March 30, 2015

Mr. Jim Griswold
New Mexico Energy, Minerals & Natural Resources
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87504

Re: 2014 Annual Groundwater Monitoring Report
OXY USA, Inc.
Todd Water Injection Station
Section 31, Township 7 South, Range 36 East
Roosevelt County, New Mexico. (AP090)

Mr. Griswold:

This report details the results of quarterly groundwater sampling events from 2014, for the OXY USA, Inc. (OXY) Todd Water Injection Station (Injection Station) located in Section 31, Township 7 South, Range 36 East, Roosevelt County, New Mexico. The site location is shown on Figures 1 and 2.

Facility Background

The Todd Field is an oil field operated by various oil and pipeline companies. The facility was acquired by OXY in March 2008. Prior to OXY acquiring the property, the facility was owned by Plains Exploration and Pipeline (PXP), Pogo Producing Company (Pogo), and Latigo Petroleum (Latigo). As part of a due diligence assessment for Pogo, the injection station was inspected and drilled by Highlander Environmental Corp. (Highlander) of Midland, Texas with soil and groundwater contamination encountered. Currently, the site contains 11 groundwater monitoring wells installed to assess chloride concentrations in the subsurface soils and shallow water table. All buildings at this site have been removed.

The results from previous soils investigation activities indicate that benzene, toluene, ethylbenzene, and xylenes (BTEX) and total petroleum hydrocarbons (TPH) concentrations were either below their respective method detection limits or below the New Mexico Oil Conservation Division (NMOCD) regulatory limits with the exception of shallow soils in the vicinity of the tank pad, the former suspected pit area and a spill area to the northeast of the former pit. TPH concentrations in the shallow soils (less than 1.5 feet in depth) exceeded NMOCD regulatory limits in the tank pad and the spill areas. TPH concentrations in the suspected former pit area exhibited TPH concentrations in excess of NMOCD regulatory limits to depths of up to 10 feet below ground surface (bgs). In addition, soils around the tank pad and the former pit exhibited chloride concentrations in excess of 1,000 milligrams per kilogram (mg/Kg).

During a November 2010 meeting, the New Mexico Office of the State Engineer (OSE) stated they do not necessarily consider groundwater monitored by the 11 site monitoring wells to be "public water" (i.e. hydraulically connected to the Causey-Lingo Water Basin). The OSE may consider this suspected artificial shallow water zone as "private water". The "public water" associated with the Causey-Lingo Water Basin in the vicinity of the site is noted at depths of approximately 180 feet bgs. During the 2010 subsurface investigation conducted by Tetra Tech, Inc. (Tetra Tech) at this site (and 3 other sites in the immediate area), a tan to yellow clay of moderate to high plasticity was observed below the bottom of the shallow water (at depths of 70 to 80 feet bgs). This clay layer was observed at one of the other sites to extend to depths of 130 feet bgs (termination of the soil boring). At the site with the deeper boring, water was observed at approximately 120 feet bgs. A monitoring well was installed at this other location (identified as the Todd Field West Spill Area) in this deep boring. This water was found to be of drinking water standards (chloride concentrations below New Mexico Water Quality Control Commission [NMWQCC] standards). The data demonstrates that the clay material above acts as an aquitard which prevents the downward migration of chlorides from the shallow water table aquifer.

OXY is proceeding with the restoration of this area (including the removal of well locations, roads and tank pads) in order that the site can be moved towards regulatory closure and the management of the property and surrounding properties can revert to the New Mexico State Land Office (SLO). The SLO intends to restore the sections surrounding Section 31 to native grass lands and allow the Nature Conservancy to manage the Todd Field as a Prairie Chicken Habitat.

Regulatory Requirements

The NMOCD has regulatory jurisdiction over oil and gas exploration and production in the State of New Mexico. This Site is subject to the NMOCD's rules. New Mexico Administrative Code (NMAC) 19.15.29 requires all releases over five barrels of produced water be reported to the NMOCD using Form C-141. In addition, the operator must submit a remediation plan to be approved by the NMOCD or an abatement plan in accordance with NMAC 19.15.30.

At locations where constituents in the vadose zone are likely to leach to groundwater, the NMOCD rules require that groundwater be analyzed for potential contaminants as defined by the NMWQCC regulatory limits (NMAC 20.6.2.3103). Human health standards for groundwater are presented in the following table. It should be noted that chlorides are not identified by the NMWQCC as a human health standard, but rather as an "Other Standard for Domestic Water Supply".

Human Health Standard Maximum Allowable Concentration

Compound	Maximum Allowable Concentration (mg/L)
Benzene	0.01
Toluene	0.75
Ethyl-benzene	0.75
Xylenes	0.62
Chlorides	250*

***Other Standard for Domestic Water Supply**

Gauging and Monitor Well Sampling

Since the first quarter of 2010, quarterly groundwater monitoring, including the gauging, purging, and sampling of all site monitoring wells has been performed. Utilizing the water level elevation calculations, groundwater gradient maps were generated for each of the sampling events. The hydraulic gradient was to the east/northeast during all of the sampling events. The groundwater gradient maps for the 2014 monitoring events are included as Figures 3 through 5. Gauging data is summarized in Table 1. Monitoring well MW-7 has not had any measurable water since it's installation in 2007 and is identified on figures and in the table as "dry", suggesting that shallow groundwater observed is "perched" and of limited lateral extent. Phase Separated Hydrocarbons (PSH) have never been observed at the Injection Station site.

During the monitoring events, each of the wells was properly purged and sampled for BTEX and chlorides. The samples were properly preserved and were submitted under proper chain-of-custody control to ALS Laboratories of Houston, Texas for analysis of BTEX by EPA Method SW8260 and chlorides by EPA Method 300.0. Analytical results indicated that benzene did not exceed the NMWQCC Human Health Standards Maximum Allowable Concentration of 0.010 mg/L in any of the monitoring wells during the sampling events. Chloride concentrations exceeded the NMWQCC Maximum Allowable Concentration for Domestic Water Supply of 250 milligrams per liter (mg/L) in all monitoring wells during the monitoring events with the exception of MW-7 which did not have any observable water. The chloride concentrations for the monitoring events are included as Figures 6 through 8. The analyses are shown in Tables 1. Copies of the laboratory analyses are enclosed in Appendix A.

Quality Assurance/Quality Control Parameters

At the time of sampling, all monitoring well caps were opened and each well was inspected for the presence of PSH. Water level measurements were taken from a permanent mark placed at the top of the each monitoring well casing. The measurements were taken to the nearest 0.01 feet. Prior to sampling, approximately three casing volumes of water were purged from each well. Groundwater samples were collected as soon as possible, after the groundwater returned to its static level using dedicated, disposable bailers and line.

Samples were collected into labeled and preserved containers provided by the laboratory. All of the samples were shipped under proper chain-of-custody control to ALS Laboratories of Houston, Texas. The groundwater samples were analyzed for BTEX by EPA Method 8260 and chlorides by EPA Method 300.0.

A blind duplicate sample was collected and submitted for analysis during each groundwater sampling event. A trip blank provided by the laboratory was also submitted for analysis during each event. The trip blank was below the method detection limits during each event. Quality Assurance/Quality Control results showed all the recovery spike percentages within recommended recovery limits.

All non-dedicated down-hole monitoring equipment (i.e. water level meter, oil-water interface probe) was decontaminated between monitoring wells with laboratory grade detergent and potable water wash followed with a distilled water rinse. Purged water was combined with other produced water in the field and transported by OXY for management at one of their facilities.

Soil Remediation

The soil in the spill area still contains elevated concentrations of chlorides in the soils. This site is located within an area of land that the New Mexico SLO and The Nature Conservancy plan to manage as a Prairie Chicken Habitat. OXY and Glenn Springs have removed all surface equipment and restored the majority of well and facility sites, including several access roads. This will allow this area to return to native grass lands in an attempt to rehabilitate the prairie chicken population. In order to achieve these goals, a path-forward closure plan dated April 12, 2013 was prepared and submitted to the NMOCD. The plan was approved by Mr. Jim Griswold with the NMOCD on September 16, 2014. The approved work plan will consist of the following:

1. Excavate the area of the suspected former pit area in the vicinity of MW-1 to a an approximate depth of 10' as discussed in the Closure Plan dated April 12, 2013, submitted to the NMOCD.

2. Place a 40-mil plastic liner at four feet bgs to reduce the potential leaching of surface water through the soils within the vadose zone that exhibit elevated chloride concentrations. Backfill the excavation with clean soil and spread native grass seed.

Groundwater Conclusions

1. The New Mexico Office of the State Engineer does not necessarily consider this suspected artificial groundwater associated with this site as "public water" of the Causey-Lingo Water Basin.

2. The groundwater at this site is separated from the "public water" of the Causey-Lingo Water Basin by a clay aquitard observed in the area to be approximately 40 feet in thickness. This aquitard has been observed to prevent the downward migration of chloride impacted water to the "public water".

3. Phase Separated Hydrocarbons have never been observed in any of the site monitoring wells.

4. The hydraulic gradient direction continues to be to the east/northeast.

5. BTEX was below laboratory reporting limits for all monitoring wells during all sampling events in 2014.

6. During the 2014 sampling events, chlorides ranged from 3,900 mg/L in monitor well MW-11 to 51,400 mg/L in monitoring well MW-5. Chloride concentrations exceeded the NMWQCC Maximum Allowable Concentration for Domestic Water Supply of 250 mg/L in all monitoring wells during the sampling events with the exception of MW-7 which did not have any observable water. MW-7 remains dry giving some validity to the potential for this being an artificial shallow water.

7. The site is being returned to native conditions and is under the control of the Nature Conservancy. The roads and infrastructure have been removed, causing continued usage of removed roads and locations to delay final restoration.

Proposed Groundwater Closure Activities

Based on the conclusions presented above, OXY proposes the following:

1. Complete the NMOCD approved soil excavation and liner placement.

2. Plugging and abandonment of all site monitoring wells.

3. Restore all surface improvements to native conditions for prairie chicken habitat.

4. Complete a yield test to classify the groundwater bearing unit at the site.

Apex and OXY understand that until all parties responsible for regulating and managing the site agree on the recommendations for site closure. Apex recommends continuation of the quarterly groundwater gauging and sampling activities until the soil excavation is complete.

Respectfully submitted,
Apex

Lyle Alsobrook
Senior Project Manager

cc: Rick Passmore –Glenn Spring Holdings
Dusty Wilson – Glenn Springs Holdings

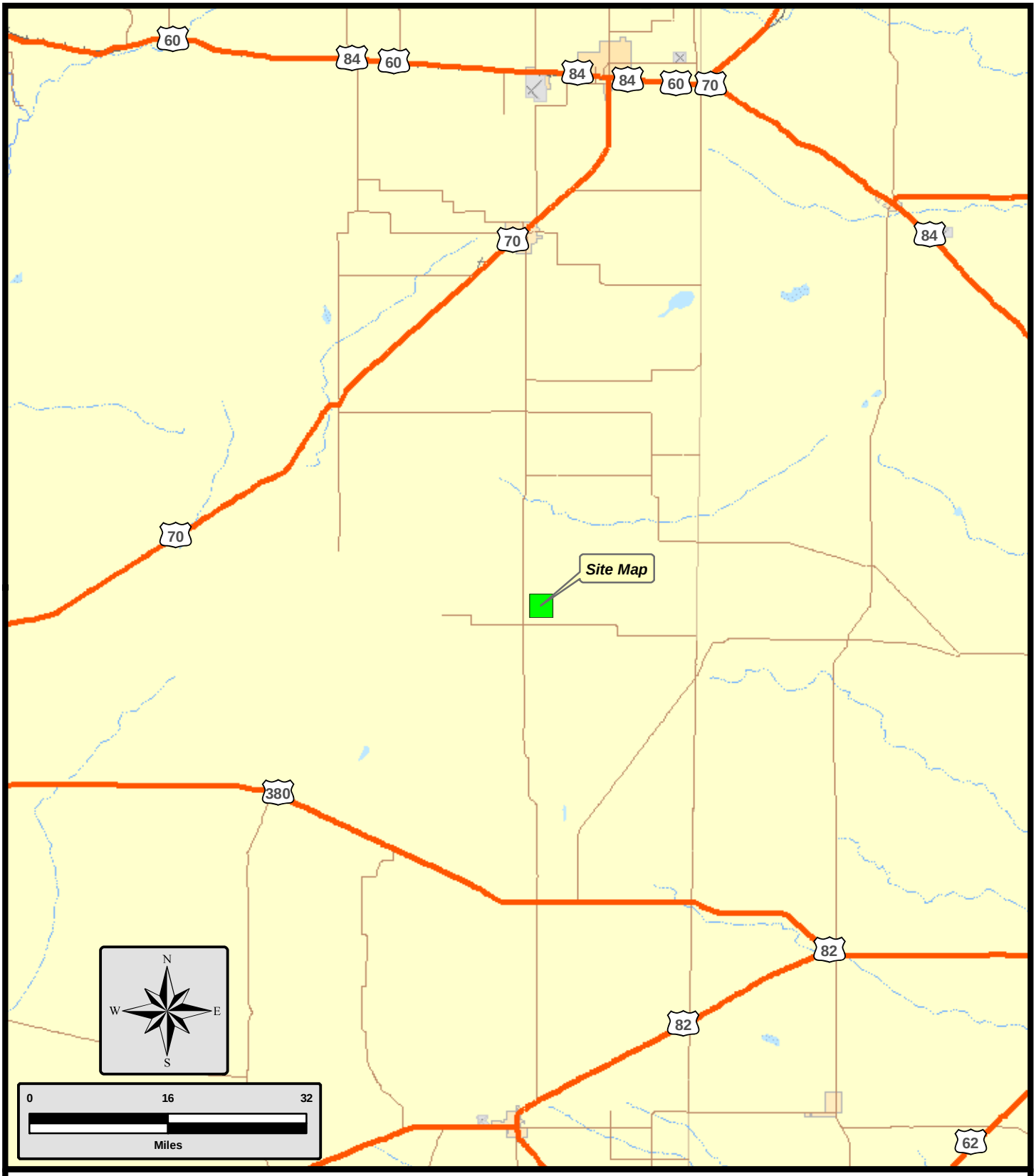

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FIGURE 1 - SITE LOCATION MAP
Glenn Springs Holding, Inc.
Todd West Injection Station
Roosevelt County, New Mexico
Apex-TITAN Project No. 84800375-23.002
from USGS Quadrangle Milnesand, Texas
Digital Data Courtesy of Google Earth

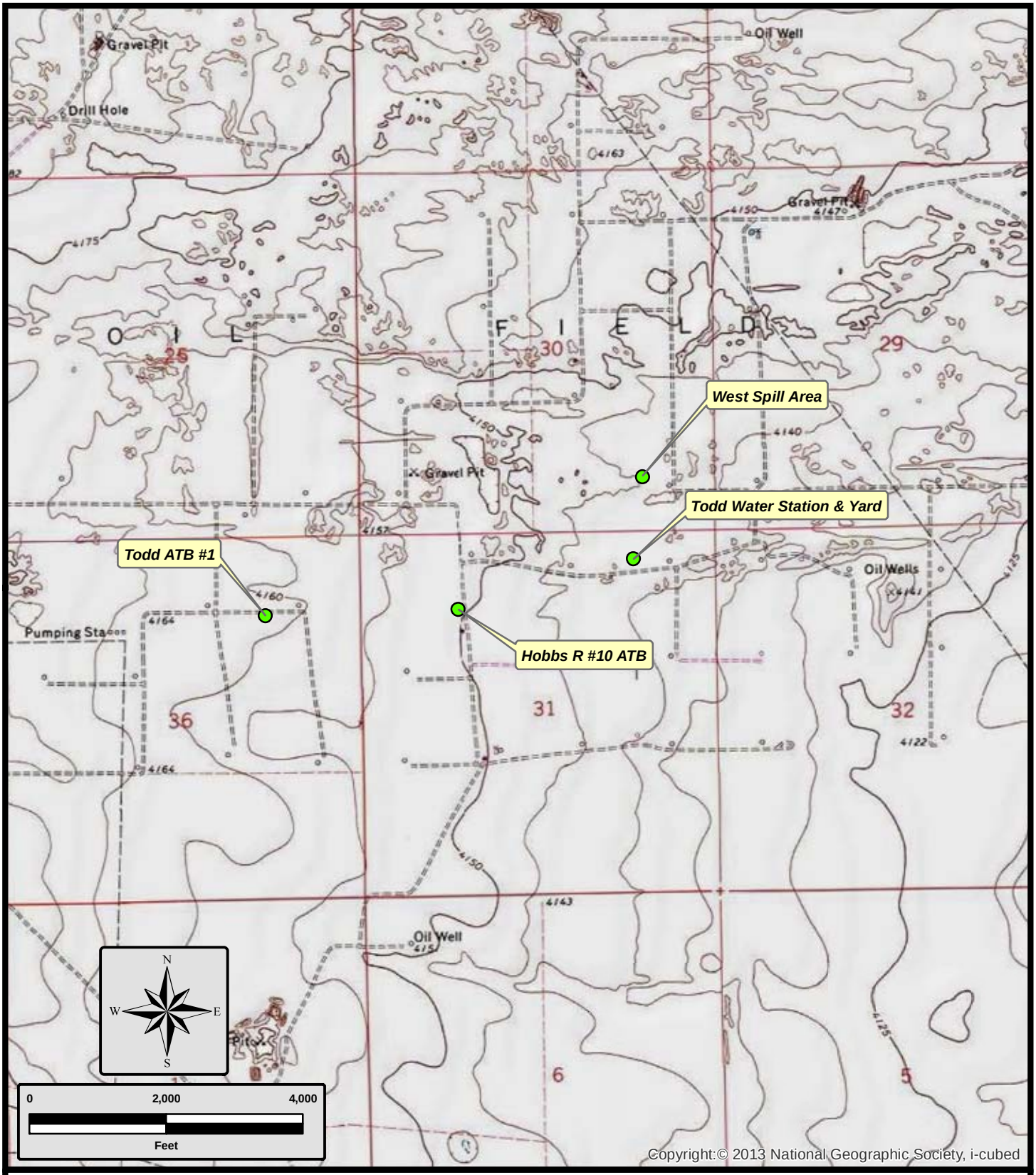

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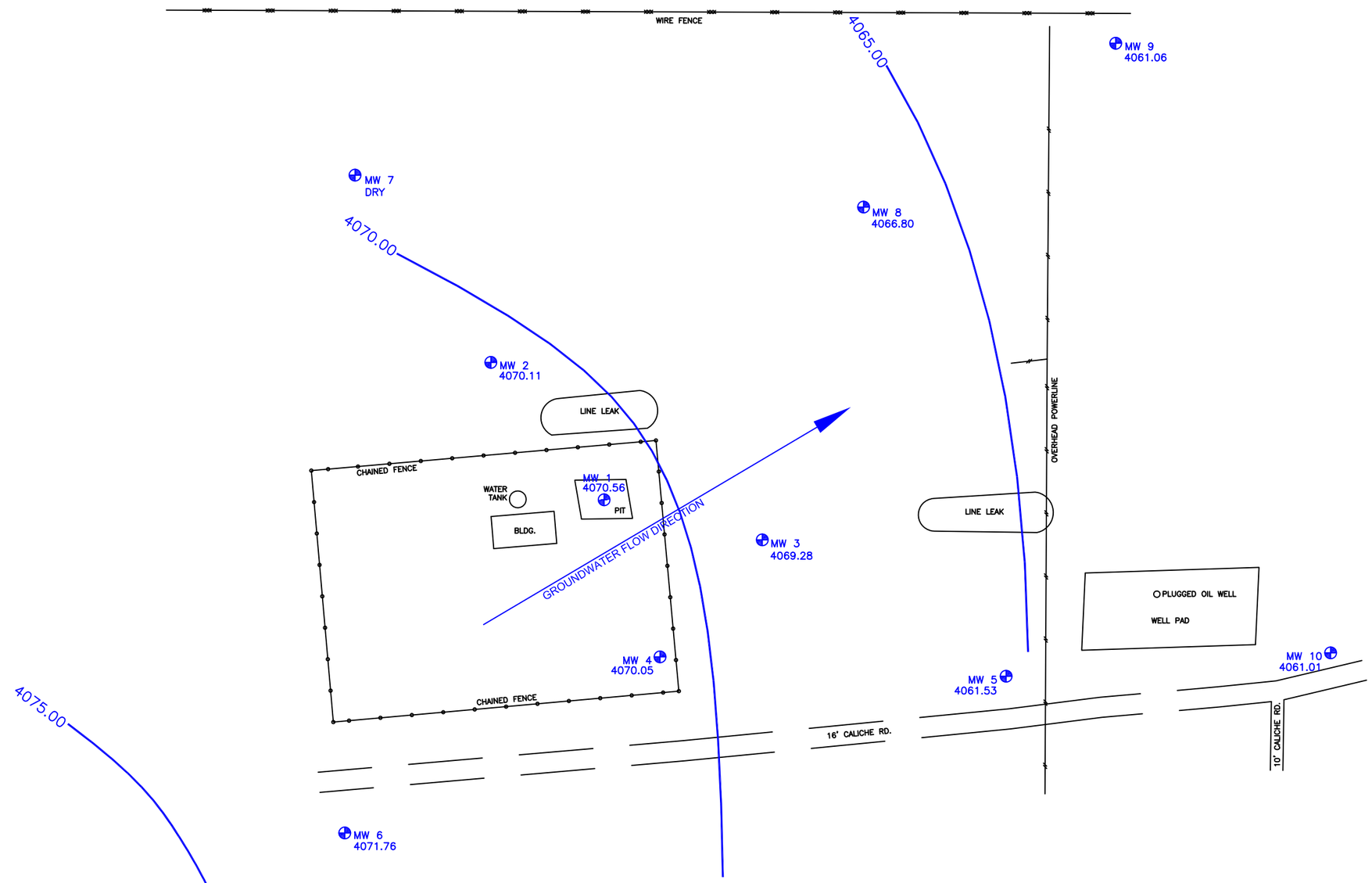
FIGURE 2 - TOPOGRAPHIC MAP
Glenn Springs Holding, Inc.
Todd West Injection Station
Roosevelt County, New Mexico
Apex-TITAN Project No. 84800375-23.002
from USGS Quadrangle Milnesand, Texas
Date Map Published 1985
Digital Data Courtesy of Google Earth



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GRAPHIC SCALE

0 60' 120'

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FIGURE 3
2nd Quarter 2014
Groundwater Gradient Map

Todd Injection Station
Roosevelt County, New Mexico

DESIGNED BY:	DETAILED BY:	CHECKED BY:
TEI	LLA	LS
FILE NAME: T:\GlennSpring\375-23\Task002\2014\Figs\CAD		
DATE: 01/2015	PROJECT NO.: 84800375-23	PLOT SCALE: 1"=60'
DRAWING NO.: TEI-0000	REVISION: 0	FIGURE: 3

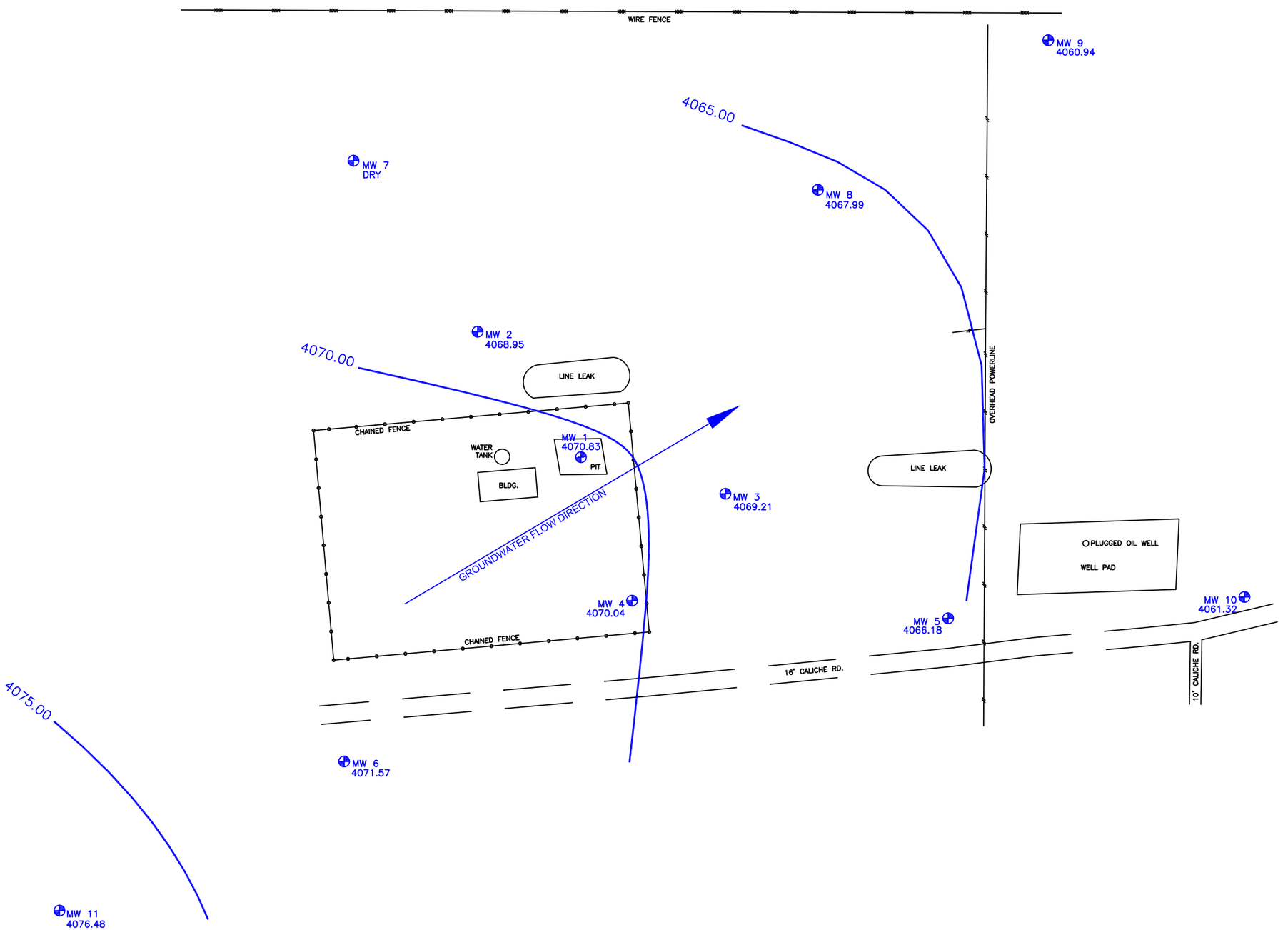

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FIGURE 4
3rd Quarter 2014
Groundwater Gradient Map

Todd Injection Station
Roosevelt County, New Mexico

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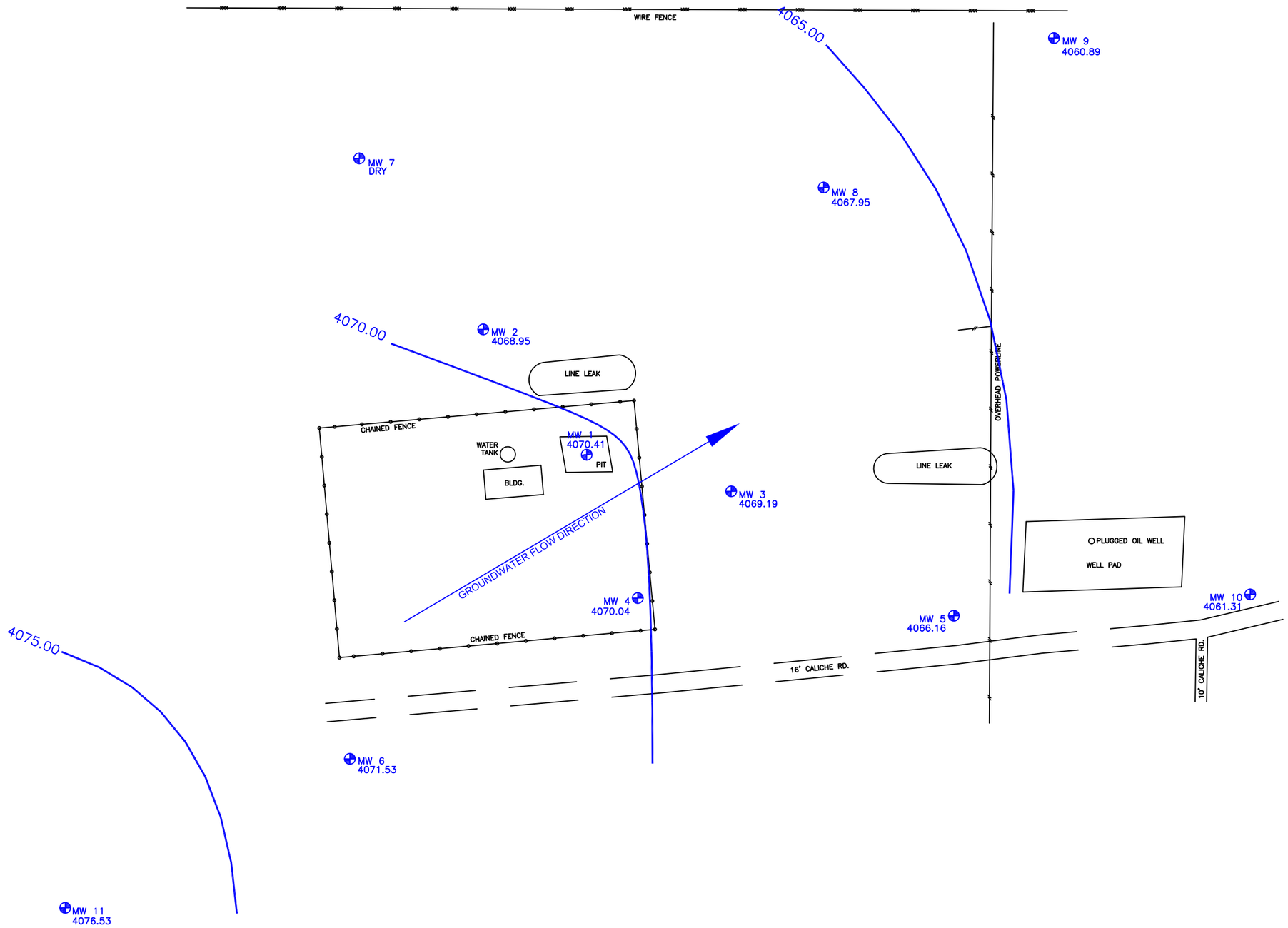

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FIGURE 5
4th Quarter 2014
Groundwater Gradient Map

Todd Injection Station
Roosevelt County, New Mexico

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DRAWING NO.: TEI-0000	REVISION: 0	FIGURE: 5

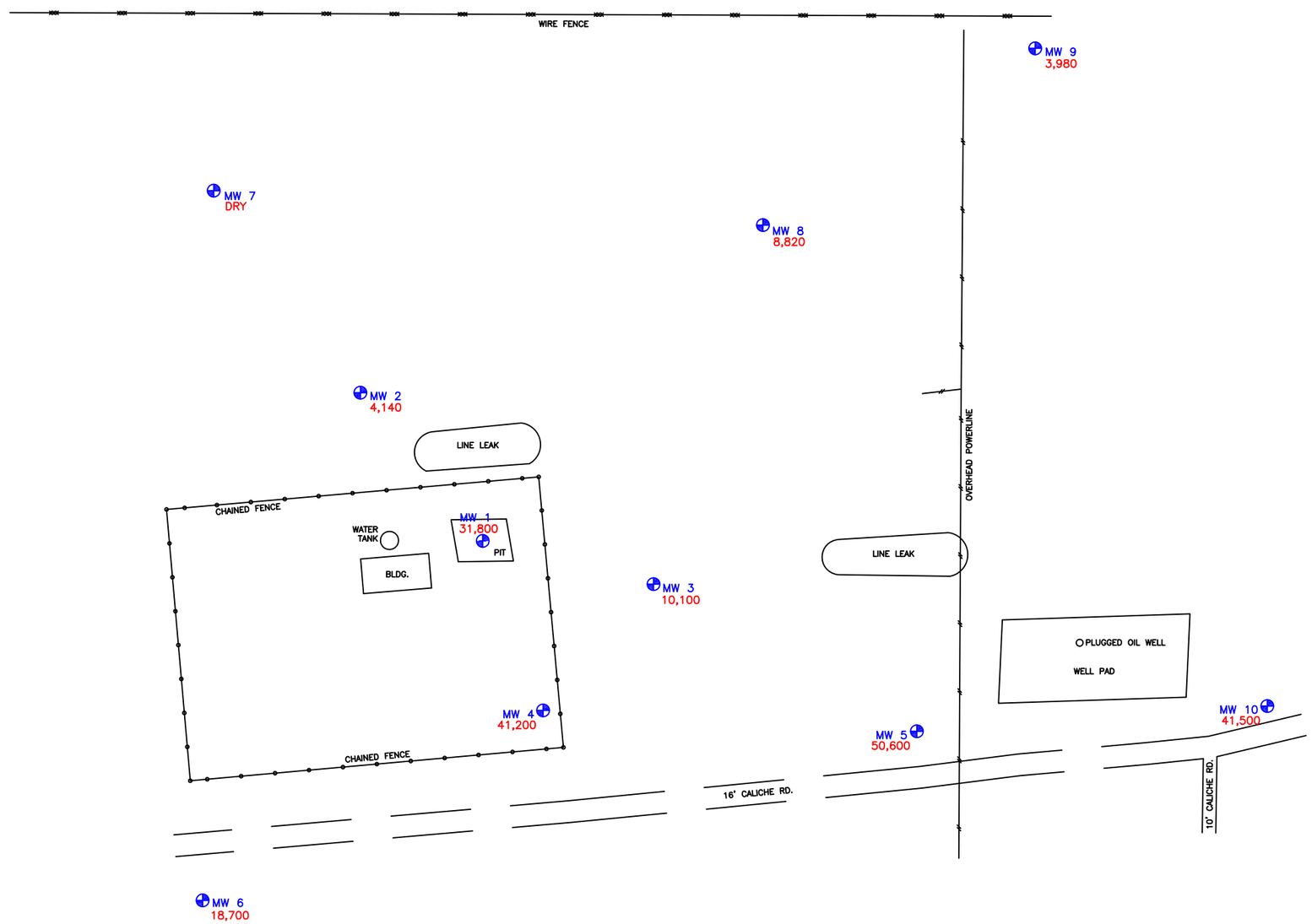

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FIGURE 6
2nd Quarter 2014
Chlorides Concentration Map (mg/L)

Todd Injection Station
Roosevelt County, New Mexico

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TEI	LLA	LS
FILE NAME: T:\GlennSpring\375-23\Task002\2014\Figs\CAD		
DATE: 01/2015	PROJECT NO.: 84800375-23	PLOT SCALE: 1"=60'
DRAWING NO.: TEI-0000	REVISION: 0	FIGURE: 6

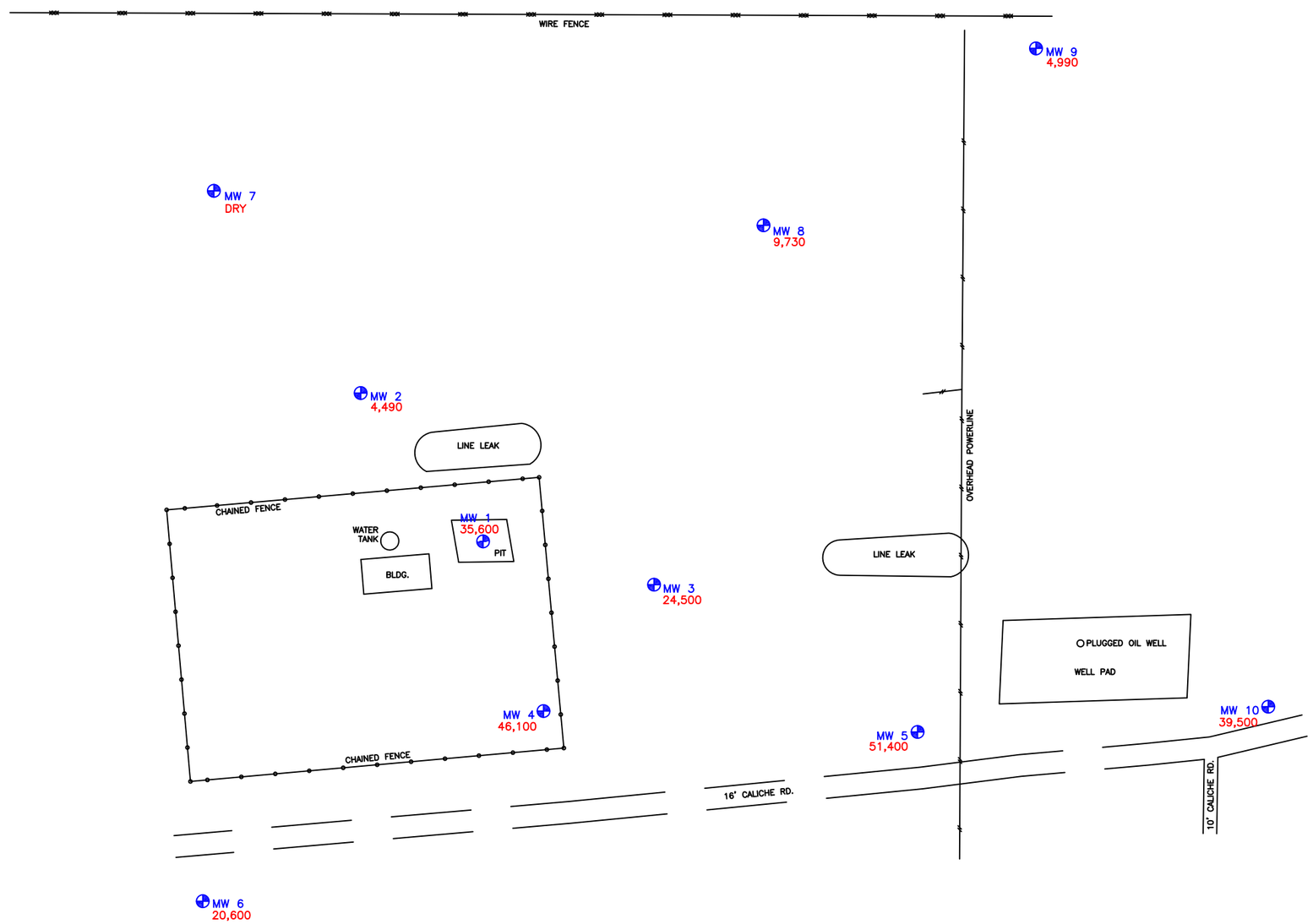

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FIGURE 7
3rd Quarter 2014
Chlorides Concentration Map (mg/L)

Todd Injection Station
Roosevelt County, New Mexico

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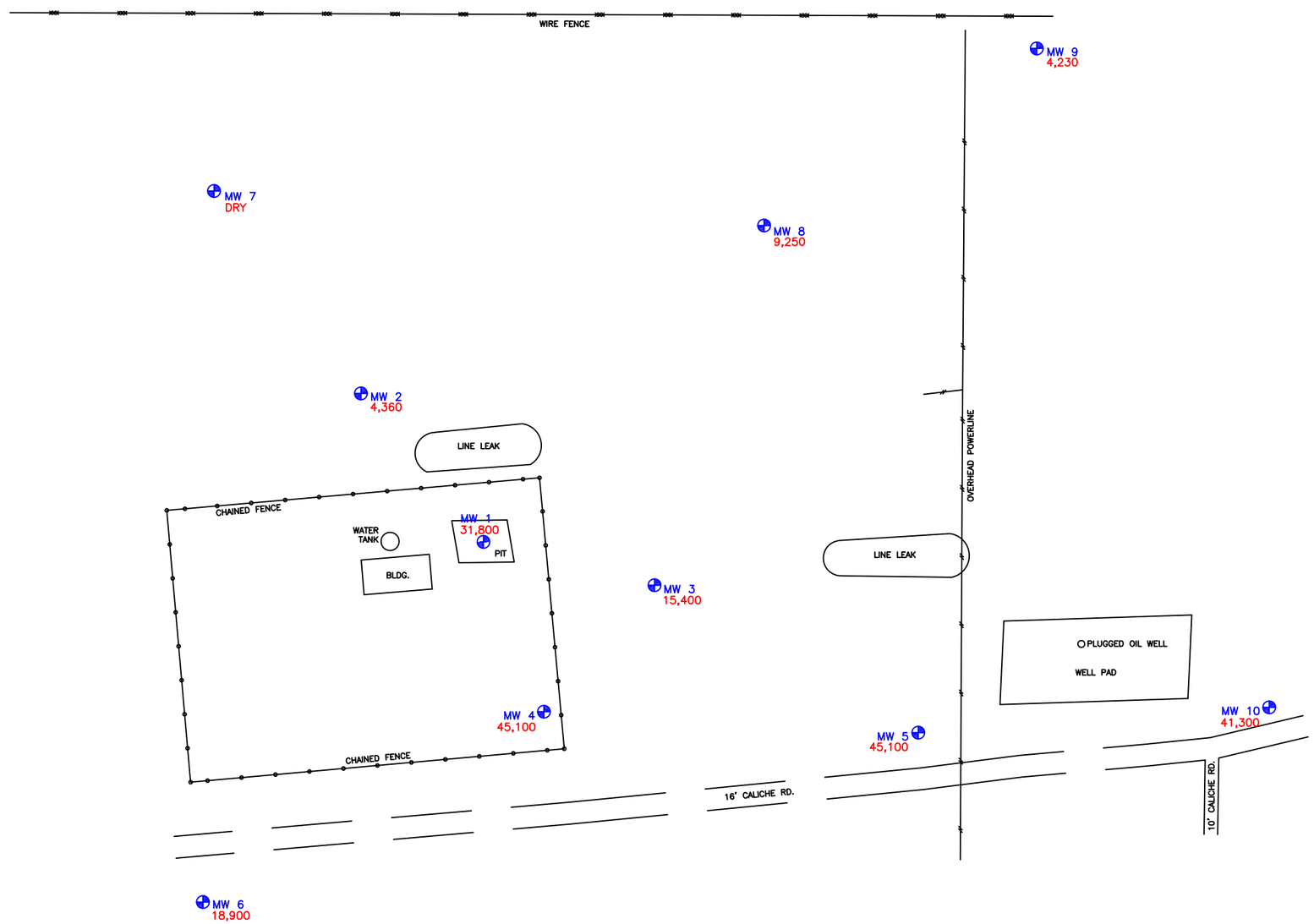

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FIGURE 8
4th Quarter 2014
Chlorides Concentration Map (mg/L)

Todd Injection Station
Roosevelt County, New Mexico

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FILE NAME: T:\GlennSpring\375-23\Task002\2014\Figs\CAD		
DATE: 01/2015	PROJECT NO.: 84800375-23	PLOT SCALE: 1"=60'
DRAWING NO.: TEI-0000	REVISION: 0	FIGURE: 8

TABLE 1
GLENN SPRINGS
TODD WATER INJECTION STATION
ROOSEVELT COUNTY, NEW MEXICO

Sample ID	Date Sampled	Date Gauged	Total Depth (feet)	Top of Casing Elevation (feet)	Measured Groundwater Elevations (feet)	Corrected Groundwater Elevations (feet)	Sample Number	TPH (mg/kg)			Benzene	Toluene	Ethly-benzene	Xylene	Chloride	TDS
								C6-C12	C12-C35	Total	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
TMW-1	09/06/06	N.G.	80.10	4,142.16	N.G.	N.G.	102407	-	-	-	**0.00220**	**0.00350**	**0.00390**	**0.00280**	**8,250**	-
(MW-1)	05/15/07	N.G.			N.G.	N.G.	124635	-	-	-	<0.001	<0.001	<0.001	<0.001	**26,200**	-
	09/20/07	09/25/07		4,142.16	69.42	4,072.74	137376				<0.001	<0.001	<0.001	<0.001	**22,300**	-
	12/07/07	12/04/07		4,142.16	69.37	4,072.79	-				-	-	-	-	**20,700**	**38,200**
	10/01/08	09/30/08		4,142.16	69.65	4,072.51	-				-	-	-	-	**22,000**	-
	12/16/08	12/15/08		4,142.16	69.78	4,072.38	0812491-01				<0.005	<0.005	<0.005	<0.015	**20,000**	-
	02/24/10	02/22/10		4,142.16	70.12	4,072.04	-				<0.002	<0.002	<0.002	<0.006	**23,500**	-
	06/28/10	06/28/10		4,142.16	70.33	4,071.83	-				<0.002	<0.002	<0.002	<0.006	**22,500**	-
	09/27/10	09/27/10		4,142.16	70.38	4,071.78	-				<0.002	<0.002	<0.002	<0.006	**25,200**	-
	12/08/10	12/06/10		4,142.16	70.43	4,071.73	-				<0.002	<0.002	<0.002	<0.006	**20,700**	-
Dup	12/08/10						-				<0.002	<0.002	<0.002	<0.006	**24,700**	-
	03/30/11	03/28/11		4,142.16	71.30	4,070.86	-				<0.002	<0.002	<0.002	<0.006	**19,400**	-
	06/23/11	06/22/11		4,142.16	71.19	4,070.97	-				<0.00014	<0.00030	<0.00020	<0.00023	**17,000**	-
Dup	06/23/11						-				<0.00014	<0.00030	<0.00020	<0.00023	**16,000**	-
	10/05/11	10/04/11		4,142.16	70.63	4,071.53	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0030	**25,000**	-
Dup	10/05/11							-	-	-	<0.0010	<0.0010	<0.0010	<0.0030	**24,000**	-
	12/14/11	12/13/11		4,142.16	70.66	4,071.50	-	-	-	-	<0.00014	<0.00030	<0.00020	<0.00023	**25,000**	
Dup	12/14/11							-	-	-	0.00022 J	<0.00030	<0.00020	<0.00023	**26,000**	-
	03/14/12	03/12/12		4,142.16	70.78	4,071.38	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**28,900**	-
	06/29/12	06/28/12		4,142.16	70.87	4,071.29	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**27,600**	-
	09/19/12	09/18/12		4,142.16	70.97	4,071.19	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**27,400**	-
Dup	09/19/12						-	-	-	-	<0.005	<0.005	<0.005	<0.015	**27,500**	-
	12/19/12	12/17/12		4,142.16	71.08	4,071.08	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**25,600**	-
Dup	12/19/12						-	-	-	-	<0.005	<0.005	<0.005	<0.015	**26,600**	-
	03/20/13	03/19/13		4,142.16	71.12	4,071.04	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**27,700**	-
Dup	03/20/13						-	-	-	-	<0.005	<0.005	<0.005	<0.015	**29,500**	-
	06/12/13	06/12/13		4,142.16	71.27	4,070.89	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**28,100**	-
Dup	06/12/13						-	-	-	-	<0.005	<0.005	<0.005	<0.015	**27,300**	-
	09/18/13	09/17/13		4,142.16	71.37	4,070.79	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**30,800**	-
Dup	09/18/13						-	-	-	-	<0.005	<0.005	<0.005	<0.015	**30,800**	-
	06/05/14	06/04/14		4,142.16	71.60	4,070.56	HS14060364	-	-	-	<0.005	<0.005	<0.005	<0.015	**31,800**	-
	09/16/14	09/15/14		4,142.16	71.33	4,070.83	HS14090834	-	-	-	<0.005	<0.005	<0.005	<0.015	**35,600**	-
	11/20/14	11/20/14		4,142.16	71.75	4,070.41	HS14110823	-	-	-	<0.005	<0.005	<0.005	<0.015	**31,800**	-
MW-2	09/24/07	09/25/07	84.80	4,143.19	73.35	4,069.84	137487	-	-	-	<0.001	<0.001	<0.001	<0.001	**6,820**	-
	12/07/07	12/04/07		4,143.19	70.94	4,072.25	-				-	-	-	-	**9,080**	**16,400**
	10/01/08	09/30/08		4,143.19	71.09	4,072.10	-				-	-	-	-	**12,200**	
	12/15/08	12/15/08		4,143.19	71.20	4,071.99	0812491-02				<0.005	<0.005	<0.005	<0.015	**8,470**	-
	02/24/10	02/22/10		4,143.19	71.50	4,071.69	-				<0.002	<0.002	<0.002	<0.006	**7,510**	-
	06/28/10	06/28/10		4,143.19	71.66	4,071.53	-				<0.002	<0.002	<0.002	<0.006	**6,180**	-
	09/27/10	09/27/10		4,143.19	71.88	4,071.31	-				<0.002	<0.002	<0.002	<0.006	**6,060**	-
MW-2	12/08/10	12/06/10		4,143.19	72.03	4,071.16	-				<0.002	<0.002	<0.002	<0.006	**4,680**	-
	03/30/11	03/28/11		4,143.19	72.87	4,070.32	-				<0.002	<0.002	<0.002	<0.006	**2,190**	-
	06/23/11	06/22/11		4,143.19	72.45	4,070.74	-				<0.00014	<0.00030	<0.00020	<0.00023	**2,700**	-
	10/05/11	10/04/11		4,143.19	72.30	4,070.89	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0030	**2,400**	-
	12/14/11	12/13/11		4,143.19	72.31	4,070.88	-	-	-	-	<0.00014	<0.00030	<0.00020	<0.00023	**2,900**	-
	03/14/12	03/12/12		4,143.19	72.37	4,070.82	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**3,420**	-
	06/29/12	06/28/12		4,143.19	72.49	4,070.70	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**3,390**	-
	09/19/12	09/18/12		4,143.19	72.53	4,070.66	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**3,530**	-
	12/19/12	12/17/12		4,143.19	72.62	4,070.57	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**3,160**	-
	03/20/13	03/19/13		4,143.19	72.65	4,070.54	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**3,250**	-
	06/12/13	06/12/13		4,143.19	72.50	4,070.69	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**3,690**	-
	09/18/13	09/17/13		4,143.19	72.83	4,070.36	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**4,040**	-
	06/05/14	06/04/14		4,143.19	73.08	4,070.11	HS14060364	-	-	-	<0.005	<0.005	<0.005	<0.015	**4,140**	-
	09/16/14	09/15/14		4,143.19	74.24	4,068.95	HS14090834	-	-	-	<0.005	<0.005	<0.005	<0.015	**4,490**	-
	11/20/14	11/20/14		4,143.19	74.24	4,068.95	HS14110823	-	-	-	<0.005	<0.005	<0.005	<0.015	**4,360**	-
MW-3	09/20/07	09/25/07	88.10	4,141.38	69.35	4,072.03	137377	-	-	-	<0.001	<0.001	<0.001	<0.001	**17,800**	-
	12/07/07	12/04/07		4,141.38	69.32	4,072.06	-				-	-	-	-	**4,100**	**9,000**
	10/01/08	09/30/08		4,141.38	69.83	4,071.55	-				-	-	-	-	**20,700**	-
	12/16/08	12/15/08		4,141.38	69.93	4,071.45	0812491-03				<0.005	<0.005	<0.005	<0.015	**14,500**	-
	02/24/10	02/22/10		4,141.38	70.33	4,071.05	-				<0.002	<0.002	<0.002	<0.006	**6,800**	-
	06/28/10	06/28/10		4,141.38	70.47	4,070.91	-				<0.002	<0.002	<0.002	<0.006	**11,100**	-
	09/27/10	09/27/10		4,141.38	70.60	4,070.78	-				<0.002	<0.002	<0.002	<0.006	**3,850**	-
	12/08/10	12/06/10		4,141.38	70.65	4,070.73	-				<0.002	<0.002	<0.002	<0.006	**13,000**	-
	03/30/11	03/28/11		4,141.38	71.51	4,069.87	-				<0.002	<0.002	<0.002	<0.006	**8,070**	-
	06/23/11	06/22/11		4,141.38	71.65	4,069.73	-				<0.00014	<0.00030	<0.00020	<0.00023	**8,700**	-
	10/05/11	10/04/11		4,141.38	70.89	4,070.49	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0030	**5,400**	-
	12/14/11	12/13/11		4,141.38	70.98	4,070.40	-	-	-	-	<0.00014	<0.00030	<0.00020	<0.00023	**9,800**	-
	03/14/12	03/12/12		4,141.38	71.02	4,070.36	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**22,300**	-
	06/29/12	06/28/12		4,141.38	71.30	4,070.08	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**13,700**	-

TABLE 1
GLENN SPRINGS
TODD WATER INJECTION STATION
ROOSEVELT COUNTY, NEW MEXICO

Sample ID	Date Sampled	Date Gauged	Total Depth (feet)	Top of Casing Elevation (feet)	Measured Groundwater Elevations (feet)	Corrected Groundwater Elevations (feet)	Sample Number	TPH (mg/kg)			Benzene	Toluene	Ethly-benzene	Xylene	Chloride	TDS
								C6-C12	C12-C35	Total	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
	09/19/12	09/18/12		4,141.38	71.39	4,069.99	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**8,190**	-
	12/19/12	12/17/12		4,141.38	71.44	4,069.94	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**7,570**	-
	03/20/13	03/19/13		4,141.38	71.50	4,069.88	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**20,700**	-
	06/12/13	06/12/13		4,141.38	71.70	4,069.68		-	-	-	<0.005	<0.005	<0.005	<0.015	**11,600**	-
	09/18/13	09/17/13		4,141.38	71.78	4,069.60					<0.005	<0.005	<0.005	<0.015	**14,600**	
	06/05/14	06/04/14		4,141.38	72.10	4,069.28	HS14060364	-	-	-	<0.005	<0.005	<0.005	<0.015	**10,100**	-
	09/16/14	09/15/14		4,141.38	72.17	4,069.21	HS14090834	-	-	-	<0.005	<0.005	<0.005	<0.015	**24,500**	-
	11/20/14	11/20/14		4,141.38	72.19	4,069.19	HS14110823	-	-	-	<0.005	<0.005	<0.005	<0.015	**15,400**	-
MW-4	09/20/07	09/25/07	87.80	4,142.03	68.73	4,073.30	137378	-	-	-	<0.001	<0.001	<0.001	<0.001	**29,000**	-
	12/07/08	12/04/08		4,142.03	68.70	4,073.33	-				-	-	-	-	**6,760**	**14,150**
	10/01/08	09/30/08		4,142.03	69.41	4,072.62	-				-	-	-	-	**33,800**	-
	12/16/08	12/15/08		4,142.03	69.48	4,072.55	0812491-04				<0.005	<0.005	<0.005	<0.015	**32,000**	-
	02/24/10	02/22/10		4,142.03	69.98	4,072.05	-				<0.002	<0.002	<0.002	<0.006	**10,900**	-
	06/28/10	06/28/10		4,142.03	70.12	4,071.91	-				<0.002	<0.002	<0.002	<0.006	**22,600**	-
	09/27/10	09/27/10		4,142.03	70.16	4,071.87	-				<0.002	<0.002	<0.002	<0.006	**34,700**	-
	12/08/10	12/06/10		4,142.03	70.29	4,071.74	-				<0.002	<0.002	<0.002	<0.006	**24,300**	-
	03/30/11	03/28/11		4,142.03	71.15	4,070.88	-				<0.002	<0.002	<0.002	<0.006	**13,100**	-
	06/23/11	06/22/11		4,142.03	71.29	4,070.74	-				0.00028 J	<0.00030	<0.00020	<0.00023	36,000	-
	10/05/11	10/04/11		4,142.03	70.60	4,071.43	-	-	-	-	0.00020 J	<0.0010	<0.0010	<0.0030	**17,000**	-
	12/14/11	12/13/11		4,142.03	70.71	4,071.32	-	-	-	-	0.00022 J	<0.00030	<0.00020	<0.00023	**32,000**	-
	03/14/12	03/12/12		4,142.03	70.86	4,071.17	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**39,100**	-
	06/29/12	06/28/12		4,142.03	70.99	4,071.04	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**18,700**	-
	09/19/12	09/18/12		4,142.03	71.15	4,070.88	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**26,900**	-
	12/19/12	12/17/12		4,142.03	71.11	4,070.92	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**30,200**	-
	03/20/13	03/19/13		4,142.03	71.31	4,070.72	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**36,800**	-
	06/12/13	06/12/13		4,142.03	71.52	4,070.51		-	-	-	<0.005	<0.005	<0.005	<0.015	**22,600**	-
	09/18/13	09/17/13		4,142.03	71.60	4,070.43					<0.005	<0.005	<0.005	<0.015	**37,900**	-
	06/05/14	06/04/14		4,142.03	71.93	4,070.10	HS14060364	-	-	-	<0.005	<0.005	<0.005	<0.015	**41,200**	-
	09/16/14	09/15/14		4,142.03	71.98	4,070.05	HS14090834	-	-	-	<0.005	<0.005	<0.005	<0.015	**46,100**	-
Dup	09/16/14	09/15/14		4,142.03	71.98	4,070.05	HS14090834	-	-	-	<0.005	<0.005	<0.005	<0.015	**47,300**	-
	11/20/14	11/20/214		4,142.03	71.99	4,070.04	HS14110823	-	-	-	<0.005	<0.005	<0.005	<0.015	**45,100**	-
Dup	11/20/14	11/20/14		4,142.03	71.99	4,070.04	HS14110823	-	-	-	<0.005	<0.005	<0.005	<0.015	**46,200**	-
MW-5	09/20/07	09/25/07	88.70	4,142.21	77.51	4,064.70	137379	-	-	-	<0.001	<0.001	<0.001	<0.001	**21,700**	-
	12/07/07	12/04/07		4,142.21	72.72	4,069.49	-				-	-	-	-	**14,100**	**21,100**
	10/01/08	09/30/08		4,142.21	73.23	4,068.98	-				-	-	-	-	**25,900**	-
	12/16/08	12/15/08		4,142.21	73.38	4,068.83	0812491-05				<0.005	<0.005	<0.005	<0.015	**24,400**	-
	02/24/10	02/22/10		4,142.21	73.84	4,068.37	-				<0.002	<0.002	<0.002	<0.006	**24,100**	-
	06/28/10	06/28/10		4,142.21	74.01	4,068.20	-				<0.002	<0.002	<0.002	<0.006	**33,400**	-
	09/27/10	09/27/10		4,142.21	74.13	4,068.08	-				<0.002	<0.002	<0.002	<0.006	**33,300**	-
	12/08/10	12/06/10		4,142.21	74.17	4,068.04	-				<0.002	<0.002	<0.002	<0.006	**33,100**	-
	03/30/11	03/28/11		4,142.21	75.10	4,067.11	-				<0.002	<0.002	<0.002	<0.006	**16,300**	-
	06/23/11	06/22/11		4,142.21	75.19	4,067.02	-				<0.00014	<0.00030	<0.00020	<0.00023	27,000	-
	10/05/11	10/04/11		4,142.21	74.58	4,067.63	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0030	**30,000**	-
	12/14/11	12/13/11		4,142.21	74.60	4,067.61	-	-	-	-	<0.00014	<0.00030	<0.00020	<0.00023	**38,000**	-
	03/14/12	03/12/12		4,142.21	74.78	4,067.43	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**44,500**	-
	06/29/12	06/28/12		4,142.21	74.97	4,067.24	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**41,200**	-
	09/19/12	09/18/12		4,142.21	75.08	4,067.13	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**42,900**	-
	12/19/12	12/17/12		4,142.21	75.21	4,067.00	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**38,100**	-
	03/20/13	03/19/13		4,142.21	75.29	4,066.92	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**44,400**	-
	06/12/13	06/12/13		4,142.21	75.50	4,066.71		-	-	-	<0.005	<0.005	<0.005	<0.015	**41,000**	-
	09/18/13	09/17/13		4,142.21	75.57	4,066.64					<0.005	<0.005	<0.005	<0.015	**46,000**	-
	06/05/14	06/04/14		4,142.21	80.68	4,061.53	HS14060364	-	-	-	<0.005	<0.005	<0.005	<0.015	**50,600**	-
	09/16/14	09/15/14		4,142.21	76.03	4,066.18	HS14090834	-	-	-	<0.005	<0.005	<0.005	<0.015	**51,400**	-
	11/20/14	11/20/14		4,142.21	76.05	4,066.16	HS14110823	-	-	-	<0.005	<0.005	<0.005	<0.015	**45,100**	-
MW-6	09/20/07	09/25/07	89.50	4,143.94	69.25	4,074.69	137380	-	-	-	<0.001	<0.001	<.0.001	<0.001	**3,540**	-
	12/07/07	12/04/07		4,143.94	69.34	4,074.60	-				-	-	-	-	**3,520**	**7,660**
	10/01/08	09/30/08		4,143.94	69.75	4,074.19	-				-	-	-	-	**3,730**	-
	12/16/08	12/15/08		4,143.94	69.88	4,074.06	0812491-06				<0.005	<0.005	<0.005	<0.015	**3,920**	-
	02/24/10	02/22/10		4,143.94	70.26	4,073.68	-				<0.002	<0.002	<0.002	<0.006	**17,600**	-
	06/28/10	06/28/10		4,143.94	70.35	4,073.59	-				<0.002	<0.002	<0.002	<0.006	**5,190**	-
	09/27/10	09/27/10		4,143.94	70.50	4,073.44	-				<0.002	<0.002	<0.002	<0.006	**6,460**	-
	12/08/10	12/06/10		4,143.94	70.58	4,073.36	-				<0.002	<0.002	<0.002	<0.006	**7,170**	-
	03/30/11	03/28/11		4,143.94	71.50	4,072.44	-				<0.002	<0.002	<0.002	<0.006	**5,990**	-
	06/23/11	06/22/11		4,143.94	71.68	4,072.26	-				<0.00014	<0.00030	<0.00020	<0.00023	9,100	-
	10/05/11	10/04/11		4,143.94	71.02	4,072.92	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0030	**6,900**	-
	12/14/11	12/13/11		4,143.94	71.03	4,072.91	-	-	-	-	<0.00014	<0.00030	<0.00020	<0.00023	**8,000**	-
	03/14/12	03/12/12		4,143.94	71.08	4,072.86	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**13,300**	-
	06/29/12	06/28/12		4,143.94	71.31	4,072.63	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**12,900**	-

TABLE 1
GLENN SPRINGS
TODD WATER INJECTION STATION
ROOSEVELT COUNTY, NEW MEXICO

Sample ID	Date Sampled	Date Gauged	Total Depth (feet)	Top of Casing Elevation (feet)	Measured Groundwater Elevations (feet)	Corrected Groundwater Elevations (feet)	Sample Number	TPH (mg/kg)			Benzene	Toluene	Ethly-benzene	Xylene	Chloride	TDS
								C6-C12	C12-C35	Total	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
	09/19/12	09/18/12		4,143.94	71.51	4,072.43	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**12,700**	-
	12/19/12	12/17/12		4,143.94	71.63	4,072.31	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**13,900**	-
	03/20/13	03/19/13		4,143.94	71.65	4,072.29	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**15,500**	-
	06/12/13	06/12/13		4,143.94	71.86	4,072.08	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**15,400**	-
	09/18/13	09/17/13		4,143.94	71.92	4,072.02	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**17,900**	-
	06/05/14	06/04/14		4,143.94	72.18	4,071.76	HS14060364	-	-	-	<0.005	<0.005	<0.005	<0.015	**18,700**	-
	09/16/14	09/15/14		4,143.94	72.37	4,071.57	HS14090834	-	-	-	<0.005	<0.005	<0.005	<0.015	**20,600**	-
	11/20/14	11/20/14		4,143.94	72.41	4,071.53	HS14110823	-	-	-	<0.005	<0.005	<0.005	<0.015	**18,900**	-
MW-7	-	09/25/07	88.10	4,143.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	12/04/07		4,143.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	09/30/08		4,143.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	12/15/08		4,143.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	02/22/10		4,143.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	06/28/10		4,143.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	09/27/10		4,143.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	12/06/10		4,143.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	03/28/11		4,143.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	06/22/11		4,143.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	10/04/11		4,143.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	12/13/11		4,143.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	03/12/12		4,143.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	06/28/12		4,144.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	09/18/12		4,145.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	12/17/12		4,145.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	03/19/13		4,145.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	06/12/13		4,145.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
	-	09/17/13		4,145.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
		06/04/14		4,145.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
		09/15/14	88.35	4,145.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
		11/20/14	88.35	4,145.27	Dry	Dry	-	-	-	-	-	-	-	-	-	-
MW-8	09/20/07	09/25/07	88.82	4,142.61	74.25	4,068.36	137381	-	-	-	<0.001	<0.001	<0.001	<0.001	**10,400**	-
	12/07/07	12/04/07		4,142.61	74.62	4,067.99	-	-	-	-	-	-	-	-	**10,800**	**20,300**
	10/01/08	09/30/08		4,142.61	74.44	4,068.17	-	-	-	-	-	-	-	-	**10,200**	-
	12/16/08	12/15/08		4,142.61	74.51	4,068.10	0812491-08		-	-	<0.005	<0.005	<0.005	<0.015	**10,600**	-
	02/24/10	02/22/10		4,142.61	74.56	4,068.05	-	-	-	-	<0.002	<0.002	<0.002	<0.006	**14,500**	-
	06/28/10	06/28/10		4,142.61	74.70	4,067.91	-	-	-	-	<0.002	<0.002	<0.002	<0.006	**8,460**	-
	09/27/10	09/27/10		4,142.61	74.71	4,067.90	-	-	-	-	<0.002	<0.002	<0.002	<0.006	**9,420**	-
	12/08/10	12/06/10		4,142.61	74.77	4,067.84	-	-	-	-	<0.002	<0.002	<0.002	<0.006	**10,200**	-
	03/30/11	03/28/11		4,142.61	75.65	4,066.96	-	-	-	-	<0.002	<0.002	<0.002	<0.006	**4,440**	-
	06/23/11	06/22/11		4,142.61	75.72	4,066.89	-	-	-	-	<0.00014	<0.00030	<0.00020	<0.00023	**8,900**	-
	10/05/11	10/04/11		4,142.61	75.04	4,067.57	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0030	**5,800**	-
	12/14/11	12/13/11		4,142.61	75.06	4,067.55	-	-	-	-	<0.00014	<0.00030	<0.00020	<0.00023	**8,400**	-
	03/14/12	03/12/12		4,142.61	75.12	4,067.49	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**9,460**	-
	06/29/12	06/28/12		4,142.61	75.22	4,067.39	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**8,910**	-
	09/19/12	09/18/12		4,142.61	75.34	4,067.27	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**7,870**	-
	12/19/12	12/17/12		4,142.61	75.34	4,067.27	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**8,240**	-
	03/20/13	03/19/13		4,142.61	75.42	4,067.19	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**8,680**	-
	06/12/13	06/12/13		4,142.61	75.57	4,067.04		-	-	-	<0.005	<0.005	<0.005	<0.015	**8,020**	-
	09/18/13	09/17/13		4,142.61	75.62	4,066.99					<0.005	<0.005	<0.005	<0.015	**8,910**	-
	06/05/14	06/04/14		4,142.61	75.81	4,066.80	HS14060364	-	-	-	<0.005	<0.005	<0.005	<0.015	**8,820**	-
	09/16/14	09/15/14		4,143.94	75.95	4,067.99	HS14090834	-	-	-	<0.005	<0.005	<0.005	<0.015	**9,730**	-
	11/20/14	11/20/14		4,143.91	75.96	4,067.95	HS14110823	-	-	-	<0.005	<0.005	<0.005	<0.015	**9,250**	-
MW-9	09/26/07	09/25/07	92.25	4,141.66	81.18	4,060.48	137488	-	-	-	<0.001	<0.001	<0.001	<0.001	**4,290**	-
	12/07/07	12/04/07		4,141.66	80.95	4,060.71	-	-	-	-	-	-	-	-	**4,690**	**8,862**
	10/01/08	09/30/08		4,141.66	80.81	4,060.85	-	-	-	-	-	-	-	-	**8,670**	-
	12/16/08	12/15/08		4,141.66	80.93	4,060.73	0812491-08		-	-	<0.005	<0.005	<0.005	<0.015	**8,770**	-
	02/24/10	02/22/10		4,141.66	80.48	4,061.18	-	-	-	-	<0.002	<0.002	<0.002	<0.006	**5,460**	-
	06/28/10	06/28/10		4,141.66	80.39	4,061.27	-	-	-	-	<0.002	<0.002	<0.002	<0.006	**4,390**	-
	09/27/10	09/27/10		4,141.66	80.42	4,061.24	-	-	-	-	<0.002	<0.002	<0.002	<0.006	**5,300**	-
	12/08/10	12/06/10		4,141.66	80.37	4,061.29	-	-	-	-	<0.002	<0.002	<0.002	<0.006	**20,200**	-
	03/30/11	03/28/11		4,141.66	81.16	4,060.50	-	-	-	-	<0.002	<0.002	<0.002	<0.006	**11,500**	-
	06/23/11	06/22/11		4,141.66	81.23	4,060.43	-	-	-	-	<0.00014	<0.00030	<0.00020	<0.00023	**3,900**	-
	10/05/11	10/04/11		4,141.66	80.39	4,061.27	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0030	**4,400**	-
	12/14/11	12/13/11		4,141.66	80.41	4,061.25	-	-	-	-	<0.00014	<0.00030	<0.00020	<0.00023	**4,000**	-
	03/14/12	03/12/12		4,141.66	80.44	4,061.22	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**6,640**	-
	06/29/12	06/28/12		4,141.66	80.44	4,061.22	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**4,090**	-
	09/19/12	09/18/12		4,141.66	80.59	4,061.07	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**3,680**	-
	12/19/12	12/17/12		4,141.66	79.53	4,062.13	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**4,330**	-

TABLE 1
GLENN SPRINGS
TODD WATER INJECTION STATION
ROOSEVELT COUNTY, NEW MEXICO

Sample ID	Date Sampled	Date Gauged	Total Depth (feet)	Top of Casing Elevation (feet)	Measured Groundwater Elevations (feet)	Corrected Groundwater Elevations (feet)	Sample Number	TPH (mg/kg)			Benzene	Toluene	Ethly-benzene	Xylene	Chloride	TDS
								C6-C12	C12-C35	Total	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
	03/20/13	03/19/13		4,141.66	80.56	4,061.10	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**4,530**	-
	06/12/13	06/12/13		4,141.66	80.60	4,061.06		-	-	-	<0.005	<0.005	<0.005	<0.015	**4,560**	-
	09/18/13	09/17/13		4,141.66	80.66	4,061.00					<0.005	<0.005	<0.005	<0.015	**4,930**	-
	06/05/14	06/04/14		4,141.66	80.60	4,061.06	HS14060364	-	-	-	<0.005	<0.005	<0.005	<0.015	**3,980**	-
	09/16/14	09/15/14		4,141.66	80.72	4,060.94	HS14090834	-	-	-	<0.005	<0.005	<0.005	<0.015	**4,990**	-
	11/20/14	11/20/14		4,141.66	80.77	4,060.89	HS14110823	-	-	-	<0.005	<0.005	<0.005	<0.015	**4,230**	-
MW-10	09/26/07	09/25/07	90.24	4,142.92	79.11	4,063.81	137489	-	-	-	<0.001	<0.001	<0.001	<0.001	**3,090**	-
	12/07/07	12/04/07		4,142.92	78.98	4,063.94	-				-	-	-	-	**3,310**	**6,410**
	10/01/08	09/30/08		4,142.92	79.39	4,063.53	-				-	-	-	-	**11,500**	-
	12/16/08	12/15/08		4,142.92	79.65	4,063.27	0812491-09				<0.005	<0.005	<0.005	<0.015	**13,400**	-
	02/24/10	02/22/10		4,142.92	79.82	4,063.10	-				<0.002	<0.002	<0.002	<0.006	**2,740**	-
	06/28/10	06/28/10		4,142.92	80.16	4,062.76	-				<0.002	<0.002	<0.002	<0.006	**17,500**	-
	09/27/10	09/27/10		4,142.92	80.11	4,062.81	-				<0.002	<0.002	<0.002	<0.006	**11,000**	-
	12/08/10	12/06/10		4,142.92	80.19	4,062.73	-				<0.002	<0.002	<0.002	<0.006	**10,700**	-
	03/30/11	03/28/11		4,142.92	81.11	4,061.81	-				<0.002	<0.002	<0.002	<0.006	**9,090**	-
	06/23/11	06/22/11		4,142.92	81.29	4,061.63	-				<0.00014	<0.00030	<0.00020	<0.00023	**13,000**	-
	10/05/11	10/04/11		4,142.92	80.51	4,062.41	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0030	**9,300**	-
	12/14/11	12/13/11		4,142.92	80.55	4,062.37	-	-	-	-	<0.00014	<0.00030	<0.00020	<0.00023	**23,000**	-
	03/14/12	03/12/12		4,142.92	80.67	4,062.25	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**31,500**	-
	06/29/12	06/28/12		4,142.92	80.83	4,062.09	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**2,660**	-
	09/19/12	09/18/12		4,142.92	80.03	4,062.89	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**20,300**	-
	12/19/12	12/17/12		4,142.92	79.98	4,062.94	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**23,900**	-
	03/20/13	03/19/13		4,142.92	81.06	4,061.86	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**32,700**	-
	06/12/13	06/12/13		4,142.92	81.18	4,061.74		-	-	-	<0.005	<0.005	<0.005	<0.015	**30,800**	-
	09/18/13	09/17/13		4,142.92	81.21	4,061.71					<0.005	<0.005	<0.005	<0.015	**31,800**	-
	06/05/14	06/04/14		4,142.92	81.91	4,061.01	HS14060364	-	-	-	<0.005	<0.005	<0.005	<0.015	**41,500**	-
	09/16/14	09/15/14		4,142.92	81.60	4,061.32	HS14090834	-	-	-	<0.005	<0.005	<0.005	<0.015	**39,500**	-
	11/20/214	11/20/14		4,142.92	81.61	4,061.31	HS14110823	-	-	-	<0.005	<0.005	<0.005	<0.015	**41,300**	-
MW-11	09/26/07	09/25/07	81.49	4,145.09	75.65	4,069.44	137490	-	-	-	<0.001	<0.001	<0.001	<0.001	**4,080**	-
	12/07/07	12/04/07		4,145.09	63.12	4,081.97	-	-	-	-	-	-	-	-	**5,010**	**10,151**
	10/01/08	09/30/08		4,145.09	63.52	4,081.57	-	-	-	-	-	-	-	-	**4,890**	-
	12/16/08	12/15/08		4,145.09	63.68	4,081.41	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**5,250**	-
	02/24/10	02/22/10		4,145.09	63.80	4,081.29	-	-	-	-	<0.002	<0.002	<0.002	<0.006	**23,300**	-
Dup	02/24/10	02/22/10					-	-	-	-	<0.002	<0.002	<0.002	<0.006	**19,200**	-
	06/28/10	06/28/10		4,145.09	63.97	4,081.12	-	-	-	-	<0.002	<0.002	<0.002	<0.006	**4,730**	-
	09/27/10	09/27/10		4,145.09	64.16	4,080.93	-	-	-	-	<0.002	<0.002	<0.002	<0.006	**5,030**	-
	12/08/10	12/06/10		4,145.09	64.32	4,080.77	-	-	-	-	<0.002	<0.002	<0.002	<0.006	**4,470**	-
	03/30/11	03/28/11		4,145.09	65.15	4,079.94	-	-	-	-	<0.002	<0.002	<0.002	<0.006	**2,630**	-
	03/30/11						-	-	-	-	<0.002	<0.002	<0.002	<0.006	**3,440**	-
	06/23/11	06/22/11		4,145.09	65.39	4,079.70	-	-	-	-	<0.00014	<0.00030	<0.00020	<0.00023	**4,600**	-
	10/05/11	10/04/11		4,145.09	64.69	4,080.40	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0030	**4,600**	-
	12/14/11	12/13/11		4,145.09	64.64	4,080.45	-	-	-	-	<0.00014	<0.00030	<0.00020	<0.00023	**4,000**	-
	03/14/12	03/12/12		4,145.09	64.73	4,080.36	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**5,310**	-
	06/29/12	06/28/12		4,145.09	64.96	4,080.13	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**4,860**	-
	09/19/12	09/18/12		4,145.09	65.28	4,079.81	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**4,300**	-
	12/19/12	12/17/12		4,145.09	65.37	4,079.72	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**4,420**	-
	03/20/13	03/19/13		4,145.09	65.46	4,079.63	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**4,580**	-
	06/12/13	06/12/13		4,145.09	65.71	4,079.38	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**4,030**	-
	09/18/13	09/17/13		4,145.09	65.83	4,079.26	-	-	-	-	<0.005	<0.005	<0.005	<0.015	**4,570**	-
	06/05/14	06/04/14		4,145.09	66.22	4,078.87	HS14060364	-	-	-	<0.005	<0.005	<0.005	<0.015	**3,900**	-
	09/16/14	09/15/14		4,142.92	66.44	4,076.48	HS14090834	-	-	-	<0.005	<0.005	<0.005	<0.015	**4,880**	-
	11/20/14	11/20/14		4,142.92	66.39	4,076.53	HS14110823	-	-	-	<0.005	<0.005	<0.005	<0.015	**4,640**	-

(-) not analyzed N.G. - Not gauged TMW-1 converted to MW-1 on September 17, 2007

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June 24, 2014

Angela Bown
Glenn Springs Holdings
C/O CRA
2055 Niagara Falls Blvd. Suite 3
Niagara Falls, NY 14304

Work Order: **HS14060364**

Laboratory Results for: **55631DM GSHI PXP Todd Water Injection Station**

Dear Angela,

ALS Environmental received 12 sample(s) on Jun 07, 2014 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: Dane.Wacasey
Dane J. Wacasey

Client: Glenn Springs Holdings
Project: 55631DM GSHI PXP Todd Water Injection Station
Work Order: HS14060364

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS14060364-01	MW-1	Water		05-Jun-2014 12:23	07-Jun-2014 09:10	☐
HS14060364-02	MW-2	Water		05-Jun-2014 12:35	07-Jun-2014 09:10	☐
HS14060364-03	MW-3	Water		05-Jun-2014 12:55	07-Jun-2014 09:10	☐
HS14060364-04	MW-4	Water		05-Jun-2014 12:15	07-Jun-2014 09:10	☐
HS14060364-05	MW-5	Water		05-Jun-2014 13:39	07-Jun-2014 09:10	☐
HS14060364-06	MW-6	Water		05-Jun-2014 14:00	07-Jun-2014 09:10	☐
HS14060364-07	MW-8	Water		05-Jun-2014 13:14	07-Jun-2014 09:10	☐
HS14060364-08	MW-9	Water		05-Jun-2014 13:26	07-Jun-2014 09:10	☐
HS14060364-09	MW-10	Water		05-Jun-2014 13:51	07-Jun-2014 09:10	☐
HS14060364-10	MW-11	Water		05-Jun-2014 14:09	07-Jun-2014 09:10	☐
HS14060364-11	Field Dup-060514-1	Water		05-Jun-2014 00:00	07-Jun-2014 09:10	☐
HS14060364-12	Trip Blank-052814-100	Water		05-Jun-2014 00:00	07-Jun-2014 09:10	☐

Client: Glenn Springs Holdings
Project: 55631DM GSHI PXP Todd Water Injection Station
Work Order: HS14060364

CASE NARRATIVE

Analyst Initials and Names:
KKB Karin K. UnderBrink
PC Presenta Cabascango

Batch R235520, BTEX Method SW8260, Sample HS14060493-01: MS/MSD was performed on an unrelated sample.

Batch R235711, Anions Method E300, Sample HS14060168-01: MS/MSD was performed on an unrelated sample.

Batch R236018, Anions Method E300, Sample HS14060831-01: MS/MSD was performed on an unrelated sample.

Client: Glenn Springs Holdings
ANALYTICAL REPORT
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder:HS14060364
Sample ID: MW-1
Lab ID:HS14060364-01
Collection Date: 05-Jun-2014 12:23
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	12-Jun-2014 20:22
Ethylbenzene	U		0.50	5.0	ug/L	1	12-Jun-2014 20:22
Toluene	U		0.50	5.0	ug/L	1	12-Jun-2014 20:22
Xylenes, Total	U		1.5	15	ug/L	1	12-Jun-2014 20:22
Surr: 1,2-Dichloroethane-d4	*89.5*			*70-125*	*%REC*	*1*	*12-Jun-2014 20:22*
Surr: 4-Bromofluorobenzene	*100*			*72-125*	*%REC*	*1*	*12-Jun-2014 20:22*
Surr: Dibromofluoromethane	*92.3*			*71-125*	*%REC*	*1*	*12-Jun-2014 20:22*
Surr: Toluene-d8	*97.5*			*75-125*	*%REC*	*1*	*12-Jun-2014 20:22*
ANIONS - EPA 300.0 (1993)		**Method:E300**					Analyst: KKB
Chloride	**31,800**		**200**	**500**	**mg/L**	1000	19-Jun-2014 21:05

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
ANALYTICAL REPORT
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder:HS14060364
Sample ID: MW-2
Lab ID:HS14060364-02
Collection Date: 05-Jun-2014 12:35
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	12-Jun-2014 20:46
Ethylbenzene	U		0.50	5.0	ug/L	1	12-Jun-2014 20:46
Toluene	U		0.50	5.0	ug/L	1	12-Jun-2014 20:46
Xylenes, Total	U		1.5	15	ug/L	1	12-Jun-2014 20:46
Surr: 1,2-Dichloroethane-d4	*91.0*			*70-125*	*%REC*	*1*	*12-Jun-2014 20:46*
Surr: 4-Bromofluorobenzene	*97.8*			*72-125*	*%REC*	*1*	*12-Jun-2014 20:46*
Surr: Dibromofluoromethane	*95.4*			*71-125*	*%REC*	*1*	*12-Jun-2014 20:46*
Surr: Toluene-d8	*96.3*			*75-125*	*%REC*	*1*	*12-Jun-2014 20:46*
ANIONS - EPA 300.0 (1993)		**Method:E300**					Analyst: KKB
Chloride	**4,140**		**20.0**	**50.0**	**mg/L**	100	20-Jun-2014 12:56

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
ANALYTICAL REPORT
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder:HS14060364
Sample ID: MW-3
Lab ID:HS14060364-03
Collection Date: 05-Jun-2014 12:55
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	12-Jun-2014 21:10
Ethylbenzene	U		0.50	5.0	ug/L	1	12-Jun-2014 21:10
Toluene	U		0.50	5.0	ug/L	1	12-Jun-2014 21:10
Xylenes, Total	U		1.5	15	ug/L	1	12-Jun-2014 21:10
Surr: 1,2-Dichloroethane-d4	*87.8*			*70-125*	*%REC*	*1*	*12-Jun-2014 21:10*
Surr: 4-Bromofluorobenzene	*101*			*72-125*	*%REC*	*1*	*12-Jun-2014 21:10*
Surr: Dibromofluoromethane	*92.4*			*71-125*	*%REC*	*1*	*12-Jun-2014 21:10*
Surr: Toluene-d8	*98.2*			*75-125*	*%REC*	*1*	*12-Jun-2014 21:10*
ANIONS - EPA 300.0 (1993)		**Method:E300**					Analyst: KKB
Chloride	**10,100**		**200**	**500**	**mg/L**	1000	20-Jun-2014 13:10

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
ANALYTICAL REPORT
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder:HS14060364
Sample ID: MW-4
Lab ID:HS14060364-04
Collection Date: 05-Jun-2014 12:15
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	13-Jun-2014 15:33
Ethylbenzene	U		0.50	5.0	ug/L	1	13-Jun-2014 15:33
Toluene	U		0.50	5.0	ug/L	1	13-Jun-2014 15:33
Xylenes, Total	U		1.5	15	ug/L	1	13-Jun-2014 15:33
Surr: 1,2-Dichloroethane-d4	*111*			*70-125*	*%REC*	*1*	*13-Jun-2014 15:33*
Surr: 4-Bromofluorobenzene	*100.0*			*72-125*	*%REC*	*1*	*13-Jun-2014 15:33*
Surr: Dibromofluoromethane	*108*			*71-125*	*%REC*	*1*	*13-Jun-2014 15:33*
Surr: Toluene-d8	*103*			*75-125*	*%REC*	*1*	*13-Jun-2014 15:33*
ANIONS - EPA 300.0 (1993)		**Method:E300**					Analyst: KKB
Chloride	**41,200**		**200**	**500**	**mg/L**	1000	20-Jun-2014 13:25

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
ANALYTICAL REPORT
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder:HS14060364
Sample ID: MW-5
Lab ID:HS14060364-05
Collection Date: 05-Jun-2014 13:39
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	13-Jun-2014 15:58
Ethylbenzene	U		0.50	5.0	ug/L	1	13-Jun-2014 15:58
Toluene	U		0.50	5.0	ug/L	1	13-Jun-2014 15:58
Xylenes, Total	U		1.5	15	ug/L	1	13-Jun-2014 15:58
Surr: 1,2-Dichloroethane-d4	*114*			*70-125*	*%REC*	*1*	*13-Jun-2014 15:58*
Surr: 4-Bromofluorobenzene	*97.4*			*72-125*	*%REC*	*1*	*13-Jun-2014 15:58*
Surr: Dibromofluoromethane	*109*			*71-125*	*%REC*	*1*	*13-Jun-2014 15:58*
Surr: Toluene-d8	*103*			*75-125*	*%REC*	*1*	*13-Jun-2014 15:58*
ANIONS - EPA 300.0 (1993)		**Method:E300**					Analyst: KKB
Chloride	**50,600**		**200**	**500**	**mg/L**	1000	19-Jun-2014 21:20

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
ANALYTICAL REPORT
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder:HS14060364
Sample ID: MW-6
Lab ID:HS14060364-06
Collection Date: 05-Jun-2014 14:00
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	13-Jun-2014 16:49
Ethylbenzene	U		0.50	5.0	ug/L	1	13-Jun-2014 16:49
Toluene	U		0.50	5.0	ug/L	1	13-Jun-2014 16:49
Xylenes, Total	U		1.5	15	ug/L	1	13-Jun-2014 16:49
Surr: 1,2-Dichloroethane-d4	*110*			*70-125*	*%REC*	*1*	*13-Jun-2014 16:49*
Surr: 4-Bromofluorobenzene	*99.0*			*72-125*	*%REC*	*1*	*13-Jun-2014 16:49*
Surr: Dibromofluoromethane	*107*			*71-125*	*%REC*	*1*	*13-Jun-2014 16:49*
Surr: Toluene-d8	*102*			*75-125*	*%REC*	*1*	*13-Jun-2014 16:49*
ANIONS - EPA 300.0 (1993)		**Method:E300**					Analyst: KKB
Chloride	**18,700**		**200**	**500**	**mg/L**	1000	19-Jun-2014 21:35

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14060364

Sample ID: MW-8

Lab ID:HS14060364-07

Collection Date: 05-Jun-2014 13:14

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	13-Jun-2014 19:20
Ethylbenzene	U		0.50	5.0	ug/L	1	13-Jun-2014 19:20
Toluene	U		0.50	5.0	ug/L	1	13-Jun-2014 19:20
Xylenes, Total	U		1.5	15	ug/L	1	13-Jun-2014 19:20
Surr: 1,2-Dichloroethane-d4	*110*			*70-125*	*%REC*	*1*	*13-Jun-2014 19:20*
Surr: 4-Bromofluorobenzene	*101*			*72-125*	*%REC*	*1*	*13-Jun-2014 19:20*
Surr: Dibromofluoromethane	*108*			*71-125*	*%REC*	*1*	*13-Jun-2014 19:20*
Surr: Toluene-d8	*104*			*75-125*	*%REC*	*1*	*13-Jun-2014 19:20*
ANIONS - EPA 300.0 (1993)		**Method:E300**					Analyst: KKB
Chloride	**8,820**		**200**	**500**	**mg/L**	1000	19-Jun-2014 21:49

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
ANALYTICAL REPORT
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder:HS14060364
Sample ID: MW-9
Lab ID:HS14060364-08
Collection Date: 05-Jun-2014 13:26
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	13-Jun-2014 19:45
Ethylbenzene	U		0.50	5.0	ug/L	1	13-Jun-2014 19:45
Toluene	U		0.50	5.0	ug/L	1	13-Jun-2014 19:45
Xylenes, Total	U		1.5	15	ug/L	1	13-Jun-2014 19:45
Surr: 1,2-Dichloroethane-d4	*112*			*70-125*	*%REC*	*1*	*13-Jun-2014 19:45*
Surr: 4-Bromofluorobenzene	*97.8*			*72-125*	*%REC*	*1*	*13-Jun-2014 19:45*
Surr: Dibromofluoromethane	*108*			*71-125*	*%REC*	*1*	*13-Jun-2014 19:45*
Surr: Toluene-d8	*102*			*75-125*	*%REC*	*1*	*13-Jun-2014 19:45*
ANIONS - EPA 300.0 (1993)		**Method:E300**					Analyst: KKB
Chloride	**3,980**		**100**	**250**	**mg/L**	500	19-Jun-2014 22:04

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
ANALYTICAL REPORT
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder:HS14060364
Sample ID: MW-10
Lab ID:HS14060364-09
Collection Date: 05-Jun-2014 13:51
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	13-Jun-2014 20:10
Ethylbenzene	U		0.50	5.0	ug/L	1	13-Jun-2014 20:10
Toluene	U		0.50	5.0	ug/L	1	13-Jun-2014 20:10
Xylenes, Total	U		1.5	15	ug/L	1	13-Jun-2014 20:10
Surr: 1,2-Dichloroethane-d4	*111*			*70-125*	*%REC*	*1*	*13-Jun-2014 20:10*
Surr: 4-Bromofluorobenzene	*96.4*			*72-125*	*%REC*	*1*	*13-Jun-2014 20:10*
Surr: Dibromofluoromethane	*106*			*71-125*	*%REC*	*1*	*13-Jun-2014 20:10*
Surr: Toluene-d8	*102*			*75-125*	*%REC*	*1*	*13-Jun-2014 20:10*
ANIONS - EPA 300.0 (1993)		**Method:E300**					Analyst: KKB
Chloride	**41,500**		**100**	**250**	**mg/L**	500	19-Jun-2014 22:18

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
ANALYTICAL REPORT
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder:HS14060364
Sample ID: MW-11
Lab ID:HS14060364-10
Collection Date: 05-Jun-2014 14:09
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	13-Jun-2014 20:35
Ethylbenzene	U		0.50	5.0	ug/L	1	13-Jun-2014 20:35
Toluene	U		0.50	5.0	ug/L	1	13-Jun-2014 20:35
Xylenes, Total	U		1.5	15	ug/L	1	13-Jun-2014 20:35
Surr: 1,2-Dichloroethane-d4	*110*			*70-125*	*%REC*	*1*	*13-Jun-2014 20:35*
Surr: 4-Bromofluorobenzene	*98.2*			*72-125*	*%REC*	*1*	*13-Jun-2014 20:35*
Surr: Dibromofluoromethane	*108*			*71-125*	*%REC*	*1*	*13-Jun-2014 20:35*
Surr: Toluene-d8	*103*			*75-125*	*%REC*	*1*	*13-Jun-2014 20:35*
ANIONS - EPA 300.0 (1993)		**Method:E300**					Analyst: KKB
Chloride	**3,900**		**200**	**500**	**mg/L**	1000	17-Jun-2014 07:56

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
ANALYTICAL REPORT
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder:HS14060364
Sample ID: Field Dup-060514-1
Lab ID:HS14060364-11
Collection Date: 05-Jun-2014 00:00
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	13-Jun-2014 21:00
Ethylbenzene	U		0.50	5.0	ug/L	1	13-Jun-2014 21:00
Toluene	U		0.50	5.0	ug/L	1	13-Jun-2014 21:00
Xylenes, Total	U		1.5	15	ug/L	1	13-Jun-2014 21:00
Surr: 1,2-Dichloroethane-d4	*112*			*70-125*	*%REC*	*1*	*13-Jun-2014 21:00*
Surr: 4-Bromofluorobenzene	*98.1*			*72-125*	*%REC*	*1*	*13-Jun-2014 21:00*
Surr: Dibromofluoromethane	*108*			*71-125*	*%REC*	*1*	*13-Jun-2014 21:00*
Surr: Toluene-d8	*102*			*75-125*	*%REC*	*1*	*13-Jun-2014 21:00*
ANIONS - EPA 300.0 (1993)		**Method:E300**					Analyst: KKB
Chloride	**14,300**		**200**	**500**	**mg/L**	1000	17-Jun-2014 08:19

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14060364

Sample ID: Trip Blank-052814-100

Lab ID:HS14060364-12

Collection Date: 05-Jun-2014 00:00

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C	**Method:SW8260**						Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	12-Jun-2014 16:17
Ethylbenzene	U		0.50	5.0	ug/L	1	12-Jun-2014 16:17
Toluene	U		0.50	5.0	ug/L	1	12-Jun-2014 16:17
Xylenes, Total	U		1.5	15	ug/L	1	12-Jun-2014 16:17
Surr: 1,2-Dichloroethane-d4	*89.2*			*70-125*	*%REC*	*1*	*12-Jun-2014 16:17*
Surr: 4-Bromofluorobenzene	*100*			*72-125*	*%REC*	*1*	*12-Jun-2014 16:17*
Surr: Dibromofluoromethane	*93.5*			*71-125*	*%REC*	*1*	*12-Jun-2014 16:17*
Surr: Toluene-d8	*96.1*			*75-125*	*%REC*	*1*	*12-Jun-2014 16:17*

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder: HS14060364

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID R235520	**Test Name :** VOLATILES - SW8260C			**Matrix:** Water		
HS14060364-01	MW-1	05 Jun 2014 12:23			12 Jun 2014 20:22	1
HS14060364-02	MW-2	05 Jun 2014 12:35			12 Jun 2014 20:46	1
HS14060364-03	MW-3	05 Jun 2014 12:55			12 Jun 2014 21:10	1
HS14060364-12	Trip Blank-052814-100	05 Jun 2014 00:00			12 Jun 2014 16:17	1
Batch ID R235617	**Test Name :** VOLATILES - SW8260C			**Matrix:** Water		
HS14060364-04	MW-4	05 Jun 2014 12:15			13 Jun 2014 15:33	1
HS14060364-05	MW-5	05 Jun 2014 13:39			13 Jun 2014 15:58	1
HS14060364-06	MW-6	05 Jun 2014 14:00			13 Jun 2014 16:49	1
HS14060364-07	MW-8	05 Jun 2014 13:14			13 Jun 2014 19:20	1
HS14060364-08	MW-9	05 Jun 2014 13:26			13 Jun 2014 19:45	1
HS14060364-09	MW-10	05 Jun 2014 13:51			13 Jun 2014 20:10	1
HS14060364-10	MW-11	05 Jun 2014 14:09			13 Jun 2014 20:35	1
HS14060364-11	Field Dup-060514-1	05 Jun 2014 00:00			13 Jun 2014 21:00	1
Batch ID R235711	**Test Name :** ANIONS - EPA 300.0 (1993)			**Matrix:** Water		
HS14060364-10	MW-11	05 Jun 2014 14:09			17 Jun 2014 07:56	1000
HS14060364-11	Field Dup-060514-1	05 Jun 2014 00:00			17 Jun 2014 08:19	1000
Batch ID R235983	**Test Name :** ANIONS - EPA 300.0 (1993)			**Matrix:** Water		
HS14060364-01	MW-1	05 Jun 2014 12:23			19 Jun 2014 21:05	1000
HS14060364-05	MW-5	05 Jun 2014 13:39			19 Jun 2014 21:20	1000
HS14060364-06	MW-6	05 Jun 2014 14:00			19 Jun 2014 21:35	1000
HS14060364-07	MW-8	05 Jun 2014 13:14			19 Jun 2014 21:49	1000
HS14060364-08	MW-9	05 Jun 2014 13:26			19 Jun 2014 22:04	500
HS14060364-09	MW-10	05 Jun 2014 13:51			19 Jun 2014 22:18	500
Batch ID R236018	**Test Name :** ANIONS - EPA 300.0 (1993)			**Matrix:** Water		
HS14060364-02	MW-2	05 Jun 2014 12:35			20 Jun 2014 12:56	100
HS14060364-03	MW-3	05 Jun 2014 12:55			20 Jun 2014 13:10	1000
HS14060364-04	MW-4	05 Jun 2014 12:15			20 Jun 2014 13:25	1000

Client: Glenn Springs Holdings
WorkOrder: HS14060364
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R235520 **Instrument: VOA6** **Method: SW8260**

MBLK Sample ID: **VBLKW-140612** Units: **ug/L** Analysis Date: **12-Jun-2014 12:10**
Client ID: Run ID: **VOA6_235520** SeqNo: **2879070** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	U	5.0								
Ethylbenzene	U	5.0								
Toluene	U	5.0								
Xylenes, Total	U	15								
Surr: 1,2-Dichloroethane-d4	*44.31*	*5.0*	*50*	*0*	*88.6*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*49.3*	*5.0*	*50*	*0*	*98.6*	*72 - 125*				
Surr: Dibromofluoromethane	*46.24*	*5.0*	*50*	*0*	*92.5*	*71 - 125*				
Surr: Toluene-d8	*48.62*	*5.0*	*50*	*0*	*97.2*	*75 - 125*				

LCS Sample ID: **VLCSW-140612** Units: **ug/L** Analysis Date: **12-Jun-2014 10:57**
Client ID: Run ID: **VOA6_235520** SeqNo: **2879069** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	48.15	5.0	50	0	96.3	73 - 121				
Ethylbenzene	48.23	5.0	50	0	96.5	80 - 120				
Toluene	47.25	5.0	50	0	94.5	80 - 120				
Xylenes, Total	144.4	15	150	0	96.3	80 - 120				
Surr: 1,2-Dichloroethane-d4	*45.1*	*5.0*	*50*	*0*	*90.2*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.47*	*5.0*	*50*	*0*	*103*	*72 - 125*				
Surr: Dibromofluoromethane	*47.18*	*5.0*	*50*	*0*	*94.4*	*71 - 125*				
Surr: Toluene-d8	*49.89*	*5.0*	*50*	*0*	*99.8*	*75 - 125*				

MS Sample ID: **HS14060493-01MS** Units: **ug/L** Analysis Date: **12-Jun-2014 15:24**
Client ID: Run ID: **VOA6_235520** SeqNo: **2879074** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	4551	500	5000	0	91.0	73 - 121				
Ethylbenzene	4403	500	5000	0	88.1	80 - 120				
Toluene	4426	500	5000	0	88.5	80 - 120				
Xylenes, Total	13420	1500	15000	0	89.4	80 - 120				
Surr: 1,2-Dichloroethane-d4	*4382*	*500*	*5000*	*0*	*87.6*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*5217*	*500*	*5000*	*0*	*104*	*72 - 125*				
Surr: Dibromofluoromethane	*4677*	*500*	*5000*	*0*	*93.5*	*71 - 125*				
Surr: Toluene-d8	*5034*	*500*	*5000*	*0*	*101*	*75 - 125*				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14060364
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R235520 **Instrument: VOA6** **Method: SW8260**

MSD Sample ID: **HS14060493-01MSD** Units: **ug/L** Analysis Date: **12-Jun-2014 15:49**
Client ID: Run ID: **VOA6_235520** SeqNo: **2879075** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	4451	500	5000	0	89.0	73 - 121	4551	2.22	20	
Ethylbenzene	4269	500	5000	0	85.4	80 - 120	4403	3.11	20	
Toluene	4391	500	5000	0	87.8	80 - 120	4426	0.795	20	
Xylenes, Total	13050	1500	15000	0	87.0	78 - 121	13420	2.74	20	
Surr: 1,2-Dichloroethane-d4	*4397*	*500*	*5000*	*0*	*87.9*	*70 - 125*	*4382*	*0.336*	*20*	
Surr: 4-Bromofluorobenzene	*5212*	*500*	*5000*	*0*	*104*	*72 - 125*	*5217*	*0.0838*	*20*	
Surr: Dibromofluoromethane	*4691*	*500*	*5000*	*0*	*93.8*	*71 - 125*	*4677*	*0.296*	*20*	
Surr: Toluene-d8	*5079*	*500*	*5000*	*0*	*102*	*75 - 125*	*5034*	*0.881*	*20*	

The following samples were anayzed in this batch: HS14060364-01 HS14060364-02 HS14060364-03 HS14060364-12

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14060364
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R235617 **Instrument: VOA8** **Method: SW8260**

MBLK Sample ID: **VBLKW-140613** Units: **ug/L** Analysis Date: **13-Jun-2014 14:05**
Client ID: Run ID: **VOA8_235617** SeqNo: **2881409** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	U	5.0								
Ethylbenzene	U	5.0								
Toluene	U	5.0								
Xylenes, Total	U	15								
Surr: 1,2-Dichloroethane-d4	*55.07*	*5.0*	*50*	*0*	*110*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*49.27*	*5.0*	*50*	*0*	*98.5*	*72 - 125*				
Surr: Dibromofluoromethane	*53.14*	*5.0*	*50*	*0*	*106*	*71 - 125*				
Surr: Toluene-d8	*51.33*	*5.0*	*50*	*0*	*103*	*75 - 125*				

LCS Sample ID: **VLCSW-140613** Units: **ug/L** Analysis Date: **13-Jun-2014 12:49**
Client ID: Run ID: **VOA8_235617** SeqNo: **2881408** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	47.23	5.0	50	0	94.5	73 - 121				
Ethylbenzene	48.25	5.0	50	0	96.5	80 - 120				
Toluene	50.05	5.0	50	0	100	80 - 120				
Xylenes, Total	150.4	15	150	0	100	80 - 120				
Surr: 1,2-Dichloroethane-d4	*50.49*	*5.0*	*50*	*0*	*101*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.27*	*5.0*	*50*	*0*	*103*	*72 - 125*				
Surr: Dibromofluoromethane	*51.19*	*5.0*	*50*	*0*	*102*	*71 - 125*				
Surr: Toluene-d8	*47.85*	*5.0*	*50*	*0*	*95.7*	*75 - 125*				

MS Sample ID: **HS14060364-04MS** Units: **ug/L** Analysis Date: **13-Jun-2014 17:14**
Client ID: **MW-4** Run ID: **VOA8_235617** SeqNo: **2881414** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	50.52	5.0	50	0	101	73 - 121				
Ethylbenzene	45.19	5.0	50	0	90.4	80 - 120				
Toluene	51.14	5.0	50	0	102	80 - 120				
Xylenes, Total	140.3	15	150	0	93.6	80 - 120				
Surr: 1,2-Dichloroethane-d4	*51.67*	*5.0*	*50*	*0*	*103*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.32*	*5.0*	*50*	*0*	*103*	*72 - 125*				
Surr: Dibromofluoromethane	*51.78*	*5.0*	*50*	*0*	*104*	*71 - 125*				
Surr: Toluene-d8	*46.95*	*5.0*	*50*	*0*	*93.9*	*75 - 125*				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14060364
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R235617 **Instrument: VOA8** **Method: SW8260**

MSD Sample ID: **HS14060364-04MSD** Units: **ug/L** Analysis Date: **13-Jun-2014 18:04**
Client ID: **MW-4** Run ID: **VOA8_235617** SeqNo: **2881415** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	44.8	5.0	50	0	89.6	73 - 121	50.52	12	20	
Ethylbenzene	40.52	5.0	50	0	81.0	80 - 120	45.19	10.9	20	
Toluene	45.66	5.0	50	0	91.3	80 - 120	51.14	11.3	20	
Xylenes, Total	127.5	15	150	0	85.0	78 - 121	140.3	9.56	20	
Surr: 1,2-Dichloroethane-d4	*51.66*	*5.0*	*50*	*0*	*103*	*70 - 125*	*51.67*	*0.0343*	*20*	
Surr: 4-Bromofluorobenzene	*50.69*	*5.0*	*50*	*0*	*101*	*72 - 125*	*51.32*	*1.22*	*20*	
Surr: Dibromofluoromethane	*51.99*	*5.0*	*50*	*0*	*104*	*71 - 125*	*51.78*	*0.409*	*20*	
Surr: Toluene-d8	*46.31*	*5.0*	*50*	*0*	*92.6*	*75 - 125*	*46.95*	*1.38*	*20*	

The following samples were anayzed in this batch: HS14060364-04 HS14060364-05 HS14060364-06 HS14060364-07 HS14060364-08 HS14060364-09 HS14060364-10 HS14060364-11

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14060364
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R235711 **Instrument: ICS3000** **Method: E300**

MBLK Sample ID: **WBLKW1** Units: **mg/L** Analysis Date: **16-Jun-2014 21:27**
Client ID: Run ID: **ICS3000_235711** SeqNo: **2883627** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.500								

LCS Sample ID: **WLCSW1** Units: **mg/L** Analysis Date: **16-Jun-2014 21:50**
Client ID: Run ID: **ICS3000_235711** SeqNo: **2883628** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	18.56	0.500	20	0	92.8	90 - 110				

MS Sample ID: **HS14060168-01MS** Units: **mg/L** Analysis Date: **16-Jun-2014 23:00**
Client ID: Run ID: **ICS3000_235711** SeqNo: **2883631** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	194.9	0.500	10	189	59.1	80 - 120				SEO

MSD Sample ID: **HS14060168-01MSD** Units: **mg/L** Analysis Date: **16-Jun-2014 23:23**
Client ID: Run ID: **ICS3000_235711** SeqNo: **2883632** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	194.2	0.500	10	189	52.4	80 - 120	194.9	0.346	20	SEO

The following samples were anayzed in this batch: HS14060364-10 HS14060364-11

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14060364
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R235983 **Instrument: ICS2100** **Method: E300**

MBLK Sample ID: **WBLKW1** Units: **mg/L** Analysis Date: **19-Jun-2014 15:45**
Client ID: Run ID: **ICS2100_235983** SeqNo: **2888775** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.500								

LCS Sample ID: **WLCSW1** Units: **mg/L** Analysis Date: **19-Jun-2014 16:00**
Client ID: Run ID: **ICS2100_235983** SeqNo: **2888776** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	19.89	0.500	20	0	99.4	90 - 110				

MS Sample ID: **HS14060574-01MS** Units: **mg/L** Analysis Date: **19-Jun-2014 18:11**
Client ID: Run ID: **ICS2100_235983** SeqNo: **2888785** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	10.06	0.500	10	0.041	100	80 - 120				

MSD Sample ID: **HS14060574-01MSD** Units: **mg/L** Analysis Date: **19-Jun-2014 18:55**
Client ID: Run ID: **ICS2100_235983** SeqNo: **2888788** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	10.01	0.500	10	0.041	99.7	80 - 120	10.06	0.478	20	

The following samples were anayzed in this batch: HS14060364-01 HS14060364-05 HS14060364-06 HS14060364-07 HS14060364-08 HS14060364-09

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14060364
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R236018 **Instrument: ICS2100** **Method: E300**

MBLK Sample ID: **WBLKW1** Units: **mg/L** Analysis Date: **20-Jun-2014 09:07**
Client ID: Run ID: **ICS2100_236018** SeqNo: **2889728** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.500								

LCS Sample ID: **WLCSW1** Units: **mg/L** Analysis Date: **20-Jun-2014 10:16**
Client ID: Run ID: **ICS2100_236018** SeqNo: **2889729** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	19.79	0.500	20	0	99.0	90 - 110				

MS Sample ID: **HS14060831-01MS** Units: **mg/L** Analysis Date: **20-Jun-2014 10:45**
Client ID: Run ID: **ICS2100_236018** SeqNo: **2889731** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	68.45	0.500	10	58.35	101	80 - 120				O

MSD Sample ID: **HS14060831-01MSD** Units: **mg/L** Analysis Date: **20-Jun-2014 10:59**
Client ID: Run ID: **ICS2100_236018** SeqNo: **2889732** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	87.18	0.500	10	58.35	288	80 - 120	68.45	24.1	20	SRO

The following samples were anayzed in this batch: HS14060364-02 HS14060364-03 HS14060364-04

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder: **HS14060364**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	AR - 2014	27-Mar-2015
California	06248CA 2013-2014	31-Jul-2014
Dept of Defense	L2231 Rev 3-20-2014	22-Dec-2015
Illinois	003403	09-May-2015
Kansas	E-10352 8/15/2013-2014	31-Jul-2014
Kentucky	KY 2014-2015	30-Apr-2015
Louisiana	03087 2013/2014	30-Jun-2014
North Carolina	624 - 2014	31-Dec-2014
North Dakota	R-193 2025	30-Apr-2015
Oklahoma	2013-024	31-Aug-2014
Texas	TX104704231-14-13	30-Apr-2015

Sample Receipt Checklist

Client Name: Glen Springs/CRA
Work Order: HS14060364

Date/Time Received: **07-Jun-2014 09:10**
Received by: **DRC**

Checklist completed by: *Dana.Capps* eSignature 9-Jun-2014 Date

Reviewed by: *Dane J. Wacasey* eSignature 11-Jun-2014 Date

Matrices: **Water**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	0.7/0.7 C/U	IR3	
Cooler(s)/Kit(s):	3121		
Date/Time sample(s) sent to storage:	06/09/2014		
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: 0 Regarding:

Comments:

Corrective Action:

ALS Environmental

Cincinnati, OH +1 513 733 5336
Everett, WA +1 425 356 2600
Fort Collins, CO +1 970 490 1511
Holland, MI +1 616 399 6070

Chain of Custody Form

Page 1 of 2

COC ID: 098981

HS14060364

Glenn Springs Holdings

GSHI PXP Todd Water Injection Station 55631 DM (EN

ALS Project Manager:

Customer Information		Project Information			
Purchase Order	4501709538	Project Name	GSHI PXP Todd Water Injection Statio	A	BTEX (8260)
Work Order		Project Number	55631DM (ENV749A03)	B	Chloride by 300
Company Name	Glenn Springs Holdings	Bill To Company	Glenn Springs Holdings	C	
Send Report To	Angela Bown	Invoice Attn	Jennifer Devonshire	D	
Address	C/O CRA 9033 Meridian Way	Address	C/O CRA 2055 Niagara Falls Blvd. Suite 3	E F	
City/State/Zip	West Chester,Ohio,45069	City/State/Zip	Niagara Falls, NY 14304	G	
Phone	(513) 942-4750	Phone		H	
Fax		Fax		I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-1	6-5-14	1223	Water	1, 8	4	X	X									
2	MW-2	6-5-14	1235	Water	1, 8	4	X	X									
3	MW-3	6-5-14	1255	Water	1, 8	4	X	X									
4	MW-4	6-5-14	1215	Water	1, 8	4	X	X									
5	MW-5	6-5-14	~~1334~~ 1339	Water	1, 8	4	X	X									
6	MW-6	6-5-14	1400	Water	1, 8	4	X	X									
7	~~MW-7~~	—	—	~~Water~~	—	~~4~~	~~X~~	~~X~~									
8	MW-8	6-5-14	1314	Water	1, 8	4	X	X									
9	MW-9	6-5-14	1326	Water	1, 8	4	X	X									
10																	

Sampler(s) Please Print & Sign: Kyra Werner

Shipment Method: FEDEX

Required Turnaround Time: (Check Box) [X] Std 10 Wk days [ ] 5 WK Days [ ] Other [ ] 2 WK Days [ ] 24 Hour

Results Due Date:

Relinquished by:	Date: 6-6-14	Time: 1100	Received by:	Notes: 10 Day TAT	
Relinquished by:	Date: 6/7/14	Time: 910	Received by (Laboratory):	Cooler ID	Cooler Temp.
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):		

QC Package: (Check One Box Below)

- [X] Level 2 Std QC
- [ ] Level 3 Std QC/Row da
- [ ] Level 4 SW846/CLP
- [ ] Other/EDD
- [ ] TRRP ChkList
- [ ] TRRP Level 4

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

ALS Environmental

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Chain of Custody Form

COC ID: 098980

ALS Project Manager: | ALS Work Order #:

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order	4501709538	Project Name	GSHI PXP Todd Water Injection Statio	A	BTEX (8260)
Work Order		Project Number	55631DM (ENV749A03)	B	Chloride by 300
Company Name	Glenn Springs Holdings	Bill To Company	Glenn Springs Holdings	C	
Send Report To	Angela Bown	Invoice Attn	Jennifer Devonshire	D	
Address	C/O CRA 9033 Merridian Way	Address	C/O CRA 2055 Niagara Falls Blvd. Suite 3	E F	
City/State/Zip	West Chester,Ohio,45069	City/State/Zip	Niagara Falls, NY 14304	G	
Phone	(513) 942-4750	Phone		H	
Fax		Fax		I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-10	6-5-14	1351	Water	1,8	4	X	X									
2	MW-11	6-5-14	1409	Water	1,8	4	X	X									
3	Field Dup - 060514-1	6-5-14	PM	Water	1,8	4	X	X									
4	Trip Blank - 052814-100	6-5-14	PM	Water	1,8	2	X										
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Ryan Werner Ryan Werner

Shipment Method: FEDEX

Required Turnaround Time: (Check Box) ☒ Std 10 WK days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other

Results Due Date:

Relinquished by:	Date:	Time:	Received by:
Ryan Werner	6-6-14	1100	
Relinquished by:	Date:	Time:	Received by (Laboratory):
	6/7/14	910	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):

Notes: 10 Day TAT

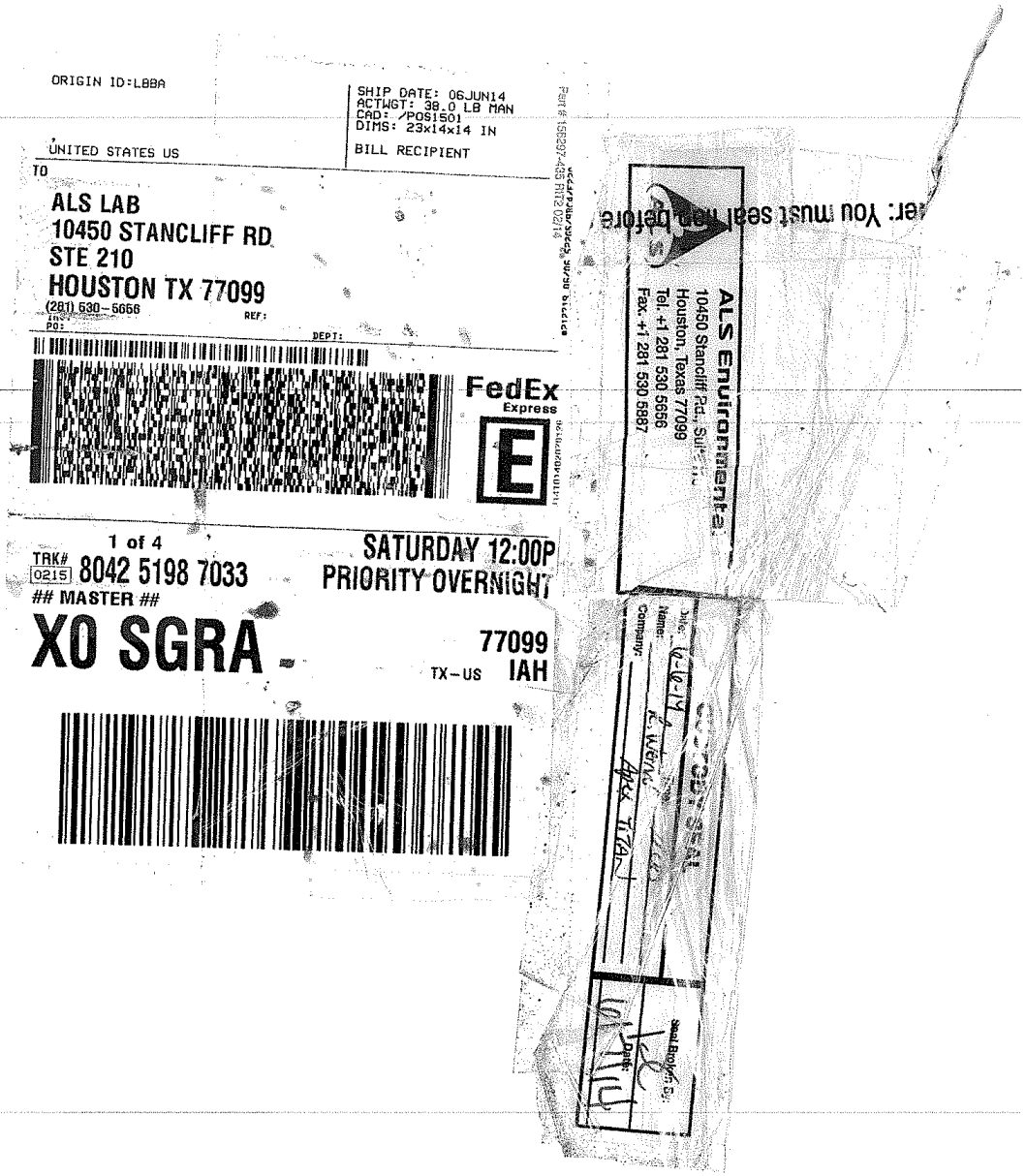
Cooler ID	Cooler Temp.

QC Package: (Check One Box Below)

☒ Level 2 Std QC ☐ TRRP ChkList
☐ Level 3 Std QC/Row da ☐ TRRP Level 4
☐ Level 4 SW846/CLP
☐ Other/EDD

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.


ORIGIN ID:LBBA
SHIP DATE: 06JUN14
ACTWGT: 38.0 LB MAN
CAD: /POS1501
DIMS: 23x14x14 IN
BILL RECIPIENT
UNITED STATES US
TO
ALS LAB
10450 STANCLIFF RD
STE 210
HOUSTON TX 77099
(281) 530-5656
REF:
DEPT:
FedEx
Express
1 of 4
TRK# 8042 5198 7033
MASTER
SATURDAY 12:00P
PRIORITY OVERNIGHT
XO SGRA
77099
TX-US IAH
ALS Environmental
10450 Stancliff Rd. Suite
Houston, Texas 77099
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Name:
Company:

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October 03, 2014

Angela Bown
Glenn Springs Holdings
C/O CRA
2055 Niagara Falls Blvd. Suite 3
Niagara Falls, NY 14304

Work Order: **HS14090834**

Laboratory Results for: **55631DM GSHI PXP Todd Water Injection Station**

Dear Angela,

ALS Environmental received 12 sample(s) on Sep 19, 2014 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: Dane.Wacasey
Dane J. Wacasey

Client: Glenn Springs Holdings
Project: 55631DM GSHI PXP Todd Water Injection Station
Work Order: HS14090834

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS14090834-01	MW-1	Water		16-Sep-2014 17:58	19-Sep-2014 10:22	☐
HS14090834-02	MW-2	Water		16-Sep-2014 10:24	19-Sep-2014 10:22	☐
HS14090834-03	MW-3	Water		16-Sep-2014 15:10	19-Sep-2014 10:22	☐
HS14090834-04	MW-4	Water		16-Sep-2014 18:58	19-Sep-2014 10:22	☐
HS14090834-05	MW-5	Water		16-Sep-2014 20:04	19-Sep-2014 10:22	☐
HS14090834-06	MW-6	Water		16-Sep-2014 16:10	19-Sep-2014 10:22	☐
HS14090834-07	MW-8	Water		16-Sep-2014 13:09	19-Sep-2014 10:22	☐
HS14090834-08	MW-9	Water		16-Sep-2014 12:04	19-Sep-2014 10:22	☐
HS14090834-09	MW-10	Water		16-Sep-2014 16:58	19-Sep-2014 10:22	☐
HS14090834-10	MW-11	Water		16-Sep-2014 14:14	19-Sep-2014 10:22	☐
HS14090834-11	Field Dup MW-4	Water		16-Sep-2014 18:58	19-Sep-2014 10:22	☐
HS14090834-12	Trip Blank 082014-89	Water		16-Sep-2014 00:00	19-Sep-2014 10:22	☐

Client: Glenn Springs Holdings **CASE NARRATIVE**
Project: 55631DM GSHI PXP Todd Water Injection Station
Work Order: HS14090834

Work Order Comments

- Analyst Names and Initials:
  JBA Johnnie B. Allen
  PC Presenta Cabascango

GCMS Volatiles by Method SW8260

Batch ID: R241406

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Batch ID: R241325

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method E300

Batch ID: R242143,R242154

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14090834

Sample ID: MW-1

Lab ID:HS14090834-01

Collection Date: 16-Sep-2014 17:58

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	23-Sep-2014 12:45
Ethylbenzene	U		0.50	5.0	ug/L	1	23-Sep-2014 12:45
Toluene	U		0.50	5.0	ug/L	1	23-Sep-2014 12:45
Xylenes, Total	U		1.5	15	ug/L	1	23-Sep-2014 12:45
Surr: 1,2-Dichloroethane-d4	*109*			*70-125*	*%REC*	*1*	*23-Sep-2014 12:45*
Surr: 4-Bromofluorobenzene	*98.9*			*72-125*	*%REC*	*1*	*23-Sep-2014 12:45*
Surr: Dibromofluoromethane	*107*			*71-125*	*%REC*	*1*	*23-Sep-2014 12:45*
Surr: Toluene-d8	*93.6*			*75-125*	*%REC*	*1*	*23-Sep-2014 12:45*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**35,600**		**200**	**500**	**mg/L**	1000	02-Oct-2014 23:19

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14090834

Sample ID: MW-2

Lab ID:HS14090834-02

Collection Date: 16-Sep-2014 10:24

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	22-Sep-2014 20:40
Ethylbenzene	U		0.50	5.0	ug/L	1	22-Sep-2014 20:40
Toluene	U		0.50	5.0	ug/L	1	22-Sep-2014 20:40
Xylenes, Total	U		1.5	15	ug/L	1	22-Sep-2014 20:40
Surr: 1,2-Dichloroethane-d4	*106*			*70-125*	*%REC*	*1*	*22-Sep-2014 20:40*
Surr: 4-Bromofluorobenzene	*98.1*			*72-125*	*%REC*	*1*	*22-Sep-2014 20:40*
Surr: Dibromofluoromethane	*108*			*71-125*	*%REC*	*1*	*22-Sep-2014 20:40*
Surr: Toluene-d8	*95.1*			*75-125*	*%REC*	*1*	*22-Sep-2014 20:40*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**4,490**		**200**	**500**	**mg/L**	1000	03-Oct-2014 00:31

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14090834

Sample ID: MW-3

Lab ID:HS14090834-03

Collection Date: 16-Sep-2014 15:10

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	22-Sep-2014 21:04
Ethylbenzene	U		0.50	5.0	ug/L	1	22-Sep-2014 21:04
Toluene	U		0.50	5.0	ug/L	1	22-Sep-2014 21:04
Xylenes, Total	U		1.5	15	ug/L	1	22-Sep-2014 21:04
Surr: 1,2-Dichloroethane-d4	*109*			*70-125*	*%REC*	*1*	*22-Sep-2014 21:04*
Surr: 4-Bromofluorobenzene	*98.0*			*72-125*	*%REC*	*1*	*22-Sep-2014 21:04*
Surr: Dibromofluoromethane	*109*			*71-125*	*%REC*	*1*	*22-Sep-2014 21:04*
Surr: Toluene-d8	*94.4*			*75-125*	*%REC*	*1*	*22-Sep-2014 21:04*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**24,500**		**200**	**500**	**mg/L**	1000	03-Oct-2014 00:55

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14090834

Sample ID: MW-4

Lab ID:HS14090834-04

Collection Date: 16-Sep-2014 18:58

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	22-Sep-2014 21:28
Ethylbenzene	U		0.50	5.0	ug/L	1	22-Sep-2014 21:28
Toluene	U		0.50	5.0	ug/L	1	22-Sep-2014 21:28
Xylenes, Total	U		1.5	15	ug/L	1	22-Sep-2014 21:28
Surr: 1,2-Dichloroethane-d4	*109*			*70-125*	*%REC*	*1*	*22-Sep-2014 21:28*
Surr: 4-Bromofluorobenzene	*97.0*			*72-125*	*%REC*	*1*	*22-Sep-2014 21:28*
Surr: Dibromofluoromethane	*109*			*71-125*	*%REC*	*1*	*22-Sep-2014 21:28*
Surr: Toluene-d8	*95.1*			*75-125*	*%REC*	*1*	*22-Sep-2014 21:28*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**46,100**		**200**	**500**	**mg/L**	1000	03-Oct-2014 01:19

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14090834

Sample ID: MW-5

Lab ID:HS14090834-05

Collection Date: 16-Sep-2014 20:04

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C	**Method:SW8260**						Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	22-Sep-2014 21:53
Ethylbenzene	U		0.50	5.0	ug/L	1	22-Sep-2014 21:53
Toluene	U		0.50	5.0	ug/L	1	22-Sep-2014 21:53
Xylenes, Total	U		1.5	15	ug/L	1	22-Sep-2014 21:53
Surr: 1,2-Dichloroethane-d4	*107*			*70-125*	*%REC*	*1*	*22-Sep-2014 21:53*
Surr: 4-Bromofluorobenzene	*97.1*			*72-125*	*%REC*	*1*	*22-Sep-2014 21:53*
Surr: Dibromofluoromethane	*106*			*71-125*	*%REC*	*1*	*22-Sep-2014 21:53*
Surr: Toluene-d8	*94.1*			*75-125*	*%REC*	*1*	*22-Sep-2014 21:53*
ANIONS BY E300.0	**Method:E300**						Analyst: JBA
Chloride	**51,400**		**200**	**500**	**mg/L**	1000	03-Oct-2014 03:42

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14090834

Sample ID: MW-6

Lab ID:HS14090834-06

Collection Date: 16-Sep-2014 16:10

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	23-Sep-2014 13:09
Ethylbenzene	U		0.50	5.0	ug/L	1	23-Sep-2014 13:09
Toluene	U		0.50	5.0	ug/L	1	23-Sep-2014 13:09
Xylenes, Total	U		1.5	15	ug/L	1	23-Sep-2014 13:09
Surr: 1,2-Dichloroethane-d4	*106*			*70-125*	*%REC*	*1*	*23-Sep-2014 13:09*
Surr: 4-Bromofluorobenzene	*96.9*			*72-125*	*%REC*	*1*	*23-Sep-2014 13:09*
Surr: Dibromofluoromethane	*107*			*71-125*	*%REC*	*1*	*23-Sep-2014 13:09*
Surr: Toluene-d8	*93.6*			*75-125*	*%REC*	*1*	*23-Sep-2014 13:09*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**20,600**		**200**	**500**	**mg/L**	1000	03-Oct-2014 04:06

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14090834

Sample ID: MW-8

Lab ID:HS14090834-07

Collection Date: 16-Sep-2014 13:09

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	23-Sep-2014 13:34
Ethylbenzene	U		0.50	5.0	ug/L	1	23-Sep-2014 13:34
Toluene	U		0.50	5.0	ug/L	1	23-Sep-2014 13:34
Xylenes, Total	U		1.5	15	ug/L	1	23-Sep-2014 13:34
Surr: 1,2-Dichloroethane-d4	*105*			*70-125*	*%REC*	*1*	*23-Sep-2014 13:34*
Surr: 4-Bromofluorobenzene	*96.7*			*72-125*	*%REC*	*1*	*23-Sep-2014 13:34*
Surr: Dibromofluoromethane	*107*			*71-125*	*%REC*	*1*	*23-Sep-2014 13:34*
Surr: Toluene-d8	*94.2*			*75-125*	*%REC*	*1*	*23-Sep-2014 13:34*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**9,730**		**200**	**500**	**mg/L**	1000	03-Oct-2014 05:18

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14090834

Sample ID: MW-9

Lab ID:HS14090834-08

Collection Date: 16-Sep-2014 12:04

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	23-Sep-2014 13:58
Ethylbenzene	U		0.50	5.0	ug/L	1	23-Sep-2014 13:58
Toluene	U		0.50	5.0	ug/L	1	23-Sep-2014 13:58
Xylenes, Total	U		1.5	15	ug/L	1	23-Sep-2014 13:58
Surr: 1,2-Dichloroethane-d4	*103*			*70-125*	*%REC*	*1*	*23-Sep-2014 13:58*
Surr: 4-Bromofluorobenzene	*96.9*			*72-125*	*%REC*	*1*	*23-Sep-2014 13:58*
Surr: Dibromofluoromethane	*106*			*71-125*	*%REC*	*1*	*23-Sep-2014 13:58*
Surr: Toluene-d8	*94.5*			*75-125*	*%REC*	*1*	*23-Sep-2014 13:58*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**4,990**		**200**	**500**	**mg/L**	1000	03-Oct-2014 05:42

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14090834

Sample ID: MW-10

Lab ID:HS14090834-09

Collection Date: 16-Sep-2014 16:58

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	23-Sep-2014 14:22
Ethylbenzene	U		0.50	5.0	ug/L	1	23-Sep-2014 14:22
Toluene	U		0.50	5.0	ug/L	1	23-Sep-2014 14:22
Xylenes, Total	U		1.5	15	ug/L	1	23-Sep-2014 14:22
Surr: 1,2-Dichloroethane-d4	*108*			*70-125*	*%REC*	*1*	*23-Sep-2014 14:22*
Surr: 4-Bromofluorobenzene	*98.0*			*72-125*	*%REC*	*1*	*23-Sep-2014 14:22*
Surr: Dibromofluoromethane	*107*			*71-125*	*%REC*	*1*	*23-Sep-2014 14:22*
Surr: Toluene-d8	*94.3*			*75-125*	*%REC*	*1*	*23-Sep-2014 14:22*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**39,500**		**200**	**500**	**mg/L**	1000	03-Oct-2014 06:06

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14090834

Sample ID: MW-11

Lab ID:HS14090834-10

Collection Date: 16-Sep-2014 14:14

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	23-Sep-2014 14:46
Ethylbenzene	U		0.50	5.0	ug/L	1	23-Sep-2014 14:46
Toluene	U		0.50	5.0	ug/L	1	23-Sep-2014 14:46
Xylenes, Total	U		1.5	15	ug/L	1	23-Sep-2014 14:46
Surr: 1,2-Dichloroethane-d4	*106*			*70-125*	*%REC*	*1*	*23-Sep-2014 14:46*
Surr: 4-Bromofluorobenzene	*97.6*			*72-125*	*%REC*	*1*	*23-Sep-2014 14:46*
Surr: Dibromofluoromethane	*107*			*71-125*	*%REC*	*1*	*23-Sep-2014 14:46*
Surr: Toluene-d8	*94.3*			*75-125*	*%REC*	*1*	*23-Sep-2014 14:46*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**4,880**		**200**	**500**	**mg/L**	1000	03-Oct-2014 06:30

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14090834

Sample ID: Field Dup MW-4

Lab ID:HS14090834-11

Collection Date: 16-Sep-2014 18:58

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	23-Sep-2014 15:10
Ethylbenzene	U		0.50	5.0	ug/L	1	23-Sep-2014 15:10
Toluene	U		0.50	5.0	ug/L	1	23-Sep-2014 15:10
Xylenes, Total	U		1.5	15	ug/L	1	23-Sep-2014 15:10
Surr: 1,2-Dichloroethane-d4	*109*			*70-125*	*%REC*	*1*	*23-Sep-2014 15:10*
Surr: 4-Bromofluorobenzene	*97.8*			*72-125*	*%REC*	*1*	*23-Sep-2014 15:10*
Surr: Dibromofluoromethane	*109*			*71-125*	*%REC*	*1*	*23-Sep-2014 15:10*
Surr: Toluene-d8	*95.0*			*75-125*	*%REC*	*1*	*23-Sep-2014 15:10*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**47,300**		**200**	**500**	**mg/L**	1000	03-Oct-2014 06:54

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14090834

Sample ID: Trip Blank 082014-89

Lab ID:HS14090834-12

Collection Date: 16-Sep-2014 00:00

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C	**Method:SW8260**						Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	23-Sep-2014 12:21
Ethylbenzene	U		0.50	5.0	ug/L	1	23-Sep-2014 12:21
Toluene	U		0.50	5.0	ug/L	1	23-Sep-2014 12:21
Xylenes, Total	U		1.5	15	ug/L	1	23-Sep-2014 12:21
Surr: 1,2-Dichloroethane-d4	*104*			*70-125*	*%REC*	*1*	*23-Sep-2014 12:21*
Surr: 4-Bromofluorobenzene	*97.7*			*72-125*	*%REC*	*1*	*23-Sep-2014 12:21*
Surr: Dibromofluoromethane	*107*			*71-125*	*%REC*	*1*	*23-Sep-2014 12:21*
Surr: Toluene-d8	*93.7*			*75-125*	*%REC*	*1*	*23-Sep-2014 12:21*

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder: HS14090834

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID R241325	**Test Name :** VOLATILES - SW8260C			**Matrix:** Water		
HS14090834-02	MW-2	16 Sep 2014 10:24			22 Sep 2014 20:40	1
HS14090834-03	MW-3	16 Sep 2014 15:10			22 Sep 2014 21:04	1
HS14090834-04	MW-4	16 Sep 2014 18:58			22 Sep 2014 21:28	1
HS14090834-05	MW-5	16 Sep 2014 20:04			22 Sep 2014 21:53	1
Batch ID R241406	**Test Name :** VOLATILES - SW8260C			**Matrix:** Water		
HS14090834-01	MW-1	16 Sep 2014 17:58			23 Sep 2014 12:45	1
HS14090834-06	MW-6	16 Sep 2014 16:10			23 Sep 2014 13:09	1
HS14090834-07	MW-8	16 Sep 2014 13:09			23 Sep 2014 13:34	1
HS14090834-08	MW-9	16 Sep 2014 12:04			23 Sep 2014 13:58	1
HS14090834-09	MW-10	16 Sep 2014 16:58			23 Sep 2014 14:22	1
HS14090834-10	MW-11	16 Sep 2014 14:14			23 Sep 2014 14:46	1
HS14090834-11	Field Dup MW-4	16 Sep 2014 18:58			23 Sep 2014 15:10	1
HS14090834-12	Trip Blank 082014-89	16 Sep 2014 00:00			23 Sep 2014 12:21	1
Batch ID R242143	**Test Name :** ANIONS BY E300.0			**Matrix:** Water		
HS14090834-01	MW-1	16 Sep 2014 17:58			02 Oct 2014 23:19	1000
HS14090834-02	MW-2	16 Sep 2014 10:24			03 Oct 2014 00:31	1000
HS14090834-03	MW-3	16 Sep 2014 15:10			03 Oct 2014 00:55	1000
HS14090834-04	MW-4	16 Sep 2014 18:58			03 Oct 2014 01:19	1000
Batch ID R242154	**Test Name :** ANIONS BY E300.0			**Matrix:** Water		
HS14090834-05	MW-5	16 Sep 2014 20:04			03 Oct 2014 03:42	1000
HS14090834-06	MW-6	16 Sep 2014 16:10			03 Oct 2014 04:06	1000
HS14090834-07	MW-8	16 Sep 2014 13:09			03 Oct 2014 05:18	1000
HS14090834-08	MW-9	16 Sep 2014 12:04			03 Oct 2014 05:42	1000
HS14090834-09	MW-10	16 Sep 2014 16:58			03 Oct 2014 06:06	1000
HS14090834-10	MW-11	16 Sep 2014 14:14			03 Oct 2014 06:30	1000
HS14090834-11	Field Dup MW-4	16 Sep 2014 18:58			03 Oct 2014 06:54	1000

Client: Glenn Springs Holdings
WorkOrder: HS14090834
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R241325 **Instrument: VOA6** **Method: SW8260**

MBLK Sample ID: **VBLKW-140922** Units: **ug/L** Analysis Date: **22-Sep-2014 12:59**
Client ID: Run ID: **VOA6_241325** SeqNo: **3013928** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	U	5.0								
Ethylbenzene	U	5.0								
Toluene	U	5.0								
Xylenes, Total	U	15								
Surr: 1,2-Dichloroethane-d4	*52.92*	*5.0*	*50*	*0*	*106*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*48.91*	*5.0*	*50*	*0*	*97.8*	*72 - 125*				
Surr: Dibromofluoromethane	*52.91*	*5.0*	*50*	*0*	*106*	*71 - 125*				
Surr: Toluene-d8	*47.16*	*5.0*	*50*	*0*	*94.3*	*75 - 125*				

LCS Sample ID: **VLCSW-140922** Units: **ug/L** Analysis Date: **22-Sep-2014 11:46**
Client ID: Run ID: **VOA6_241325** SeqNo: **3013927** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	49.14	5.0	50	0	98.3	73 - 121				
Ethylbenzene	45.39	5.0	50	0	90.8	80 - 120				
Toluene	46.13	5.0	50	0	92.3	80 - 120				
Xylenes, Total	135.7	15	150	0	90.4	80 - 120				
Surr: 1,2-Dichloroethane-d4	*52.13*	*5.0*	*50*	*0*	*104*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.38*	*5.0*	*50*	*0*	*103*	*72 - 125*				
Surr: Dibromofluoromethane	*53.37*	*5.0*	*50*	*0*	*107*	*71 - 125*				
Surr: Toluene-d8	*48.67*	*5.0*	*50*	*0*	*97.3*	*75 - 125*				

MS Sample ID: **HS14090808-08MS** Units: **ug/L** Analysis Date: **22-Sep-2014 14:36**
Client ID: Run ID: **VOA6_241325** SeqNo: **3013932** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	46	5.0	50	0	92.0	73 - 121				
Ethylbenzene	42.2	5.0	50	0	84.4	80 - 120				
Toluene	43.29	5.0	50	0	86.6	80 - 120				
Xylenes, Total	127.4	15	150	0	84.9	80 - 120				
Surr: 1,2-Dichloroethane-d4	*52.87*	*5.0*	*50*	*0*	*106*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.44*	*5.0*	*50*	*0*	*103*	*72 - 125*				
Surr: Dibromofluoromethane	*53.72*	*5.0*	*50*	*0*	*107*	*71 - 125*				
Surr: Toluene-d8	*48.22*	*5.0*	*50*	*0*	*96.4*	*75 - 125*				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14090834
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R241325 **Instrument: VOA6** **Method: SW8260**

MSD Sample ID: **HS14090808-08MSD** Units: **ug/L** Analysis Date: **22-Sep-2014 15:00**
Client ID: Run ID: **VOA6_241325** SeqNo: **3013933** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Benzene	47.73	5.0	50	0	95.5	73 - 121	46	3.69	20	
Ethylbenzene	44.31	5.0	50	0	88.6	80 - 120	42.2	4.86	20	
Toluene	45.5	5.0	50	0	91.0	80 - 120	43.29	4.98	20	
Xylenes, Total	133.3	15	150	0	88.8	78 - 121	127.4	4.5	20	
Surr: 1,2-Dichloroethane-d4	*52.3*	*5.0*	*50*	*0*	*105*	*70 - 125*	*52.87*	*1.09*	*20*	
Surr: 4-Bromofluorobenzene	*51.22*	*5.0*	*50*	*0*	*102*	*72 - 125*	*51.44*	*0.427*	*20*	
Surr: Dibromofluoromethane	*53.08*	*5.0*	*50*	*0*	*106*	*71 - 125*	*53.72*	*1.2*	*20*	
Surr: Toluene-d8	*48.2*	*5.0*	*50*	*0*	*96.4*	*75 - 125*	*48.22*	*0.0381*	*20*	

The following samples were anayzed in this batch: HS14090834-01 HS14090834-02 HS14090834-03 HS14090834-04 HS14090834-05

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14090834
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R241406 **Instrument: VOA6** **Method: SW8260**

MBLK Sample ID: **VBLKW-140923** Units: **ug/L** Analysis Date: **23-Sep-2014 11:57**
Client ID: Run ID: **VOA6_241406** SeqNo: **3015629** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	U	5.0								
Ethylbenzene	U	5.0								
Toluene	U	5.0								
Xylenes, Total	U	15								
Surr: 1,2-Dichloroethane-d4	*51.41*	*5.0*	*50*	*0*	*103*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*49.25*	*5.0*	*50*	*0*	*98.5*	*72 - 125*				
Surr: Dibromofluoromethane	*53.25*	*5.0*	*50*	*0*	*107*	*71 - 125*				
Surr: Toluene-d8	*47.79*	*5.0*	*50*	*0*	*95.6*	*75 - 125*				

LCS Sample ID: **VLCSW-140923** Units: **ug/L** Analysis Date: **23-Sep-2014 10:45**
Client ID: Run ID: **VOA6_241406** SeqNo: **3015628** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	49.7	5.0	50	0	99.4	73 - 121				
Ethylbenzene	46.07	5.0	50	0	92.1	80 - 120				
Toluene	47.05	5.0	50	0	94.1	80 - 120				
Xylenes, Total	137.8	15	150	0	91.9	80 - 120				
Surr: 1,2-Dichloroethane-d4	*50.86*	*5.0*	*50*	*0*	*102*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.29*	*5.0*	*50*	*0*	*103*	*72 - 125*				
Surr: Dibromofluoromethane	*53.68*	*5.0*	*50*	*0*	*107*	*71 - 125*				
Surr: Toluene-d8	*48.85*	*5.0*	*50*	*0*	*97.7*	*75 - 125*				

MS Sample ID: **HS14090834-06MS** Units: **ug/L** Analysis Date: **23-Sep-2014 15:33**
Client ID: **MW-6** Run ID: **VOA6_241406** SeqNo: **3015638** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	47.47	5.0	50	0	94.9	73 - 121				
Ethylbenzene	43.37	5.0	50	0	86.7	80 - 120				
Toluene	45.17	5.0	50	0	90.3	80 - 120				
Xylenes, Total	132.3	15	150	0	88.2	80 - 120				
Surr: 1,2-Dichloroethane-d4	*52.07*	*5.0*	*50*	*0*	*104*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.34*	*5.0*	*50*	*0*	*103*	*72 - 125*				
Surr: Dibromofluoromethane	*53.05*	*5.0*	*50*	*0*	*106*	*71 - 125*				
Surr: Toluene-d8	*48.19*	*5.0*	*50*	*0*	*96.4*	*75 - 125*				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14090834
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R241406 **Instrument: VOA6** **Method: SW8260**

MSD Sample ID: **HS14090834-06MSD** Units: **ug/L** Analysis Date: **23-Sep-2014 15:57**
Client ID: **MW-6** Run ID: **VOA6_241406** SeqNo: **3015639** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	47.65	5.0	50	0	95.3	73 - 121	47.47	0.387	20	
Ethylbenzene	42.07	5.0	50	0	84.1	80 - 120	43.37	3.03	20	
Toluene	44.26	5.0	50	0	88.5	80 - 120	45.17	2.02	20	
Xylenes, Total	126.9	15	150	0	84.6	78 - 121	132.3	4.16	20	
Surr: 1,2-Dichloroethane-d4	*52.52*	*5.0*	*50*	*0*	*105*	*70 - 125*	*52.07*	*0.861*	*20*	
Surr: 4-Bromofluorobenzene	*51.26*	*5.0*	*50*	*0*	*103*	*72 - 125*	*51.34*	*0.158*	*20*	
Surr: Dibromofluoromethane	*54.44*	*5.0*	*50*	*0*	*109*	*71 - 125*	*53.05*	*2.6*	*20*	
Surr: Toluene-d8	*48.52*	*5.0*	*50*	*0*	*97.0*	*75 - 125*	*48.19*	*0.695*	*20*	

The following samples were anayzed in this batch:

HS14090834-01	HS14090834-06	HS14090834-07	HS14090834-08
HS14090834-09	HS14090834-10	HS14090834-11	HS14090834-12

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14090834
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R242143 **Instrument: ICS3000** **Method: E300**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
MBLK Sample ID: **WBLKW1-100214** Units: **mg/L** Analysis Date: **02-Oct-2014 14:56**										
Client ID: Run ID: **ICS3000_242143** SeqNo: **3032049** PrepDate: DF: **1**										
Chloride	U	0.500								
LCS Sample ID: **WLCSW1-100214** Units: **mg/L** Analysis Date: **02-Oct-2014 15:20**										
Client ID: Run ID: **ICS3000_242143** SeqNo: **3032050** PrepDate: DF: **1**										
Chloride	20.3	0.500	20	0	101	90 - 110				
LCSD Sample ID: **WLCSDW1-100214** Units: **mg/L** Analysis Date: **02-Oct-2014 15:44**										
Client ID: Run ID: **ICS3000_242143** SeqNo: **3032051** PrepDate: DF: **1**										
Chloride	20.54	0.500	20	0	103	90 - 110	20.3	1.19	20	
MS Sample ID: **HS14090834-04MS** Units: **mg/L** Analysis Date: **03-Oct-2014 01:43**										
Client ID: **MW-4** Run ID: **ICS3000_242143** SeqNo: **3032063** PrepDate: DF: **1000**										
Chloride	56240	500	10000	46150	101	80 - 120				O
MS Sample ID: **HS14090808-01MS** Units: **mg/L** Analysis Date: **03-Oct-2014 10:30**										
Client ID: Run ID: **ICS3000_242143** SeqNo: **3032320** PrepDate: DF: **2000**										
Chloride	146500	1000	20000	128600	89.7	80 - 120				O
MSD Sample ID: **HS14090834-04MSD** Units: **mg/L** Analysis Date: **03-Oct-2014 02:07**										
Client ID: **MW-4** Run ID: **ICS3000_242143** SeqNo: **3032064** PrepDate: DF: **1000**										
Chloride	56870	500	10000	46150	107	80 - 120	56240	1.12	20	O

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14090834
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R242143 **Instrument: ICS3000** **Method: E300**

MSD Sample ID: **HS14090808-01MSD** Units: **mg/L** Analysis Date: **03-Oct-2014 10:54**
Client ID: Run ID: **ICS3000_242143** SeqNo: **3032321** PrepDate: DF: **2000**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	146900	1000	20000	128600	91.8	80 - 120	146500	0.286	20	O

The following samples were anayzed in this batch: HS14090834-01 HS14090834-02 HS14090834-03 HS14090834-04

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14090834
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R242154 **Instrument: ICS3000** **Method: E300**

MBLK Sample ID: **WBLKW2-100214** Units: **mg/L** Analysis Date: **03-Oct-2014 02:30**
Client ID: Run ID: **ICS3000_242154** SeqNo: **3032131** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.500								

LCS Sample ID: **WLCSW2-100214** Units: **mg/L** Analysis Date: **03-Oct-2014 02:54**
Client ID: Run ID: **ICS3000_242154** SeqNo: **3032132** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	20.52	0.500	20	0	103	90 - 110				

LCSD Sample ID: **WLCSDW2-100214** Units: **mg/L** Analysis Date: **03-Oct-2014 03:18**
Client ID: Run ID: **ICS3000_242154** SeqNo: **3032133** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	20.23	0.500	20	0	101	90 - 110	20.52	1.44	20	

MS Sample ID: **HS14090834-11MS** Units: **mg/L** Analysis Date: **03-Oct-2014 07:18**
Client ID: **Field Dup MW-4** Run ID: **ICS3000_242154** SeqNo: **3032143** PrepDate: DF: **1000**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	56010	500	10000	47270	87.4	80 - 120				O

MSD Sample ID: **HS14090834-11MSD** Units: **mg/L** Analysis Date: **03-Oct-2014 07:42**
Client ID: **Field Dup MW-4** Run ID: **ICS3000_242154** SeqNo: **3032144** PrepDate: DF: **1000**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	55760	500	10000	47270	84.9	80 - 120	56010	0.447	20	O

The following samples were anayzed in this batch: HS14090834-05, HS14090834-06, HS14090834-07, HS14090834-08, HS14090834-09, HS14090834-10, HS14090834-11

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder: **HS14090834**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	AR - 2014	27-Mar-2015
California	2919	31-Jul-2015
Dept of Defense	L2231 Rev 3-20-2014	22-Dec-2015
Illinois	003403	09-May-2015
Kansas	E-10352 8/15/2013-2014	31-Oct-2014
Kentucky	KY 2014-2015	30-Apr-2015
Louisiana	03087 2014/2015	30-Jun-2015
North Carolina	624 - 2014	31-Dec-2014
North Dakota	R-193 2025	30-Apr-2015
Oklahoma	2014-128	31-Aug-2015
Texas	TX104704231-14-13	30-Apr-2015

ALS Group USA, Corp Date: 03-Oct-14

Sample Receipt Checklist

Client Name: Glen Springs/CRA Date/Time Received: **19-Sep-2014 10:22**

Work Order: HS14090834 Received by: **JOD**

Checklist completed by: *Stephen L. Smith* eSignature 20-Sep-2014 Date

Reviewed by: *Dane J. Wacasey* eSignature 22-Sep-2014 Date

Matrices: **water** Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	0.1/0.1 c/u	1	
Cooler(s)/Kit(s):	23659		
Date/Time sample(s) sent to storage:	09/20/2014 1300		
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: 0 Regarding:

Comments:

Corrective Action:

ALS Environmental

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Chain of Custody Form

Page 1 of 2

COC ID: 112076

HS14090834

WV

Glenn Springs Holdings

55631DM GSHI PXP Todd Water Injection Station

ALS Project Manager:

Customer Information		Project Information			
Purchase Order	4501709538	Project Name	GSHI PXP Todd Water Injection Statio	A	BTEX (8260)
Work Order		Project Number	55631DM (ENV749A03)	B	Chloride by 300
Company Name	Glenn Springs Holdings	Bill To Company	Glenn Springs Holdings	C	
Send Report To	Angela Bown	Invoice Attn	Jennifer Devonshire	D	
Address	C/O CRA 9033 Merridian Way	Address	C/O CRA 2055 Niagara Falls Blvd. Suite 3	E F	
City/State/Zip	West Chester,Ohio,45069	City/State/Zip	Niagara Falls, NY 14304	G	
Phone	(513) 942-4750	Phone		H	
Fax		Fax		I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-1	9-16-14	1758	Water		4	X	X									
2	MW-2		1024	Water		4	X	X									
3	MW-3		1510	Water		4	X	X									
4	MW-4		1858	Water		4	X	X									
5	MW-5		2004	Water		4	X	X									
6	MW-6		1610	Water		4	X	X									
7	MW-7			Water		4	X	X									
8	MW-8		1309	Water		4	X	X									
9	MW-9		1204	Water		4	X	X									
10																	

Sampler(s) Please Print & Sign: John T. Newman — John T. Newman

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☒ Std 10 WK days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other

Results Due Date:

Relinquished by: John T. Newman — Date: 9-18-14 — Time: 1530

Received by:

Relinquished by: — Date: — Time:

Received by (Laboratory):

Logged by (Laboratory): — Date: 09/19/14 — Time: 1022

Checked by (Laboratory):

Notes: 10 Day TAT

Cooler ID	Cooler Temp.
23659	0.1

QC Package: (Check One Box Below)
☒ Level 2 Std QC ☐ TRRP Chklist
☐ Level 3 Std QC/Raw da ☐ TRRP Level 4
☐ Level 4 SW846/CLP
☐ Other/EDD

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

ALS Environmental

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Chain of Custody For HS14090834

Page 2 of 2

COC ID: 11207

Glenn Springs Holdings

55631DM GSHI PXP Todd Water Injection Station

on, WV 58

80

ALS Project Manager:

Customer Information		Project Information			
Purchase Order	4501709538	Project Name	GSHI PXP Todd Water Injection Statio	A	BTEX (8260)
Work Order		Project Number	55631DM (ENV749A03)	B	Chloride by 300
Company Name	Glenn Springs Holdings	Bill To Company	Glenn Springs Holdings	C	
Send Report To	Angela Bown	Invoice Attn	Jennifer Devonshire	D	
Address	C/O CRA 9033 Meridian Way	Address	C/O CRA 2055 Niagara Falls Blvd. Suite 3	E F	
City/State/Zip	West Chester,Ohio,45069	City/State/Zip	Niagara Falls, NY 14304	G	
Phone	(513) 942-4750	Phone		H	
Fax		Fax		I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-10	9-16-14	1658	Water		4	X	X									
2	MW-11		1414	Water		4	X	X									
3	Field Dup MW-4		1858	Water		4	X	X									
4	Trip Blank			Water		2	X										
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: John T. Norman

Shipment Method:

Required Turnaround Time: (Check Box) [X] Std 10 WK days [ ] 5 WK Days [ ] 2 WK Days [ ] 24 Hour [ ] Other

Results Due Date:

Relinquished by: John T. Norman Date: 9-18-14 Time: 1530

Received by:

Relinquished by: Date: Time:

Received by (Laboratory):

Logged by (Laboratory): Date: 09/19/14 Time: 1022

Checked by (Laboratory):

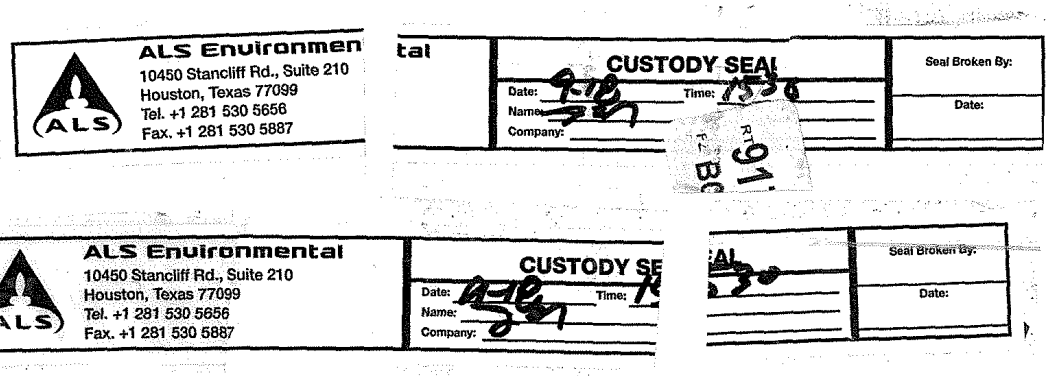
Notes: 10 Day TAT

Cooler ID: 23659 Cooler Temp: 0.1

QC Package: (Check One Box Below)
[X] Level 2 Std QC [ ] TRRP Chklist
[ ] Level 3 Std QC/Raw da [ ] TRRP Level 4
[ ] Level 4 SW846/CLP
[ ] Other/EDD

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.


ALS Environmen
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887
tal
CUSTODY SEAL
Date:
Time:
Name:
Company:
Seal Broken By:
Date:
ALS Environmental
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887
CUSTODY SE
Date:
Time:
Name:
Company:
Seal Broken By:
Date:

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December 08, 2014

Angela Bown
Glenn Springs Holdings
C/O CRA
2055 Niagara Falls Blvd. Suite 3
Niagara Falls, NY 14304

Work Order: **HS14110823**

Laboratory Results for: **55631DM GSHI PXP Todd Water Injection Station**

Dear Angela,

ALS Environmental received 12 sample(s) on Nov 22, 2014 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: Dane.Wacasey
Dane J. Wacasey

Client: Glenn Springs Holdings
Project: 55631DM GSHI PXP Todd Water Injection Station
Work Order: HS14110823

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS14110823-01	MW-1	Water		20-Nov-2014 09:00	22-Nov-2014 09:40	☐
HS14110823-02	MW-2	Water		20-Nov-2014 09:10	22-Nov-2014 09:40	☐
HS14110823-03	MW-3	Water		20-Nov-2014 09:40	22-Nov-2014 09:40	☐
HS14110823-04	MW-4	Water		20-Nov-2014 09:50	22-Nov-2014 09:40	☐
HS14110823-05	MW-5	Water		20-Nov-2014 10:20	22-Nov-2014 09:40	☐
HS14110823-06	MW-6	Water		20-Nov-2014 10:10	22-Nov-2014 09:40	☐
HS14110823-07	MW-8	Water		20-Nov-2014 09:30	22-Nov-2014 09:40	☐
HS14110823-08	MW-9	Water		20-Nov-2014 09:20	22-Nov-2014 09:40	☐
HS14110823-09	MW-10	Water		20-Nov-2014 10:30	22-Nov-2014 09:40	☐
HS14110823-10	MW-11	Water		20-Nov-2014 10:00	22-Nov-2014 09:40	☐
HS14110823-11	Field Dup	Water		20-Nov-2014 00:00	22-Nov-2014 09:40	☐
HS14110823-12	Trip Blank 111014-06	Water		20-Nov-2014 00:00	22-Nov-2014 09:40	☐

Client: Glenn Springs Holdings **CASE NARRATIVE**
Project: 55631DM GSHI PXP Todd Water Injection Station
Work Order: HS14110823

Work Order Comments

- Analyst Initials and Names:
  JBA Johnnie B. Allen
  PC Presenta Cabascango

GCMS Volatiles by Method SW8260

Batch ID: R245735

Sample ID: **HS14110820-01**
- MS/MSD performed on an unrelated sample

Batch ID: R245731,R245826

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method E300

Batch ID: R245786

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14110823

Sample ID: MW-1

Lab ID:HS14110823-01

Collection Date: 20-Nov-2014 09:00

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	26-Nov-2014 03:55
Ethylbenzene	U		0.50	5.0	ug/L	1	26-Nov-2014 03:55
Toluene	U		0.50	5.0	ug/L	1	26-Nov-2014 03:55
Xylenes, Total	U		1.5	15	ug/L	1	26-Nov-2014 03:55
Surr: 1,2-Dichloroethane-d4	*112*			*70-125*	*%REC*	*1*	*26-Nov-2014 03:55*
Surr: 4-Bromofluorobenzene	*103*			*72-125*	*%REC*	*1*	*26-Nov-2014 03:55*
Surr: Dibromofluoromethane	*102*			*71-125*	*%REC*	*1*	*26-Nov-2014 03:55*
Surr: Toluene-d8	*101*			*75-125*	*%REC*	*1*	*26-Nov-2014 03:55*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**31,800**		**400**	**1000**	**mg/L**	2000	26-Nov-2014 07:59

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14110823

Sample ID: MW-2

Lab ID:HS14110823-02

Collection Date: 20-Nov-2014 09:10

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	26-Nov-2014 04:44
Ethylbenzene	U		0.50	5.0	ug/L	1	26-Nov-2014 04:44
Toluene	U		0.50	5.0	ug/L	1	26-Nov-2014 04:44
Xylenes, Total	U		1.5	15	ug/L	1	26-Nov-2014 04:44
Surr: 1,2-Dichloroethane-d4	*111*			*70-125*	*%REC*	*1*	*26-Nov-2014 04:44*
Surr: 4-Bromofluorobenzene	*99.8*			*72-125*	*%REC*	*1*	*26-Nov-2014 04:44*
Surr: Dibromofluoromethane	*108*			*71-125*	*%REC*	*1*	*26-Nov-2014 04:44*
Surr: Toluene-d8	*104*			*75-125*	*%REC*	*1*	*26-Nov-2014 04:44*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**4,360**		**40.0**	**100**	**mg/L**	200	26-Nov-2014 13:19

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14110823

Sample ID: MW-3

Lab ID:HS14110823-03

Collection Date: 20-Nov-2014 09:40

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	26-Nov-2014 05:34
Ethylbenzene	U		0.50	5.0	ug/L	1	26-Nov-2014 05:34
Toluene	U		0.50	5.0	ug/L	1	26-Nov-2014 05:34
Xylenes, Total	U		1.5	15	ug/L	1	26-Nov-2014 05:34
Surr: 1,2-Dichloroethane-d4	*106*			*70-125*	*%REC*	*1*	*26-Nov-2014 05:34*
Surr: 4-Bromofluorobenzene	*99.9*			*72-125*	*%REC*	*1*	*26-Nov-2014 05:34*
Surr: Dibromofluoromethane	*103*			*71-125*	*%REC*	*1*	*26-Nov-2014 05:34*
Surr: Toluene-d8	*104*			*75-125*	*%REC*	*1*	*26-Nov-2014 05:34*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**15,400**		**400**	**1000**	**mg/L**	2000	26-Nov-2014 08:57

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station WorkOrder:HS14110823

Sample ID: MW-4 Lab ID:HS14110823-04

Collection Date: 20-Nov-2014 09:50 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C	**Method:SW8260**						Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	26-Nov-2014 06:23
Ethylbenzene	U		0.50	5.0	ug/L	1	26-Nov-2014 06:23
Toluene	U		0.50	5.0	ug/L	1	26-Nov-2014 06:23
Xylenes, Total	U		1.5	15	ug/L	1	26-Nov-2014 06:23
Surr: 1,2-Dichloroethane-d4	*116*			*70-125*	*%REC*	*1*	*26-Nov-2014 06:23*
Surr: 4-Bromofluorobenzene	*105*			*72-125*	*%REC*	*1*	*26-Nov-2014 06:23*
Surr: Dibromofluoromethane	*107*			*71-125*	*%REC*	*1*	*26-Nov-2014 06:23*
Surr: Toluene-d8	*106*			*75-125*	*%REC*	*1*	*26-Nov-2014 06:23*
ANIONS BY E300.0	**Method:E300**						Analyst: JBA
Chloride	**45,100**		**400**	**1000**	**mg/L**	2000	26-Nov-2014 09:12

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14110823

Sample ID: MW-5

Lab ID:HS14110823-05

Collection Date: 20-Nov-2014 10:20

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	26-Nov-2014 07:12
Ethylbenzene	U		0.50	5.0	ug/L	1	26-Nov-2014 07:12
Toluene	U		0.50	5.0	ug/L	1	26-Nov-2014 07:12
Xylenes, Total	U		1.5	15	ug/L	1	26-Nov-2014 07:12
Surr: 1,2-Dichloroethane-d4	*108*			*70-125*	*%REC*	*1*	*26-Nov-2014 07:12*
Surr: 4-Bromofluorobenzene	*101*			*72-125*	*%REC*	*1*	*26-Nov-2014 07:12*
Surr: Dibromofluoromethane	*104*			*71-125*	*%REC*	*1*	*26-Nov-2014 07:12*
Surr: Toluene-d8	*100*			*75-125*	*%REC*	*1*	*26-Nov-2014 07:12*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**45,100**		**400**	**1000**	**mg/L**	2000	26-Nov-2014 09:26

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14110823

Sample ID: MW-6

Lab ID:HS14110823-06

Collection Date: 20-Nov-2014 10:10

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	26-Nov-2014 08:01
Ethylbenzene	U		0.50	5.0	ug/L	1	26-Nov-2014 08:01
Toluene	U		0.50	5.0	ug/L	1	26-Nov-2014 08:01
Xylenes, Total	U		1.5	15	ug/L	1	26-Nov-2014 08:01
Surr: 1,2-Dichloroethane-d4	*95.7*			*70-125*	*%REC*	*1*	*26-Nov-2014 08:01*
Surr: 4-Bromofluorobenzene	*100.0*			*72-125*	*%REC*	*1*	*26-Nov-2014 08:01*
Surr: Dibromofluoromethane	*106*			*71-125*	*%REC*	*1*	*26-Nov-2014 08:01*
Surr: Toluene-d8	*106*			*75-125*	*%REC*	*1*	*26-Nov-2014 08:01*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**18,900**		**400**	**1000**	**mg/L**	2000	26-Nov-2014 10:10

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14110823

Sample ID: MW-8

Lab ID:HS14110823-07

Collection Date: 20-Nov-2014 09:30

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	26-Nov-2014 08:50
Ethylbenzene	U		0.50	5.0	ug/L	1	26-Nov-2014 08:50
Toluene	U		0.50	5.0	ug/L	1	26-Nov-2014 08:50
Xylenes, Total	U		1.5	15	ug/L	1	26-Nov-2014 08:50
Surr: 1,2-Dichloroethane-d4	*93.8*			*70-125*	*%REC*	*1*	*26-Nov-2014 08:50*
Surr: 4-Bromofluorobenzene	*100.0*			*72-125*	*%REC*	*1*	*26-Nov-2014 08:50*
Surr: Dibromofluoromethane	*106*			*71-125*	*%REC*	*1*	*26-Nov-2014 08:50*
Surr: Toluene-d8	*102*			*75-125*	*%REC*	*1*	*26-Nov-2014 08:50*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**9,250**		**400**	**1000**	**mg/L**	2000	26-Nov-2014 10:25

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14110823

Sample ID: MW-9

Lab ID:HS14110823-08

Collection Date: 20-Nov-2014 09:20

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C	**Method:SW8260**						Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	25-Nov-2014 20:02
Ethylbenzene	U		0.50	5.0	ug/L	1	25-Nov-2014 20:02
Toluene	U		0.50	5.0	ug/L	1	25-Nov-2014 20:02
Xylenes, Total	U		1.5	15	ug/L	1	25-Nov-2014 20:02
Surr: 1,2-Dichloroethane-d4	*104*			*70-125*	*%REC*	*1*	*25-Nov-2014 20:02*
Surr: 4-Bromofluorobenzene	*99.0*			*72-125*	*%REC*	*1*	*25-Nov-2014 20:02*
Surr: Dibromofluoromethane	*101*			*71-125*	*%REC*	*1*	*25-Nov-2014 20:02*
Surr: Toluene-d8	*98.2*			*75-125*	*%REC*	*1*	*25-Nov-2014 20:02*
ANIONS BY E300.0	**Method:E300**						Analyst: JBA
Chloride	**4,230**		**40.0**	**100**	**mg/L**	200	26-Nov-2014 13:05

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
ANALYTICAL REPORT
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder:HS14110823
Sample ID: MW-10
Lab ID:HS14110823-09
Collection Date: 20-Nov-2014 10:30
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	25-Nov-2014 20:50
Ethylbenzene	U		0.50	5.0	ug/L	1	25-Nov-2014 20:50
Toluene	U		0.50	5.0	ug/L	1	25-Nov-2014 20:50
Xylenes, Total	U		1.5	15	ug/L	1	25-Nov-2014 20:50
Surr: 1,2-Dichloroethane-d4	*107*			*70-125*	*%REC*	*1*	*25-Nov-2014 20:50*
Surr: 4-Bromofluorobenzene	*99.8*			*72-125*	*%REC*	*1*	*25-Nov-2014 20:50*
Surr: Dibromofluoromethane	*98.9*			*71-125*	*%REC*	*1*	*25-Nov-2014 20:50*
Surr: Toluene-d8	*99.8*			*75-125*	*%REC*	*1*	*25-Nov-2014 20:50*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**41,300**		**400**	**1000**	**mg/L**	2000	26-Nov-2014 10:54

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
ANALYTICAL REPORT
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder:HS14110823
Sample ID: MW-11
Lab ID:HS14110823-10
Collection Date: 20-Nov-2014 10:00
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	27-Nov-2014 03:00
Ethylbenzene	U		0.50	5.0	ug/L	1	27-Nov-2014 03:00
Toluene	U		0.50	5.0	ug/L	1	27-Nov-2014 03:00
Xylenes, Total	U		1.5	15	ug/L	1	27-Nov-2014 03:00
Surr: 1,2-Dichloroethane-d4	*108*			*70-125*	*%REC*	*1*	*27-Nov-2014 03:00*
Surr: 4-Bromofluorobenzene	*97.8*			*72-125*	*%REC*	*1*	*27-Nov-2014 03:00*
Surr: Dibromofluoromethane	*102*			*71-125*	*%REC*	*1*	*27-Nov-2014 03:00*
Surr: Toluene-d8	*95.7*			*75-125*	*%REC*	*1*	*27-Nov-2014 03:00*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**4,640**		**40.0**	**100**	**mg/L**	200	26-Nov-2014 13:34

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
ANALYTICAL REPORT
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder:HS14110823
Sample ID: Field Dup
Lab ID:HS14110823-11
Collection Date: 20-Nov-2014 00:00
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	27-Nov-2014 04:36
Ethylbenzene	U		0.50	5.0	ug/L	1	27-Nov-2014 04:36
Toluene	U		0.50	5.0	ug/L	1	27-Nov-2014 04:36
Xylenes, Total	U		1.5	15	ug/L	1	27-Nov-2014 04:36
Surr: 1,2-Dichloroethane-d4	*108*			*70-125*	*%REC*	*1*	*27-Nov-2014 04:36*
Surr: 4-Bromofluorobenzene	*98.7*			*72-125*	*%REC*	*1*	*27-Nov-2014 04:36*
Surr: Dibromofluoromethane	*100*			*71-125*	*%REC*	*1*	*27-Nov-2014 04:36*
Surr: Toluene-d8	*100*			*75-125*	*%REC*	*1*	*27-Nov-2014 04:36*
ANIONS BY E300.0		**Method:E300**					Analyst: JBA
Chloride	**46,200**		**400**	**1000**	**mg/L**	2000	26-Nov-2014 11:23

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings

ANALYTICAL REPORT

Project: 55631DM GSHI PXP Todd Water Injection Station

WorkOrder:HS14110823

Sample ID: Trip Blank 111014-06

Lab ID:HS14110823-12

Collection Date: 20-Nov-2014 00:00

Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C	**Method:SW8260**						Analyst: PC
Benzene	U		0.60	5.0	ug/L	1	27-Nov-2014 02:12
Ethylbenzene	U		0.50	5.0	ug/L	1	27-Nov-2014 02:12
Toluene	U		0.50	5.0	ug/L	1	27-Nov-2014 02:12
Xylenes, Total	U		1.5	15	ug/L	1	27-Nov-2014 02:12
Surr: 1,2-Dichloroethane-d4	*106*			*70-125*	*%REC*	*1*	*27-Nov-2014 02:12*
Surr: 4-Bromofluorobenzene	*100*			*72-125*	*%REC*	*1*	*27-Nov-2014 02:12*
Surr: Dibromofluoromethane	*102*			*71-125*	*%REC*	*1*	*27-Nov-2014 02:12*
Surr: Toluene-d8	*100*			*75-125*	*%REC*	*1*	*27-Nov-2014 02:12*

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder: HS14110823

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID R245731	**Test Name :** VOLATILES - SW8260C			**Matrix:** Water		
HS14110823-01	MW-1	20 Nov 2014 09:00			26 Nov 2014 03:55	1
HS14110823-02	MW-2	20 Nov 2014 09:10			26 Nov 2014 04:44	1
HS14110823-03	MW-3	20 Nov 2014 09:40			26 Nov 2014 05:34	1
HS14110823-04	MW-4	20 Nov 2014 09:50			26 Nov 2014 06:23	1
HS14110823-05	MW-5	20 Nov 2014 10:20			26 Nov 2014 07:12	1
HS14110823-06	MW-6	20 Nov 2014 10:10			26 Nov 2014 08:01	1
HS14110823-07	MW-8	20 Nov 2014 09:30			26 Nov 2014 08:50	1
Batch ID R245735	**Test Name :** VOLATILES - SW8260C			**Matrix:** Water		
HS14110823-08	MW-9	20 Nov 2014 09:20			25 Nov 2014 20:02	1
HS14110823-09	MW-10	20 Nov 2014 10:30			25 Nov 2014 20:50	1
Batch ID R245786	**Test Name :** ANIONS BY E300.0			**Matrix:** Water		
HS14110823-01	MW-1	20 Nov 2014 09:00			26 Nov 2014 07:59	2000
HS14110823-02	MW-2	20 Nov 2014 09:10			26 Nov 2014 13:19	200
HS14110823-03	MW-3	20 Nov 2014 09:40			26 Nov 2014 08:57	2000
HS14110823-04	MW-4	20 Nov 2014 09:50			26 Nov 2014 09:12	2000
HS14110823-05	MW-5	20 Nov 2014 10:20			26 Nov 2014 09:26	2000
HS14110823-06	MW-6	20 Nov 2014 10:10			26 Nov 2014 10:10	2000
HS14110823-07	MW-8	20 Nov 2014 09:30			26 Nov 2014 10:25	2000
HS14110823-08	MW-9	20 Nov 2014 09:20			26 Nov 2014 13:05	200
HS14110823-09	MW-10	20 Nov 2014 10:30			26 Nov 2014 10:54	2000
HS14110823-10	MW-11	20 Nov 2014 10:00			26 Nov 2014 13:34	200
HS14110823-11	Field Dup	20 Nov 2014 00:00			26 Nov 2014 11:23	2000
Batch ID R245826	**Test Name :** VOLATILES - SW8260C			**Matrix:** Water		
HS14110823-10	MW-11	20 Nov 2014 10:00			27 Nov 2014 03:00	1
HS14110823-11	Field Dup	20 Nov 2014 00:00			27 Nov 2014 04:36	1
HS14110823-12	Trip Blank 111014-06	20 Nov 2014 00:00			27 Nov 2014 02:12	1

Client: Glenn Springs Holdings
WorkOrder: HS14110823
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R245731 **Instrument: VOA1** **Method: SW8260**

MBLK Sample ID: **VBLKW-141125** Units: **ug/L** Analysis Date: **26-Nov-2014 00:15**
Client ID: Run ID: **VOA1_245731** SeqNo: **3108859** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	U	5.0								
Ethylbenzene	U	5.0								
Toluene	U	5.0								
Xylenes, Total	U	15								
Surr: 1,2-Dichloroethane-d4	*52.69*	*5.0*	*50*	*0*	*105*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*49.17*	*5.0*	*50*	*0*	*98.3*	*72 - 125*				
Surr: Dibromofluoromethane	*52.15*	*5.0*	*50*	*0*	*104*	*71 - 125*				
Surr: Toluene-d8	*50.69*	*5.0*	*50*	*0*	*101*	*75 - 125*				

LCS Sample ID: **VLCSW-141125** Units: **ug/L** Analysis Date: **25-Nov-2014 23:26**
Client ID: Run ID: **VOA1_245731** SeqNo: **3108858** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	50.49	5.0	50	0	101	73 - 121				
Ethylbenzene	49.67	5.0	50	0	99.3	80 - 120				
Toluene	48.13	5.0	50	0	96.3	80 - 120				
Xylenes, Total	150.3	15	150	0	100	80 - 120				
Surr: 1,2-Dichloroethane-d4	*53.57*	*5.0*	*50*	*0*	*107*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.89*	*5.0*	*50*	*0*	*104*	*72 - 125*				
Surr: Dibromofluoromethane	*55.36*	*5.0*	*50*	*0*	*111*	*71 - 125*				
Surr: Toluene-d8	*51.86*	*5.0*	*50*	*0*	*104*	*75 - 125*				

MS Sample ID: **HS14110754-07MS** Units: **ug/L** Analysis Date: **26-Nov-2014 01:03**
Client ID: Run ID: **VOA1_245731** SeqNo: **3108861** PrepDate: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	240.6	25	250	0	96.2	73 - 121				
Ethylbenzene	229.8	25	250	0	91.9	80 - 120				
Toluene	230.7	25	250	0	92.3	80 - 120				
Xylenes, Total	676.9	75	750	0	90.2	80 - 120				
Surr: 1,2-Dichloroethane-d4	*272.3*	*25*	*250*	*0*	*109*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*255.3*	*25*	*250*	*0*	*102*	*72 - 125*				
Surr: Dibromofluoromethane	*283.3*	*25*	*250*	*0*	*113*	*71 - 125*				
Surr: Toluene-d8	*247.2*	*25*	*250*	*0*	*98.9*	*75 - 125*				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14110823
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R245731 **Instrument: VOA1** **Method: SW8260**

MSD Sample ID: **HS14110754-07MSD** Units: **ug/L** Analysis Date: **26-Nov-2014 01:28**
Client ID: Run ID: **VOA1_245731** SeqNo: **3108862** PrepDate: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Benzene	239.4	25	250	0	95.8	73 - 121	240.6	0.477	20	
Ethylbenzene	233.1	25	250	0	93.2	80 - 120	229.8	1.44	20	
Toluene	225.5	25	250	0	90.2	80 - 120	230.7	2.3	20	
Xylenes, Total	686.9	75	750	0	91.6	78 - 121	676.9	1.47	20	
Surr: 1,2-Dichloroethane-d4	*269.8*	*25*	*250*	*0*	*108*	*70 - 125*	*272.3*	*0.919*	*20*	
Surr: 4-Bromofluorobenzene	*255.4*	*25*	*250*	*0*	*102*	*72 - 125*	*255.3*	*0.0302*	*20*	
Surr: Dibromofluoromethane	*282.3*	*25*	*250*	*0*	*113*	*71 - 125*	*283.3*	*0.359*	*20*	
Surr: Toluene-d8	*254.4*	*25*	*250*	*0*	*102*	*75 - 125*	*247.2*	*2.85*	*20*	

The following samples were anayzed in this batch: HS14110823-01 HS14110823-02 HS14110823-03 HS14110823-04 HS14110823-05 HS14110823-06 HS14110823-07

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14110823
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R245735 **Instrument: VOA6** **Method: SW8260**

MBLK Sample ID: **VBLKW-14125** Units: **ug/L** Analysis Date: **25-Nov-2014 11:17**
Client ID: Run ID: **VOA6_245735** SeqNo: **3108996** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	U	5.0								
Ethylbenzene	U	5.0								
Toluene	U	5.0								
Xylenes, Total	U	15								
Surr: 1,2-Dichloroethane-d4	*51.73*	*5.0*	*50*	*0*	*103*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*49.51*	*5.0*	*50*	*0*	*99.0*	*72 - 125*				
Surr: Dibromofluoromethane	*50.14*	*5.0*	*50*	*0*	*100*	*71 - 125*				
Surr: Toluene-d8	*50.33*	*5.0*	*50*	*0*	*101*	*75 - 125*				

LCS Sample ID: **VLCSW-141125** Units: **ug/L** Analysis Date: **25-Nov-2014 10:05**
Client ID: Run ID: **VOA6_245735** SeqNo: **3108995** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	45.07	5.0	50	0	90.1	73 - 121				
Ethylbenzene	45.7	5.0	50	0	91.4	80 - 120				
Toluene	44.76	5.0	50	0	89.5	80 - 120				
Xylenes, Total	136.5	15	150	0	91.0	80 - 120				
Surr: 1,2-Dichloroethane-d4	*51.31*	*5.0*	*50*	*0*	*103*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*50.58*	*5.0*	*50*	*0*	*101*	*72 - 125*				
Surr: Dibromofluoromethane	*50.67*	*5.0*	*50*	*0*	*101*	*71 - 125*				
Surr: Toluene-d8	*48.8*	*5.0*	*50*	*0*	*97.6*	*75 - 125*				

MS Sample ID: **HS14110820-01MS** Units: **ug/L** Analysis Date: **25-Nov-2014 14:49**
Client ID: Run ID: **VOA6_245735** SeqNo: **3109004** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	42.02	5.0	50	0	84.0	73 - 121				
Ethylbenzene	39.14	5.0	50	0	78.3	80 - 120				S
Toluene	40.81	5.0	50	0	81.6	80 - 120				
Xylenes, Total	118.9	15	150	0	79.3	80 - 120				S
Surr: 1,2-Dichloroethane-d4	*53.36*	*5.0*	*50*	*0*	*107*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.22*	*5.0*	*50*	*0*	*102*	*72 - 125*				
Surr: Dibromofluoromethane	*51.38*	*5.0*	*50*	*0*	*103*	*71 - 125*				
Surr: Toluene-d8	*49.88*	*5.0*	*50*	*0*	*99.8*	*75 - 125*				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14110823
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R245735 **Instrument: VOA6** **Method: SW8260**

MSD Sample ID: **HS14110820-01MSD** Units: **ug/L** Analysis Date: **25-Nov-2014 15:13**
Client ID: Run ID: **VOA6_245735** SeqNo: **3109005** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Benzene	41.35	5.0	50	0	82.7	73 - 121	42.02	1.62	20	
Ethylbenzene	40.54	5.0	50	0	81.1	80 - 120	39.14	3.53	20	
Toluene	41.82	5.0	50	0	83.6	80 - 120	40.81	2.44	20	
Xylenes, Total	123.2	15	150	0	82.2	78 - 121	118.9	3.59	20	
Surr: 1,2-Dichloroethane-d4	*52.82*	*5.0*	*50*	*0*	*106*	*70 - 125*	*53.36*	*1.02*	*20*	
Surr: 4-Bromofluorobenzene	*51.06*	*5.0*	*50*	*0*	*102*	*72 - 125*	*51.22*	*0.313*	*20*	
Surr: Dibromofluoromethane	*51.23*	*5.0*	*50*	*0*	*102*	*71 - 125*	*51.38*	*0.294*	*20*	
Surr: Toluene-d8	*49.9*	*5.0*	*50*	*0*	*99.8*	*75 - 125*	*49.88*	*0.0454*	*20*	

The following samples were anayzed in this batch: HS14110823-08 HS14110823-09

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14110823
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R245826 **Instrument: VOA6** **Method: SW8260**

MBLK Sample ID: **VBLKW-14126** Units: **ug/L** Analysis Date: **26-Nov-2014 22:59**
Client ID: Run ID: **VOA6_245826** SeqNo: **3110724** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	U	5.0								
Ethylbenzene	U	5.0								
Toluene	U	5.0								
Xylenes, Total	U	15								
Surr: 1,2-Dichloroethane-d4	*52.88*	*5.0*	*50*	*0*	*106*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*49.36*	*5.0*	*50*	*0*	*98.7*	*72 - 125*				
Surr: Dibromofluoromethane	*50.72*	*5.0*	*50*	*0*	*101*	*71 - 125*				
Surr: Toluene-d8	*48.45*	*5.0*	*50*	*0*	*96.9*	*75 - 125*				

LCS Sample ID: **VLCSW-141126** Units: **ug/L** Analysis Date: **26-Nov-2014 22:11**
Client ID: Run ID: **VOA6_245826** SeqNo: **3110723** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	44.23	5.0	50	0	88.5	73 - 121				
Ethylbenzene	44.6	5.0	50	0	89.2	80 - 120				
Toluene	43.93	5.0	50	0	87.9	80 - 120				
Xylenes, Total	133.8	15	150	0	89.2	80 - 120				
Surr: 1,2-Dichloroethane-d4	*52.27*	*5.0*	*50*	*0*	*105*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*51.43*	*5.0*	*50*	*0*	*103*	*72 - 125*				
Surr: Dibromofluoromethane	*50.57*	*5.0*	*50*	*0*	*101*	*71 - 125*				
Surr: Toluene-d8	*48.84*	*5.0*	*50*	*0*	*97.7*	*75 - 125*				

MS Sample ID: **HS14110754-25MS** Units: **ug/L** Analysis Date: **27-Nov-2014 01:00**
Client ID: Run ID: **VOA6_245826** SeqNo: **3110728** PrepDate: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	213.3	25	250	0	85.3	73 - 121				
Ethylbenzene	216.5	25	250	0	86.6	80 - 120				
Toluene	217.3	25	250	0	86.9	80 - 120				
Xylenes, Total	653.4	75	750	0	87.1	80 - 120				
Surr: 1,2-Dichloroethane-d4	*261.2*	*25*	*250*	*0*	*104*	*70 - 125*				
Surr: 4-Bromofluorobenzene	*261.1*	*25*	*250*	*0*	*104*	*72 - 125*				
Surr: Dibromofluoromethane	*253.2*	*25*	*250*	*0*	*101*	*71 - 125*				
Surr: Toluene-d8	*251.4*	*25*	*250*	*0*	*101*	*75 - 125*				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14110823
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R245826 **Instrument: VOA6** **Method: SW8260**

MSD Sample ID: **HS14110754-25MSD** Units: **ug/L** Analysis Date: **27-Nov-2014 01:24**
Client ID: Run ID: **VOA6_245826** SeqNo: **3110729** PrepDate: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	213	25	250	0	85.2	73 - 121	213.3	0.169	20	
Ethylbenzene	217.7	25	250	0	87.1	80 - 120	216.5	0.539	20	
Toluene	212.5	25	250	0	85.0	80 - 120	217.3	2.27	20	
Xylenes, Total	648.2	75	750	0	86.4	78 - 121	653.4	0.791	20	
Surr: 1,2-Dichloroethane-d4	*260*	*25*	*250*	*0*	*104*	*70 - 125*	*261.2*	*0.431*	*20*	
Surr: 4-Bromofluorobenzene	*255*	*25*	*250*	*0*	*102*	*72 - 125*	*261.1*	*2.37*	*20*	
Surr: Dibromofluoromethane	*255.3*	*25*	*250*	*0*	*102*	*71 - 125*	*253.2*	*0.798*	*20*	
Surr: Toluene-d8	*245.9*	*25*	*250*	*0*	*98.4*	*75 - 125*	*251.4*	*2.21*	*20*	

The following samples were anayzed in this batch: HS14110823-10 HS14110823-11 HS14110823-12

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14110823
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R245786 **Instrument: ICS2100** **Method: E300**

MBLK Sample ID: **WBLKW3-112614** Units: **mg/L** Analysis Date: **26-Nov-2014 06:39**
Client ID: Run ID: **ICS2100_245786** SeqNo: **3110002** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.500								

LCS Sample ID: **WLCSW3-112614** Units: **mg/L** Analysis Date: **26-Nov-2014 06:54**
Client ID: Run ID: **ICS2100_245786** SeqNo: **3110003** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	19.31	0.500	20	0	96.6	90 - 110				

LCSD Sample ID: **WLCSDW3-112614** Units: **mg/L** Analysis Date: **26-Nov-2014 07:08**
Client ID: Run ID: **ICS2100_245786** SeqNo: **3110004** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	19.65	0.500	20	0	98.3	90 - 110	19.31	1.75	20	

MS Sample ID: **HS14110823-11MS** Units: **mg/L** Analysis Date: **26-Nov-2014 11:37**
Client ID: **Field Dup** Run ID: **ICS2100_245786** SeqNo: **3110020** PrepDate: DF: **2000**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	64710	1000	20000	46170	92.7	80 - 120				

MS Sample ID: **HS14110823-01MS** Units: **mg/L** Analysis Date: **26-Nov-2014 08:14**
Client ID: **MW-1** Run ID: **ICS2100_245786** SeqNo: **3110006** PrepDate: DF: **2000**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	51000	1000	20000	31800	96.0	80 - 120				

MSD Sample ID: **HS14110823-11MSD** Units: **mg/L** Analysis Date: **26-Nov-2014 11:52**
Client ID: **Field Dup** Run ID: **ICS2100_245786** SeqNo: **3110021** PrepDate: DF: **2000**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	64370	1000	20000	46170	91.0	80 - 120	64710	0.532	20	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
WorkOrder: HS14110823
Project: 55631DM GSHI PXP Todd Water Injection Station

QC BATCH REPORT

Batch ID: R245786 **Instrument: ICS2100** **Method: E300**

MSD Sample ID: **HS14110823-01MSD** Units: **mg/L** Analysis Date: **26-Nov-2014 08:28**
Client ID: **MW-1** Run ID: **ICS2100_245786** SeqNo: **3110007** PrepDate: DF: **2000**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	50460	1000	20000	31800	93.3	80 - 120	51000	1.06	20	

The following samples were anayzed in this batch:

HS14110823-01	HS14110823-02	HS14110823-03	HS14110823-04
HS14110823-05	HS14110823-06	HS14110823-07	HS14110823-08
HS14110823-09	HS14110823-10	HS14110823-11	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Glenn Springs Holdings
Project: 55631DM GSHI PXP Todd Water Injection Station
WorkOrder: **HS14110823**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	AR - 2014	27-Mar-2015
California	2919	31-Jul-2015
Dept of Defense	L2231 Rev 3-20-2014	22-Dec-2015
Illinois	003403	09-May-2015
Kentucky	KY 2014-2015	30-Apr-2015
Louisiana	03087 2014/2015	30-Jun-2015
North Carolina	624 - 2014	31-Dec-2014
North Dakota	R-193 2025	30-Apr-2015
Oklahoma	2014-128	31-Aug-2015
Texas	T104704231-14-14	30-Apr-2015

Client: Glenn Springs Holdings
Project: 55631DM GSHI PXP Todd Water Injection Station
Work Order: HS14110823

SAMPLE TRACKING

Lab Samp ID	Client Sample ID	Action	Date	Person	New Location
HS14110823-01	MW-1	Login	11/22/2014 1:51:09 PM	SLS	20C
HS14110823-01	MW-1	Login	11/22/2014 1:51:09 PM	SLS	VW-3
HS14110823-02	MW-2	Login	11/22/2014 1:51:09 PM	SLS	20C
HS14110823-02	MW-2	Login	11/22/2014 1:51:09 PM	SLS	VW-3
HS14110823-03	MW-3	Login	11/22/2014 1:51:09 PM	SLS	20C
HS14110823-03	MW-3	Login	11/22/2014 1:51:09 PM	SLS	VW-3
HS14110823-04	MW-4	Login	11/22/2014 1:51:09 PM	SLS	20C
HS14110823-04	MW-4	Login	11/22/2014 1:51:09 PM	SLS	VW-3
HS14110823-05	MW-5	Login	11/22/2014 1:51:09 PM	SLS	20C
HS14110823-05	MW-5	Login	11/22/2014 1:51:09 PM	SLS	VW-3
HS14110823-06	MW-6	Login	11/22/2014 1:51:09 PM	SLS	20C
HS14110823-06	MW-6	Login	11/22/2014 1:51:09 PM	SLS	VW-3
HS14110823-07	MW-8	Login	11/22/2014 1:51:09 PM	SLS	20C
HS14110823-07	MW-8	Login	11/22/2014 1:51:09 PM	SLS	VW-3
HS14110823-08	MW-9	Login	11/22/2014 1:58:49 PM	SLS	20C
HS14110823-08	MW-9	Login	11/22/2014 1:58:49 PM	SLS	VW-3
HS14110823-09	MW-10	Login	11/22/2014 1:58:50 PM	SLS	20C
HS14110823-09	MW-10	Login	11/22/2014 1:58:50 PM	SLS	VW-3
HS14110823-10	MW-11	Login	11/22/2014 1:58:50 PM	SLS	20C
HS14110823-10	MW-11	Login	11/22/2014 1:58:50 PM	SLS	VW-3
HS14110823-11	Field Dup	Login	11/22/2014 1:58:50 PM	SLS	20C
HS14110823-11	Field Dup	Login	11/22/2014 1:58:50 PM	SLS	VW-3
HS14110823-12	Trip Blank 111014-06	Login	11/22/2014 1:59:44 PM	SLS	VW-3

Sample Receipt Checklist

Client Name: GLEN SPRINGS/CRA Date/Time Received: **22-Nov-2014 09:40**

Work Order: HS14110823 Received by: **SLS**

Checklist completed by: *Stephen L. Smith* eSignature 22-Nov-2014 Date

Reviewed by: *Dane J. Wacasey* eSignature 25-Nov-2014 Date

Matrices: **water** Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	2.6/2.6, 4.8/4.8 c/u	2	
Cooler(s)/Kit(s):	23738,33793		
Date/Time sample(s) sent to storage:	11/22/2014 1400		
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: 0 Regarding:

Comments:

Corrective Action:

ALS Environmental

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Everett, WA +1 425 356 2600
Fort Collins, CO +1 970 490 1511
Holland, MI +1 616 399 6070

Chain of Custody Fo

Page ____ of ____

COC ID: 1127

HS14110823

Glenn Springs Holdings

GSHI PXP Todd Water Injection Station

ALS Project Manager:

Customer Information		Project Information	
Purchase Order	4501709538	Project Name	GSHI PXP Todd Water Injection Statio
Work Order		Project Number	55631DM (ENV749A03)
Company Name	Glenn Springs Holdings	Bill To Company	Glenn Springs Holdings
Send Report To	Angela Bown	Invoice Attn	Jennifer Devonshire
Address	C/O CRA 9033 Merridian Way	Address	C/O CRA 2055 Niagara Falls Blvd. Suite 3
City/State/Zip	West Chester,Ohio,45069	City/State/Zip	Niagara Falls, NY 14304
Phone	(513) 942-4750	Phone	
Fax		Fax	
e-Mail Address		e-Mail Address	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-1	11/20/14	0900	Water		4	X	X									
2	MW-2		0910	Water		4	X	X									
3	MW-3		0940	Water		4	X	X									
4	MW-4		0950	Water		4	X	X									
5	MW-5		1020	Water		4	X	X									
6	MW-6		1010	Water		4	X	X									
7	MW-7 — NO Sample —		—	Water		4	X	X									
8	MW-8		0930	Water		4	X	X									
9	MW-9		0920	Water		4	X	X									
10																	

Sampler(s) Please Print & Sign: Ryan Reiss

Shipment Method: Fed Ex

Required Turnaround Time: (Check Box) [X] Std 10 WK days [ ] 5 WK Days [ ] 2 WK Days [ ] 24 Hour [ ] Other

Results Due Date:

Relinquished by:	Date: 11/20/14	Time: 1900	Received by:	
Relinquished by:	Date: 11-22-14	Time: 0940	Received by (Laboratory):	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

Notes: 10 Day TAT

Cooler ID	Cooler Temp.

QC Package: (Check One Box Below)
[X] Level 2 Std QC [ ] TRRP ChkList
[ ] Level 3 Std QC/Row da [ ] TRRP Level 4
[ ] Level 4 SW846/CLP
[ ] Other/EDD

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note:
1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

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Chain of Custody Form

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COC ID: 112734

HS14110823

Glenn Springs Holdings

GSHI PXP Todd Water Injection Station

ALS Project Manager:

Customer Information		Project Information	
Purchase Order	4501709538	Project Name	GSHI PXP Todd Water Injection Statio
Work Order		Project Number	55631DM (ENV749A03)
Company Name	Glenn Springs Holdings	Bill To Company	Glenn Springs Holdings
Send Report To	Angela Bown	Invoice Attn	Jennifer Devonshire
Address	C/O CRA 9033 Meridian Way	Address	C/O CRA 2055 Niagara Falls Blvd. Suite 3
City/State/Zip	West Chester,Ohio,45069	City/State/Zip	Niagara Falls, NY 14304
Phone	(513) 942-4750	Phone	
Fax		Fax	
e-Mail Address		e-Mail Address	

	A	B	C	D	E	F	G	H	I	J
	BTEX (8260)	Chloride by 300								

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-10	11/7-/14	1030	Water		4	X	X									
2	MW-11		1000	Water		4	X	X									
3	Field Dup			Water		4	X	X									
4	Trip Blank			Water		2	X										
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Ryan Roth

Shipment Method: Fed Ex

Required Turnaround Time: (Check Box) [X] Std 10 WK days [ ] 5 WK Days [ ] 2 WK Days [ ] 24 Hour [ ] Other

Results Due Date:

	Date:	Time:	
Relinquished by:	11/20/14	1900	Received by:
Relinquished by:	11-22-14	0940	Received by (Laboratory):
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):

Notes: 10 Day TAT

Cooler ID	Cooler Temp.

QC Package: (Check One Box Below)

- [X] Level 2 Std QC
- [ ] Level 3 Std QC/Raw da
- [ ] Level 4 SW846/CLP
- [ ] Other/EDD
- [ ] TRRP ChkList
- [ ] TRRP Level 4

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

ote:
1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.


ALS Environmental
3352 128th Avenue
Holland, Michigan 49424
Tel. +1 616 399 6070
Fax. +1 616 399 6185
CUSTODY SEAL
Date: 11/21/14
Time: 0900
Name: Ryan Reid
Company: ALS
Seal Broken By:
Date: 11-22-14
ALS Environmental
3352 128th Avenue
Holland, Michigan 49424
Tel. +1 616 399 6070
Fax. +1 616 399 6185
CUSTODY SEAL
Date: 11/21/14
Time: 0900
Name: Ryan Reid
Company: ALS
Seal Broken
Date:
1 of 2
TRK# 0215 8035 6168 7255
MASTER
XO SGRA
SATURDAY 12:00P
PRIORITY OVERNIGHT
DSR
77099
TX-US IAH
FedEx
Express
J14221409230126
2 of 2
MPS# 0681 7801 5462 3577
Mstr# 8035 6168 7255
0215
XO SGRA
SATURDAY 12:00P
PRIORITY OVERNIGHT
DSR
77099
TX-US IAH
Seal Broken By:
Date:
ALS Environmental
3352 128th Avenue
Holland, Michigan 49424
Tel. +1 616 399 6070
Fax. +1 616 399 6185