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AGWMR

04/04/2012

2R-006

Antea USA, Inc.
704 Central Parkway East, Suite 1220
Plano, Texas 75074 USA
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April 4, 2012

Mr. Glenn Von Gonten
New Mexico Oil Conservation Division – Environmental Bureau
1220 So. St. Francis Drive
Santa Fe, New Mexico 87505

$10,185,27E

RE: **Status Update Report**
Centurion Pipeline L.P.
Artesia Tank Farm
Artesia, New Mexico
NMOCD ID. 2RP-6
Antea Group Project No. CPNM1

Dear Mr. Von Gonten:

On behalf of Centurion Pipeline L.P., Antea Group is pleased to present the attached Status Update Report for the above-referenced site. If you have any questions or comments, or if additional information is required, please contact me at 972-665-0528 or Mr. Bill Von Drehle at 713-215-7379.

Respectfully,

ANTEA™GROUP

Michael Henn
Senior Project Manager

Cc via email: Bill Von Drehle - Centurion Pipeline L.P.
Albert Ochoa - Centurion Pipeline L.P.

STATUS UPDATE REPORT

CENTURION PIPELINE L.P.
ARTESIA TANK FARM
ARTESIA, EDDY COUNTY, NEW MEXICO
NMOCD ID. 2RP-6

ANTEA GROUP PROJECT NO. CPNM1

Prepared for:

Centurion Pipeline L.P.
5 Greenway Plaza
Houston, Texas 77046

April 4, 2012

Prepared by:

Antea™Group
704 Central Parkway East, #1220
Plano, Texas 75024

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CENTURION PIPELINE L.P.
ARTESIA TANK FARM
ARTESIA, EDDY COUNTY, NEW MEXICO
NMOCD ID. 2RP-6

ANTEA GROUP PROJECT NO. CPNM1

1.0 REPORT SUMMARY

On behalf of Centurion Pipeline L.P. (Centurion), Antea Group has prepared this Status Update Report for the above-referenced site. This report provides the results of the groundwater monitoring activities that occurred at the above-referenced site on January 25, 2012.

2.0 SITE HISTORY

In March 1993, a release of crude oil was discovered at the Artesia Pump Station (site) located approximately 12 miles southeast of Artesia, New Mexico. In August 1993, an initial assessment that included the installation of twenty three (23) soil borings concluded that impacts from light non-aqueous phase liquid (LNAPL) extended approximately 1,700 feet down Scoggin Draw. An interception trench and an associated groundwater separation/air-stripper remediation system were installed in November 1994 to control and remediate the LNAPL and dissolved-phase hydrocarbons associated with the release. A total of fourteen monitor wells (MW-1 through MW-14) were eventually installed along Scoggin Draw to evaluate/monitor the extent of the groundwater impact. Quarterly reporting was performed throughout the operation of the remediation system, which was shut down in early 1997. The system was dismantled in the fall of 1998.

Subsequent to April 1997, the on-site monitor wells have been monitored and sampled on an annual basis.

Per New Mexico Oil Conservation Division (NMOCD) approval, monitor wells MW-4, MW-6, MW-7, MW-12, and MW-13 were plugged and abandoned at the site on June 19, 2003. On August 18, 2005, monitor wells MW-5, MW-8 and MW-14 were plugged and abandoned.

Antea Group prepared and submitted a site-specific 'Risk Assessment Report' on May 12, 2005.

On June 29, 2007, the NMOCD was notified that effective July 1, 2007, the Operator of Record for Artesia Pump Station and the associated water development easement (WM-72) transferred from BP Pipelines (North America) Inc. to Centurion, a subsidiary of Occidental Petroleum Corporation.

The most recent annual report, titled "2010 Annual Groundwater Monitoring Report", was submitted to the NMOCD on November 1, 2010.

3.0 GROUNDWATER ASSESSMENT

On January 25, 2012, Antea Group conducted groundwater monitoring activities at the site. The field data and laboratory analytical results from the event were used to produce this report. Note; because no COC concentrations above human health standards, as stated in New Mexico Water Quality Control Commission (NMWQCC) Regulations (20.6.2 NMAC) Subpart III, Section 3103, have been identified in samples collected from MW-11 since installation in 1994, or from MW-9 since March 2004, these two monitor wells have been removed from the monitoring program.

3.1 Groundwater Elevations

Groundwater elevation data was collected using a product/water interface probe. Unfortunately, the probe malfunctioned at MW-2B; thus, a reading at this location was not collected. In general, the identified groundwater elevations at the site ranged from 3436.46 feet above mean sea level (amsl) at MW-1 to 3400.47 feet amsl at MW-10. Depth to water measurements ranged from 10.48 feet below grade surface (bgs) at MW-3RS to 17.86 feet bgs at MW-10. Compared to the data collected in June 2010, groundwater elevation dropped by 5.45 feet in MW-1, 7.78 feet in MW-3RS and 7.77 feet in MW-10. The shallow groundwater in the vicinity of the site generally flows south toward and along Scoggin Draw. The groundwater elevation data is presented in Table 1 and depicted on Figure 2.

No light non-aqueous phase liquid (LNAPL) was observed in the monitor wells gauged in January 2012.

3.2 Groundwater Chemistry

Groundwater samples were collected from monitor wells MW-1, MW-2B, MW-3R, MW-3RS and MW-10 utilizing the low-flow purge and sample method, which is in general accordance with guidance contained in EPA publication EPA/540/S-95/504. A blind duplicate sample (labeled MW-17) that was collected from MW-2B and a trip blank were also submitted for laboratory analysis. The samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8021B.

Based on the results of the laboratory analyses (refer to Table 2), the samples collected from MW-2B, MW-3R and MW-3RS, which are located within the boundaries of the pump station compound, exhibited benzene concentrations (0.161 milligrams per liter (mg/L), 2.750 mg/L and 0.148 mg/L respectively) above the New Mexico Water Quality Commission (NMWQC) human health standard of 0.01 mg/L. Additionally, the xylenes concentration identified at MW-3R (0.812 mg/L) exceeded the NMWQC human health standard of 0.62 mg/L. No other COC concentrations exceeded regulatory standards at these sampling locations.

The sample collected from MW-1, which is located approximately 60 feet from and immediately downgradient of the pump station compound, did not exhibit COC concentrations above the associated NMWQC human health standards. Similarly, the sample collected from MW-10 did not exhibit COC concentrations above the NMWQC human health standards.

Regarding the biochemical compounds, the analytical results (refer to Table 3) show sulfate concentrations of 2,830 mg/L at MW-2B, 1,700 mg/L at MW-3R and 1,830 mg/L at MW-1. The nitrogen, nitrate (as N) concentrations were 0.28 mg/L at MW-2B, <1.0 mg/L at MW-3R and <0.011 at MW-1. The total and dissolved iron concentrations were 0.28 mg/L at MW-2B, <1.0 mg/L at MW-3R and <0.011 at MW-1. During the sampling activities, the dissolved oxygen readings ranged from 1.38 mg/L at MW-2B to 0.16 mg/L at MW-1; and, the oxygen reduction potential readings ranged from -127.9 electron volts (eV) at MW-2B to -282.3 mV at MW-1. The geochemical data indicates that near anaerobic conditions exist in the vicinity of pump station compound.

The laboratory analytical results are provided in Table 2 (BTEX, Naphthalene, TDS and Chloride) and Table 3 (biochemical compounds). The benzene concentrations detected at the site since 2005 are depicted on Figure 3. The geochemical parameter readings are provided in Table 4. Copies of the laboratory analytical reports and chain-of-custody documentation are presented in Appendix A.

4.0 FINDINGS

Based on the laboratory analytical data, benzene and ethylbenzene concentrations exceeding the NMWQC human health standard standards of 0.01 mg/L and 0.62 mg/L, respectively, were identified in groundwater underlying the pump station compound.

The laboratory analytical results indicate that potential COC concentrations in groundwater underlying areas outside the pump station compound is below the applicable NMWQC human health standard standards.

The historical data indicates that the LNAPL is degraded and the dissolved-phase contaminant plume is non-mobile and in decline.

Regarding the biochemical compounds, the analytical results show general trends associated with natural biodegradation of the residual petroleum hydrocarbons.

The historical data show generally encouraging trends associated with biodegradation of the residual petroleum hydrocarbons.

In general accordance with §20.6.2 NMAC, monitored natural attenuation (MNA), with annual groundwater monitoring and reporting, will continue as the response action to address the affected groundwater at the site. Please note that based on the historical laboratory analytical data, MW-10 will be removed from the monitoring program during future events.

5.0 QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES

Groundwater samples were collected from monitor wells MW-1, MW-2A, MW-3R, MW-3RS and MW-10 utilizing the low-flow purge and sample method, which is in general accordance with guidance contained in EPA publication EPA/540/S-95/504. The groundwater samples were collected utilizing industry standard methods and appropriate personnel protective equipment (PPE). The groundwater samples were collected in laboratory-prepared containers (i.e., 40 ml, clear glass vials with hydrochloric acid as a preservative), immediately placed in an ice-filled cooler and chilled to less than four degrees Celsius. The cooler was then transferred to Southern Petroleum Laboratories, Inc. in Houston, TX under chain-of-custody protocol.

6.0 REMARKS

The recommendations contained in this report represent Antea Group's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The contract between Antea Group and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Antea Group's client and anyone else specifically listed on this report. Antea Group will not and

cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Antea Group makes no express or implied warranty as to the content of this report.

7.0 SIGNATURES

This report was prepared by **ANTEA™GROUP**

Date: 4-4-12

Michael Henn
Senior Project Manager

Reviewed by:

Date: 4-4-2012

Dallas Dupre, P.G.
Senior Project Manager

TABLES

TABLE 1
GROUNDWATER ELEVATION DATA
CENTURION PIPELINE L.P. - ARTESIA TANK FARM
ARTESIA, NEW MEXICO

LOCATION	DATE	CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PRODUCT THICKNESS	GROUND WATER ELEVATION
MW-1	05/21/93	3448.58	20.52	20.73	0.21	3428.03
	11/17/94		17.54	17.56	0.02	3431.04
	02/09/95		18.02	18.05	0.03	3430.56
	06/16/95		19.15	19.21	0.06	3429.42
	10/02/95		Sheen	16.48	Sheen	3432.10
	11/26/95		15.85	15.87	0.02	3432.73
	04/16/96		14.32	14.33	0.01	3434.26
	07/06/96		15.55	15.57	0.02	3433.03
	09/30/96		11.70	11.75	0.05	3436.87
	01/10/97		12.79	12.90	0.11	3435.77
	04/02/97		13.60	13.62	0.02	3434.98
	07/10/97		14.78	14.79	0.01	3433.80
	10/17/97		14.62	14.63	0.01	3433.96
	01/18/98		NP	13.74	NA	3434.84
	04/18/98		13.75	13.76	0.01	3434.83
	05/29/98		NP	14.56	NA	3434.02
	06/30/98		NP	14.90	NA	3433.68
	07/23/98		NP	15.71	NA	3432.87
	08/19/98		NP	16.49	NA	3432.09
	12/05/98		NP	17.94	NA	3430.64
	04/01/99		NP	18.30	NA	3430.28
	06/03/99		NP	17.65	NA	3430.93
	09/16/99		NP	11.02	NA	3437.56
	01/08/00		NP	10.18	NA	3438.40
	06/08/00		NP	9.84	NA	3438.74
	07/24/01		9.88	9.90	0.02	3438.70
	03/12/02		7.70	7.73	0.03	3440.88
	07/18/03		9.67	9.68	0.01	3438.91
	03/29/04		NP	7.05	NA	3441.53
	08/17/05		NP	6.58	NA	3442.00
	10/10/06		6.54	6.56	0.02	3442.02
	08/12/08		6.02	6.03	0.01	3442.55
	07/29/09		5.570	5.575	0.005	3443.01
	06/10/10		Sheen	6.67	Sheen	3441.91
	01/25/12		NP	12.12	NA	3436.46
MW-2	05/21/93	3456.88	25.81	27.56	1.75	3430.81
	11/17/94		23.28	26.67	3.39	3433.09
	02/09/95		23.98	26.50	2.52	3432.52
	06/16/95		25.63	26.45	0.82	3431.13
	10/02/95		22.01	26.18	4.17	3434.24
	11/26/95		21.23	26.17	4.94	3434.91
	04/16/96		20.58	22.46	1.88	3436.02
	07/06/96		21.86	25.18	3.32	3434.52
	09/30/96		19.17	20.94	1.77	3437.44
	01/10/97		20.20	22.98	2.78	3436.26
	04/02/97		21.00	24.04	3.04	3435.42
	07/10/97		22.41	23.50	1.09	3434.31
	10/17/97		21.92	26.18	4.26	3434.32
	01/18/98		20.03	24.00	3.97	3436.25
	04/18/98		21.04	25.31	4.27	3435.20
	05/29/98		21.68	25.86	4.18	3434.57
	06/30/98		22.00	26.20	4.20	3434.25
	07/23/98		23.08	26.25	3.17	3433.32
	08/19/98		23.66	26.16	2.50	3432.85
	12/05/98		24.90	26.70	1.80	3431.71
	04/01/99		25.15	26.47	1.32	3431.53
	06/01/99		23.10	26.20	3.10	3433.32
	09/16/99		NP	18.28	NA	3438.60
	01/08/00		18.65	19.23	0.58	3438.14
	06/07/00		19.28	19.31	0.03	3437.60
	07/24/01		17.03	17.50	0.47	3439.78
	03/12/02		16.61	17.03	0.42	3440.21
	07/18/03		17.22	17.63	0.41	3439.60
	03/29/04		Not gauged - not accessible			
	08/17/05		Not gauged - not accessible			
	10/10/06		Not gauged - not accessible			
	08/12/08		Not gauged - not accessible			
	07/29/09		Not gauged - not accessible			
	06/10/10		Not gauged - not accessible			
	01/25/12		Not gauged			

TABLE 1
GROUNDWATER ELEVATION DATA
CENTURION PIPELINE L.P. - ARTESIA TANK FARM
ARTESIA, NEW MEXICO

LOCATION	DATE	CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PRODUCT THICKNESS	GROUND WATER ELEVATION
MW-2A	10/10/01	3457.46	NP	19.01	NA	3438.45
(MW-2R)	03/12/02		NP	17.76	NA	3439.70
(MW-2B)	07/18/03		NP	18.39	NA	3439.07
	03/29/04		NP	17.10	NA	3440.36
	08/17/05		NP	16.94	NA	3440.52
	10/10/06		NP	16.08	NA	3441.38
	08/12/08		NP	15.32	NA	3442.14
	07/29/09		NP	15.29	NA	3442.17
	06/10/10		NP	15.04	NA	3442.42
	01/25/12		Not Gauged - Meter Malfunction			
MW-3	05/21/93	3447.67	16.45	17.81	1.36	3431.02
	11/17/94		13.07	13.65	0.58	3434.51
	02/09/95		13.75	14.32	0.57	3433.83
	06/16/95		15.20	15.84	0.64	3432.37
	10/02/95		10.69	11.43	0.74	3436.87
	11/26/95		9.69	10.41	0.72	3437.87
	04/16/96		9.58	9.63	0.05	3438.08
	07/06/96		11.70	11.80	0.10	3435.96
	09/30/96		8.71	8.75	0.04	3438.95
	01/10/97		10.33	10.40	0.07	3437.33
	04/02/97		11.36	11.42	0.06	3436.30
	07/10/97		13.02	13.10	0.08	3434.64
	10/17/97		13.22	13.24	0.02	3434.45
	01/18/98		10.68	10.78	0.10	3436.98
	04/18/98		11.47	11.55	0.08	3436.19
	05/29/98		12.34	12.45	0.11	3435.31
	06/30/98		12.70	12.80	0.10	3434.96
	07/23/98		13.95	14.02	0.07	3433.71
	08/19/98		15.08	15.15	0.07	3432.58
	12/05/98		16.40	16.50	0.10	3431.26
	04/01/99		16.00	16.08	0.08	3431.66
	06/03/99		14.35	14.38	0.03	3433.32
	09/16/99		7.82	7.87	0.05	3439.84
	01/08/00		8.50	8.60	0.10	3439.16
	06/08/00		6.98	7.05	0.07	3440.68
	07/24/01		6.63	6.73	0.10	3441.03
	03/12/02		5.43	5.50	0.07	3442.23
	07/18/03		Not gauged			
	03/29/04		Not gauged			
	08/17/05		5.20	5.28	0.08	3442.46
	10/10/06		Not gauged			
	08/12/08		Not gauged			
	07/29/09		Not gauged			
	06/10/10		2.97	2.98	0.01	3444.70
	01/25/12		Not gauged			
MW-3A	10/10/01	ND	NP	7.34	NA	ND
(MW-3RS)	03/12/02		NP	5.24	NA	ND
(MW-3C)	07/18/03		NP	6.34	NA	ND
	03/29/04		NP	4.50	NA	ND
	08/17/05		NP	3.70	NA	ND
	10/10/06		NP	3.18	NA	ND
	08/12/08		NP	3.32	NA	ND
	07/29/09		Not gauged - not accessible			
	06/10/10		NP	2.70	NA	ND
	01/25/12		NP	10.48	NA	ND
MW-3B	10/10/01	ND	NP	7.47	NA	ND
(MW-3R)	03/12/02		NP	5.62	NA	ND
	07/18/03		NP	6.81	NA	ND
	03/29/04		Not gauged			
	08/17/05		NP	4.82	NA	ND
	10/10/06		NP	3.86	NA	ND
	08/12/08		NP	3.90	NA	ND
	07/29/09		Not gauged - not accessible			
	06/10/10		NP	2.88	NA	ND
	01/25/12		NP	11.41	NA	ND

TABLE 1
GROUNDWATER ELEVATION DATA
CENTURION PIPELINE L.P. - ARTESIA TANK FARM
ARTESIA, NEW MEXICO

LOCATION	DATE	CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PRODUCT THICKNESS	GROUND WATER ELEVATION
MW-4	11/17/94	ND	NP	28.28	NA	ND
	02/09/95		NP	28.51	NA	ND
	06/16/95		NP	29.58	NA	ND
	10/02/95		NP	24.42	NA	ND
	11/26/95		NP	22.61	NA	ND
	04/16/96		NP	20.63	NA	ND
	07/06/96		NP	26.44	NA	ND
	09/30/96		NP	21.88	NA	ND
	01/10/97		NP	25.24	NA	ND
	04/02/97		NP	25.49	NA	ND
	04/18/98		NP	25.02	NA	ND
	12/05/98		29.52	29.70	0.18	ND
	04/01/99		28.65	28.67	0.02	ND
	06/03/99		NP	26.48	NA	ND
	09/20/99		NP	18.85	NA	ND
	01/08/00		NP	19.30	NA	ND
	06/08/00		NP	18.46	NA	ND
	07/24/01		NP	16.93	NA	ND
	03/12/02		NP	14.89	NA	ND
	06/19/03		Plugged and Abandoned			
MW-5	11/17/94	3430.25	16.22	24.19	7.97	3412.83
	02/09/95		16.84	24.85	8.01	3412.21
	06/16/95		19.44	21.14	1.70	3410.56
	10/02/95		16.19	17.85	1.66	3413.81
	11/26/95		17.58	19.31	1.73	3412.41
	04/16/96		17.04	17.25	0.21	3413.18
	07/06/96		16.20	16.36	0.16	3414.03
	09/30/96		11.17	11.38	0.21	3419.05
	01/10/97		13.45	13.60	0.15	3416.78
	04/02/97		14.19	14.35	0.16	3416.04
	07/10/97		16.22	16.25	0.03	3414.03
	10/17/97		13.37	13.39	0.02	3416.88
	01/18/98		13.57	13.58	0.01	3416.68
	04/18/98		14.04	14.05	0.01	3416.21
	05/29/98		NP	15.09	NA	3415.16
	06/30/98		NP	15.42	NA	3414.83
	07/23/98		NP	17.30	NA	3412.95
	08/19/98		18.09	18.10	0.01	3412.16
	12/05/98		NP	18.94	NA	3411.31
	04/01/99		NP	19.48	NA	3410.77
	06/03/99		NP	14.46	NA	3415.79
	09/20/99		NP	9.91	NA	3420.34
	01/08/00		NP	12.11	NA	3418.14
	06/08/00		NP	12.13	NA	3418.12
	07/24/01		NP	12.77	NA	3417.48
	03/21/02		NP	10.43	NA	3419.82
	07/17/03		NP	12.02	NA	3418.23
	03/29/04		NP	8.90	NA	3421.35
	08/17/05		NP	9.61	NA	3420.64
	08/18/05		Plugged and Abandoned			

TABLE 1
GROUNDWATER ELEVATION DATA
CENTURION PIPELINE L.P. - ARTESIA TANK FARM
ARTESIA, NEW MEXICO

LOCATION	DATE	CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PRODUCT THICKNESS	GROUND WATER ELEVATION
MW-6	11/17/94	ND	Sheen	14.53	Sheen	ND
	02/09/95		NP	15.02	NA	ND
	06/16/95		16.24	16.27	0.03	ND
	10/02/95		NP	13.55	NA	ND
	11/26/95		NP	14.84	NA	ND
	04/16/96		NP	13.80	NA	ND
	07/06/96		NP	14.55	NA	ND
	09/30/96		NP	9.62	NA	ND
	01/10/97		NP	12.26	NA	ND
	04/02/97		NP	12.03	NA	ND
	04/18/98		NP	12.14	NA	ND
	12/05/98		NP	15.95	NA	ND
	04/01/99		NP	16.04	NA	ND
	06/03/99		NP	13.60	NA	ND
	09/20/99		NP	8.69	NA	ND
	01/08/00		NP	10.73	NA	ND
	06/08/00		NP	11.45	NA	ND
	07/24/01		NP	11.69	NA	ND
	03/21/02		NP	9.43	NA	ND
	06/19/03		Plugged and Abandoned			
MW-7 *	11/17/94	3460.55	NP	34.33	NA	3426.22
	02/09/95		NP	34.67	NA	3425.88
	06/16/95		NP	35.61	NA	3424.94
	10/02/95		NP	33.79	NA	3426.76
	11/26/95		NP	33.20	NA	3427.35
	04/16/96		NP	30.95	NA	3429.60
	07/06/96		NP	33.36	NA	3427.19
	09/30/96		NP	29.15	NA	3431.40
	01/10/97		NP	30.72	NA	3429.83
	04/02/97		NP	31.85	NA	3428.70
	04/18/98		NP	31.94	NA	3428.61
	12/05/98		NP	35.24	NA	3425.31
	04/01/99		NP	35.24	NA	3425.31
	06/03/99		NP	33.32	NA	3427.23
	09/20/99		NP	27.25	NA	3433.30
	01/08/00		NP	27.95	NA	3432.60
	06/08/00		NP	26.91	NA	3433.64
	07/24/01		NP	25.65	NA	3434.90
	03/21/02		NP	24.08	NA	3436.47
	06/19/03		Plugged and Abandoned			

TABLE 1
GROUNDWATER ELEVATION DATA
CENTURION PIPELINE L.P. - ARTESIA TANK FARM
ARTESIA, NEW MEXICO

LOCATION	DATE	CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PRODUCT THICKNESS	GROUND WATER ELEVATION
MW-8	11/17/94	3424.57	13.69	14.95	1.26	3410.69
	02/09/95		14.46	15.02	0.56	3410.03
	06/16/95		15.50	16.41	0.91	3408.93
	10/02/95		13.03	13.45	0.42	3411.48
	11/26/95		14.16	14.71	0.55	3410.33
	04/16/96		13.66	13.70	0.04	3410.90
	07/06/96		13.05	13.07	0.02	3411.52
	09/30/96		8.04	8.07	0.03	3416.53
	01/10/97		9.89	9.90	0.01	3414.68
	04/02/97		10.58	10.60	0.02	3413.99
	07/10/97		NP	12.59	NA	3411.98
	10/17/97		NP	10.20	NA	3414.37
	01/18/98		NP	10.08	NA	3414.49
	04/18/98		NP	10.52	NA	3414.05
	05/29/98		NP	11.55	NA	3413.02
	06/30/98		NP	11.87	NA	3412.70
	07/23/98		NP	13.65	NA	3410.92
	08/19/98		NP	14.42	NA	3410.15
	12/05/98		NP	15.30	NA	3409.27
	04/01/99		NP	15.73	NA	3408.84
	06/03/99		NP	11.88	NA	3412.69
	09/20/99		NP	7.20	NA	3417.37
	01/08/00		NP	8.58	NA	3415.99
	06/08/00		NP	9.71	NA	3414.86
	07/24/01		NP	9.53	NA	3415.04
	03/21/02		NP	7.28	NA	3417.29
	07/17/03		NP	8.59	NA	3415.98
	03/29/04		NP	6.80	NA	3417.77
	08/17/05		NP	6.82	NA	3417.75
	08/18/05		Plugged and Abandoned			
MW-9	11/17/94	3456.12	23.07	23.10	0.03	3433.05
	02/09/95		Sheen	23.41	Sheen	3432.71
	06/16/95		Sheen	24.65	Sheen	3431.47
	10/02/95		Sheen	20.73	Sheen	3435.39
	11/26/95		Sheen	19.52	Sheen	3436.60
	04/16/96		17.53	17.54	0.01	3438.59
	07/06/96		21.20	21.23	0.03	3434.92
	09/30/96		16.00	16.02	0.02	3440.12
	01/10/97		17.55	17.57	0.02	3438.57
	04/02/97		18.91	18.92	0.01	3437.21
	07/10/97		20.39	20.41	0.02	3435.73
	10/17/97		20.13	20.15	0.02	3435.99
	01/18/98		18.39	18.40	0.01	3437.73
	04/18/98		18.80	18.81	0.01	3437.32
	05/29/98		NP	19.50	NA	3436.62
	06/30/98		NP	19.82	NA	3436.30
	07/23/98		21.00	21.01	0.01	3435.12
	08/19/98		NP	21.75	NA	3434.37
	12/05/98		NP	23.18	NA	3432.94
	04/01/99		NP	22.85	NA	3433.27
	06/03/99		NP	20.85	NA	3435.27
	09/20/99		NP	12.56	NA	3443.56
	01/08/00		NP	12.64	NA	3443.48
	06/08/00		NP	11.65	NA	3444.47
	07/24/01		NP	10.65	NA	3445.47
	03/12/02		7.80	7.81	0.01	3448.32
	07/18/03		Sheen	9.71	Sheen	3446.41
	03/29/04		NP	6.90	NA	3449.22
	08/17/05		NP	9.63	NA	3446.49
	10/10/06		NP	6.12	NA	3450.00
	08/12/08		NP	6.02	NA	3450.10
	07/29/09		NP	5.86	NA	3450.26
	06/10/10		Not gauged			
	01/25/12		Not gauged			

TABLE 1
GROUNDWATER ELEVATION DATA
CENTURION PIPELINE L.P. - ARTESIA TANK FARM
ARTESIA, NEW MEXICO

LOCATION	DATE	CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PRODUCT THICKNESS	GROUND WATER ELEVATION
MW-10	11/17/94	3418.33	19.02	21.24	2.22	3398.98
	02/09/95		19.74	22.36	2.62	3398.20
	06/16/95		20.97	23.30	2.33	3397.01
	10/02/95		18.49	19.55	1.06	3399.68
	11/26/95		20.13	22.03	1.90	3397.92
	04/16/96		20.26	20.88	0.62	3397.98
	07/06/96		19.86	20.03	0.17	3398.44
	09/30/96		NP	15.62	NA	3402.71
	01/10/97		19.00	19.05	0.05	3399.32
	04/02/97		19.35	19.40	0.05	3398.97
	07/10/97		20.37	20.42	0.05	3397.95
	10/17/97		NP	16.58	NA	3401.75
	01/18/98		NP	17.82	NA	3400.51
	04/18/98		NP	18.27	NA	3400.06
	05/29/98		NP	18.72	NA	3399.61
	06/30/98		NP	19.04	NA	3399.29
	07/23/98		NP	19.26	NA	3399.07
	08/19/98		NP	19.40	NA	3398.93
	12/05/98		NP	19.69	NA	3398.64
	04/01/99		NP	19.62	NA	3398.71
	06/03/99		NP	17.10	NA	3401.23
	09/16/99		NP	16.39	NA	3401.94
	01/08/00		NP	17.75	NA	3400.58
	06/08/00		NP	17.80	NA	3400.53
	07/24/01		NP	17.44	NA	3400.89
	03/21/02		NP	16.36	NA	3401.97
	07/17/03		NP	16.86	NA	3401.47
	03/29/04		NP	14.20	NA	3404.13
	08/17/05		NP	11.68	NA	3406.65
	10/10/06		NP	15.81	NA	3402.52
	08/12/08		Not gauged - not accessible			
	07/29/09		NP	11.20	NA	3407.13
	06/10/10		NP	10.09	NA	3408.24
	01/25/12		NP	17.86	NA	3400.47
MW-11	11/17/94	3415.81	NP	19.34	NA	3396.47
	02/09/95		NP	19.61	NA	3396.20
	06/16/95		NP	20.08	NA	3395.73
	10/02/95		NP	19.74	NA	3396.07
	11/26/95		NP	19.94	NA	3395.87
	04/16/96		NP	19.68	NA	3396.13
	07/06/96		NP	19.75	NA	3396.06
	09/30/96		NP	18.65	NA	3397.16
	01/10/97		NP	19.92	NA	3395.89
	04/02/97		NP	19.50	NA	3396.31
	01/18/98		NP	18.91	NA	3396.90
	04/18/98		NP	19.07	NA	3396.74
	06/30/98		NP	19.39	NA	3396.42
	08/19/98		NP	19.54	NA	3396.27
	12/05/98		NP	19.47	NA	3396.34
	04/01/99		NP	19.44	NA	3396.37
	06/02/99		NP	19.58	NA	3396.23
	09/16/99		NP	18.20	NA	3397.61
	01/08/00		NP	18.22	NA	3397.59
	06/07/00		NP	18.55	NA	3397.26
	07/24/01		NP	18.69	NA	3397.12
	03/21/02		NP	17.62	NA	3398.19
	07/17/03		NP	17.65	NA	3398.16
	03/29/04		NP	17.23	NA	3398.58
	08/17/05		NP	16.68	NA	3399.13
	10/10/06		NP	16.50	NA	3399.31
	08/12/08		NP	16.03	NA	3399.78
	07/29/09		NP	15.93	NA	3399.88
	06/10/10		Not gauged			
	01/25/12		Not gauged			

TABLE 1
GROUNDWATER ELEVATION DATA
CENTURION PIPELINE L.P. - ARTESIA TANK FARM
ARTESIA, NEW MEXICO

LOCATION	DATE	CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PRODUCT THICKNESS	GROUND WATER ELEVATION
MW-12	11/17/94	ND	NP	16.47	NA	ND
	02/09/95		NP	16.78	NA	ND
	06/16/95		NP	17.28	NA	ND
	10/02/95		NP	16.03	NA	ND
	11/26/95		NP	16.63	NA	ND
	04/16/96		NP	16.55	NA	ND
	07/06/96		NP	16.45	NA	ND
	09/30/96		NP	13.81	NA	ND
	01/10/97		NP	18.92	NA	ND
	04/02/97		NP	15.20	NA	ND
	04/18/98		NP	14.91	NA	ND
	12/05/98		NP	16.63	NA	ND
	04/01/99		NP	16.87	NA	ND
	06/03/99		NP	15.55	NA	ND
	09/16/99		NP	13.59	NA	ND
	01/08/00		NP	13.70	NA	ND
	06/07/00		NP	14.35	NA	ND
	07/24/01		NP	13.66	NA	ND
	03/21/02		NP	12.94	NA	ND
	06/19/03		Plugged and Abandoned			
MW-13	11/17/94	ND	20.41	20.49	0.08	ND
	02/09/95		20.84	20.87	0.03	ND
	06/16/95		21.35	21.40	0.05	ND
	10/02/95		19.35	19.44	0.09	ND
	11/26/95		21.53	21.58	0.05	ND
	04/16/96		21.82	21.90	0.08	ND
	07/06/96		21.00	21.05	0.05	ND
	09/30/96		16.40	16.42	0.02	ND
	01/10/97		19.17	19.19	0.02	ND
	04/02/97		18.50	18.52	0.02	ND
	07/10/97		NP	19.00	NA	ND
	10/17/97		NP	18.03	NA	ND
	01/18/98		NP	19.11	NA	ND
	04/18/98		NP	19.60	NA	ND
	05/29/98		NP	19.96	NA	ND
	06/30/98		NP	20.28	NA	ND
	07/23/98		NP	20.91	NA	ND
	08/19/98		NP	21.25	NA	ND
	12/05/98		NP	21.60	NA	ND
	04/01/99		NP	21.81	NA	ND
	06/03/99		NP	18.52	NA	ND
	09/16/99		NP	13.59	NA	ND
	01/08/00		NP	16.79	NA	ND
	06/07/00		NP	17.81	NA	ND
	07/24/01		NP	18.18	NA	ND
	03/21/02		NP	16.69	NA	ND
	06/19/03		Plugged and Abandoned			

TABLE 1
GROUNDWATER ELEVATION DATA
CENTURION PIPELINE L.P. - ARTESIA TANK FARM
ARTESIA, NEW MEXICO

LOCATION	DATE	CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PRODUCT THICKNESS	GROUND WATER ELEVATION
MW-14	11/17/94	3417.70	NP	18.11	NA	3399.59
	02/09/95		NP	18.45	NA	3399.25
	06/16/95		NP	18.93	NA	3398.77
	10/02/95		NP	18.63	NA	3399.07
	11/26/95		NP	18.83	NA	3398.87
	04/16/96		NP	18.55	NA	3399.15
	07/06/96		NP	18.58	NA	3399.12
	09/30/96		NP	17.63	NA	3400.07
	01/10/97		NP	17.42	NA	3400.28
	04/02/97		NP	17.82	NA	3399.88
	01/18/98		NP	17.61	NA	3400.09
	04/18/98		NP	17.77	NA	3399.93
	06/30/98		NP	18.10	NA	3399.60
	08/19/98		NP	18.23	NA	3399.47
	12/05/98		NP	18.15	NA	3399.55
	04/01/99		NP	18.27	NA	3399.43
	06/02/99		NP	18.25	NA	3399.45
	09/16/99		NP	16.82	NA	3400.88
	01/08/00		NP	16.75	NA	3400.95
	06/07/00		NP	17.07	NA	3400.63
	07/24/01		NP	16.16	NA	3401.54
	03/21/02		NP	15.97	NA	3401.73
	07/17/03		NP	15.97	NA	3401.73
	03/29/04		NP	15.50	NA	3402.20
	08/17/05		NP	15.16	NA	3402.54
	08/18/05		Plugged and Abandoned			

All measurements in feet.
NP = free product not present.
NA = not applicable.
ND = No Data
* - Casing elevation determined by adding 2.84 feet of PVC stick-up (from the MW installation report).
to 3457.71 feet (ground elevation survey, 12/27/04)

Centurion Pipeline L.P.
Artesia Pump Station
Artesia, New Mexico

Table 2
Groundwater Analytical Data (BTEX, TPH, Other)

SAMPLE ID	DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)	NAPHTHALENE (mg/L)	TDS (mg/L)	CHLORIDE (mg/L)
NMWQCC Human Health Standards		0.01	0.75	0.75	0.62	NA	1,000	250
MW-1	7/18/2003	not sampled - free product present						
	3/29/2004*	**1.30**	0.069	0.160	0.371	0.028	**4,060**	**395**
	8/17/2005	**0.640**	<0.005	0.240	0.340	NA	NA	NA
	10/10/2006	not sampled - free product present						
	8/12/2008	not sampled - free product present						
	7/29/2009	**0.280**	0.0036	0.058	0.205	NA	NA	NA
	6/10/2010	**0.200**	0.0024	0.068	0.212	NA	NA	NA
	1/25/2012	*0.0057*	*<0.00028*	*<0.00025*	*0.0490*	NA	NA	NA
MW-2	7/18/2003	not sampled - free product present						
	3/29/2004	not sampled - not accessible						
	8/17/2005	not sampled - not accessible						
	10/10/2006	not sampled - not accessible						
	8/12/2008	not sampled - not accessible						
MW-2A (MW-2B) (MW-2R)	10/10/2001	**0.920**	0.2100	0.520	**1.200**	NA	**4,700**	**670**
	3/12/2002	**0.880**	0.0330	0.200	0.520	NA	NA	**590**
	3/14/2003*	**0.980**	0.0150	0.290	0.440	NA	**4,320**	**745**
	7/18/2003	**0.690**	< 0.005	0.192	0.410	NA	NA	NA
	3/29/2004*	**0.710**	0.013	0.21	0.395	<0.005	**4,820**	**835**
	8/17/2005	***0.590***	*0.0054*	*0.140*	*0.2856*	NA	NA	NA
	10/10/2006	**0.510**	0.011	0.072	0.2482	NA	NA	NA
	8/12/2008	**0.054**	<0.001	0.0016	0.012	NA	NA	NA
	7/29/2009	**0.058**	0.00042-J	0.00056-J	0.0054	NA	NA	NA
	6/10/2010	0.0046	<0.001	<0.001	0.0011	NA	NA	NA
	1/25/2012	**0.161**	<0.00028	0.0103	0.151	NA	NA	NA
MW-16 Dup - 2B	3/12/2003*	0.052	<0.001	0.0013	0.010	NA	NA	NA
MW-17 Dup - 2R	7/29/2009	**0.057**	0.00044-J	0.00055-J	0.0055	NA	NA	NA
	6/10/2010	0.0075	<0.001	<0.001	0.0024	NA	NA	NA
	1/25/2012	**0.116**	0.0022	0.0076	0.117	NA	NA	NA
MW-3	7/18/2003	not sampled						
	3/29/2004*	not sampled						
	8/17/2005	not sampled						
	10/10/2006	not sampled						
	8/12/2008	not sampled						
	7/29/2009	not sampled - not accessible						
MW-3A (MW-3RS) (MW-3C)	10/10/2001	**5.800**	0.400	0.570	1.400	NA	**4,700**	**690**
	3/12/2002	**2.400**	0.120	0.310	0.700	NA	NA	**520**
	3/14/2003*	**0.720**	< 0.001	0.087	0.110	NA	**4,220**	**526**
	7/18/2003	**0.347**	< 0.005	0.0361	0.0534	NA	NA	NA
	3/29/2004*	**0.14**	<0.001	0.014	0.026	<0.005	**3,840**	**383**
	8/17/2005	**0.027**	0.0035	0.018	0.0354	NA	NA	NA
	10/10/2006	<0.001	<0.001	<0.001	<0.001	NA	NA	NA
	8/12/2008	**0.059**	0.0017	0.0072	0.260	NA	NA	NA
	7/29/2009	not sampled - not accessible						
	6/10/2010	**0.011**	<0.001	0.0075	0.200	NA	NA	NA
	1/25/2012	**0.148**	0.0015	0.0191	0.320	NA	NA	NA

Centurion Pipeline L.P.
Artesia Pump Station
Artesia, New Mexico

Table 2
Groundwater Analytical Data (BTEX, TPH, Other)

SAMPLE ID	DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)	NAPHTHALENE (mg/L)	TDS (mg/L)	CHLORIDE (mg/L)
MW-3B (MW-3R)	10/10/2001	**7.900**	**4.500**	**1.200**	**4.400**	NA	**6,300**	**1,300**
	3/12/2002	**3.300**	**1.200**	0.440	**1.100**	NA	NA	**1,200**
	7/18/2003	**2.92**	0.226	0.448	**0.908**	NA	NA	NA
	3/29/2004*	not sampled						
	8/17/2005	**3.300**	0.500	0.410	**0.870**	NA	NA	NA
	10/10/2006	**3.100**	0.300	0.480	**1.020**	NA	NA	NA
	8/12/2008	not sampled						
	7/29/2009	not sampled - not accessible						
	6/10/2010	**1.700**	0.093	0.310	**0.660**	NA	NA	NA
	1/25/2012	**2.750**	0.190	0.409	**0.812**	NA	NA	NA
MW-4	8/31/1993	< 0.0005	< 0.0005	< 0.0005	< 0.0005	NA	NA	NA
	11/25/1994	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	12/22/1994	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	2/16/1995	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	6/16/1995	**0.0544**	< 0.001	0.0025	0.0067	NA	NA	NA
	10/2/1995	0.0098	< 0.001	< 0.001	< 0.001	NA	NA	NA
	11/26/1995	0.0047	0.0020	0.0013	0.0038	NA	NA	NA
	4/17/1995	0.0063	0.0011	< 0.001	0.0036	NA	NA	NA
	7/5/1996	0.0050	< 0.001	< 0.001	0.0020	NA	NA	NA
	9/30/1996	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	1/10/1997	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	4/2/1997	0.0013	< 0.001	< 0.001	< 0.001	NA	NA	NA
	7/10/1997	NA	NA	NA	NA	NA	NA	NA
	9/14/1997	NA	NA	NA	NA	NA	NA	NA
	1/18/1998	NA	NA	NA	NA	NA	NA	NA
	4/18/1998	**0.750**	0.130	0.100	0.150	NA	NA	NA
	9/20/1999	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	6/8/2000	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	7/24/2001	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	3/12/2002	**0.031**	0.0024	0.012	0.019	NA	NA	NA
	3/14/2003*	< 0.001	< 0.001	< 0.001	< 0.002	NA	**3,290**	**328**
	6/19/2003	Plugged and Abandoned						
MW-5	8/31/1993	1.500	0.290	0.094	0.480	0.0059	NA	NA
	12/22/1994	NA	NA	NA	NA	NA	NA	NA
	2/16/1995	NA	NA	NA	NA	NA	NA	NA
	6/16/1995	NA	NA	NA	NA	NA	NA	NA
	10/2/1995	NA	NA	NA	NA	NA	NA	NA
	11/26/1995	NA	NA	NA	NA	NA	NA	NA
	4/17/1995	NA	NA	NA	NA	NA	NA	NA
	7/5/1996	NA	NA	NA	NA	NA	NA	NA
	9/30/1996	NA	NA	NA	NA	NA	NA	NA
	1/10/1997	NA	NA	NA	NA	NA	NA	NA
	4/2/1997	NA	NA	NA	NA	NA	NA	NA
	4/18/1998	NA	NA	NA	NA	NA	NA	NA
	9/20/1999	NA	NA	NA	NA	NA	NA	NA
	6/8/2000	NA	NA	NA	NA	NA	NA	NA
	7/25/2001	**0.400**	0.0097	0.060	0.160	NA	NA	NA
	3/21/2002	**0.440**	0.0091	0.064	0.240	NA	NA	**590**
	3/14/2003*	0.0094	< 0.001	< 0.001	0.008	NA	**4,170**	**832**
	7/17/2003	***0.0157***	*< 0.005*	*0.000558*	*0.00403*	NA	NA	NA
	3/29/2004*	0.0085	< 0.001	< 0.001	0.022	<0.005	**4,020**	**570**
	8/17/2005	Plugged and Abandoned						

Centurion Pipeline L.P.
Artesia Pump Station
Artesia, New Mexico

Table 2
Groundwater Analytical Data (BTEX, TPH, Other)

SAMPLE ID	DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)	NAPHTHALENE (mg/L)	TDS (mg/L)	CHLORIDE (mg/L)
MW-6	11/25/1994	not sampled - free product present						
	12/21/1994	not sampled - free product present						
	2/16/1995	0.0022	< 0.001	< 0.001	< 0.001	NA	NA	NA
	6/16/1995	not sampled - free product present						
	10/2/1995	0.0031	< 0.001	< 0.001	0.0025	NA	NA	NA
	11/26/1995	0.0058	< 0.001	0.0061	0.0190	NA	NA	NA
	4/16/1995	0.0063	0.0011	< 0.001	0.0036	NA	NA	NA
	7/6/1996	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	9/30/1996	< 0.001	< 0.001	0.002	< 0.001	NA	NA	NA
	1/10/1997	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	4/2/1997	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	7/10/1997	NA	NA	NA	NA	NA	NA	NA
	9/14/1997	NA	NA	NA	NA	NA	NA	NA
	1/18/1998	NA	NA	NA	NA	NA	NA	NA
	4/18/1998	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	9/20/1999	NA	NA	NA	NA	NA	NA	NA
	6/8/2000	NA	NA	NA	NA	NA	NA	NA
	7/24/2001	NA	NA	NA	NA	NA	NA	NA
	3/21/2002	**0.013**	0.00077	0.0025	0.006	NA	NA	**990**
	3/14/2003*	< 0.001	< 0.001	< 0.001	< 0.002	NA	**4,740**	**1100**
	6/19/2003	Plugged and Abandoned						
MW-7	8/31/1993	< 0.0005	< 0.0005	< 0.0005	< 0.0005	NA	NA	NA
	11/25/1994	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	12/22/1994	**1.590**	< 0.010	0.039	0.0865	NA	NA	NA
	2/16/1995	**0.846**	< 0.010	0.0209	0.0527	NA	NA	NA
	6/16/1995	**3.100**	0.0036	0.0587	0.140	NA	NA	NA
	10/2/1995	**0.880**	< 0.010	0.017	0.0350	NA	NA	NA
	11/26/1995	**3.000**	0.0046	0.051	0.200	NA	NA	NA
	4/17/1995	**1.900**	<0.020	0.130	0.100	NA	NA	NA
	7/6/1996	**1.800**	< 0.010	0.160	0.120	NA	NA	NA
	9/30/1996	**0.170**	<0.020	<0.020	0.011	NA	NA	NA
	1/10/1997	**0.160**	< 0.001	< 0.001	0.0032	NA	NA	NA
	4/2/1997	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	7/10/1997	NA	NA	NA	NA	NA	NA	NA
	9/14/1997	NA	NA	NA	NA	NA	NA	NA
	1/18/1998	NA	NA	NA	NA	NA	NA	NA
	4/18/1998	**0.120**	< 0.001	< 0.001	0.0077	NA	NA	NA
	9/20/1999	< 0.001	< 0.001	< 0.001	<0.003	NA	NA	NA
	6/8/2000	**0.300**	< 0.010	< 0.010	0.04200	NA	NA	NA
	7/24/2001	<0.00021	<0.00022	<0.0002	0.0018	NA	NA	NA
	3/21/2002	0.00068	<0.0050	0.0011	0.00029	NA	NA	**550**
	3/14/2003*	< 0.001	< 0.001	< 0.001	< 0.002	NA	**3,640**	**503**
	6/19/2003	Plugged and Abandoned						

Centurion Pipeline L.P.
Artesia Pump Station
Artesia, New Mexico

Table 2
Groundwater Analytical Data (BTEX, TPH, Other)

SAMPLE ID	DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)	NAPHTHALENE (mg/L)	TDS (mg/L)	CHLORIDE (mg/L)
MW-8	11/17/1994	NA	NA	NA	NA	NA	NA	NA
	12/22/1994	NA	NA	NA	NA	NA	NA	NA
	2/16/1995	NA	NA	NA	NA	NA	NA	NA
	6/16/1995	NA	NA	NA	NA	NA	NA	NA
	10/2/1995	NA	NA	NA	NA	NA	NA	NA
	11/26/1995	NA	NA	NA	NA	NA	NA	NA
	4/16/1995	NA	NA	NA	NA	NA	NA	NA
	7/2/1996	NA	NA	NA	NA	NA	NA	NA
	9/30/1996	NA	NA	NA	NA	NA	NA	NA
	1/10/1997	NA	NA	NA	NA	NA	NA	NA
	4/2/1997	NA	NA	NA	NA	NA	NA	NA
	7/10/1997	NA	NA	NA	NA	NA	NA	NA
	9/14/1997	NA	NA	NA	NA	NA	NA	NA
	1/18/1998	NA	NA	NA	NA	NA	NA	NA
	4/18/1998	**3.800**	**0.820**	0.480	**1.100**	NA	NA	NA
	9/20/1999	NA	NA	NA	NA	NA	NA	NA
	6/8/2000	NA	NA	NA	NA	NA	NA	NA
	7/24/2001	NA	NA	NA	NA	NA	NA	NA
	3/21/2002	**1.500**	0.110	0.390	**0.920**	NA	NA	580
	3/21/2003*	**0.760**	0.039	0.270	0.430	NA	**3,990**	**583**
	7/17/2003	**1.02000**	0.03750	0.30800	**0.71800**	NA	NA	NA
	3/29/2004*	**0.790**	0.0038	0.350	**0.80**	<0.005	**3,970**	**441**
	8/17/2005	Plugged and Abandoned						
MW-9	3/12/2003*	0.0082	< 0.001	0.0013	0.072	NA	**3,580**	**530**
	7/18/2003	not sampled						
	3/29/2004*	**0.023**	<0.001	<0.001	0.110	<0.005	**3,840**	**570**
	8/17/2005	**0.010**	<0.001	0.00590	0.037	NA	NA	NA
	10/10/2006	0.0029	<0.001	0.0014	0.012	NA	NA	NA
	8/12/2008	0.0013	<0.001	0.0013	0.010	NA	NA	NA
	7/29/2009	0.00041-J	<0.00025	0.00036-J	0.00341	NA	NA	NA
MW-10	11/17/1994	NA	NA	NA	NA	NA	NA	NA
	12/22/1994	NA	NA	NA	NA	NA	NA	NA
	2/16/1995	NA	NA	NA	NA	NA	NA	NA
	6/14/1995	NA	NA	NA	NA	NA	NA	NA
	10/2/1995	NA	NA	NA	NA	NA	NA	NA
	11/25/1995	NA	NA	NA	NA	NA	NA	NA
	4/16/1995	NA	NA	NA	NA	NA	NA	NA
	7/2/1996	NA	NA	NA	NA	NA	NA	NA
	9/30/1996	**0.062**	<0.001	0.0022	0.0022	NA	NA	NA
	1/10/1997	NA	NA	NA	NA	NA	NA	NA
	4/2/1997	NA	NA	NA	NA	NA	NA	NA
	7/10/1997	NA	NA	NA	NA	NA	NA	NA
	9/14/1997	NA	NA	NA	NA	NA	NA	NA
	1/18/1998	NA	NA	NA	NA	NA	NA	NA
	4/18/1998	**0.061**	<0.001	<0.001	0.020	NA	NA	NA
	3/21/2002	**0.013**	0.030	**0.990**	**1.000**	NA	NA	23
	3/14/2003*	**0.220**	0.0078	< 0.001	0.019	NA	**4,480**	**795**
	7/17/2003	**0.0209**	0.00129	< 0.005	0.0116	NA	NA	NA
	3/29/2004*	**0.230**	<0.001	<0.001	0.041	<0.005	**2,510**	**671**
	8/17/2005	**0.037**	<0.001	<0.001	0.016	NA	NA	NA
	10/10/2006	**0.017**	<0.001	<0.001	0.0036	NA	NA	NA
	8/12/2008	not sampled						
	7/29/2009	<0.00030	0.0004-J	0.0004-J	0.0021	NA	NA	NA
	6/10/2010	0.0011	<0.001	<0.001	0.0014	NA	NA	NA
	1/25/2012	0.00096-J	0.00046-J	0.00028-J	0.0020-J	NA	NA	NA

Centurion Pipeline L.P.
Artesia Pump Station
Artesia, New Mexico

Table 2
Groundwater Analytical Data (BTEX, TPH, Other)

SAMPLE ID	DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)	NAPHTHALENE (mg/L)	TDS (mg/L)	CHLORIDE (mg/L)
MW-11	11/17/1994	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	12/22/1994	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	2/16/1995	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	6/14/1995	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	10/2/1995	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	11/25/1995	0.0013	0.0053	0.0021	0.0061	NA	NA	NA
	4/16/1995	< 0.001	0.0028	0.0011	0.0037	NA	NA	NA
	7/2/1996	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	9/30/1996	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	1/10/1997	< 0.001	0.0012	0.0015	0.006	NA	NA	NA
	4/2/1997	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	7/10/1997	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	9/14/1997	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	1/18/1998	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	4/18/1998	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	3/21/2002	<0.0005	<0.0005	0.00052	0.0016	NA	NA	35
	3/14/2003*	< 0.001	< 0.001	< 0.001	< 0.002	NA	**3,000**	41.7
	7/17/2003	< 0.005	< 0.005	< 0.005	< 0.0015	NA	NA	NA
	3/29/2004*	<0.001	<0.001	<0.001	<0.002	<0.005	**2,510**	38.5
	8/17/2005	<0.001	<0.001	<0.001	<0.001	NA	NA	NA
	10/10/2006	<0.001	<0.001	<0.001	<0.001	NA	NA	NA
	8/12/2008	<0.001	<0.001	<0.001	<0.001	NA	NA	NA
	7/29/2009	<0.00030	<0.00025	<0.00022	<0.00030	NA	NA	NA
MW-12	11/17/1994	**0.075**	0.0011	0.001	0.001	NA	NA	NA
	12/22/1994	0.0056	< 0.001	< 0.001	< 0.001	NA	NA	NA
	2/16/1995	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	6/16/1995	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	10/2/1995	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	11/26/1995	0.0011	0.0035	< 0.001	0.0051	NA	NA	NA
	4/16/1995	0.0015	0.0051	0.0018	0.0058	NA	NA	NA
	7/2/1996	0.0041	<0.001	<0.001	0.0012	NA	NA	NA
	9/30/1996	**0.030**	<0.001	<0.001	<0.001	NA	NA	NA
	1/10/1997	0.0023	<0.001	<0.001	<0.001	NA	NA	NA
	4/2/1997	<0.001	<0.001	<0.001	<0.001	NA	NA	NA
	7/10/1997	NA	NA	NA	NA	NA	NA	NA
	9/14/1997	NA	NA	NA	NA	NA	NA	NA
	1/18/1998	NA	NA	NA	NA	NA	NA	NA
	4/18/1998	0.0039	< 0.001	< 0.001	<0.001	NA	NA	NA
	9/16/1999	**0.030**	< 0.001	< 0.001	<0.003	NA	NA	NA
	6/7/2000	< 0.001	< 0.001	< 0.001	<0.003	NA	NA	NA
	7/24/2001	<0.00013	<0.0002	<0.00022	<0.0028	NA	NA	NA
	3/21/2002	<0.0005	<0.0005	<0.0005	<0.0015	NA	NA	**570**
	3/14/2003*	< 0.001	< 0.001	< 0.001	< 0.002	NA	**4,150**	**676**
	6/19/2003	Plugged and Abandoned						

Centurion Pipeline L.P.
Artesia Pump Station
Artesia, New Mexico

Table 2
Groundwater Analytical Data (BTEX, TPH, Other)

SAMPLE ID	DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)	NAPHTHALENE (mg/L)	TDS (mg/L)	CHLORIDE (mg/L)
MW-13	11/17/1994	NA	NA	NA	NA	NA	NA	NA
	12/22/1994	NA	NA	NA	NA	NA	NA	NA
	2/16/1995	NA	NA	NA	NA	NA	NA	NA
	6/16/1995	NA	NA	NA	NA	NA	NA	NA
	10/2/1995	NA	NA	NA	NA	NA	NA	NA
	11/26/1995	NA	NA	NA	NA	NA	NA	NA
	4/16/1995	NA	NA	NA	NA	NA	NA	NA
	7/2/1996	NA	NA	NA	NA	NA	NA	NA
	9/30/1996	NA	NA	NA	NA	NA	NA	NA
	1/10/1997	NA	NA	NA	NA	NA	NA	NA
	4/2/1997	NA	NA	NA	NA	NA	NA	NA
	7/10/1997	NA	NA	NA	NA	NA	NA	NA
	9/14/1997	NA	NA	NA	NA	NA	NA	NA
	1/18/1998	NA	NA	NA	NA	NA	NA	NA
	4/18/1998	< 0.001	< 0.001	0.006	0.013	NA	NA	NA
	9/20/1999	NA	NA	NA	NA	NA	NA	NA
	6/8/2000	NA	NA	NA	NA	NA	NA	NA
	7/24/2001	NA	NA	NA	NA	NA	NA	NA
	3/21/2002	0.0026	<0.00050	0.0017	0.0048	NA	NA	**520**
	3/14/2003*	< 0.001	0.0011	< 0.001	< 0.002	NA	**2,940**	28.2
	6/19/2003	Plugged and Abandoned						
MW-14	11/17/1994	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	12/22/1994	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	2/16/1995	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	6/16/1995	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	10/2/1995	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	11/26/1995	< 0.001	0.0036	0.0017	0.0068	NA	NA	NA
	4/16/1995	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	7/2/1996	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	9/30/1996	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	1/10/1997	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	4/2/1997	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	7/10/1997	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	9/14/1997	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	1/18/1998	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	4/18/1998	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	3/21/2002	< 0.0050	< 0.0050	< 0.0050	0.0011	NA	NA	31
	3/14/2003*	< 0.001	< 0.001	< 0.001	< 0.002	NA	**2,950**	39.1
	7/17/2003	< 0.005	< 0.005	< 0.005	< 0.0015	NA	NA	NA
	3/29/2004*	<0.001	<0.001	<0.001	<0.002	<0.005	**3,000**	38.9
	8/17/2005	Plugged and Abandoned						
Trip Blank	8/17/2005	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA
	10/10/2006	<0.001	<0.001	<0.001	<0.001	NA	NA	NA
	8/12/2008	<0.001	<0.001	<0.001	<0.001	NA	NA	NA
	7/29/2009	<0.00030	<0.00025	<0.00022	<0.00030	NA	NA	NA
	6/10/2010	<0.001	<0.001	<0.001	<0.001	NA	NA	NA
	1/25/2012	<0.00036	<0.00028	<0.00025	<0.00093	NA	NA	NA

mg/L = milligrams per Liter.

NA = Not Analyzed.

See individual laboratory analytical reports for specific analysis methods utilized.

MCLs = Maximum Concentration Levels.

Bold = Indicates concentrations above Human Health Standards per New Mexico Water Quality Control Commission (NMWQCC) Regulations (20.6.2 NMAC) Subpart III, Section 3103.

* - Sampled by RT Hicks Consulting.

Centurion Pipeline L.P.
Artesia Pump Station
Artesia, New Mexico

Table 3
Groundwater Biochemical Compound Data

WellID	Sample Date	Alkalinity, Total as $CaCO_3$ (mg/L)	Iron, Total (mg/L)	Iron, Dissolved (mg/L)	Sulfate (mg/L)	Nitrogen, Nitrate as N (mg/L)	Nitrogen, Nitrate + Nitrite (mg/L)	Nitrogen, Nitrite (mg/L)
MW-1	01-25-12	246	<0.100	<0.100	1830	<0.11[b]	<0.10	<0.010
MW-2R	01-25-12	54.0	204.000	213.000	2830	0.28[b]	0.29	0.013
MW-3R	01-25-12	490	920	163	1700	<1.0[b]	<1.0	<0.010

mg/L - milligrams per liter
Total alkalinity (as CaCO3) - by SM2320B
Sulfate - by SM4500 SO4
Nitrogen, Nitrate - by EPA Method 353.2
Total and dissolved Fe - by EPA Method 6010B
[b] - Calculated as (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Centurion Pipeline L.P.
Artesia Pump Station
Artesia, New Mexico

Table 4
Groundwater Geochemical Data

Well ID	Date	Temperature C°	Conductivity mS/cm	Dissolved Oxygen mg/L	pH	Oxygen Reduction Potential mV
MW-1	07-29-09	25.37	4.196	3.59	6.76	-335.7
	06-10-10	26.05	4.340	0.36	6.68	-373.8
	01-25-12	15.61	3.155	0.16	7.06	-282.3
MW-2R	07-29-09	23.39	5.114	0.17	6.52	-84.3
	06-10-10	21.65	4.891	1.68	6.55	-71.3
	01-25-12	16.18	7.316	1.38	5.56	-127.9
MW-3R	07-29-09	NS	NS	NS	NS	NS
	06-10-10	27.01	6.348	3.28	6.43	-359.6
	01-25-12	13.84	4.556	0.39	6.45	-274.8

C° - degrees Celcius
mS/cm - milliseconds per centimeter
mg/L - milligrams per liter
eV - electrol volts
Readings collected by a YSI Multi-meter
NS - Not sampled
NC - Not collected due to low volume of water
BOLD - Concentration exceeds OCC Tier 1 Screening Level

FIGURES

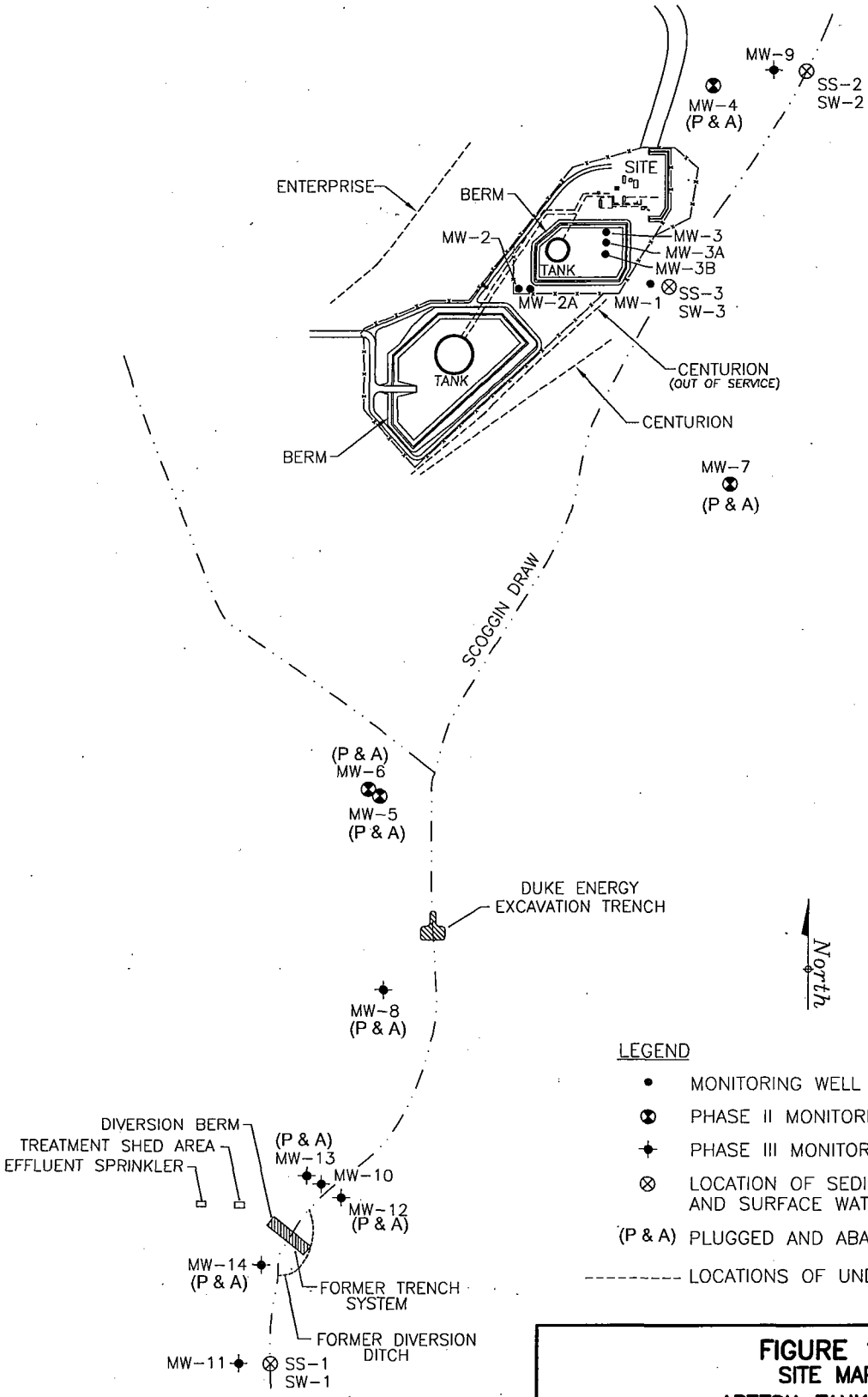


FIGURE 1A
SITE MAP
ARTESIA TANK FARM
CENTURION PIPELINE L.P.
ARTESIA, NEW MEXICO

PROJECT NO.	PREPARED BY	DRAWN BY	
CPNM1	MH	DD	
DATE	REVIEWED BY	FILE NAME	
03/20/12		Artesia-Site	anteagroup

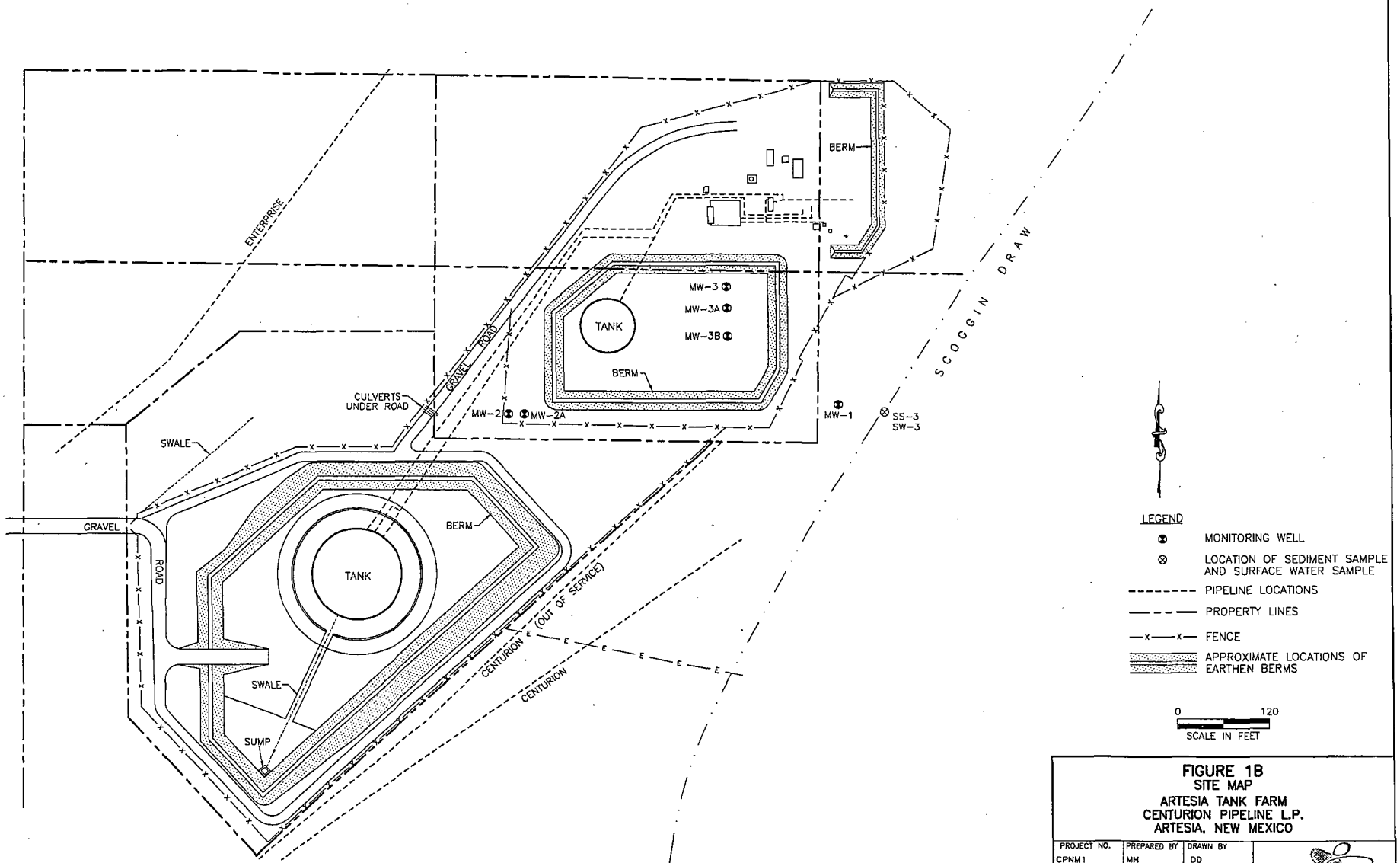
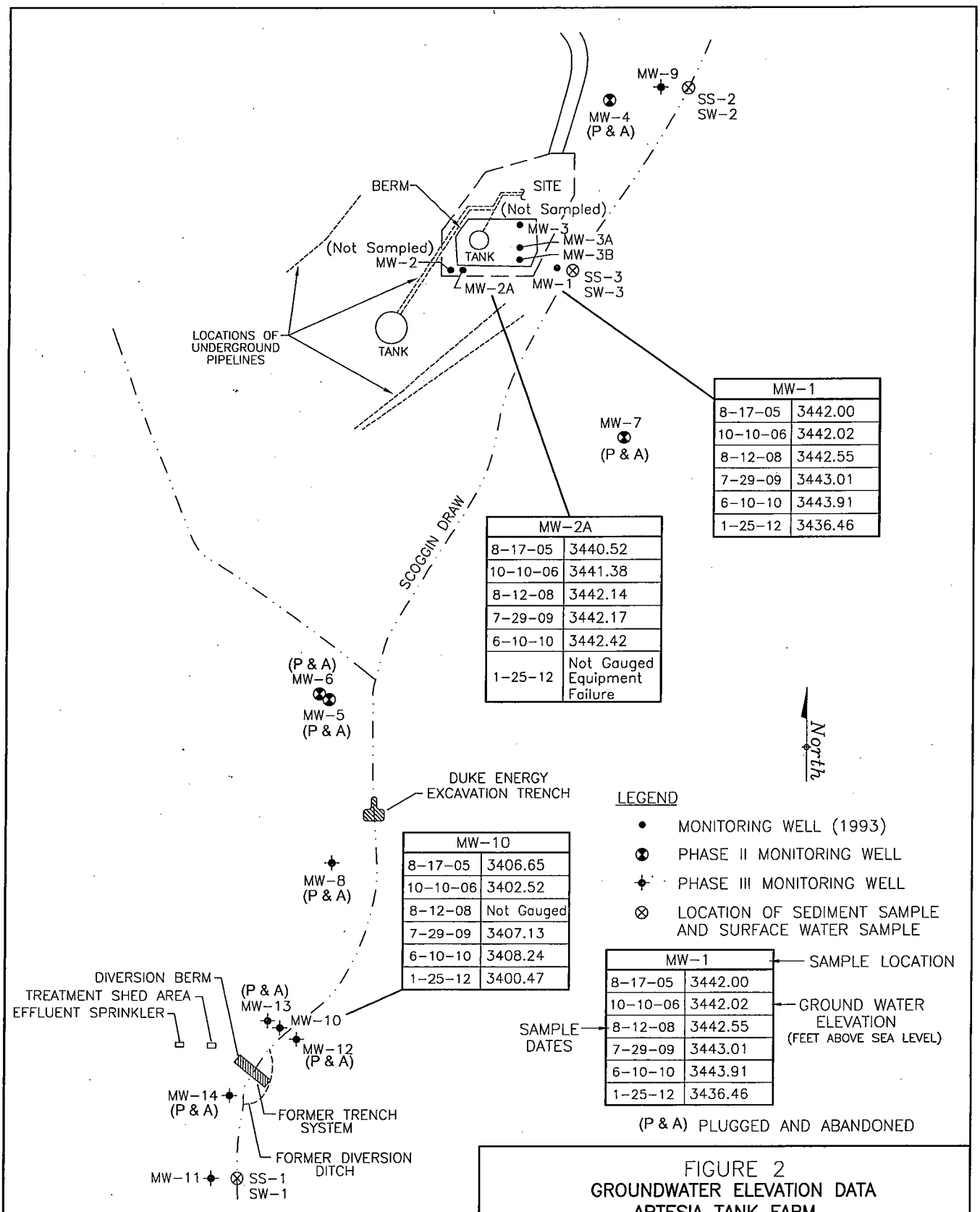


FIGURE 1B
SITE MAP
ARTESIA TANK FARM
CENTURION PIPELINE L.P.
ARTESIA, NEW MEXICO

PROJECT NO.	PREPARED BY	DRAWN BY
CPNM1	MH	DD
DATE	REVIEWED BY	FILE NAME
03/20/12		Artesia-1A

anteagroup



MW-1	
8-17-05	3442.00
10-10-06	3442.02
8-12-08	3442.55
7-29-09	3443.01
6-10-10	3443.91
1-25-12	3436.46

MW-2A	
8-17-05	3440.52
10-10-06	3441.38
8-12-08	3442.14
7-29-09	3442.17
6-10-10	3442.42
1-25-12	Not Gauged Equipment Failure

MW-10	
8-17-05	3406.65
10-10-06	3402.52
8-12-08	Not Gauged
7-29-09	3407.13
6-10-10	3408.24
1-25-12	3400.47

MW-1	
8-17-05	3442.00
10-10-06	3442.02
8-12-08	3442.55
7-29-09	3443.01
6-10-10	3443.91
1-25-12	3436.46

FIGURE 2
GROUNDWATER ELEVATION DATA
ARTESIA TANK FARM
CENTURION PIPELINE L.P.
ARTESIA, NEW MEXICO

PROJECT NO.	PREPARED BY	DRAWN BY
CPNM1	MH	DD
DATE	REVIEWED BY	FILE NAME
03/13/12		Artesia-GW3

anteagroup

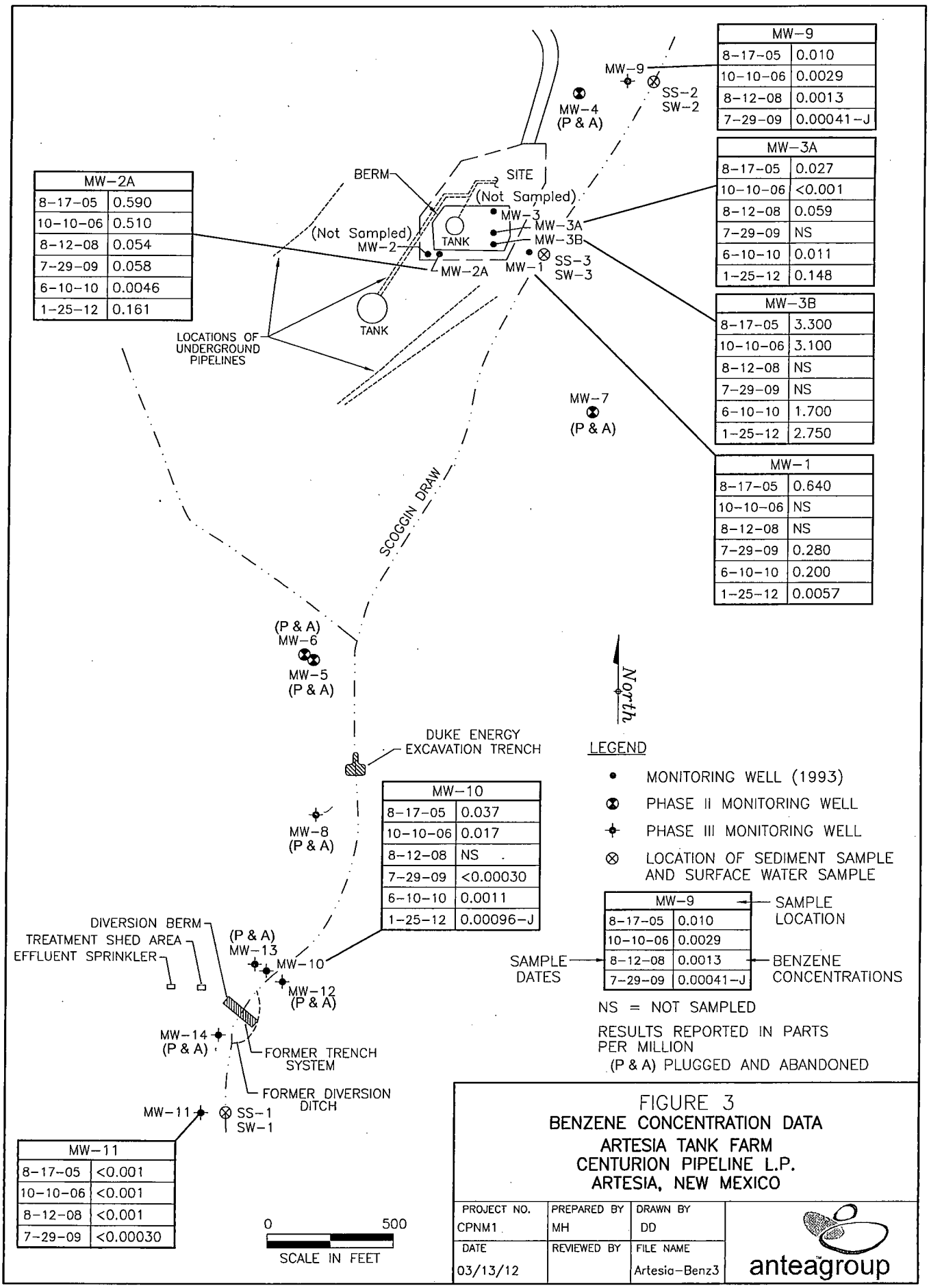


FIGURE 3
BENZENE CONCENTRATION DATA
ARTESIA TANK FARM
CENTURION PIPELINE L.P.
ARTESIA, NEW MEXICO

PROJECT NO.	PREPARED BY	DRAWN BY
CPNM1	MH	DD
DATE	REVIEWED BY	FILE NAME
03/13/12		Artesia-Benz3

anteagroup

APPENDIX A

LABORATORY ANALYTICAL REPORT

Gulf Coast ACCUTEST LABORATORIES

02/08/12

Technical Report for

Antea Group

Artesia Pump Station-CPNM1 / Artesia, NM

CPNM1

Accutest Job Number: T98826

Sampling Dates: 01/24/12 - 01/25/12

Report to:

Antea Group
704 Central PKWY East, #1220
Plano, TX 75074
michael.henn@anteagroup.com

ATTN: Michael Henn

Total number of pages in report: 47

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Paul K Canevaro

Paul Canevaro
Laboratory Director

Client Service contact: Sylvia Garza 713-271-4700

Certifications: TX (T104704220-12-6) AR (11-028-0) AZ (AZ0769) FL (E87628) KS (E-10366) LA (85695/04004) OK (211-035)

Sections: 1 2 3 4 5 6

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Sample Summary

Antea Group

Job No: T98826

Artesia Pump Station-CPNM1 / Artesia, NM
Project No: CPNM1

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
T98826-1	01/25/12	13:15		01/26/12	AQ	Ground Water	MW-1
T98826-1F	01/25/12	13:15		01/26/12	AQ	Groundwater Filtered	MW-1
T98826-2	01/25/12	12:10		01/26/12	AQ	Ground Water	MW-2B
T98826-2F	01/25/12	12:10		01/26/12	AQ	Groundwater Filtered	MW-2B
T98826-3	01/25/12	11:45		01/26/12	AQ	Ground Water	MW-3R
T98826-3F	01/25/12	11:45		01/26/12	AQ	Groundwater Filtered	MW-3R
T98826-4	01/25/12	11:20		01/26/12	AQ	Ground Water	MW-3RS
T98826-5	01/24/12	15:15		01/26/12	AQ	Ground Water	MW-10
T98826-6	01/25/12	14:10		01/26/12	AQ	Ground Water	MW-17
T98826-7	01/25/12	00:00		01/26/12	AQ	Trip Blank Water	TRIP BLANK

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	T98826-1	**Date Sampled:**	01/25/12
Matrix:	AQ - Ground Water	**Date Received:**	01/26/12
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Artesia Pump Station-CPNM1 / Artesia, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004866.D	1	01/30/12	LW	n/a	n/a	GAA208
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.0057	0.0010	0.00036	mg/l	
108-88-3	Toluene	ND	0.0010	0.00028	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00025	mg/l	
1330-20-7	Xylenes (total)	0.0490	0.0030	0.00093	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	133% [a]		58-125%
98-08-8	aaa-Trifluorotoluene	90%		73-139%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	T98826-1	**Date Sampled:**	01/25/12
Matrix:	AQ - Ground Water	**Date Received:**	01/26/12
		Percent Solids:	n/a
Project:	Artesia Pump Station-CPNM1 / Artesia, NM		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	< 100	100	ug/l	1	01/27/12	01/31/12	NS	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA6450
(2) Prep QC Batch: MP16695

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	T98826-1	**Date Sampled:**	01/25/12
Matrix:	AQ - Ground Water	**Date Received:**	01/26/12
		Percent Solids:	n/a
Project:	Artesia Pump Station-CPNM1 / Artesia, NM		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	246	5.0	mg/l	1	01/31/12 12:00	RA	SM 2320B
Nitrogen, Nitrate [a]	< 0.11	0.11	mg/l	1	01/28/12 12:31	CV	EPA 353.2
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	01/28/12 12:31	CV	EPA 353.2
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	01/26/12 13:34	CV	EPA 353.2
Sulfate	1830	40	mg/l	4	02/06/12 11:00	SS	SM 4500 SO4

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	T98826-1F	**Date Sampled:**	01/25/12
Matrix:	AQ - Groundwater Filtered	**Date Received:**	01/26/12
		Percent Solids:	n/a
Project:	Artesia Pump Station-CPNM1 / Artesia, NM		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	< 100	100	ug/l	1	01/27/12	01/27/12	NS	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA6440
(2) Prep QC Batch: MP16693

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-2B		
Lab Sample ID:	T98826-2	**Date Sampled:**	01/25/12
Matrix:	AQ - Ground Water	**Date Received:**	01/26/12
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Artesia Pump Station-CPNM1 / Artesia, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004849.D	1	01/30/12	LW	n/a	n/a	GAA208
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.161	0.0010	0.00036	mg/l	
108-88-3	Toluene	ND	0.0010	0.00028	mg/l	
100-41-4	Ethylbenzene	0.0103	0.0010	0.00025	mg/l	
1330-20-7	Xylenes (total)	0.151	0.0030	0.00093	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	245% [a]		58-125%
98-08-8	aaa-Trifluorotoluene	168% [a]		73-139%

(a) Outside control limits due to matrix interference. Confirmed by MS/MSD.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-2B		
Lab Sample ID:	T98826-2	**Date Sampled:**	01/25/12
Matrix:	AQ - Ground Water	**Date Received:**	01/26/12
		Percent Solids:	n/a
Project:	Artesia Pump Station-CPNM1 / Artesia, NM		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	204000	100	ug/l	1	01/27/12	01/31/12	NS	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA6450
(2) Prep QC Batch: MP16695

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-2B		
Lab Sample ID:	T98826-2	**Date Sampled:**	01/25/12
Matrix:	AQ - Ground Water	**Date Received:**	01/26/12
		Percent Solids:	n/a
Project:	Artesia Pump Station-CPNM1 / Artesia, NM		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	54.0	5.0	mg/l	1	01/31/12 12:00	RA	SM 2320B
Nitrogen, Nitrate [a]	0.28	0.11	mg/l	1	01/28/12 12:33	CV	EPA 353.2
Nitrogen, Nitrate + Nitrite	0.29	0.10	mg/l	1	01/28/12 12:33	CV	EPA 353.2
Nitrogen, Nitrite	0.013	0.010	mg/l	1	01/26/12 13:35	CV	EPA 353.2
Sulfate	2830	40	mg/l	4	02/06/12 11:00	SS	SM 4500 SO4

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-2B		
Lab Sample ID:	T98826-2F	**Date Sampled:**	01/25/12
Matrix:	AQ - Groundwater Filtered	**Date Received:**	01/26/12
		Percent Solids:	n/a
Project:	Artesia Pump Station-CPNM1 / Artesia, NM		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	213000	100	ug/l	1	01/27/12	01/27/12	NS	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA6440
(2) Prep QC Batch: MP16693

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-3R		
Lab Sample ID:	T98826-3	**Date Sampled:**	01/25/12
Matrix:	AQ - Ground Water	**Date Received:**	01/26/12
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Artesia Pump Station-CPNM1 / Artesia, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004910.D	25	02/01/12	LW	n/a	n/a	GAA211
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	2.75	0.025	0.0090	mg/l	
108-88-3	Toluene	0.190	0.025	0.0071	mg/l	
100-41-4	Ethylbenzene	0.409	0.025	0.0063	mg/l	
1330-20-7	Xylenes (total)	0.812	0.075	0.023	mg/l	
1634-04-4	Methyl Tert Butyl Ether [a]	0.0270	0.025	0.0044	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	113%		58-125%
98-08-8	aaa-Trifluorotoluene	105%		73-139%

(a) More than 40% RPD for detected concentrations between two GC columns.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-3R		
Lab Sample ID:	T98826-3	**Date Sampled:**	01/25/12
Matrix:	AQ - Ground Water	**Date Received:**	01/26/12
		Percent Solids:	n/a
Project:	Artesia Pump Station-CPNM1 / Artesia, NM		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	920	100	ug/l	1	01/27/12	01/31/12	NS	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA6450
(2) Prep QC Batch: MP16695

RL = *Reporting Limit*

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-3R		
Lab Sample ID:	T98826-3	**Date Sampled:**	01/25/12
Matrix:	AQ - Ground Water	**Date Received:**	01/26/12
		Percent Solids:	n/a
Project:	Artesia Pump Station-CPNM1 / Artesia, NM		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	490	5.0	mg/l	1	01/31/12 12:00	RA	SM 2320B
Nitrogen, Nitrate [a]	< 1.0	1.0	mg/l	1	01/28/12 13:00	CV	EPA 353.2
Nitrogen, Nitrate + Nitrite	< 1.0	1.0	mg/l	10	01/28/12 13:00	CV	EPA 353.2
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	01/26/12 13:36	CV	EPA 353.2
Sulfate	1700	40	mg/l	4	02/06/12 11:00	SS	SM 4500 SO4

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-3R		
Lab Sample ID:	T98826-3F	**Date Sampled:**	01/25/12
Matrix:	AQ - Groundwater Filtered	**Date Received:**	01/26/12
		Percent Solids:	n/a
Project:	Artesia Pump Station-CPNM1 / Artesia, NM		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	163	100	ug/l	1	01/27/12	01/27/12	NS	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA6440
(2) Prep QC Batch: MP16693

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-3RS		
Lab Sample ID:	T98826-4	**Date Sampled:**	01/25/12
Matrix:	AQ - Ground Water	**Date Received:**	01/26/12
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Artesia Pump Station-CPNM1 / Artesia, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004911.D	1	02/01/12	LW	n/a	n/a	GAA211
Run #2 [a]	AA004870.D	1	01/30/12	LW	n/a	n/a	GAA208

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.148	0.0010	0.00036	mg/l	
108-88-3	Toluene [b]	0.0015	0.0010	0.00028	mg/l	
100-41-4	Ethylbenzene	0.0191	0.0010	0.00025	mg/l	
1330-20-7	Xylenes (total)	0.320	0.0030	0.00093	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	193% [c]	182% [c]	58-125%
98-08-8	aaa-Trifluorotoluene	92%	89% [c]	73-139%

(a) Confirmation run for surrogate recoveries.
(b) More than 40% RPD for detected concentrations between two GC columns.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-10		
Lab Sample ID:	T98826-5	**Date Sampled:**	01/24/12
Matrix:	AQ - Ground Water	**Date Received:**	01/26/12
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Artesia Pump Station-CPNM1 / Artesia, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004912.D	1	02/01/12	LW	n/a	n/a	GAA211
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene [a]	0.00096	0.0010	0.00036	mg/l	J
108-88-3	Toluene [a]	0.00046	0.0010	0.00028	mg/l	J
100-41-4	Ethylbenzene [a]	0.00028	0.0010	0.00025	mg/l	J
1330-20-7	Xylenes (total) [a]	0.0020	0.0030	0.00093	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	102%		58-125%
98-08-8	aaa-Trifluorotoluene	90%		73-139%

(a) More than 40% RPD for detected concentrations between two GC columns.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-17		
Lab Sample ID:	T98826-6	**Date Sampled:**	01/25/12
Matrix:	AQ - Ground Water	**Date Received:**	01/26/12
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Artesia Pump Station-CPNM1 / Artesia, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004913.D	1	02/01/12	LW	n/a	n/a	GAA211
Run #2 [a]	AA004872.D	1	01/30/12	LW	n/a	n/a	GAA208

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.116	0.0010	0.00036	mg/l	
108-88-3	Toluene	0.0022	0.0010	0.00028	mg/l	
100-41-4	Ethylbenzene	0.0076	0.0010	0.00025	mg/l	
1330-20-7	Xylenes (total)	0.117	0.0030	0.00093	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	133% [b]	153% [b]	58-125%
98-08-8	aaa-Trifluorotoluene	96%	99%	73-139%

(a) Confirmation run for surrogate recoveries.
(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	T98826-7	**Date Sampled:**	01/25/12
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/26/12
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Artesia Pump Station-CPNM1 / Artesia, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004916.D	1	02/01/12	LW	n/a	n/a	GAA211
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00036	mg/l	
108-88-3	Toluene	ND	0.0010	0.00028	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00025	mg/l	
1330-20-7	Xylenes (total)	ND	0.0030	0.00093	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%		58-125%
98-08-8	aaa-Trifluorotoluene	89%		73-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Gulf Coast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories
10165 Harwin Dr, Ste 150 Houston, TX 77036
TEL. 713-271-4700 FAX: 713-271-4770
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: T98826

Client / Reporting Information

Company Name: Antea Group
Street Address: ~~9009 Mountain Ridge Drive, Suite 110~~ See billing
City: ~~Austin~~ State: ~~TX~~ Zip: ~~78759~~
Project Contact: Michael Henn E-mail: michael.henn@anteagroup.com
Phone #: 972-665-0528 Fax #:
Sampler(s) Name(s): Michael Henn Phone #: 9726650528

Project Information

Project Name: Artesia Pump Station-CPNM1
Street:
City: Artesia State: NM
Project #: CPNM1
Client Purchase Order #:
Project Manager: Michael Henn

Billing Information (if different from Report to)

Company Name: Antea Group
Street Address: 704 Central Pkwy East, #1220
City: Plano State: TX Zip: 75074
Attention: Michael Henn

Requested Analyses

Accutest Sample #	Field ID / Point of Collection	Collection: Date	Time	Sampled By	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	Unpres	HNO3	H2SO4	NONE	DI Water	MEOH	TSP	NaHSO4	ENCORE	OTHER	BTEX (8021)	Sulfate (375.4)	Nitrate (353.1) SHORT HOLD	Alkalinity	Total Iron (6010)	Dissolved Iron (6010) LAB FILTER	Matrix Codes / LAB USE ONLY
1	MW-1	1-25-12	1315	MH	W	6	X			X		X							X	X	X	X	X	X	
2	MW-2B	1-25-12	1210	MH	W	6	X			X		X							X	X	X	X	X	X	
3	MW-3R	1-25-12	1145	MH	W	6	X			X		X							X	X	X	X	X	X	
4	MW-3RS	1-25-12	1120	MH	W	3	X			X		X							X						
5	MW-10	1-24-12	1515	MH	W	3	X			X		X							X						
6	MW-17	1-25-12	1410	MH	W	3	X			X		X							X						
7	Trip Blank	—			W	2													X						

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank

Turnaround Time (Business days)

- [X] Standard
- [ ] 5 Day *RUSH*
- [ ] 4 Day *RUSH*
- [ ] 3 Day *RUSH*
- [ ] 2 Day *RUSH*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Labtink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULT1 (Level 3+4)
- [ ] REDT1 (Level 3+4)
- [X] Commercial "C"
- [ ] TRRP
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC & Surrogate Summary

Comments / Special Instructions

AESTXAU

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	1-25-12/1627		2	1/26/12	2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal #	Intact / Not Intact	Preserved where applicable	On Ice	Cooler Temp.
6		5					

3.1

T98826: Chain of Custody
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ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: T98826 **Client:** ANTEA GROUP **Project:** ARTESIA PUMP STATION-CPNM1

Date / Time Received: 1/26/2012 **Delivery Method:** **Airbill #'s:** 515585092158

No. Coolers: 1 **Therm ID:** 110; **Temp Adjustment Factor:** -0.3;

Cooler Temps (Initial/Adjusted): #1: (1.4/1.1);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Glass Thermometer		
3. Cooler media:	Ice (Bag)		

Quality Control Preservation	Y	or	N	N/A	WTB	STB
1. Trip Blank present / cooler:	☑		☐	☐	☑	☐
2. Trip Blank listed on COC:	☑		☐	☐		
3. Samples preserved properly:	☑		☐			
4. VOCs headspace free:	☑		☐	☐		

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

T98826: Chain of Custody
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ACCUTEST LABORATORIES

Sample Receipt Log

Job #: T98826 **Date / Time Received:** 1/26/2012 9:45:00 AM **Initials:** BG

Client: ANTEA GROUP

3.1

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	T98826-1	1000 ml	1	3I	N/P	Note #2 - Preservative check not applicable.	110	1.4	-0.3	1.1
1	T98826-1	500 ml	2	M3D	N/P	Note #2 - Preservative check not applicable.	110	1.4	-0.3	1.1
1	T98826-1	250 ml	3	M3D	HNO3	pH < 2	110	1.4	-0.3	1.1
1	T98826-1	40 ml	4	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	110	1.4	-0.3	1.1
1	T98826-1	40 ml	5	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	110	1.4	-0.3	1.1
1	T98826-1	40 ml	6	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	110	1.4	-0.3	1.1
1	T98826-2	1000 ml	1	3I	N/P	Note #2 - Preservative check not applicable.	110	1.4	-0.3	1.1
1	T98826-2	500 ml	2	M3D	N/P	Note #2 - Preservative check not applicable.	110	1.4	-0.3	1.1
1	T98826-2	250 ml	3	M3D	HNO3	pH < 2	110	1.4	-0.3	1.1
1	T98826-2	40 ml	4	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	110	1.4	-0.3	1.1
1	T98826-2	40 ml	5	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	110	1.4	-0.3	1.1
1	T98826-2	40 ml	6	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	110	1.4	-0.3	1.1
1	T98826-3	1000 ml	1	3I	N/P	Note #2 - Preservative check not applicable.	110	1.4	-0.3	1.1
1	T98826-3	500 ml	2	M3D	N/P	Note #2 - Preservative check not applicable.	110	1.4	-0.3	1.1
1	T98826-3	250 ml	3	M3D	HNO3	pH < 2	110	1.4	-0.3	1.1
1	T98826-3	40 ml	4	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	110	1.4	-0.3	1.1
1	T98826-3	40 ml	5	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	110	1.4	-0.3	1.1
1	T98826-3	40 ml	6	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	110	1.4	-0.3	1.1
1	T98826-4	40 ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	110	1.4	-0.3	1.1
1	T98826-4	40 ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	110	1.4	-0.3	1.1
1	T98826-4	40 ml	3	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	110	1.4	-0.3	1.1
1	T98826-5	40 ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	110	1.4	-0.3	1.1
1	T98826-5	40 ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	110	1.4	-0.3	1.1

T98826: Chain of Custody
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GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T98826
Account: AESTXAU Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAA208-MB	AA004847.D	1	01/30/12	LW	n/a	n/a	GAA208

The QC reported here applies to the following samples: **Method:** SW846 8021B

T98826-1, T98826-2, T98826-4, T98826-6

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.36	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
108-88-3	Toluene	ND	1.0	0.28	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	0.93	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	112%	58-125%
98-08-8	aaa-Trifluorotoluene	113%	73-139%

Method Blank Summary

Job Number: T98826
Account: AESTXAU Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAA211-MB	AA004905.D	1	02/01/12	LW	n/a	n/a	GAA211

The QC reported here applies to the following samples: **Method:** SW846 8021B

T98826-3, T98826-4, T98826-5, T98826-6, T98826-7

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.36	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.17	ug/l	
108-88-3	Toluene	ND	1.0	0.28	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	0.93	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	114%	58-125%
98-08-8	aaa-Trifluorotoluene	109%	73-139%

Blank Spike Summary

Job Number: T98826
Account: AESTXAU Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAA208-BS	AA004846.D	1	01/30/12	LW	n/a	n/a	GAA208

The QC reported here applies to the following samples: **Method:** SW846 8021B

T98826-1, T98826-2, T98826-4, T98826-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	21.9	110	86-121
100-41-4	Ethylbenzene	20	22.1	111	81-116
108-88-3	Toluene	20	22.0	110	87-117
1330-20-7	Xylenes (total)	60	64.4	107	85-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	113%	58-125%
98-08-8	aaa-Trifluorotoluene	108%	73-139%

Blank Spike Summary

Job Number: T98826
Account: AESTXAU Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAA211-BS	AA004904.D	1	02/01/12	LW	n/a	n/a	GAA211

The QC reported here applies to the following samples: **Method:** SW846 8021B

T98826-3, T98826-4, T98826-5, T98826-6, T98826-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.7	104	86-121
100-41-4	Ethylbenzene	20	20.8	104	81-116
1634-04-4	Methyl Tert Butyl Ether	20	20.9	105	79-120
108-88-3	Toluene	20	20.7	104	87-117
1330-20-7	Xylenes (total)	60	60.5	101	85-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	114%	58-125%
98-08-8	aaa-Trifluorotoluene	102%	73-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T98826
Account: AESTXAU Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T98826-2MS	AA004850.D	1	01/30/12	LW	n/a	n/a	GAA208
T98826-2MSD	AA004851.D	1	01/30/12	LW	n/a	n/a	GAA208
T98826-2	AA004849.D	1	01/30/12	LW	n/a	n/a	GAA208

The QC reported here applies to the following samples: **Method:** SW846 8021B

T98826-1, T98826-2, T98826-4, T98826-6

CAS No.	Compound	T98826-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	161		20	209	240* [a]	199	190* [a]	5	86-121/19
100-41-4	Ethylbenzene	10.3		20	42.4	161*	42.1	159*	1	81-116/14
108-88-3	Toluene	ND		20	30.1	151*	29.9	150*	1	87-117/16
1330-20-7	Xylenes (total)	151		60	259	180* [a]	254	172* [a]	2	85-115/12

CAS No.	Surrogate Recoveries	MS	MSD	T98826-2	Limits
460-00-4	4-Bromofluorobenzene	262%* [b]	263%* [b]	245%* [b]	58-125%
98-08-8	aaa-Trifluorotoluene	156%* [b]	168%* [b]	168%* [b]	73-139%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Outside control limits due to matrix interference. Confirmed by MS/MSD.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T98826
Account: AESTXAU Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T99181-1MS	AA004920.D	5	02/01/12	LW	n/a	n/a	GAA211
T99181-1MSD	AA004921.D	5	02/01/12	LW	n/a	n/a	GAA211
T99181-1	AA004906.D	5	02/01/12	LW	n/a	n/a	GAA211

The QC reported here applies to the following samples: **Method:** SW846 8021B

T98826-3, T98826-4, T98826-5, T98826-6, T98826-7

CAS No.	Compound	T99181-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	265		100	392	106	387	101	1	86-121/19
100-41-4	Ethylbenzene	51.2		100	161	108	157	104	3	81-116/14
1634-04-4	Methyl Tert Butyl Ether	ND		100	126	126*	124	124*	2	79-120/26
108-88-3	Toluene	535		100	676	113	664	101	2	87-117/16
1330-20-7	Xylenes (total)	265		300	588	101	580	98	1	85-115/12

CAS No.	Surrogate Recoveries	MS	MSD	T99181-1	Limits
460-00-4	4-Bromofluorobenzene	131%* [a]	128%* [a]	104%	58-125%
98-08-8	aaa-Trifluorotoluene	109%	108%	105%	73-139%

(a) Outside control limits due to high level in sample relative to spike amount.

Gulf Coast ACCUTEST LABORATORIES

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: T98826
Account: AESTXAU - Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

QC Batch ID: MP16693
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/27/12

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	6.9	12		
Antimony	5.0	.56	1		
Arsenic	5.0	1	1		
Barium	200	.16	3.4		
Beryllium	4.0	.1	.16		
Boron	100	.39	7.8		
Cadmium	4.0	.15	.09		
Calcium	5000	4	25		
Chromium	10	.22	.27		
Cobalt	50	.25	.22		
Copper	20	.24	5.9		
Iron	100	4.6	23	4.2	<100
Lead	3.0	.65	1.8		
Lithium	300	.65	2		
Magnesium	5000	7.7	7.9		
Manganese	15	.09	1.9		
Molybdenum	10	.62	.2		
Nickel	40	.22	1.4		
Potassium	5000	7.6	45		
Selenium	5.0	1.2	.98		
Silver	10	.2	.24		
Sodium	5000	5.7	100		
Strontium	10	.07	.4		
Thallium	10	.83	1.2		
Tin	20	.67	2.8		
Titanium	20	.19	.3		
Vanadium	50	.18	.3		
Zinc	20	.13	3.5		

Associated samples MP16693: T98826-1F, T98826-2F, T98826-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

5.1.1

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: T98826
Account: AESTXAU - Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

QC Batch ID: MP16693
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/27/12 01/27/12

Metal	T98826-1F Original	DUP	RPD	QC Limits	T98826-1F Original	MS	Spikelot MPTW4	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron	53.5	44.8	17.7	0-20	53.5	51900	50000	103.7	75-125
Lead									
Lithium									
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP16693: T98826-1F, T98826-2F, T98826-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

5.1.2

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: T98826
Account: AESTXAU - Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

QC Batch ID: MP16693
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/27/12

Metal	T98826-1F Original	MSD	Spikelot MPTW4	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron	53.5	51700	50000	103.3	0.4	20
Lead						
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP16693: T98826-1F, T98826-2F, T98826-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

5.1.2

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: T98826
Account: AESTXAU - Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

QC Batch ID: MP16693
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/27/12

Metal	BSP Result	Spikelot MPTW4	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	53800	50000	107.6	80-120
Lead				
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP16693: T98826-1F, T98826-2F, T98826-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

5.1.3

SERIAL DILUTION RESULTS SUMMARY

Login Number: T98826
Account: AESTXAU - Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

QC Batch ID: MP16693
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/27/12

Metal	T98826-1F Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	53.5	64.4	20.3 (a)	0-10
Lead				
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP16693: T98826-1F, T98826-2F, T98826-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

5.1.4

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: T98826
Account: AESTXAU - Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

QC Batch ID: MP16695
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/27/12

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	6.9	12		
Antimony	5.0	.56	1		
Arsenic	5.0	1	1		
Barium	200	.16	3.4		
Beryllium	4.0	.1	.16		
Boron	100	.39	7.8		
Cadmium	4.0	.15	.09		
Calcium	5000	4	25		
Chromium	10	.22	.27		
Cobalt	50	.25	.22		
Copper	20	.24	5.9		
Iron	100	4.6	23	0.14	<100
Lead	3.0	.65	1.8		
Lithium	300	.65	2		
Magnesium	5000	7.7	7.9		
Manganese	15	.09	1.9		
Molybdenum	10	.62	.2		
Nickel	40	.22	1.4		
Potassium	5000	7.6	45		
Selenium	5.0	1.2	.98		
Silver	10	.2	.24		
Sodium	5000	5.7	100		
Strontium	10	.07	.4		
Thallium	10	.83	1.2		
Tin	20	.67	2.8		
Titanium	20	.19	.3		
Vanadium	50	.18	.3		
Zinc	20	.13	3.5		

Associated samples MP16695: T98826-1, T98826-2, T98826-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

5.2.1

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: T98826
Account: AESTXAU - Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

QC Batch ID: MP16695
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/27/12 01/27/12

Metal	T98708-1 Original	DUP	RPD	QC Limits	T98708-1 Original	MS	Spikelot MPTW4	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Iron	58500	58400	0.2	0-20	58500	103000	50000	89.0	75-125
Lead	anr								
Lithium									
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP16695: T98826-1, T98826-2, T98826-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

5.2.2

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: T98826
Account: AESTXAU - Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

QC Batch ID: MP16695
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/27/12

Metal	T98708-1 Original	MSD	Spikelot MPTW4	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	anr					
Barium	anr					
Beryllium						
Boron						
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt						
Copper						
Iron	58500	105000	50000	93.0	1.9	20
Lead	anr					
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP16695: T98826-1, T98826-2, T98826-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

5.2.2

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: T98826
Account: AESTXAU - Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

QC Batch ID: MP16695
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/27/12

Metal	BSP Result	Spikelot MPTW4	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron	52200	50000	104.4	80-120
Lead	anr			
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP16695: T98826-1, T98826-2, T98826-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

5.2.3

SERIAL DILUTION RESULTS SUMMARY

Login Number: T98826
Account: AESTXAU - Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

QC Batch ID: MP16695
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/27/12

Metal	T98708-1 Original	SDL 10:50%DIF		QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron	58500	62000	6.0	0-10
Lead	anr			
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP16695: T98826-1, T98826-2, T98826-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

5.2.4

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T98826
Account: AESTXAU - Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN39029	5.0	2.0	mg/l	100	92.0	92.0	80-120%
Nitrogen, Nitrate + Nitrite	GP17333/GN38988	0.10	0.0	mg/l	1	1.03	103.0	90-110%
Nitrogen, Nitrite	GP17329/GN38984	0.010	0.0	mg/l	0.1	0.0960	96.0	90-110%
Sulfate	GP17457/GN39170	10	0.0	mg/l	100	97.5	97.5	80-120%

Associated Samples:
Batch GN39029: T98826-1, T98826-2, T98826-3
Batch GP17329: T98826-1, T98826-2, T98826-3
Batch GP17333: T98826-1, T98826-2, T98826-3
Batch GP17457: T98826-1, T98826-2, T98826-3
(*) Outside of QC limits

6.1

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T98826
Account: AESTXAU - Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN39029	T98826-1	mg/l	246	245	0.4	0-10%
Nitrogen, Nitrate + Nitrite	GP17333/GN38988	T97931-15	mg/l	0.030 U	0.0	0.0	0-20%
Nitrogen, Nitrite	GP17329/GN38984	T98826-1	mg/l	0.0040	0.0	200.0(a)	0-20%
Sulfate	GP17457/GN39170	T99557-1	mg/l	797	796	0.3	0-20%

Associated Samples:
Batch GN39029: T98826-1, T98826-2, T98826-3
Batch GP17329: T98826-1, T98826-2, T98826-3
Batch GP17333: T98826-1, T98826-2, T98826-3
Batch GP17457: T98826-1, T98826-2, T98826-3
(*) Outside of QC limits
(a) RPD acceptable due to low duplicate and sample concentrations.

6.2

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T98826
Account: AESTXAU - Antea Group
Project: Artesia Pump Station-CPNM1 / Artesia, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Alkalinity, Total as CaCO3	GN39029	T98826-1	mg/l	246	25	270	96.0	79-122%
Nitrogen, Nitrate + Nitrite	GP17333/GN38988	T97931-15	mg/l	0.030 U	1	1.0	100.0	90-110%
Nitrogen, Nitrite	GP17329/GN38984	T98826-1	mg/l	0.0040	0.1	0.094	90.0	90-110%
Sulfate	GP17457/GN39170	T99557-1	mg/l	797	25	819	92.2	75-125%

Associated Samples:
Batch GN39029: T98826-1, T98826-2, T98826-3
Batch GP17329: T98826-1, T98826-2, T98826-3
Batch GP17333: T98826-1, T98826-2, T98826-3
Batch GP17457: T98826-1, T98826-2, T98826-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

6.3