100	87-110			
LCS Analyzed: 11/17/09	) (Lab Numb	er:9K1702	20-BS1, Bat	tch: 9K17020)							
1,1-Dichloroethane		20.0	5.0	0.59	ug/L	20.5	102	73-128			
Trichloroethene		20.0	5.0	0.60	ug/L	20.0	100	67-134			
Surrogate: 1,2-Dichloroethane-d4					ug/L		104	88-132			
Surrogate: 4-Bromofluorobenzene					ug/L		100	78-122			
Surrogate: Toluene-d8					ug/L		100	87-110			

THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSK0770

Received: 11/16/09 Reported: 12/11/09 15:42

			LA	BORATORY	QC DATA						
	Source	Spike					%	% REC	%	RPD	Data
Analyte	Result	Level	RL	MDL	Units	Result	REC	Limits	RPD	Limit	Qualifiers
Total Metals by EPA 200	Series Met	<u>hods</u>									
Blank Analyzed: 11/18/09	(Lab Num	ber:9K17	070-BLK1, E	Batch: 9K17070	))						
Barium			2000	NR	ug/L	ND					
Chromium			100	NR	ug/L	ND					
Copper			14.7	NR	ug/L	ND					
Iron			300	NR	ug/L	ND					В
Nickel			70.0	NR	ug/L	ND					
Zinc			115	NR	ug/L	ND					
LCS Analyzed: 11/18/09 (	Lab Numb	er:9K1707	70-BS1, Bat	ch: 9K17070)							
Barium		200	200	NR	ug/L	200	100	85-115			
Chromium		200	10.0	NR	ug/L	204	102	85-115			
Copper		200	25.0	NR	ug/L	201	100	85-115			
Iron		10000	100	NR	ug/L	10100	101	85-115			
Nickel		200	40.0	NR	ug/L	205	102	85-115			
Zinc		200	20.0	NR	ug/L	209	104	85-115			
Total Metals by EPA 200	Series Met	<u>hods</u>									
Blank Analyzed: 11/18/09	(Lab Num	ber:9K18	013-BLK1, E	Batch: 9K18013	3)						
Selenium			4.6	NR	ug/L	ND					
Thallium			4.0	NR	ug/L	ND					В
LCS Analyzed: 11/18/09 (	Lab Numb	er:9K1801	I3-BS1, Bat	ch: 9K18013)							
Selenium			1.0				~~	05 445			
		20.0	4.6	NR	ug/L	19.6	98	85-115			
Thallium		20.0 20.0	4.6 4.0	NR NR	ug/L ug/L	19.6 20.4	98 102	85-115 85-115			
Thallium Matrix Spike Analyzed: 1 <sup>4</sup> QC Source Sample: RSK0770-0	-	20.0	4.0	NR	ug/L						
Matrix Spike Analyzed: 1	-	20.0	4.0	NR	ug/L						
Matrix Spike Analyzed: 1 QC Source Sample: RSK0770-0	)1	20.0 ab Numbe	4.0 r:9K18013-I	NR MS1, Batch: 9K	ug/L 18013)	20.4	102	85-115			
Matrix Spike Analyzed: 1 QC Source Sample: RSK0770-C Selenium	5.10 0.196 ed: <b>11/18/0</b> 9	20.0 ab Numbe 20.0 20.0	4.0 <b>r:9K18013-F</b> 4.6 4.0	NR <b>MS1, Batch: 9K</b> NR NR	ug/L 1 <b>8013)</b> ug/L ug/L	20.4 25.5	102 102	85-115 70-130			
Matrix Spike Analyzed: 14 QC Source Sample: RSK0770-0 Selenium Thallium Matrix Spike Dup Analyze	5.10 0.196 ed: <b>11/18/0</b> 9	20.0 ab Numbe 20.0 20.0	4.0 <b>r:9K18013-F</b> 4.6 4.0	NR <b>MS1, Batch: 9K</b> NR NR	ug/L 1 <b>8013)</b> ug/L ug/L	20.4 25.5	102 102	85-115 70-130	2	20	

Americ

Work Order: RSK0770 Greenstar Environmental Solutions, LLC 11/16/09 Received: 6 Gellatly Drive Reported: 12/11/09 15:42 Wappinger Falls, NY 12590 Project: Quarterly Discharge Monitoring GES Project Number: LABORATORY QC DATA Source Spike % % REC % RPD Data Result Level RL MDL REC **RPD Limit Qualifiers** Analyte Units Result Limits **General Chemistry Parameters** Blank Analyzed: 11/16/09 (Lab Number:9K16122-BLK1, Batch: 9K16122) Chromium, Hexavalent 11.0 NR ug/L ND LCS Analyzed: 11/16/09 (Lab Number:9K16122-BS1, Batch: 9K16122) Chromium, Hexavalent 10.0 NR ug/L 55.4 111 85-115 50.0 **General Chemistry Parameters** LCS Analyzed: 11/16/09 (Lab Number:9K16123-BS1, Batch: 9K16123) 6.98 SU 100 pН 7.00 NA NR 99.3-100. 8 **General Chemistry Parameters** Blank Analyzed: 11/19/09 (Lab Number:9K17110-BLK1, Batch: 9K17110) Phenolics. Total 8.00 NR ug/L 9.40 Recoverable LCS Analyzed: 11/19/09 (Lab Number:9K17110-BS1, Batch: 9K17110) Phenolics, Total 765 40.0 NR ug/L 728 95 75-125 D08,B Recoverable **General Chemistry Parameters** Blank Analyzed: 11/17/09 (Lab Number:9K17117-BLK1, Batch: 9K17117) **Biochemical Oxygen** 5.0 NR mg/L ND Demand LCS Analyzed: 11/17/09 (Lab Number:9K17117-BS1, Batch: 9K17117) 20 NR 185 94 85-115 **Biochemical Oxygen** 198 mg/L Demand Matrix Spike Analyzed: 11/17/09 (Lab Number:9K17117-MS1, Batch: 9K17117) QC Source Sample: RSK0770-01 ND 2.0 NR mg/L 174 88 22-178 **Biochemical Oxygen** 198 Demand **General Chemistry Parameters** Blank Analyzed: 11/17/09 (Lab Number:9K17118-BLK1, Batch: 9K17118) Nitrate 0.050 NR mg/L as N ND LCS Analyzed: 11/17/09 (Lab Number:9K17118-BS1, Batch: 9K17118) Nitrate 0.050 NR mg/L as N 1.41 94 90-110 1.50 Duplicate Analyzed: 11/17/09 (Lab Number:9K17118-DUP1, Batch: 9K17118) QC Source Sample: RSK0770-01

TestAmerica Buffalo - 10 Hazelwood Drive Amherst, NY 14228 tel 716-691-2600 fax 716-691-7991 www.testamericainc.com

<u>TestAmerica</u>

Greenstar Environmental S 6 Gellatly Drive	-			Work Order: RSK0770						d: 11/16/09 d: 12/11/09 15:42	
Wappinger Falls, NY 12590	)		Project: C Project N	uarterly Discha umber: GE							
			LA	BORATOR	Y QC DATA						
Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifier
General Chemistry Para	meters										
Duplicate Analyzed: 11/1	17/09 (Lab I	Number:9	K17118-DUF	P1, Batch: 9K <sup>r</sup>	17118)						
Nitrate	3.22		0.100	NR	mg/L as N	3.19			0.8	20	D08
Matrix Spike Analyzed: 1 QC Source Sample: RSK0770		ab Numbe	r:9K17118-N	/IS1, Batch: 9	K17118)						
Nitrate	3.22	2.00	0.100	NR	mg/L as N	5.24	101	77-123			D08
General Chemistry Para	meters										
Blank Analyzed: 11/17/0	9 (Lab Num	ber:9K18	004-BLK1, E	Batch: 9K1800	)4)						
Nitrite	·		0.050	NR	mg/L as N	ND					
LCS Analyzed: 11/17/09	(Lab Numb	er:9K1800	04-BS1, Bat	ch: 9K18004)							
Nitrite		1.50	0.050	NR	mg/L as N	1.49	100	90-110			
Duplicate Analyzed: 11/1 QC Source Sample: RSK0770	-	Number:9	K18004-DUI	P1, Batch: 9K	18004)						
Nitrite	0.220		0.050	NR	mg/L as N	0.212			4	20	
Matrix Spike Analyzed: 1 QC Source Sample: RSK0770		ab Numbe	r:9K18004-N	/IS1, Batch: 9	K18004)						
Nitrite	0.220	1.00	0.050	NR	mg/L as N	1.30	108	61-147			
General Chemistry Para	meters										
Blank Analyzed: 11/18/0	9 (Lab Num	ber:9K18	014-BLK1, E	Batch: 9K1801	14)						
Total Suspended Solids			10.0	NR	mg/L	ND					
LCS Analyzed: 11/18/09	(Lab Numb	er:9K180 <sup>-</sup>	14-BS1, Bat	ch: 9K18014)							
Total Suspended Solids		923	4.0	NR	mg/L	892	97	88-110			
General Chemistry Para	<u>meters</u>										
Blank Analyzed: 11/18/0	9 (Lab Num	ber:9K18	015-BLK1, E	Batch: 9K1801	15)						
Total Dissolved Solids			4.0	NR	mg/L	ND					
LCS Analyzed: 11/18/09	(Lab Numb	er:9K180 <sup>-</sup>	15-BS1, Bat	ch: 9K18015)							
Total Dissolved Solids		500	4.0	NR	mg/L	484	97	85-115			
General Chemistry Para	<u>meters</u>										
Blank Analyzed: 11/18/0	9 (Lab Num	ber:9K18	061-BLK1, E	Batch: 9K1806	61)						
Chemical Oxygen Demand			40.0	NR	mg/L	ND					

TestAmerica Buffalo - 10 Hazelwood Drive Amherst, NY 14228 tel 716-691-2600 fax 716-691-7991 www.testamericainc.com

Greenstar Environmental Solutions, LLC			Work Orc	Work Order: RSK0770						11/16/09 12/11/09 15:42			
	Wappinger Falls, NY 12590			Project: Quarterly Discharge Monitoring Project Number: GES									
			LA	BORATOR	QC DATA								
Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers		
General Chemistry F	Parameters												
LCS Analyzed: 11/18	8/09 (Lab Numb	er:9K1806	61-BS1, Bat	ch: 9K18061)									
LCS Analyzed: 11/18 Chemical Oxygen Demand	8/09 (Lab Numb	er:9K1806 25.0	6 <b>1-BS1, Bat</b> 10.0	ch: 9K18061) NR	mg/L	27.2	109	90-110					
Chemical Oxygen	·			,	mg/L	27.2	109	90-110					
Chemical Oxygen Demand	Parameters	25.0	10.0	NR		27.2	109	90-110					
Chemical Oxygen Demand General Chemistry F	Parameters	25.0	10.0	NR		27.2 ND	109	90-110					
Chemical Oxygen Demand General Chemistry F Blank Analyzed: 11/'	Parameters 19/09 (Lab Num	25.0 h <b>ber:9K19</b>	10.0 032-BLK1, I 9.20	NR Batch: 9K1903 NR	2)		109	90-110					

THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSK0770

Project: Quarterly Discharge Monitoring Pı

11/16/09 Received: 12/11/09 15:42 Reported:

Project Number	GES	

			LA	BORATORY	QC DATA					
	Source	Spike					%	% REC	% RPD	Data
Analyte	Result	Level	RL	MDL	Units	Result	REC	Limits	RPD Limit	Qualifiers
Nitrogen, Total Kjeldahl										
Blank Analyzed: 12/10/0	9 (Lab Nun	1ber:220-3	4155-7, Bat	tch: 34150)						
Nitrogen, Total Kjeldahl			0.50	0.050	mg/L	ND		-		
LCS Analyzed: 12/10/09	(Lab Numb	oer:220-34	155-8, Batc	h: 34150)						
Nitrogen, Total Kjeldahl		2.47	0.50	0.050	mg/L	2.40	97	85-115		

Chain of Custody Bacord	Temperature on Receipr	<u>TestAmerica</u>	
	Drinking Water? Yes 🔲 No 🔩	THE LEADER IN ENVIRONMENTAL TESTING	
Creenstar Environmental	Project Manager	11-16-09 Chain of Custody Number	84 34
 	Telephone Number (Area CooglyFax Number (245) 223-9944		of
Wappingers Falls NY 12590	Sile Contract Chilo McLead	Analysis (Attach list if more space is needed)	
	Carrien Waytum Number	4 5 5 5 1-4 55	Inctions/
Carinect Purchase Onter Outer No. Quarterly Discharge Monitoring	Methix Containers & Preservethas		of Receipt
	Tomo Alexandre South Alexandre	AR FILLE VISION	
APENE-01 9-10-01 1	1 4 3 1 2		
>			
Possible Hazard Identification	Sample Okposel Urknown Dehum To Client Disposel By Lab	(A fee may be assessed if sumples are retained a sumples are retained a sumple for	ained
Tum Around Time Required			
1. Rainyukhod By 2 mg	11-16 15:00 1. Accorded By	mt Daw	
2. Reinquiched By	Lare 2. Padawadey	Daris 1 1 Tim	
3. Reincunished By	Dale Time 3 Received By	0.416 Jane	
Comments			
DISTRIBUTION: Witit£ - Returned to Client with Report: CAWARIY - Stays with the Semple: PiNK - Field Copy	th the Semple: PINK - Field Copy		



# ANALYTICAL REPORT

Job Number: 220-10867-1 SDG Number: 220-10867 Job Description: Greenstar Environmental - RSK0770

> For: TestAmerica Laboratories, Inc. 10 Hazelwood Drive Amherst, NY 14228-2298 Attention: Mr. Jason Kacalski

Approved for release. Patty A Mercure 12/11/2009 12:52 PM

Designee for Johanna Dubauskas Project Manager I johanna.dubauskas@testamericainc.com 12/11/2009

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

TestAmerica Laboratories, Inc. TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484 Tel (203) 929-8140 Fax (203) 929-8142 www.testamericainc.com



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#### Comments

No additional comments.

### Receipt

All samples were received in good condition within temperature requirements.

General Chemistry No analytical or quality issues were noted.

## **EXECUTIVE SUMMARY - Detections**

Client: TestAmerica Laboratories, Inc.

Job Number: 220-10867-1 Sdg Number: 220-10867

Lab Sample ID Analyte	Client Sample ID	Result / Qua		Reporting Limit	Units	Method
220-10867-1	RSK0770-01					
Nitrogen, Total Kjel	dahl	0.25	J	0.50	mg/L	351.2

### **METHOD SUMMARY**

Client: TestAmerica Laboratories, Inc.

#### Job Number: 220-10867-1 Sdg Number: 220-10867

Description	Lab Location	Method	Preparation Method
Matrix Water			
Nitrogen, Total Kjeldahl	TAL CT	MCAWW 351	.2
Nitrogen, Total Kjeldahl	TAL CT		MCAWW 351.2
Lab References:			

TAL CT = TestAmerica Connecticut

#### Method References:

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

## METHOD / ANALYST SUMMARY

Client: TestAmerica Laboratories, Inc.

Job Number: 220-10867-1 Sdg Number: 220-10867

MethodAnalystAnalyst IDMCAWW 351.2Natoli, Richard ARN

TestAmerica Connecticut

#### SAMPLE SUMMARY

Client: TestAmerica Laboratories, Inc.

Job Number: 220-10867-1 Sdg Number: 220-10867

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-10867-1	RSK0770-01	Water	11/16/2009 1600	12/03/2009 0940

# SAMPLE RESULTS

Job Number: 220-10867-1 Sdg Number: 220-10867

Client Sample ID:	RSK0770-01							
Lab Sample ID: Client Matrix:	220-10867-1 Water						•	11/16/2009 16 12/03/2009 09
Analyte		Result	Qual	Units	MDL	RL	Dil	Method
Nitrogen, Total Kjeld	ahl	0.25	J	mg/L	0.050	0.50	1.0	351.2
Ar	nalysis Batch: 220 Prep Batch: 22		Date Analyze Date Pre		009 1442 08/2009 1600			

#### DATA REPORTING QUALIFIERS

Client: TestAmerica Laboratories, Inc.

Job Number: 220-10867-1 Sdg Number: 220-10867

Lab Section	Qualifier	Description
General Chemistry		
	U	Indicates analyzed for but not detected.
	J	Sample result is greater than the MDL but below the CRDL

# **QUALITY CONTROL RESULTS**

Client: TestAmerica Laboratories, Inc.

Job Number: 220-10867-1 Sdg Number: 220-10867

#### **QC Association Summary**

-				
Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Lab Control Sample	Т	Water	351.2	
Method Blank	Т	Water	351.2	
RSK0770-01	Т	Water	351.2	
Duplicate	Т	Water	351.2	
Matrix Spike	Т	Water	351.2	
155				
Lab Control Sample	Т	Water	351.2	220-34150
Method Blank	Т	Water	351.2	220-34150
RSK0770-01	Т	Water	351.2	220-34150
Duplicate	Т	Water	351.2	220-34150
Matrix Spika	т	Water	251 2	220-34150
	Lab Control Sample Method Blank RSK0770-01 Duplicate Matrix Spike I55 Lab Control Sample Method Blank RSK0770-01	Client Sample IDBasisLab Control SampleTMethod BlankTRSK0770-01TDuplicateTMatrix SpikeT155Lab Control SampleTMethod BlankTRSK0770-01TDuplicateTMethod BlankTRSK0770-01TDuplicateT	Lab Control SampleTWaterMethod BlankTWaterRSK0770-01TWaterDuplicateTWaterMatrix SpikeTWater155Lab Control SampleTMethod BlankTWaterRSK0770-01TWaterDuplicateTWaterMethod BlankTWaterRSK0770-01TWaterDuplicateTWater	Client Sample IDBasisClient MatrixMethodLab Control SampleTWater351.2Method BlankTWater351.2RSK0770-01TWater351.2DuplicateTWater351.2Matrix SpikeTWater351.2IssLab Control SampleTWaterMethod BlankTWater351.2RSK0770-01TWater351.2JuplicateTWater351.2Method BlankTWater351.2RSK0770-01TWater351.2DuplicateTWater351.2

#### Report Basis

T = Total

**Quality Control Results** 

Client: TestAmerica Laboratories, Inc.

#### Method Blank - Batch: 220-34150

Job Number: 220-10867-1 Sdg Number: 220-10867

#### Method: 351.2 Preparation: 351.2

Lab Sample ID: MB 220-34150/1-A Client Matrix: Water Dilution: 1.0 Date Analyzed: 12/10/2009 1434 Date Prepared: 12/08/2009 1600	Analysis Batch: Prep Batch: 22 Units: mg/L		Lab F Initial	ment ID: Kone ile ID: N/A Weight/Volume Weight/Volume	e: 20 mL	
Analyte	Resul	t (	Qual	MDL	RL	
Nitrogen, Total Kjeldahl	0.50	ι	J	0.050	0.50	
Lab Control Sample - Batch: 220-34	1150			od: 351.2 aration: 351.	2	
Lab Sample ID:LCS 220-34150/2-AClient Matrix:WaterDilution:1.0Date Analyzed:12/10/20091434Date Prepared:12/08/20091600	Analysis Batch: Prep Batch: 22 Units: mg/L		Lab F Initial	ment ID: Kone ile ID: N/A Weight/Volume Weight/Volume	e: 20 mL	
Analyte	Spike Amount	Result	% Rec.	Limit		Qual
Nitrogen, Total Kjeldahl	2.47	2.40	97	85 - 115		
Matrix Spike - Batch: 220-34150				od: 351.2 aration: 351.	2	
Lab Sample ID: 220-10871-D-2-C MS Client Matrix: Water Dilution: 1.0 Date Analyzed: 12/10/2009 1442 Date Prepared: 12/08/2009 1600	Analysis Batch: 22 Prep Batch: 220-3 Units: mg/L		Lab F Initial	ment ID: Kone ile ID: N/A Weight/Volume Weight/Volume	e: 20 mL	
Analyte	Sample Result/Qua	I Spike Amo	unt Result	% Rec.	Limit	Qual
Nitrogen, Total Kjeldahl	0.50 U	2.00	1.90	95	75 - 125	

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### **Quality Control Results**

Client: TestAmerica Laboratories, Inc.

#### Duplicate - Batch: 220-34150

Job Number: 220-10867-1 Sdg Number: 220-10867

#### Method: 351.2 Preparation: 351.2

Lab Sample ID: 220-10871-D-2-B DU Client Matrix: Water Dilution: 1.0 Date Analyzed: 12/10/2009 1442 Date Prepared: 12/08/2009 1600	Analysis Bate Prep Batch: Units: mg/L		5	Instrument ID: Lab File ID: Initial Weight/V Final Weight/V	N/A ′olume: 20 m	L
Analyte	Sample R	esult/Qual	Result	RPD	Limit	Qual
Nitrogen, Total Kjeldahl	0.50	U	0.50	NC	20	U

Calculations are performed before rounding to avoid round-off errors in calculated results.

# **MISCELLANEOUS DOCUMENTS**

#### SUBCONTRACT ORDER TestAmerica Buffalo



#### **RSK0770**

SENDING LABORATORY:	RECEIVING LABORATORY:
TestAmerica Buffalo	TestAmerica Connecticut
10 Hazelwood Drive	128 Long Hill Cross Road
Amherst, NY 14228	Shelton, CT 06484
Phone: 716-691-2600	Phone :(203) 944-1307
Fax: 716-691-7991	Fax: -
Project Manager: Jason Kacalski	Project Location: _UNKNOWN
Client: Greenstar Environmental Solutions, LLC	Receipt Temperature: <u>°C</u> Ice: Y / N

Report: Level 2 Report

Analysis	Units	Due	Expires	Interlab Price Sur	ch	Comments	
Sample ID: RSK0770-01	(AP-EWE-01 -	· Water)	Sampled	: 11/16/09 16:00			
WC - TKN 351.2 Containers Supplied:	mg/L	12/02/09	12/14/09 16:00	\$0.00	0%	A00088,	

REPLACE MANS Volunt

PASSED RAD SCREEN 1.0° gun# 1

BUNARCO 12 Released By

6 Date/Time

Received By

<u>12/3/09\_940</u> Date/Time

Released by

Released By

Date/Time

Page 18eceived By

Date/Time

Page 1 of 1 12/11/2009

#### WORK ORDER LOGIN REVIEW

#### **RSK0770**

#### TestAmerica Buffalo

## Greenstar Environmental Solutions, LLC

Sample	Client ID	Sample Alias	Sample Date/Time	<b>Received Date/Time</b>	QC Sam
RSK0770-01	AP-EWE-01	AP-EWE-01	11/16/09 16:00		
RSK0770-01	AP-EWE-01	AP-EWE-01		11/16/09 18:00	False
	TRIP BLANK		11/16/09 16:00	11/16/09 18:00	False
NON0770-02	INF DLANK	TRIP BLANK	11/16/09 00:00	11/16/09 18:00	False

# TESTAMERICA CONNECTICUT PRESERVATIVE RECORD



	-		 	 	 						 	 			 	 -			
Date	12-3-09															-			
Initials	KY KY																		
Preservative Lot Number	0Ĥ																		
pH after Adjustment	4 (V)	2																	
Adjustment (mLs)	AU	2																	
Hd	6										Z								
Preservative	JC JCF												0	A C					
Lab Number	(1) typu					P	age	18	of	20							12/	11/	200

TestAmerica Form# SMF00207.CT

#### Login Sample Receipt Check List

Client: TestAmerica Laboratories, Inc.

Job Number: 220-10867-1 SDG Number: 220-10867

List Source: TestAmerica Connecticut

### Login Number: 10867

Creator: Blocker, Kristina List Number: 1

Question	T / F/ NA	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	1.0C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	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	
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	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	

	t of		, [					 <u></u>					
	LUFAC	S	J	Time	ا هور								
	220-(0867	19-3.	JIC	Date	218								
		ved:	Sample #s: Locations:	Signature-Sample Return	کر								
				Reason	754	an and a subscription of the first of the subscription of the subs			15 FT				
•				Time	1543				Σ	X			
				Date	1,5/2					-19			
	Connecticut 1-of-Custody	. HA	Water: # (	Signature-Sample Removal	2								300.CT
)	TestAmerica - Connecticut Internal Chain-of-Custody Trip Black:			Laboratory Sanıple #									TestAmerica Foum# SMF02309.CT
	Trip	SS -	Soft:		Pag	re 20 o	£ 20				12	/11/200	Tes

# Attachment G

Monthly Operation and Maintenance Details July – December 2009

#### 1. INTRODUCTION

This report presents a summary of the ongoing operation and maintenance activities for the Airco Parcel site from 1 July to 31 December 2009. 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

A revision to the discharge limit was requested in the 1<sup>st</sup> 2009 Bi-Annual report. The increase was requested from 21,600 gallons per day (gpd) discharge limit to 28,800 gpd. Comparing the discharge flow rates to the revised value, the system exceeded 28,800 only twice, in August. During this report period, the overall system average flow rate was 15.7 gallons per minute (gpm).

Table 2 of the Bi-Annual 2009 Monitoring Event Letter Report provides a summary of the quarterly effluent analytical data from the August and November 2009 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, 4,169,062 gal of groundwater were treated and discharged to the stormwater swale adjacent to the engineered wetlands. The system average flow rate was 15.7 gpm during the reporting period, with no influence observed due to heavy rain events. The treatment system was operational for 100 percent of the reporting period. The emergency overflow pond (T8) was utilized at various points during the reporting period during routine system maintenance and cleaning activities, and six times due to high levels in T-8. No 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 3.0 pounds (lb) of total chromium was treated by the GCTS, of which an estimated 1.9 lb was hexavalent chromium. These values are based on the total gallons treated and the average influent and effluent concentrations observed from the bi-weekly field sampling.

#### 3.1 SYNOPSIS OF THE BI-ANNUAL ACTIVITIES

#### July 2009

The system was operational for all 31 days in July. An alarm condition was reported once during July. The alarm condition was due to high water levels in T-8. No scheduled or unscheduled shut downs or system bypasses occurred. The following details the activities which were performed during July.

- 7 July 2009 Routine site visit. Cleaned and calibrated pH probes in T3B and T6B. Cut grass around T-7 and T-8.
- 21 July 2009 Routine site visit. Cut grass around T-7 and T-8. Set rat poison in T-1 shed. Collect confirmation sample and submit to Test America to confirm elevated Cr<sup>+6</sup> levels at SS-1. Cut down weeds blocking solar panel.
- 23 July 2009 Remote monitoring response to T-8 high level alarm caused by excessive rain. Changed set points, pumped T-8 down, and reset alarms.

#### August 2009

The system was operational for all 31 days in August. An alarm condition was reported once during August. The alarm condition was due to high water levels in T-8. No unscheduled shut downs occurred. The following details the activities which were performed during August.

- 9 August 2009 Remote monitoring response to T-8 high level alarm caused by excessive rain. Changed set points, pumped T-8 down, and reset alarms.
- 10 August 2009 Routine site visit. Cut grass around T-7 and T-8. Put up wallboard in T-1 shed. Collected Quarterly effluent sampling.
- 19 August 2009 Routine site visit. Cut grass around T-7 and T-8. Weed whack around solar panel and other locations near the GCTS. Placed 4x4 blocking in T-1 floor to keep out mice.

#### September 2009

The system was operational for all 30 days in September. Alarm conditions were reported once during September. The alarm condition was due to high water levels in T-8. No unscheduled shut downs occurred. The following details the activities which were performed during September.

- 1 September 2009 Routine site visit. Cut grass around T-7 and T-8. Recalibrate field pH meter.
- 16 September 2009 Remote monitoring response to T-8 low level alarm caused by evaporation. Changed set points, added water to T-8 from T-1 and reset alarms.
- 17 September 2009 Routine site visit. Cut grass around T-7 and T-8.
- 23 September 2009 Remote monitoring response to T3A high level. Had Ridgeway personnel mobilize to the site to remove calcium build-up in crossover pipes. Alarm condition was resolved once calcium blockage was removed.

#### October 2009

The system was operational for 31 days in October. Alarm conditions were reported once during October. The alarm condition was due to low water level in T-7. The system had one scheduled and no unscheduled shut downs. The scheduled shutdown was for system cleaning. The system remained operational during the system cleaning. The following details the activities which were performed to during April.

- 3 October 2009 Routine site visit. Commenced system bypass for complete system cleaning. System cleaning was completed on 13 October 2009. In addition to system cleaning the following repairs were completed to address issues identified in the engineering inspections:
  - Cap mowing and vegetation removal.
  - Additional gravel added to areas on the access road where water typically ponds up near the treatment system and the front gate.
  - Added weed control fabric and stone around solar panel to reduce routine O&M around the solar panel.
  - Grinded, primed and painted the eight monitoring wells safety blue.
  - Generator and generator pad was removed, the soft unsuitable materials removed from under the pad, compacted structural fill added, and the generator pad and generator placed back on the pad and reconnected.
  - The section of swale in the SW corner where soils were noted to have sloughed into the swale was removed, and the stone in the swale replaced.
  - The stressed area of vegetation in the SW corner was scarified, additional topsoil added and the area seeded.
- 22 October 2009 Remote monitoring response to low level alarm in T-7. Visually checked water level in T-7 using the remote T-8 camera. Level appeared to be normal.
- 23 October 2009 Routine site visit. Clean and reset T-7 pressure transmitter. Run SS-01 sample to lab to verify chrome levels leaving site. Installed repaired network camera on office shed.

#### November 2009

The system was operational for 30 days in November. No alarm conditions were reported. No scheduled or unscheduled shut downs or system bypasses occurred. The following details the activities which were performed during November.

- 7 November 2009 Routine site visit. Perform inspection for engineers report.
- 15 November 2009 Emergency response mobilization responding to one of the PLC's being offline. Upon arrival and diagnosis it was determined that the PLC's were all functioning properly, and that the Ethernet jack was faulty. The jack and cable integrating the main PLC was replaced
- 16 18 November 2009 Routine site visit. Winterize system, turn on heaters and heat trace. Build enclosure to cover automated valve on the CO<sub>2</sub> tank vaporizer system to prevent freezing during winter operations. Collected Quarterly discharge sample.

#### December 2009

The system was operational for 31 days in December. Alarm conditions were reported once during June. The alarm condition was due to high water levels in T-8. No unscheduled shut downs occurred. The following details the activities which were performed during December.

- 8 December 2009 Remote response to alarm condition. T-2, the CO<sub>2</sub> tank RTU panel was giving false data. Notified Linde through the NSC to have tech support fix RTU.
- 12 December 2009 Routine site visit.

• 28 December 2009 – Routine site visit. Could not collect field sample at SS-01 due to excessive ice. Clean & calibrate pH probes.

#### 4. MODIFICATIONS/IMPROVEMENTS AND RECOMMENDATIONS

#### 4.1 SYSTEM MODIFICATION/IMPROVEMENTS

No system modifications to the GCTS were performed during the report period.

#### 5. PROJECTED OPERATION AND MAINTENACE

#### 5.1 JANUARY – JUNE 2010

During the first bi-annual report period of 2010, Greenstar anticipates performing routine operation and maintenance activities. Routine activities during the first report period will include routine cleaning and calibration, pump replacements, as required.

#### 6. SYSTEM MONITORING

#### 6.1 ENVIRONMENTAL SAMPLING

Routine system sampling with field analysis will continue on a bi-monthly 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 and June 2010 from the GCTS to monitor the New York State Department of Environmental Conservation discharge permit guidelines. The first bi-annual groundwater monitoring event for 2010 is anticipated to occur in April 2010.

## **Attachment G.1**

Airco Parcel Bi-Weekly System Monitoring Checklists July – December 2009

Date: 7/9/09 Project No.: 1038 Weather: Partly cloudy 78 degrees		Greenstar Personnel: Bruce Vinal
READING		ITEM
	229	Carbon Dioxide Storage Tank Pressure (220-235 psi)
	5105	Carbon Dioxide Tank Liquid Level
	2.6	T1 Water Level
AUTO	D/CYCLING	Pump P1A Running Status ON/OFF
	D/CYCLING	Pump P1BA Running Status ON/OFF
	616.1	T3A Water Elevation
	6.04	T3B pH Reading
	614.5	T3B Water Level
AUTO	D/CYCLING	Pump 3B Operational Status ON/OFF
	611.1	T5 Water Level
AUTO	D/CYCLING	Pump 5 Operational Status ON/OFF
	616.0	T6A Water Elevation
	6.4	Т6В рН
	613.9	T6B Water Level
AUTO	D/CYCLING	Pump 6B Operational Status ON/OFF
	616.1	T7 Water Level Reading
	6.2	Т7 рН
	0.9	T8 Water Elevation
18	,210,814	Flow Meter Reading
	14	Average System Flow
	19.3	Generator Run Hours
READING	Standard	LOCATION/PARAMETER
0.100	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromiun
0.115	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
0.001	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.027	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
0.012	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
-0.005	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.009	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.025	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
pH	READING	SAMPLE LOCATION
	6.62	Calcium Settling Pond Effluent (T3)
	6.76	Iron Settling Pond Effluent (T6)
	6.87	Engineered Wetland Effluent (T7)
	7.46	Southwest Corner Effluent (SS-1)

Date: 7/21/09 Project No.: 1038		Greenstar Personnel: Bruce Vinal
Weather: Rain		
	READING	ITEM
	234	Carbon Dioxide Storage Tank Pressure (220-235 psi)
	8602	Carbon Dioxide Tank Liquid Level
	2.6	T1 Water Level
AU	TO/CYCLING	Pump P1A Running Status ON/OFF
AU	TO/CYCLING	Pump P1BA Running Status ON/OFF
	616.1	T3A Water Elevation
	6.11	T3B pH Reading
	613.2	T3B Water Level
AU	TO/CYCLING	Pump 3B Operational Status ON/OFF
	613.5	T5 Water Level
AU	TO/CYCLING	Pump 5 Operational Status ON/OFF
	616.0	T6A Water Elevation
	6.5	T6B pH
	612.9	T6B Water Level
AU	TO/CYCLING	Pump 6B Operational Status ON/OFF
	616.2	T7 Water Level Reading
	6.2	Т7 рН
	0.8	T8 Water Elevation
	18,491,318	Flow Meter Reading
	17	Average System Flow
	19.5	Generator Run Hours
READING	Standard	LOCATION/PARAMETER
0.050	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromium
0.136	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
ND	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.030	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
0.003	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
0.004	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.015	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.018	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
р	H READING	SAMPLE LOCATION
*	6.52	Calcium Settling Pond Effluent (T3)
	6.69	Iron Settling Pond Effluent (T6)
	6.74	Engineered Wetland Effluent (T7)
7.22		Southwest Corner Effluent (SS-1)

Date: 8/10/09Project No.: 1038Weather: Rain/overcast 80 degrees		Greenstar Personnel: Bruce Vinal
READING		ITEM
	230	Carbon Dioxide Storage Tank Pressure (220-235 psi)
	10,475	Carbon Dioxide Tank Liquid Level
	2.7	T1 Water Level
ΔΙΙ	TO/CYCLING	Pump P1A Running Status ON/OFF
	TO/CYCLING	Pump P1BA Running Status ON/OFF
110	616.2	T3A Water Elevation
	5.7	T3B pH Reading
	613.3	T3B Water Level
AU	TO/CYCLING	Pump 3B Operational Status ON/OFF
110	613.4	T5 Water Level
AU	TO/CYCLING	Pump 5 Operational Status ON/OFF
110	616.0	T6A Water Elevation
	6.5	Т6В рН
	614.1	T6B Water Level
AU	TO/CYCLING	Pump 6B Operational Status ON/OFF
110	616.2	T7 Water Level Reading
	6.3	T7 pH
	1.7	T8 Water Elevation
	18,991,138	Flow Meter Reading
	20	Average System Flow
	20	Generator Run Hours
READING	Standard	LOCATION/PARAMETER
0.093	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromiun
0.095	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
-0.013	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.029	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
-0.006	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
0.000	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.011	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.016	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
	H READING	SAMPLE LOCATION
1	6.71	Calcium Settling Pond Effluent (T3)
	6.82	Iron Settling Pond Effluent (T6)
	6.97	Engineered Wetland Effluent (T7)
7.81		Southwest Corner Effluent (SS-1)

Date: 8/19/09 Project No.: 1038		Greenstar Personnel: Bruce Vinal
Weather: Sunny 85	2	
	READING	ITEM
	228	Carbon Dioxide Storage Tank Pressure (220-235 psi)
	5,843	Carbon Dioxide Tank Liquid Level
	2.7	T1 Water Level
AU	TO/CYCLING	Pump P1A Running Status ON/OFF
AU	TO/CYCLING	Pump P1BA Running Status ON/OFF
	616.2	T3A Water Elevation
	6.17	T3B pH Reading
	614.0	T3B Water Level
AU	TO/CYCLING	Pump 3B Operational Status ON/OFF
	613.3	T5 Water Level
AU	TO/CYCLING	Pump 5 Operational Status ON/OFF
	616.0	T6A Water Elevation
	6.5	T6B pH
	614.0	T6B Water Level
AU	TO/CYCLING	Pump 6B Operational Status ON/OFF
	616.1	T7 Water Level Reading
	6.3	Т7 рН
	0.8	T8 Water Elevation
	19,243,444	Flow Meter Reading
	18	Average System Flow
	20.1	Generator Run Hours
READING	Standard	LOCATION/PARAMETER
0.075	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromium
0.119	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
-0.011	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.019	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
-0.002	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
ND	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.006	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.014	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
pl	H READING	SAMPLE LOCATION
	6.78	Calcium Settling Pond Effluent (T3)
	7.02	Iron Settling Pond Effluent (T6)
	6.98	Engineered Wetland Effluent (T7)
	7.67	Southwest Corner Effluent (SS-1)
Notes: Cut grass- V	Wood wheels / mut A= 4 hlast in	g in T-1 floor to keep out mice

Date: 9/1/09 Project No.: 1038 Veather: Sun, 70 degrees		Greenstar Personnel: Bruce Vinal
	READING	ITEM
	231	Carbon Dioxide Storage Tank Pressure (220-235 psi)
	7,407	Carbon Dioxide Tank Liquid Level
	2.6	T1 Water Level
AUT	TO/CYCLING	Pump P1A Running Status ON/OFF
	TO/CYCLING	Pump P1BA Running Status ON/OFF
	616.3	T3A Water Elevation
	6.11	T3B pH Reading
	613.8	T3B Water Level
AUT	TO/CYCLING	Pump 3B Operational Status ON/OFF
	613.1	T5 Water Level
AUT	TO/CYCLING	Pump 5 Operational Status ON/OFF
	616.0	T6A Water Elevation
	6.5	Т6В рН
	612.4	T6B Water Level
AUT	TO/CYCLING	Pump 6B Operational Status ON/OFF
	616.1	T7 Water Level Reading
	6.2	T7 pH
	0.8	T8 Water Elevation
1	9,577,644	Flow Meter Reading
	14	Average System Flow
	20.5	Generator Run Hours
READING	Standard	LOCATION/PARAMETER
0.106	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromiun
0.108	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
-0.004	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.002	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
0.000	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
0.010	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
pH	I READING	SAMPLE LOCATION
	6.17	Calcium Settling Pond Effluent (T3)
	6.30	Iron Settling Pond Effluent (T6)
	6.54	Engineered Wetland Effluent (T7)
	7.27	Southwest Corner Effluent (SS-1)

Date: 9-17-09 Project No.: 1038 Weather: Sun 80 degrees		Greenstar Personnel: Bruce Vinal
	READING	ITEM
1	228	
		Carbon Dioxide Storage Tank Pressure (220-235 psi)
	7,893	Carbon Dioxide Tank Liquid Level
	3.1	T1 Water Level
	CO/CYCLING	Pump P1A Running Status ON/OFF
AUI	CO/CYCLING	Pump P1BA Running Status ON/OFF
	616.4	T3A Water Elevation
	5.9	T3B pH Reading
	613.5	T3B Water Level
AUT	CO/CYCLING	Pump 3B Operational Status ON/OFF
	611.8	T5 Water Level
AUT	O/CYCLING	Pump 5 Operational Status ON/OFF
	616.0	T6A Water Elevation
	6.5	Т6В рН
_	613.5	T6B Water Level
AUT	TO/CYCLING	Pump 6B Operational Status ON/OFF
	616.2	T7 Water Level Reading
	6.2	Т7 рН
	0.7	T8 Water Elevation
1	9,999,238	Flow Meter Reading
	17	Average System Flow
	21.0	Generator Run Hours
READING	Standard	LOCATION/PARAMETER
0.038	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromium
0.105	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
-0.002	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.010	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
0.005	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	I READING	SAMPLE LOCATION
	5.8	Calcium Settling Pond Effluent (T3)
	6.42	Iron Settling Pond Effluent (T6)
	6.1	Engineered Wetland Effluent (T7)
7.25		Southwest Corner Effluent (SS-1)

Date: 10-3-09Project No.: 1038Veather: overcast 55 degrees		Greenstar Personnel: Bruce Vinal
	READING	ITEM
1	234	Carbon Dioxide Storage Tank Pressure (220-235 psi)
	5710	Carbon Dioxide Storage Tank Flessure (220-235 psi)
	3.3	T1 Water Level
	O/CYCLING	Pump P1A Running Status ON/OFF
	O/CYCLING	Pump P1BA Running Status ON/OFF Pump P1BA Running Status ON/OFF
AUI	616.1	T3A Water Elevation
	5.8	
	614.3	T3B pH Reading T3B Water Level
	O/CYCLING	Pump 3B Operational Status ON/OFF
AUI	613.4	T5 Water Level
	O/CYCLING	Pump 5 Operational Status ON/OFF
AUI	616.0	T6A Water Elevation
	6.5	T6B pH
	612.6	T6B Water Level
	O/CYCLING	Pump 6B Operational Status ON/OFF
AUI	616.1	T7 Water Level Reading
	6.2	T7 pH
	0.2	T8 Water Elevation
2		
2	14	Flow Meter Reading Average System Flow
	21.6	Generator Run Hours
READING	Standard	LOCATION/PARAMETER
0.041	0.011 mg/L	
0.108	0.050 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromiun Calcium Settling Pond Effluent (T3) Total Chromium
-0.001	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.013	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
-0.009	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
-0.009 ND	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.006	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.018	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
	I READING	Southwest Corner Effluent (SS-1) Total Chromium
pr.		
	6.39	Calcium Settling Pond Effluent (T3)
	6.19	Iron Settling Pond Effluent (T6)
6.40 7.05		Engineered Wetland Effluent (T7) Southwest Corner Effluent (SS-1)

Date: 10-23-09Project No.: 1038Weather: Rain 40 degrees		Greenstar Personnel: Bruce Vinal
READING		ITEM
	235	Carbon Dioxide Storage Tank Pressure (220-235 psi)
	10,800	Carbon Dioxide Tank Liquid Level
	2.6	T1 Water Level
AUT	D/CYCLING	Pump P1A Running Status ON/OFF
	D/CYCLING	Pump P1BA Running Status ON/OFF
	616.2	T3A Water Elevation
	6.22	T3B pH Reading
	614.2	T3B Water Level
AUT	D/CYCLING	Pump 3B Operational Status ON/OFF
	613.3	T5 Water Level
AUT	D/CYCLING	Pump 5 Operational Status ON/OFF
	616.1	T6A Water Elevation
	6.2	Т6В рН
	612.5	T6B Water Level
AUT	D/CYCLING	Pump 6B Operational Status ON/OFF
	613.7	T7 Water Level Reading
	7.0	Т7 рН
	1.2	T8 Water Elevation
20	),639,744	Flow Meter Reading
	13	Average System Flow
	21.8	Generator Run Hours
READING	Standard	LOCATION/PARAMETER
0.008	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromium
0.114	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
-0.003	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.019	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
ND	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
0.006	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.014	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.019	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
pН	READING	SAMPLE LOCATION
	6.55	Calcium Settling Pond Effluent (T3)
	6.32	Iron Settling Pond Effluent (T6)
	7.07	Engineered Wetland Effluent (T7)
	7.17	Southwest Corner Effluent (SS-1)

Date: 11-7-09 Project No.: 1038		Greenstar Personnel: Bruce Vinal
Weather: Sun 65 deg		
h	READING	ITEM
	232	Carbon Dioxide Storage Tank Pressure (220-235 psi)
	9015	Carbon Dioxide Tank Liquid Level
	2.8	T1 Water Level
	O/CYCLING	Pump P1A Running Status ON/OFF
AUT	O/CYCLING	Pump P1BA Running Status ON/OFF
	616.1	T3A Water Elevation
	5.8	T3B pH Reading
	614.4	T3B Water Level
AUT	O/CYCLING	Pump 3B Operational Status ON/OFF
	613.4	T5 Water Level
AUT	O/CYCLING	Pump 5 Operational Status ON/OFF
	616.1	T6A Water Elevation
	6.3	T6B pH
	613.5	T6B Water Level
AUT	O/CYCLING	Pump 6B Operational Status ON/OFF
	615.9	T7 Water Level Reading
	6.7	Т7 рН
	2.3	T8 Water Elevation
2	0,987,596	Flow Meter Reading
	15	Average System Flow
	22.1	Generator Run Hours
READING	Standard	LOCATION/PARAMETER
0.056	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromium
0.109	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
ND	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.039	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
0.005	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
0.023	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.020	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.018	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
рН	READING	SAMPLE LOCATION
	6.42	Calcium Settling Pond Effluent (T3)
	6.32	Iron Settling Pond Effluent (T6)
	6.90	Engineered Wetland Effluent (T7)
	7.25	Southwest Corner Effluent (SS-1)

Pate: 11/17/09 Project No.: 1038 Veather: Sun 40 degrees		Greenstar Personnel: Bruce Vinal
	READING	ITEM
	234	Carbon Dioxide Storage Tank Pressure (220-235 psi)
	3,541	Carbon Dioxide Storage Tank Liquid Level
	2.6	T1 Water Level
ΔΙΙ	TO/CYCLING	Pump P1A Running Status ON/OFF
	TO/CYCLING	Pump P1BA Running Status ON/OFF
110	616.2	T3A Water Elevation
	6.15	T3B pH Reading
	613.4	T3B Water Level
AU	TO/CYCLING	Pump 3B Operational Status ON/OFF
	612.7	T5 Water Level
AU	TO/CYCLING	Pump 5 Operational Status ON/OFF
	616.1	T6A Water Elevation
	6.3	Т6В рН
	612.7	T6B Water Level
AU	TO/CYCLING	Pump 6B Operational Status ON/OFF
	615.9	T7 Water Level Reading
	6.6	Т7 рН
	3.4	T8 Water Elevation
	21,190,148	Flow Meter Reading
	14	Average System Flow
	22.3	Generator Run Hours
READING	Standard	LOCATION/PARAMETER
0.059	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromiun
0.131	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
-0.005	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.023	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
0.002	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
0.012	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.007	0.011 mg/L	Southwest Corner Effluent (SS-1) Hexavalent Chromium
0.010	0.050 mg/L	Southwest Corner Effluent (SS-1) Total Chromium
p	H READING	SAMPLE LOCATION
	6.45	Calcium Settling Pond Effluent (T3)
	6.24	Iron Settling Pond Effluent (T6)
	6.82	Engineered Wetland Effluent (T7)
7.10		Southwest Corner Effluent (SS-1)

Date: 12/12/09Project No.: 1038Weather: Clear Cold 20 Degrees		Greenstar Personnel: Bruce Vinal
READING		ITEM
	230	Carbon Dioxide Storage Tank Pressure (220-235 psi)
	11,213	Carbon Dioxide Tank Liquid Level
	3.3	T1 Water Level
AUT	TO/CYCLING	Pump P1A Running Status ON/OFF
	TO/CYCLING	Pump P1BA Running Status ON/OFF
	616.1	T3A Water Elevation
	6.2	T3B pH Reading
	613.4	T3B Water Level
AUT	TO/CYCLING	Pump 3B Operational Status ON/OFF
	611.1	T5 Water Level
AUT	TO/CYCLING	Pump 5 Operational Status ON/OFF
	616.1	T6A Water Elevation
	6.5	Т6В рН
	613.6	T6B Water Level
AUT	TO/CYCLING	Pump 6B Operational Status ON/OFF
	615.8	T7 Water Level Reading
	6.4	T7 pH
	3.0	T8 Water Elevation
2	21,721,646	Flow Meter Reading
	13	Average System Flow
	23.4	Generator Run Hours
READING	Standard	LOCATION/PARAMETER
0.013	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromiun
0.086	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
-0.013	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.028	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
0.006	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
0.026	0.050 mg/L	Engineered Wetland Effluent (T7) Total Chromium
0.009	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	I READING	SAMPLE LOCATION
	6.69	Calcium Settling Pond Effluent (T3)
	6.67	Iron Settling Pond Effluent (T6)
	7.01	Engineered Wetland Effluent (T7)
7.31		Southwest Corner Effluent (SS-1)

Date: 12/28/10Project No.: 1038Weather: Snow 29Degrees		Greenstar Personnel: Bruce Vinal
READING		ITEM
	234	Carbon Dioxide Storage Tank Pressure (220-235 psi)
	6,108	Carbon Dioxide Tank Liquid Level
	3.4	T1 Water Level
AUT	O/CYCLING	Pump P1A Running Status ON/OFF
	O/CYCLING	Pump P1BA Running Status ON/OFF
	616.2	T3A Water Elevation
	6.1	T3B pH Reading
	613.0	T3B Water Level
AUT	O/CYCLING	Pump 3B Operational Status ON/OFF
	611.4	T5 Water Level
AUT	0/CYCLING	Pump 5 Operational Status ON/OFF
	616.1	T6A Water Elevation
	6.5	Т6В рН
	612.9	T6B Water Level
AUT	O/CYCLING	Pump 6B Operational Status ON/OFF
	615.7	T7 Water Level Reading
	6.3	Т7 рН
	3.2	T8 Water Elevation
22	2,107,006	Flow Meter Reading
	16	Average System Flow
	23.7	Generator Run Hours
READING	Standard	LOCATION/PARAMETER
0.144	0.011 mg/L	Calcium Settling Pond Effluent (T3) Hexavalent Chromiun
0.075	0.050 mg/L	Calcium Settling Pond Effluent (T3) Total Chromium
0.003	0.011 mg/L	Iron Settling Pond Effluent (T6) Hexavalent Chromium
0.050	0.050 mg/L	Iron Settling Pond Effluent (T6) Total Chromium
-0.008	0.011 mg/L	Engineered Wetland Effluent (T7) Hexavalent Chromium
0.030	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
pН	READING	SAMPLE LOCATION
	6.60	Calcium Settling Pond Effluent (T3)
	6.65	Iron Settling Pond Effluent (T6)
	6.86	Engineered Wetland Effluent (T7)
N/A		Southwest Corner Effluent (SS-1)

## Attachment G.2

Airco Parcel GCTS Monthly Flow Calculations July – December 2009

#### Monthly Airco Parcel GCTS Flow Calculations July 2009

D	Maximum Flow	Average Flow Rate	Total Daily	Total Gallons To	Run Time	Run Time
Date	(gpm)	(gpm)	Flow (Gal)	Date (Gal)	(hours)	(minutes)
7/1/2009	48	16	23,718	18,040,436	24	0
7/2/2009	44	16	23,144	18,063,580	24	0
7/3/2009	44	15	22,862	18,086,442	24	0
7/4/2009	44	15	22,468	18,108,910	24	0
7/5/2009	44	15	22,182	18,131,092	24	0
7/6/2009	44	15	22,314	18,153,406	24	0
7/7/2009	44	15	21,876	18,175,282	24	0
7/8/2009	44	15	21,928	18,197,210	24	0
7/9/2009	44	15	21,652	18,218,862	24	0
7/10/2009	44	14	21,190	18,240,052	24	0
7/11/2009	44	16	24,000	18,264,052	24	0
7/12/2009	43	15	21,604	18,285,656	24	0
7/13/2009	43	15	21,672	18,307,328	24	0
7/14/2009	43	14	21,206	18,328,534	24	0
7/15/2009	43	15	21,660	18,350,194	24	0
7/16/2009	43	14	21,218	18,371,412	24	0
7/17/2009	44	19	27,746	18,399,158	24	0
7/18/2009	43	18	26,388	18,425,546	24	0
7/19/2009	43	18	26,122	18,451,668	24	0
7/20/2009	43	17	25,546	18,477,214	24	0
7/21/2009	43	17	25,826	18,503,040	24	0
7/22/2009	43	18	26,444	18,529,484	24	0
7/23/2009	44	21	30,508	18,559,992	24	0
7/24/2009	43	17	25,154	18,585,146	24	0
7/25/2009	43	17	25,772	18,610,918	24	0
7/26/2009	43	16	24,156	18,635,074	24	0
7/27/2009	43	16	23,420	18,658,494	24	0
7/28/2009	43	16	23,982	18,682,476	24	0
7/29/2009	42	16	24,284	18,706,760	24	0
7/30/2009	42	16	23,284	18,730,044	24	0
7/31/2009	42	16	23,734	18,753,778	24	0
			· ·			
	48	16	788,152	18,753,778	31	100%
Sample Measurement	Daily Maximum (GPM)	Monitoring Period Average (GPM)	Monitoring Period Total (GAL)	Cumulative Total (GAL)	Runtime (Days)	Operational Percentage

#### Monthly Airco Parcel GCTS Flow Calculations August 2009

Date           8/1/2009           8/2/2009           8/3/2009           8/3/2009           8/4/2009           8/5/2009           8/6/2009	Flow           (gpm)           42           43           42           42           42           42           42           42           42           42           42           42           42           42           42           42           42           42           42           42	Flow Rate (gpm) 16 17 16 16 16 16 18	Total Daily           Flow (Gal)           23,390           25,278           23,046           23,150           23,216	Gallons To Date (Gal) 18,777,168 18,802,446 18,825,492 18,848,642	Time           (hours)           24           24           24           24	Run Time (minutes) 0 0
8/2/2009           8/3/2009           8/4/2009           8/5/2009	42 43 42 42 42 42 42 42 42	16 17 16 16 16	23,390 25,278 23,046 23,150	18,777,168 18,802,446 18,825,492	24 24	0 0
8/2/2009           8/3/2009           8/4/2009           8/5/2009	43 42 42 42 42 42 42	17 16 16 16	25,278 23,046 23,150	18,802,446 18,825,492	24	0
8/3/2009 8/4/2009 8/5/2009	42 42 42 42 42	16 16 16	23,046 23,150	18,825,492		
8/4/2009 8/5/2009	42 42 42	16 16	23,150			0
8/5/2009	42 42	16		10.040.042	24	0
	42			18,871,858	24	0
		10	26,484	18,898,342	24	0
8/7/2009		20	29,244	18,927,586	24	0
8/8/2009	42	19	28,766	18,956,352	24	0
8/9/2009	43	24	34,786	18,991,138	24	0
8/10/2009	43	21	31,572	19,022,710	24	0
8/11/2009	42	19	27,726	19,050,436	24	0
8/12/2009	42	18	26,110	19,076,546	24	0
8/13/2009	41	17	25,900	19,102,446	24	0
8/14/2009	41	17	25,580	19,128,026	24	0
8/15/2009	41	17	25,790	19,153,816	24	0
8/16/2009	41	17	25,840	19,179,656	24	0
8/17/2009	44	18	26,008	19,205,664	24	0
8/18/2009	45	18	26,184	19,231,848	24	0
8/19/2009	45	18	26,392	19,258,240	24	0
8/20/2009	44	19	27,556	19,285,796	24	0
8/21/2009	40	18	27,338	19,313,134	24	0
8/22/2009	40	19	27,708	19,340,842	24	0
8/23/2009	40	19	28,584	19,369,426	24	0
8/24/2009	40	19	27,568	19,396,994	24	0
8/25/2009	40	19	27,748	19,424,742	24	0
8/26/2009	40	19	27,514	19,452,256	24	0
8/27/2009	40	19	27,536	19,479,792	24	0
8/28/2009	40	14	21,388	19,501,180	24	0
8/29/2009	40	16	23,074	19,524,254	24	0
8/30/2009	40	15	22,350	19,546,604	24	0
8/31/2009	40	15	21,722	19,568,326	24	0
	45	18	814,548	19,568,326	31	100%
Sample Measurement	Daily	Monitoring Period	Monitoring			
N	Maximum (GPM)	Average (GPM)	Period Total (GAL)	Cumulative Total (GAL)	Runtime (Days)	Operational Percentage

#### Monthly Airco Parcel GCTS Flow Calculations September 2009

	Maximum Flow	Average Flow Rate	Total Daily	Total Gallons To	Run Time	Run Time
Date	(gpm)	(gpm)	Flow (Gal)	Date (Gal)	(hours)	(minutes)
9/1/2009	40	14	21,408	19,589,734	24	0
9/2/2009	40	15	21,686	19,611,420	24	0
9/3/2009	40	18	26,008	19,637,428	24	0
9/4/2009	40	19	27,814	19,665,242	24	0
9/5/2009	39	19	27,840	19,693,082	24	0
9/6/2009	39	19	28,000	19,721,082	24	0
9/7/2009	39	19	27,588	19,748,670	24	0
9/8/2009	39	19	27,400	19,776,070	24	0
9/9/2009	39	18	26,972	19,803,042	24	0
9/10/2009	39	18	26,762	19,829,804	24	0
9/11/2009	42	18	26,664	19,856,468	24	0
9/12/2009	39	18	26,378	19,882,846	24	0
9/13/2009	39	18	26,158	19,909,004	24	0
9/14/2009	38	17	25,674	19,934,678	24	0
9/15/2009	38	17	25,594	19,960,272	24	0
9/16/2009	38	17	24,586	19,984,858	24	0
9/17/2009	44	16	23,896	20,008,754	24	0
9/18/2009	44	16	23,972	20,032,726	24	0
9/19/2009	44	16	24,152	20,056,878	24	0
9/20/2009	44	16	23,668	20,080,546	24	0
9/21/2009	44	16	23,936	20,104,482	24	0
9/22/2009	44	15	22,998	20,127,480	24	0
9/23/2009	45	16	24,418	20,151,898	24	0
9/24/2009	44	15	22,498	20,174,396	24	0
9/25/2009	44	15	22,720	20,197,116	24	0
9/26/2009	44	15	22,456	20,219,572	24	0
9/27/2009	44	16	24,378	20,243,950	24	0
9/28/2009	44	17	25,004	20,268,954	24	0
9/29/2009	44	15	22,806	20,291,760	24	0
9/30/2009	44	14	20,926	20,312,686	24	0
	45	17	744,360	20,312,686	30	100%
Sample Measurement	Daily Maximum	Monitoring Period Average	Monitoring Period Total	Cumulative	Runtime	Operational
	(GPM)	(GPM)	(GAL)	Total (GAL)	(Days)	Percentage

## Monthly Airco Parcel GCTS Flow Calculations October 2009

D	Maximum Flow	Average Flow Rate	Total Daily	Total Gallons To	Run Time	Run Time
Date	(gpm)	(gpm)	Flow (Gal)	Date (Gal)	(hours)	(minutes)
10/1/2009	44	14	21,266	20,333,952	24	0
10/2/2009	43	15	22,292	20,356,244	24	0
10/3/2009	43	15	21,140	20,377,384	24	0
10/4/2009	43	4	5,776	20,383,160	24	0
10/5/2009*	0	0	0	20,383,160	24	0
10/6/2009*	0	0	0	20,383,160	24	0
10/7/2009*	0	0	0	20,383,160	24	0
10/8/2009*	0	0	0	20,383,160	24	0
10/9/2009*	0	0	0	20,383,160	24	0
10/10/2009*	0	0	0	20,383,160	24	0
10/11/2009	46	7	10,640	20,393,800	24	0
10/12/2009	46	18	26,554	20,420,354	24	0
10/13/2009	46	18	26,944	20,447,298	24	0
10/14/2009	45	13	19,204	20,466,502	24	0
10/15/2009	45	14	21,038	20,487,540	24	0
10/16/2009	45	14	20,678	20,508,218	24	0
10/17/2009	45	14	20,208	20,528,426	24	0
10/18/2009	50	14	20,166	20,548,592	24	0
10/19/2009	45	14	20,420	20,569,012	24	0
10/20/2009	45	13	19,608	20,588,620	24	0
10/21/2009	45	13	19,730	20,608,350	24	0
10/22/2009	45	13	19,506	20,627,856	24	0
10/23/2009	45	15	22,018	20,649,874	24	0
10/24/2009	45	17	25,838	20,675,712	24	0
10/25/2009	45	17	25,380	20,701,092	24	0
10/26/2009	45	17	25,202	20,726,294	24	0
10/27/2009	45	16	23,336	20,749,630	24	0
10/28/2009	44	16	24,310	20,773,940	24	0
10/29/2009	44	15	22,596	20,796,536	24	0
10/30/2009	44	16	23,406	20,819,942	24	0
10/31/2009	44	16	24,218	20,844,160	24	0
	50	12	531,474	16,493,904	30*	100%
Sample		Monitoring				
Measurement	Daily Maximum (GPM)	Period Average (GPM)	Monitoring Period Total (GAL)	Cumulative Total (GAL)	Runtime (Days)	Operational Percentage

\*System was taken offline for routine system cleaning. T8 pond was utilized to allow continual pumping from T1 to prevent uncontrolled discharge of leachate offsite.

# Monthly Airco Parcel GCTS Flow Calculations November 2009

	Maximum Flow	Average Flow Rate	Total Daily	Total Gallons To	Run Time	Run Time
Date	(gpm)	(gpm)	Flow (Gal)	Date (Gal)	(hours)	(minutes)
11/1/2009	44	14	21,420	20,865,580	24	0
11/2/2009	44	15	21,624	20,887,204	24	0
11/3/2009	44	15	22,382	20,909,586	24	0
11/4/2009	44	15	21,762	20,931,348	24	0
11/5/2009	44	14	21,148	20,952,496	24	0
11/6/2009	44	14	21,542	20,974,038	24	0
11/7/2009	44	15	22,174	20,996,212	24	0
11/8/2009	44	15	21,686	21,017,898	24	0
11/9/2009	44	15	22,568	21,040,466	24	0
11/10/2009	44	15	22,362	21,062,828	24	0
11/11/2009	44	14	20,412	21,083,240	24	0
11/12/2009	44	14	21,152	21,104,392	24	0
11/13/2009	44	14	21,226	21,125,618	24	0
11/14/2009	47	16	23,974	21,149,592	24	0
11/15/2009	44	16	24,340	21,173,932	24	0
11/16/2009	44	14	21,554	21,195,486	24	0
11/17/2009	44	15	22,146	21,217,632	24	0
11/18/2009	44	17	25,718	21,243,350	24	0
11/19/2009	44	15	22,762	21,266,112	24	0
11/20/2009	43	15	21,594	21,287,706	24	0
11/21/2009	43	15	21,734	21,309,440	24	0
11/22/2009	43	14	20,710	21,330,150	24	0
11/23/2009	43	14	21,232	21,351,382	24	0
11/24/2009	43	14	21,098	21,372,480	24	0
11/25/2009	43	14	20,618	21,393,098	24	0
11/26/2009	43	15	22,200	21,415,298	24	0
11/27/2009	43	14	20,176	21,435,474	24	0
11/28/2009	43	15	21,732	21,457,206	24	0
11/29/2009	43	16	23,042	21,480,248	24	0
11/30/2009	43	14	20,416	21,500,664	24	0
11/1/2009	44	14	21,420	20,865,580	24	0
	47	15	656,504	20,865,580	30	100%
Sample Measurement	Daily Maximum (GPM)	Monitoring Period Average (GPM)	Monitoring Period Total (GAL)	Cumulative Total (GAL)	Runtime (Days)	Operational Percentage

# Monthly Airco Parcel GCTS Flow Calculations December 2009

	Maximum Flow	Average Flow Rate	Total Daily	Total Gallons To	Run Time	Run Time
Date	(gpm)	(gpm)	Flow (Gal)	Date (Gal)	(hours)	(minutes)
12/1/2009	43	14	21,150	21,521,814	24	0
12/2/2009	43	16	23,534	21,545,348	24	0
12/3/2009	43	13	19,560	21,564,908	24	0
12/4/2009	43	13	19,502	21,584,410	24	0
12/5/2009	43	13	19,468	21,603,878	24	0
12/6/2009	43	13	18,916	21,622,794	24	0
12/7/2009	43	13	19,368	21,642,162	24	0
12/8/2009	43	17	25,864	21,668,026	24	0
12/9/2009	43	14	21,066	21,689,092	24	0
12/10/2009	43	13	19,508	21,708,600	24	0
12/11/2009	43	13	19,706	21,728,306	24	0
12/12/2009	43	16	23,864	21,752,170	24	0
12/13/2009	42	16	24,338	21,776,510	24	0
12/14/2009	42	16	24,284	21,800,794	24	0
12/15/2009	42	16	23,950	21,824,744	24	0
12/16/2009	42	17	25,804	21,850,548	24	0
12/17/2009	42	16	24,448	21,874,996	24	0
12/18/2009	42	16	23,810	21,898,806	24	0
12/19/2009	42	16	23,870	21,922,676	24	0
12/20/2009	42	16	23,994	21,946,670	24	0
12/21/2009	42	17	24,906	21,971,576	24	0
12/22/2009	42	16	23,574	21,995,150	24	0
12/23/2009	42	15	22,892	22,018,042	24	0
12/24/2009	42	13	18,890	22,036,932	24	0
12/25/2009	42	13	18,890	22,055,821	24	0
12/26/2009	42	13	18,890	22,074,711	24	0
12/27/2009	42	13	18,890	22,093,600	24	0
12/28/2009	42	16	23,378	22,116,978	24	0
12/29/2009	42	15	22,424	22,139,402	24	0
12/30/2009	42	16	23,340	22,162,742	24	0
12/31/2009	42	16	23,038	22,185,780	24	0
Sample Measurement	43	15	685,114	22,185,780	31	100%
	Daily Maximum (GPM)	Monitoring Period Average (GPM)	Monitoring Period Total (GAL)	Cumulative Total (GAL)	Runtime (Days)	Operational Percentage



## Analytical Report

Work Order: RSG0759

Project Description Semi-Annual GW Monitoring

For:

Charles E. McLeod, Jr.

Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

e.

Jason Kacalski Project Manager jason.kacalski@testamericainc.com

Monday, July 27, 2009

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exception to NELAP requirements are noted in this report. Persuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project manager who has signed this report.



Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSG0759

Received: 07/21/09 Reported: 07/27/09 10:08

Project: Semi-Annual GW Monitoring Project Number: GES

# TestAmerica Buffalo Current Certifications

### As of 1/27/2009

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA, NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana *	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	N Y0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP, SD WA, C WA, RC RA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA, CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
Texas *	NELAP C WA, R CRA	T104704412-08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SD WA	278
Washington*	NELAP CWA,RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA,RCRA	252

\*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accre ditation is required or available. Any exceptions to NELAP requirements are noted in this report.



Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSG0759

Project: Semi-Annual GW Monitoring Project Number: GES Received: 07/21/09 Reported: 07/27/09 10:08

### **Case Narrative**

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

A pertinent document is appended to this report, 1 page, is included and is an integral part of this report.

Reproduction of this analytical report is permitted only in its entirety. This report shall not be reproduced except in full without the written approval of the laboratory.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.



Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSG0759

Project: Semi-Annual GW Monitoring Project Number: GES Received: 07/21/09 Reported: 07/27/09 10:08

### DATA QUALIFIERS AND DEFINITIONS

**NR** Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.



Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSG0759

Project: Semi-Annual GW Monitoring Project Number: GES Received: 07/21/09 Reported: 07/27/09 10:08

			tive Summary - Deteo	tions				
Analyte	Sample Result	Data Qualifiers	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
			Sar	npled:		Recv	/d:	

THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental Solutions, LLC	Work Order: RSG0759	Received:	07/21/09
6 Gellatly Drive		Reported:	07/27/09 10:08
Wappinger Falls, NY 12590	Project: Semi-Annual GW Monitoring Project Number: GES		

## Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
AP-SS01	RSG0759-01	Water	07/21/09 16:15	07/21/09 16:43	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSG0759

Project: Semi-Annual GW Monitoring Project Number: GES Received: 07/21/09 Reported: 07/27/09 10:08

			Analyt	ical Report					
Analyte	Sample Result	Data Qualifiers	RL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSG0759-01	(AP-SS01 - V	Vater)		Samp	led: 07/	21/09 16:15	Recv	/d: 07/21/0	9 16:43
General Chemistry Para	meters								
Chromium, Hexavalent	ND		0.0100	mg/L	1.00	07/21/09 20:05	JFR	9G21104	7196A



# Greenstar Environmental Solutions, LLCWork Order: RSG07596 Gellatly Drive

Wappinger Falls, NY 12590

Project: Semi-Annual GW Monitoring Project Number: GES Received: 07/21/09 Reported: 07/27/09 10:08

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
General Chemistry Parameters									
7196A	9G21104	RSG0759-01	25.00	mL	25.00	mL	07/21/09 20:05	JFR	Hex Digestion

THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental Solutions, LLC 6 Gellatly Drive	Work Order: RSG0759		Received: Reported:	07/21/09 07/27/09 10	0:08
Wappinger Falls, NY 12590	Project: Semi-Annual GW Monitoring Project Number: GES				
	LABORATORY QC DATA				
Source Spike		%	% REC %	RPD I	Data

Analyte	Result	Level	RL	Units	Result	REC	Limits	RPD Limit	Qualifiers
General Chemistry Paran	neters								
Blank Analyzed: 07/21/09	) (Lab Nun	nber:9G21	104-BLK1, B	atch: 9G21104)					
Chromium, Hexavalent			0.0100	mg/L	ND				
LCS Analyzed: 07/21/09	(Lab Numb	oer:9G211	04-BS1, Batc	h: 9G21104)					
Chromium, Hexavalent		0.0500	0.0100	mg/L	0.0490	98	85-115		
Duplicate Analyzed: 07/2 QC Source Sample: RSG0759-	•	Number:9	G21104-DUP	1, Batch: 9G21104)					
Chromium, Hexavalent	ND		0.0100	mg/L	ND			15	
Matrix Spike Analyzed: 0 QC Source Sample: RSG0759-	•	ab Numbe	r:9G21104-M	S1, Batch: 9G21104)					
Chromium, Hexavalent	ND	0.0500	0.0100	mg/L	0.0558	112	85-115		

Chain of	Temperature an Receipt		<b>[estAmerica</b>	ica	
	Drinking Water? Ye		THE LEADER IN ENVIRONMENTAL TESTING	AL TESTING	
Creenster Engineary PC	Project Manager J R K		Date	<u>ອື່</u>	Chain of Crestory Number 093380
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Possible Hazard Identification	Sample Disposal				
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Tum Around Time Required		OC Requirements (Specify)			
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2. Reunquished By	Date Tume	2. Alecented By			latel Turne
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DISTRIBUTION: WHITE - Returned to Caers with Report, CANARY - Stays with the Sample, PINK - Field Copy	s with the Sample, PINK + Field (	Sopy	- <u>N'7</u>		



## Analytical Report

Work Order: RSJ1306

Project Description Semi-Annual GW Monitoring

For:

Charles E. McLeod, Jr.

Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

e.

Jason Kacalski Project Manager jason.kacalski@testamericainc.com Thursday, October 29, 2009

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exception to NELAP requirements are noted in this report. Persuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project manager who has signed this report.



Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSJ1306

Received: 10/23/09 Reported: 10/29/09 11:22

Project: Semi-Annual GW Monitoring Project Number: GES

# TestAmerica Buffalo Current Certifications

### As of 1/27/2009

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA, NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SD WA	90029
Kentucky UST	UST	30
Louisiana *	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	N Y0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP, SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA, CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	NELAP CWA,RCRA	68-00281
Tennessee	SD WA	02970
Texas *	NELAP CWA, RCRA	T104704412-08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SD WA	278
Washington*	NELAP CWA,RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA,RCRA	252

\*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accre ditation is required or available. Any exceptions to NELAP requirements are noted in this report.



Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSJ1306

Project: Semi-Annual GW Monitoring Project Number: GES Received: 10/23/09 Reported: 10/29/09 11:22

### **CASE NARRATIVE**

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

A pertinent document is appended to this report, 1 page, is included and is an integral part of this report.

Reproduction of this analytical report is permitted only in its entirety. This report shall not be reproduced except in full without the written approval of the laboratory.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.



Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSJ1306

Project: Semi-Annual GW Monitoring Project Number: GES Received: 10/23/09 Reported: 10/29/09 11:22

### DATA QUALIFIERS AND DEFINITIONS

NR

Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.



 Greenstar Environmental Solutions, LLC
 Work Order: RSJ1306
 Received:
 10/23/09

 6 Gellatly Drive
 Reported:
 10/29/09 11:22

 Wappinger Falls, NY 12590
 Project: Semi-Annual GW Monitoring
 10/29/09 11:22

 Project Number:
 GES

			<b>Executive Summary - De</b>	etectio	ons				
	Sample	Data			Dil	Date	Lab		
Analyte	Result	Qualifiers	Uni	nits	Fac	Analyzed	Tech	Batch	Method
			:	Sampl	ed:		Recv	d:	

THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental Solutions, LLC	Work Order: RSJ1306	Received:	10/23/09
6 Gellatly Drive		Reported:	10/29/09 11:22
Wappinger Falls, NY 12590	Project: Semi-Annual GW Monitoring Project Number: GES		

## Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
AP-SS-01	RSJ1306-01	Water	10/23/09 16:50	10/23/09 17:20	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590 Work Order: RSJ1306

Project: Semi-Annual GW Monitoring Project Number: GES Received: 10/23/09 Reported: 10/29/09 11:22

			Ana	lytical Report					
	Sample	Data			Dil	Date	Lab		
Analyte	Result	Qualifiers	RL	Units	Fac	Analyzed	Tech	Batch	Method
Sample ID: RSJ1306-01 (	AP-SS-01 - W	/ater)		Samp	oled: 10/	23/09 16:50	Recv	/d: 10/23/0	9 17:20
Total Metals by EPA 200	Series Meth	<u>ods</u>							
Chromium	ND		0.0040	mg/L	1.00	10/28/09 01:47	LMH	9J26067	200.7
General Chemistry Para	meters								
Chromium, Hexavalent	ND		11.0	ug/L	1.00	10/23/09 22:15	JME	9J23110	7196A

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

### Greenstar Environmental Solutions, LLC 6 Gellatly Drive Wappinger Falls, NY 12590

Work Order: RSJ1306

Project: Semi-Annual GW Monitoring Project Number: GES Received: 10/23/09 Reported: 10/29/09 11:22

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
General Chemistry Parameters									
7196A	9J23110	RSJ1306-01	25.00	mL	25.00	mL	10/23/09 22:15	JME	Hex Digestion
Total Metals by EPA 200 Series	Methods								
200.7	9J26067	RSJ1306-01	50.00	mL	50.00	mL	10/27/09 10:45	KCW	3005A

THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environm 6 Gellatly Drive	nental Solutions, LLC		Work Order: RS	J1306				Rece Repo		10/23/ 10/29/	09 09 11:22
Wappinger Falls, N	Y 12590		Project: Semi-A Project Number		lonitoring						
			LABOF	ATORY	QC DATA						
Analyte	Source Result	Spike Level	RL		Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Total Metals by El	PA 200 Series Met	<u>hods</u>									·

Blank Analyzed: 10/27/09 (Lat	Number:9J26	067-BLK1, Batch: 9J2606	7)			
Chromium		0.0040	mg/L	ND		
LCS Analyzed: 10/27/09 (Lab	Number:9J260	67-BS1, Batch: 9J26067)				
Chromium	0.200	0.0040	mg/L	0.203	102	85-115

THE LEADER IN ENVIRONMENTAL TESTING

Greenstar Environmental S 6 Gellatly Drive	Solutions, LLC		Work Order: RS	1306				Rece Repo		10/23/ 10/29/	09 09 11:22
Wappinger Falls, NY 12590	0		Project: Semi-Ar Project Number:	nual GW GES	0			Кере	ficu.	10/20/	00 11.22
			LABOR	ATOR	Y QC DATA						
	Source	Spike					%	% REC	%	RPD	Data
Analyte	Result	Level	RL		Units	Result	REC	Limits	RPD	Limit	Qualifiers

Blank Analyzed: 10/23/09	(Lab Nun	nber:9J231	10-BLK1, E	atch: 9J23110)				
Chromium, Hexavalent			11.0	ug/L	ND			
LCS Analyzed: 10/23/09 (L	.ab Numb	per:9J2311	0-BS1, Bate	h: 9J23110)				
Chromium, Hexavalent		50.0	10.0	ug/L	53.7	107	85-115	
Duplicate Analyzed: 10/23/ QC Source Sample: RSJ1306-01	`	Number:9	J23110-DUF	1, Batch: 9J23110)				
Chromium, Hexavalent	ND		10.0	ug/L	ND			20
Matrix Spike Analyzed: 10/ QC Source Sample: RSJ1306-01	•	ab Numbe	r:9J23110-N	IS1, Batch: 9J23110)				
Chromium, Hexavalent	ND	50.0	10.0	ug/L	54.5	109	75-120	

Chain of	-	Temperature on Receipt	on Receip		Ĕ	est/	Ĕ	<b>TestAmerica</b>		
Custody Record		Drinking Water?	er? Yes 🛛	Nota	∎₽	E LEADER I		THE LEADER IN ENVIRONMENTAL TESTING		
Cherry Creenter Environmental		Project Manager	L V				ମ୍ କାର୍ଯ		Chein of Cirelody Number	84 03
Gellaty Drive		Telephone Number (Area Code) Fax Number (945) 223 - 9944	mber (Arad Coc	Codel Fax Numb	ž		ē)	Lab Number	Page (	of (
Walkineers Falls NY 13590				Lab Contect	72		Analysi more sp	Analysis (Affach list if more space is needed)		
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equired 48 Hours 🖸 7 Days 🗍 14 Days	Days	−l ≽`		•  —	OC Requirements (Specify)	pecify)	6			
2 1MA		10-23-01	17:20	1. Flacter	anyou By			BNFBro	0000 123 100	The Are
2. Raunquished By		Date	Tune		2. Hecened By		Ş		Date	Tune .
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