## GW - 25

# MONITORING REPORTS

## DATE: 2006 to Present



September 29, 2008

#### VIA: CERTIFIED MAIL

Mr. Wayne Price, Chief Environmental Bureau New Mexico Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, New Mexico 87505

#### Re: 2007 Groundwater Monitoring Report, Targa Midstream Services, L.P., Monument Gas Plant (GW-025), Lea County, New Mexico

Dear Mr. Price:

The enclosed report is submitted to the New Mexico Oil Conservation Division (OCD) on behalf of Targa Midstream Services, L.P. (Targa) by Larson & Associates, Inc. (LAI), its consultant, and presents the results of groundwater monitoring for the Monument Gas Plant (GW-025) during 2007. Please call Mr. Cal Wrangham at (432) 688-0542 or myself at (432) 687-0901. You may also contact us by e-mail at <u>cwrangham@targaresources.com</u> or m<u>ark@laenvironmental.com</u>. Sincerely,

Larson & Associates, Inc.

Mark J. Larson, P.G., C.P.G., C.G.W.P. Sr. Project Manager/President

Encl.

cc: Cal Wrangham/Targa Todd Young/Targa Charlie Hayes/Targa Larry Johnson/OCD - District 1 RECEIVED 2008 OCT 3 PM 1 53

#### 2007

#### GROUNDWATER MONITORING REPORT MONUMENT GAS PLANT (GW-0025) LEA COUNTY, NEW MEXICO

**Prepared for:** 

Targa Midstream Services, L.P. P.O. Box 67 Monument, New Mexico 88265 (575) 393-2823

Prepared by:

Larson & Associates, Inc. 507 North Marienfeld Street Suite 202 Midland, Texas 79701 (432) 687-0901

**September 29, 2008** 

Mark J. Larson, P.G., C.P.G., C.G.W.P.



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Targa Midstream Services, L.P. 2007 Annual Groundwater Monitoring Report Monument Gas Plant (GW-025) Lea County, New Mexico September 29, 2008

#### **1.0 INTRODUCTION**

Targa Midstream Services, L.P. (Targa), as successor-company to Dynegy Midstream Services, L.P. (Dynegy), has retained Larson & Associates, Inc. (LAI) to conduct groundwater monitoring at the Monument Gas Plant (Facility) located in Lea County, New Mexico. The Facility is located about 2.6 miles southeast of Monument, New Mexico, in unit N (SE/4, SW/4), Section 36, Township 19 South, Range 36 East. The latitude and longitude is north 32° 36' 37.9" and west 103° 18' 44.1", respectively. The Facility operates under New Mexico Oil Conservation Division (OCD) discharge permit GW-025 that requires the Facility to conduct groundwater monitoring on a quarterly (4 times per year) schedule. Figure 1 presents a location and topographic map. Figure 2 presents a Facility drawing.

#### 1.1 Background

On March 5, 1998, the OCD approved a request to modify the groundwater monitoring program for the Facility, including:

- Measure depth-to-groundwater and phase-separated hydrocarbons (PSH) in twelve (12) monitoring wells (WP-1, WP-2, WP-4, WP-5, WP-6, WP-7, WP-10, WP-11, WP-12, WP-13, WP-14 and WP-15) each quarter (4 times per year);
- Collect and analyze groundwater samples from six (6) monitoring wells (WP-1, WP-5, WP-6, WP-7, WP-13 and WP-14) during the second (2<sup>nd</sup>) quarter (April through June) for benzene, toluene, ethylbenzene, xylenes (BTEX), dissolved metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver), chloride, sulfate and total dissolved solids (TDS);
- Collect and analyze groundwater samples from three (3) monitoring wells (WP-1, WP-5 and WP-14) during the fourth (4<sup>th</sup>) quarter (October through December) for BTEX, chloride, sulfate and TDS; and
- Prepare an annual report.

#### 2.0 GROUNDWATER MONITORING

#### 2.1 Depth-to-Groundwater and Phase-Separated Hydrocarbon Measurements

Depth-to-groundwater and phase-separated hydrocarbons (PSH) were measured in all monitoring wells, excluding WP-3, WP-8 and WP-9, on February 21, 2007, June 12, 2007, September 20, 2007 and December 5, 2007. Wells WP-3, WP-8 and WP-9 are used for cathodic (corrosion) protection and have no access for gauging depth-to-groundwater and PSH. Well WP-2 was dry during the 3<sup>rd</sup> (September 20, 2007) and 4<sup>th</sup> (December 5, 2007) quarterly monitoring events. The depth-to-groundwater and PSH measurements were collected at the top of the PVC well casing using an electronic interface probe. The measurements were recorded in a bound field notebook and the interface probe was thoroughly cleaned between wells using a solution of laboratory-grade detergent and water, and rinsed with distilled water. Table 1 presents a summary of the depth-to-groundwater and PSH measurements.

Referring to Table 1, PSH was observed in wells WP-6 (0.05 feet) on February 21, 2007, and WP-6 (0.31 feet) and WP-17 (0.01 feet) on June 12, 2007. No PSH was observed in the monitoring wells on September 20, 2007 and December 5, 2007. No significant change was noted in distribution and thickness of PSH compared to the previous monitoring period. No PSH recovery was performed during the current reporting period, but PSH will be monitored and recovery will resume based on observed thickness.

Depth-to-groundwater increased in most wells during the current reporting period and represents lowering of the water table. The depth-to-groundwater increased between about 0.49 feet (WP-2) and 2.18 feet (WP-14) and is likely due to a lack of recharge from precipitation. The groundwater flow direction and gradient remained consistent from northwest to southeast at approximately 0.006 feet per foot. Figure 3 through Figure 6 present groundwater potentiometric maps for February 21, 2007, June 12, 2007, September 20, 2007, and December 5, 2007, respectively.

#### 2.2 Groundwater Samples

Groundwater samples were collected from the monitoring wells during the second (2<sup>nd</sup>) quarter on June 12 and 13, 2007 and fourth (4<sup>th</sup>) quarter on December 5 and 6, 2007. The samples were analyzed for BTEX, dissolved metals, anions, cations and TDS after the wells were purged of approximately three (3) casing-volumes of groundwater or until dry using dedicated disposable polyethylene bailers. The purged water was contained in a portable tank and discharged into the Facility's waste water system for disposal in an OCD permitted disposal well. The groundwater samples were carefully poured from the dedicated bailers into laboratory containers that were preserved, labeled, chilled in an ice chest and hand delivered under chain-of-custody control to DHL Analytical, Inc. (DHL) located in Round Rock, Texas. The metals samples were filtered by the laboratory upon arrival. General chemistry samples (anions, cations and TDS) were not collected from wells WP-17 (December 13, 2007) and WP-18 (June 13, 2007) due inadequate water volume. Table 2 presents a summary of the BTEX analysis. Table 3 presents a summary of the dissolved metals analysis. Table 4 presents a summary of the general chemistry analysis. Appendix A presents the laboratory reports.

#### 2.2.1 Organics Analysis

On June 12 and 13, 2007, benzene exceeded the New Mexico Water Quality Control Commission (WQCC) human health standard of 0.01 milligrams per liter (mg/L) in samples from wells WP-1 (0.75 mg/L), WP-4 (0.824 mg/L), WP-4R (0.0108 mg/L), WP-5 (2.74 mg/L), WP-10 (4.07 mg/L), WP-11 (5.51 mg/L), WP-12 (0.956 mg/L), WP-13 (0.451 mg/L), WP-14 (0.601 mg/L), WP-15 (0.941 mg/L), WP-17 (5.38 mg/L) and WP-18 (0.503 mg/L). On December 5 and 6, 2008, benzene exceeded the WQCC human health standard in samples from wells WP-1 (0.881 mg/L), WP-4 (0.439 mg/L), WP-4R (0.0232 mg/L), WP-5 (3.52 mg/L), WP-10 (4.98 mg/L), WP-11 (6.47 mg/L), WP-12 (1.09 mg/L), WP-13 (0.614 mg/L), WP-14 (0.227 mg/L) and WP-15 (0.866 mg/L). Benzene was above the WQCC human health standard in samples from downgradient wells WP-5, WP-17 and WP-18 on June 12 and 13, 2007 and December 5 and 6, 2007. Ethylbenzene exceeded the WQCC human health standard in samples from wells WP-11 on June 13, 2007 (0.877 mg/L)

and December 5, 2007 (0.599 mg/L), and well WP-17 on June 13, 2007 (1.73 mg/L). On June 12 and 13, 2007, xylenes exceeded the WQCC human health standard of 0.62 mg/L in samples from wells WP-1 (0.741 mg/L) and WP-17 (0.752 mg/L). Table 2 presents a summary of the organic laboratory analysis. Figure 7 and Figure 8 present isopleth maps of benzene concentrations in groundwater samples collected on June 12 and 13, 2007 and December 5 and 6, 2007, respectively.

#### 2.2.2 Dissolved Metals Analysis

Barium exceeded the WQCC human health standard (1.0 mg/L) in samples from wells WP-1 (3.61 mg/L), WP-4 (3.75 mg/L), WP-10 (1.82 mg/L), WP-11 (2.16 mg/L), WP-12 (1.03 mg/L), WP-17 (80.1 mg/L) and WP-18 (1.46 mg/L) on June 12, 2007. Barium also exceeded the WQCC human health standard in samples from wells WP-1 (4.07 mg/L), WP-4 (3.56 mg/L), WP-4R (1.3 mg/L), WP-10 (1.74 mg/L), WP-11 (2.16 mg/L) and WP-12 (1.18 mg/L) December 5 and 6, 2007. None of the remaining dissolved metal constituents (arsenic, cadmium, chromium, lead, mercury, selenium and silver) was reported in the groundwater samples above the method detection limit or regulatory threshold. Table 3 presents a summary of the dissolved metals analysis.

#### 2.2.3 General Chemistry Analysis

Chloride exceeded the WQCC domestic water quality standard (250 mg/L) in groundwater samples from all wells, except WP-1 (20.9 and 26.2 mg/L), WP-4 (161 and 126 mg/L), WP-4R (244 and 196 mg/L) and WP-13 (168 and 165 mg/L) on June 12 and 13, 2007 and December 5 and 6, 2007. Chloride was highest west of the Facility in samples from well WP-7 (14,100 and 12, 400 mg/L) and east of the Facility in samples from wells WP-14 (4560 and 3,500 mg/L), WP-17 (4,750 mg/L) and WP-18 (7,510 mg/L). Figure 9 and Figure 10 present isopleths maps showing chloride concentrations in groundwater samples collected on June 12 and 13, 2007 and December 5 and 6, 2007, respectively.

TDS exceeded the WQCC domestic water quality standard (1,000 mg/L) in groundwater

samples from all wells, except WP-1 (620 and 722 mg/L) on June 12 and 13, 2007 and December 5 and 6, 2007. TDS was highest west of the Facility in samples from well WP-7 (29,400 and 27,800 mg/L) and east of the Facility in samples from wells WP-14 (9,180 and 8,700 mg/L), WP-17 (8,280 mg/L) and WP-18 (13,200 mg/L). A former chemical plant (Climax Chemical) that manufactured hydrochloric acid was located northwest (upgradient) of the Facility is the probable source for the elevated chloride and TDS. Figure 11 and Figure 12 present isopleths maps showing TDS concentrations in groundwater samples collected on June 12 and 13, 2007 and December 5 and 6, 2007, respectively.

Sulfate was reported above the WQCC domestic water quality standard (600 mg/L) in samples from wells WP-6 (2,000 and 2,290 mg/L), WP-7 (5,510 mg/L and 4,980 mg/L) and WP-14 (1,430 and 925 mg/L) on June 12 and 13, 2007 and December 5 and 6, 2007. Table 4 presents a summary of the general chemistry analysis.

#### 3.0 CONLUSIONS

- PSH was observed in wells WP-6 (0.05 feet) on February 21, 2007 and WP-6 (0.31 feet) and WP-17 (0.01 feet) on June 12, 2007. No PSH was observed in the monitoring wells on September 20, 2007 and December 5, 2007;
- 2. No PSH was recovered during the current reporting period;
- Depth-to-groundwater increased in most and ranged from about 0.49 feet (WP-2) to 2.18 feet (WP-14). The increase in depth-to-groundwater represents lowering of the water table and is likely due to a decrease in aquifer recharge from precipitation;
- 4. The groundwater flow direction and gradient was from northwest to southeast at a gradient of approximately 0.006 feet per foot and remained consistent with the previous reporting period;
- Benzene exceeded the WQCC human health standard of 0.01 mg/L in samples from wells WP-1 (0.75 mg/L), WP-4 (0.824 mg/L), WP-4R (0.0108 mg/L), WP-5 (2.74 mg/L), WP-10 (4.07 mg/L), WP-11 (5.51 mg/L), WP-12 (0.956 mg/L), WP-13 (0.451 mg/L), WP-14 (0.601

mg/L), WP-15 (0.941 mg/L), WP-17 (5.38 mg/L) and WP-18 (0.503 mg/L) on June 12 and 13, 2007;

- On December 5 and 6, 2008, benzene exceeded the WQCC human health standard in samples from wells WP-1 (0.881 mg/L), WP-4 (0.439 mg/L), WP-4R (0.0232 mg/L), WP-5 (3.52 mg/L), WP-10 (4.98 mg/L), WP-11 (6.47 mg/L), WP-12 (1.09 mg/L), WP-13 (0.614 mg/L), WP-14 (0.227 mg/L) and WP-15 (0.866 mg/L);
- 7. Benzene was above the WQCC human health standard in samples from down gradient wells WP-5, WP-17 and WP-18 on June 12 and 13, 2007 and December 5 and 6, 2007;
- Ethylbenzene exceeded the WQCC human health standard (0.75 mg/L) in samples from wells WP-11 on June 13, 2007 (0.877 mg/L) and December 5, 2007 (0.599 mg/L), and well WP-17 on June 13, 2007 (1.73 mg/L);
- Xylenes exceeded the WQCC human health standard of 0.62 mg/L in samples from wells WP-1 (0.741 mg/L) and WP-17 (0.752 mg/L) on June 12 and 13, 2007;
- 10. Barium exceeded the WQCC human health standard (1.0 mg/L) in samples from wells WP-1 (3.61 mg/L), WP-4 (3.75 mg/L), WP-10 (1.82 mg/L), WP-11 (2.16 mg/L), WP-12 (1.03 mg/L), WP-17 (80.1 mg/L) and WP-18 (1.46 mg/L) on June 12, 2007. Barium also exceeded the WQCC human health standard in samples from wells WP-1 (4.07 mg/L), WP-4 (3.56 mg/L), WP-4R (1.3 mg/L), WP-10 (1.74 mg/L), WP-11 (2.16 mg/L) and WP-12 (1.18 mg/L) December 5 and 6, 2007. These results are consistent with the previous reporting period;
- 11. None of the remaining dissolved metal constituents (arsenic, cadmium, chromium, lead, mercury, selenium and silver) was reported in the groundwater samples above the method detection limit or regulatory threshold. Previously on June 14, 2005, dissolved chromium was reported above the WQCC human health standard in samples from wells WP-5 (0.0816 mg/L) and WP-7 (0.2 mg/L);
- Chloride exceeded the WQCC domestic water quality standard (250 mg/L) in groundwater samples from all wells, except WP-1 (20.9 and 26.2 mg/L), WP-4 (161 and 126 mg/L), WP-4R (244 and 196 mg/L) and WP-13 (168 and 165 mg/L) on June 12 and 13, 2007 and 13, 2007;

- Chloride was highest west of the Facility in samples from well WP-7 (14,100 and 12, 400 mg/L) and east of the Facility in samples from wells WP-14 (4560 and 3,500 mg/L), WP-17 (4,750 mg/L) and WP-18 (7,510 mg/L);
- 14. TDS exceeded the WQCC domestic water quality standard (1,000 mg/L) in groundwater samples from all wells, except WP-1 (620 and 722 mg/L) on June 12 and 13, 2007 and December 5 and 6, 2007;
- 15. TDS was highest west of the Facility in samples from well WP-7 (29,400 and 27,800 mg/L) and east of the Facility in samples from wells WP-14 (9,180 and 8,700 mg/L), WP-17 (8,280 mg/L) and WP-18 (13,200 mg/L);
- 16. A former chemical plant (Climax Chemical) that manufactured hydrochloric acid was located northwest (upgradient) of the Facility is the probable source for the elevated chloride and TDS;

#### 4.0 **RECOMMENDATIONS**

Targa will continue quarterly groundwater monitoring in accordance with the current sampling schedule, including wells WP-16, WP-17 and WP-18. Targa will continue to recover PSH removal when detected at a recoverable thickness in the monitoring wells. Targa will assess the extent of the dissolved benzene in groundwater south and east of the Facility and will initiate a program to remediate the dissolved benzene south and east of the Facility.

#### TABLES

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## Table 1Monitoring Well Completion and Gauging SummaryTarga Midstream Services, L.P., Monument Gas Plant Gas Plant (GW-025)Lea County, New Mexico

Well Inform	ation		Groundwater	Data		·····	
	Well						Corrected
Well ID	Diameter	<b>TOC Elevation</b>	Date Gauged	well Depth	Depth to	Depth to	Water
	(inches)			from TOC	Fluid	Water	Flevation
WP-1	4	3.578.01	12/12/2006			24.98	3.553.03
		-,	2/21/2007			26.91	3.551.10
			6/12/2007	34.92		24.13	3 553 88
			9/20/2007			22.77	3,555.24
			12/5/2007			26.11	3,551.90
WP-2	4	3.577.77	12/12/2006			31.25	3,546,52
			2/21/2007			31.65	3 546 12
			6/12/2007	31.75		31 74	3 546 03
			9/20/2007	01.10		DRY	5,540.05
	l	4	12/5/2007				-
\A/D_/		3 577 15	9/12/2006			34.04	2 5/2 11
VVI -4	7	3,377.13	2/21/2007			34.04	2 5 4 2 9 2
			6/12/2007	27.40	,	25.02	3,342.03
			0/12/2007	37.40		35.05 2E 12	5,542.12
			9/20/2007			25.13	3,542.02
		2 570 25	12/3/2007			22.60	3,542.01
VVF~4N	4	5,576.55	2/21/2007			24.45	3,544.00
			2/21/2007	40.95		25.45	3,543.90
			6/12/2007	40.85		35.10	3,543.19
	}		9/20/2007			35.29	3,543.06
		2 570 50	12/5/2007			35.25	3,543.10
WP-5	4	3,579.50	12/12/2006			32.40	3,547.10
			2/21/2007	20.02		33.20	3,546.30
			6/12/2007	38.02		33.82	3,545.68
		ľ	9/20/2007			34.28	3,545.22
		2 505 26	12/5/2007			34.43	3,545.07
WP-6	4	3,585.36	12/12/2006			28.71	3,556.65
			2/21/2007		28.75	28.70	3,556.63
			6/12/2007	30.53	28.73	29.04	3,556.54
			9/20/2007			28./1	3,556.65
		2 502 04	12/5/2007			28.74	3,556.62
WP-7	4	3,583.04	12/12/2006	1		31.21	3,551.83
			2/21/2007	07.00		31./2	3,551.32
			6/12/2007	37.63		32.09	3,550.95
			9/20/2007			32.09	3,550.95
		0.000.00	12/5/2007			32.18	3,550.86
WP-10	4	3,580.08	12/12/2006			24.75	3,555.33
			2/21/2007			25.59	3,554.49
	}	ł	6/12/2007	37.13		32.09	3,547.99
			9/20/2007			25.38	3,554.70
			12/5/2007			25.49	3,554.59
WP-11	4	3,581.23	12/12/2006			25.93	3,555.30
			2/21/2007			26.76	3,554.47
			6/12/2007	36.41		27.12	3,554.11
			9/20/2007			26.61	3,554.62
i	1	1	12/5/2007		1	26.78	3,554.45

### Table 1Monitoring Well Completion and Gauging SummaryTarga Midstream Services, L.P., Monument Gas Plant Gas Plant (GW-025)Lea County, New Mexico

Well Inform	ation		Groundwater	Data			
Well ID	Well Diameter (inches)	TOC Elevation	Date Gauged	Well Depth from TOC	Depth to Fluid	Depth to Water	Corrected Water Elevation
WP-12	4	3,581.89	12/12/2006			34.11	3,547.78
			2/21/2007			34.18	3,547.71
			6/12/2007	43.27		34.56	3,547.33
			9/20/2007			34.73	3,547.16
			12/5/2007			34.89	3,547.00
WP-13	4	3,580.56	12/12/2006			26.12	3,554.44
			2/21/2007			27.24	3,553.32
			6/12/2007	36.54		27.38	3,553.18
			9/20/2007			26.82	3,553.74
			12/5/2007			27.00	3,553.56
WP-14	4	3,581.81	12/12/2006		~-	35.70	3,546.11
			2/21/2007			35.72	3,546.09
<b>.</b>			6/12/2007	48.35		35.84	3,545.97
			9/20/2007			37.30	3,544.51
			12/5/2007			37.88	3,543.93
WP-15	2	3,582.27	12/12/2006			31.21	3,551.06
			2/21/2007			31.44	3,550.83
l			6/12/2007	35.07		31.73	3,550.54
			9/20/2007			31.47	3,550.80
			12/5/2007			31.40	3,550.87
WP-16	2	3,575.83	12/12/2006			34.64	3,541.19
			2/21/2007			35.95	3,539.88
		[	6/12/2007	40.50		35.38	3,540.45
			9/20/2007			35.55	3,540.28
			12/5/2007			35.61	3,540.22
WP-17	2	3,579.34	12/12/2006	í í	sheen	36.85	3,542.49
			2/21/2007		36.78	36.79	3,542.56
			6/12/2007	40.13	37.01	37.05	3,542.32
			9/20/2007			37.55	3,541.79
			12/5/2007			37.85	3,541.49
WP-18	2	3,579.24	12/12/2006		sheen	36.49	3,542.75
			2/21/2007		sheen	36.23	3,543.01
		]	6/12/2007	44.57		36.27	3,542.97
			9/20/2007			36.83	3,542.41
			12/5/2007		37.32	37.36	3,541.91

Notes

All values are in feet, unless otherwise noted.

bgs - below ground surface

TOC - top of casing

Elevations are above mean sea level (3554.18) referenced to 1984 Geodetic Datum.

Wells drilled and installed by Scarbrough Drilling, Inc., Lamesa, Texas. Schedule 40 threaded PVC casing and screen set.

Table 2 Table 2 مردوم Monitoring Vells و from Monitoring Vells

Monitoring	Quarter/Year	Sample	Benzene	Toluene	Ethylbenzene	Total Xylenes
VVBII		טמוב	0.01	0.75	0.75	0.67
WP-1	4th / 2006	12/13/2006	0.131	0.00292	0.00495	0.00404
8	2nd / 2007	6/12/2007	0.750	<0.100	<0.100	<0.150
	4th / 2007	12/6/2007	0.881	<0.01	0.0493	<0.015
WP-4	2nd / 2007	6/12/2007	0.824	0.244	0.325	0.741
	4th / 2007	12/6/2007	0.439	<0.01	0.0611	<0.015
WP-4R	2nd / 2007	6/12/2007	0.0108	<0.010	<0.010	<0.0150
	4th / 2007	12/6/2007	0.0232	<0.002	0.0151	<0.003
WP-5	4th/2006	12/13/2006	0.128	<0.005	<0.005	<0.01
	2nd / 2007	6/12/2007	2.74	<0.100	<0.100	<0.150
	4th / 2007	12/6/2007	3.52	<0.01	<0.01	<0.0150
WP-6	2nd / 2006	07/11/2006	0.00351	0.00816	0.00444	0.01801
	2nd / 2007	6/13/2007	0.00128	<0.002	<0.002	<0.003
	4th / 2007	12/5/2007	0.00128	<0.002	<0.002	<0.003
WP-7	2nd / 2006	07/11/2006	<0.001	<0.001	<0.001	<0.002
	2nd / 2007	6/13/2007	<0.0008	<0.002	<0.002	<0.003
	4th / 2007	12/5/2007	<0.0008	<0.002	<0.002	<0.003
WP-10	2nd / 2007	6/12/2007	4.07	<0.100	0.201	<0.150
	4th / 2007	12/5/2007	4.98	<0.002	0.251	<0.003
WP-11	2nd / 2007	6/12/2007	5.51	<0.100	0.877	<0.150
	4th / 2007	12/5/2007	6.47	0.00259	0.599	<0.003
WP-12	2nd / 2007	6/12/2007	0.956	0.149	0.558	<0.150
	4th / 2007	12/5/2007	1.09	<0.02	0.155	<0.03
WP-13	2nd / 2006	07/11/2006	0.415	0.00553	0.0331	0.0154
	2nd / 2007	6/12/2007	0.451	<0.100	<0.100	<0.150
	4th / 2007	12/6/2007	0.614	0.0215	0.0221	<0.03
WP-14	4th/2006	12/13/2006	0.221	0.00265	0.00354	0.00769
	2nd / 2007	6/12/2007	0.601	<0.100	<0.100	<0.150
	4th / 2007	12/5/2007	0.227	<0.002	0.0244	<0.003
WP-15	2nd / 2007	6/12/2007	0.941	<0.100	0.206	<0.150
	4th / 2007	12/5/2007	0.866	<0.002	0.0973	<0.003

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# Summary of BTEX Concentrations in Ground Water Samples from Monitoring Wells Targa Midstream Services, L.P., Monument Gas Plant (GW-025)

Lea County, New Mexico

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Monitoring	Quarter/Year	Sample	Benzene	Toluene	Ethylbenzene	Total Xylenes
Well		Date				
NMWQCC Standard			0.01	0.75	0.75	0.62
WP-16	4th/2006	12/13/2006	0.000416	0.00242	0.00065	0.004301
	2nd / 2007	6/12/2007	<0.004	<0.010	<0.010	<0.015
	4th / 2007	12/5/2007	0.00198	<0.002	<0.002	<0.003
WP-17	4th/2006	12/13/2006	5.38	<0.100	0.438	<0.200
	2nd / 2007	6/13/2007	5.38	0.118	1.73	0.752
WP-18	4th/2006	12/12/2006	0.428	<0.100	0.0735	0.049
	2nd / 2007	6/13/2007	0.503	<0.020	0.216	0.140
Duplicates						
WP-14	4th/2006	12/13/2006	0.2	0.00301	0.00371	0.00758
WP-16	2nd / 2007	6/12/2007	<0.004	<0.010	<0.010	<0.015
WP-15	4th / 2007	12/5/2007	0.00162	<0.002	<0.002	<0.003
Notes:	Analysis performed b	v Environmental Lab (	of Texas Inc. Odessa	Texas		

Analysis performed by Environmental Lab of Texas, Inc., Odessa, Texas Results reported after December 2006 were performed by DHL Analytical, Inc., Round Rock, TX Results reported in milligrams/Liter (mg/L) Less than method detection limit Product in well - no sample collected

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Summary of Dissolved Metals in Ground Water Samples from Monitoring Wells Targa Midstream Swervices, L.P., Monument Gas Plant (GW-025) Lea County, New Mexico

	10.04 June 1	Come lo						Nouter I	Colonium	Cilver
Well		Date	AISCHIC							
MINAVA/OCC 64-	pachar		5	6	500	0.05	0.05	0000	0.05	30.0
	2007 / 2006	111/2006	1.0	202	2,0 0172	121002	V200 07	0.0001	-0 0751	1010/2
1	2nd / 2007	6/12/2007	0.00535	3.61	<0.0003	<0.01	0.0014	<0.00008	<0.002	<0.001
	4th / 2007	12/6/2007	0.0102	4.07	<0.0003	<0.002	<0.0003	<0.00008	<0.002	<0.001
WP-4	2nd / 2007	6/12/2007	<0.002	3.75	<0.0003	<0.002	0.0019	<0.00008	<0.002	<0.001
	4th / 2007	12/6/2007	<0.002	3.56	<0.0003	<0.002	<0.0003	<0.00008	<0.002	<0.001
WP-4R	2nd / 2007	6/12/2007	0.008	0.580	<0.0003	<0.01	0.000631	<0.00008	0.00229	<0.001
	4th / 2007	12/6/2007	0.00297	1.300	<0.0003	<0.002	<0.0003	<0.00008	<0.002	<0.001
WP-5	2nd / 2006	07/11/2006	<0.0426	0.755	<0.0173	<0.0174	<0.0074	0.00014	<0.0751	<0.0101
	2nd / 2007	6/12/2007	<0.002	0.164	<0.0003	<0.002	<0.0003	<0.00008	0.0026	<0.001
	4th / 2007	12/6/2007	<0.002	0.137	<0.0003	<0.002	<0.0003	<0.00008	<0.002	<0.001
WP-6	2nd / 2006	07/11/2006	<0.0426	0.101	<0.0173	<0.0174	<0.0074	0.00017	<0.0751	<0.0101
	2nd / 2007	6/13/2007	0.00403	0.0737	<0.0003	<0.01	<0.0003	<0.00008	0.00791	<0.001
	4th / 2007	12/5/2007	<0.002	0.0572	<0.0003	<0.002	<0.0003	<0.00008	<0.002	<0.001
WP-7	2nd / 2006	07/11/2006	0.0161	0.0315	<0.0173	<0.0174	<0.0074	0.00012	<0.0751	<0.0101
	2nd / 2007	6/13/2007	<0.002	0.0388	<0.0003	0.015	0.00342	<0.00008	<0.002	<0.001
	4th / 2007	12/5/2007	0.0128	0.022	<0.0003	0.0272	<0.0003	<0.00008	0.00929	<0.001
WP-10	2nd / 2007	6/12/2007	0.00232	1.82	<0.0003	0.00581	0.000397	<0.00008	0.00386	<0.001
	4th / 2007	12/5/2007	<0.002	1.74	<0.0003	0.00315	<0.0003	<0.00008	<0.002	<0.001
WP-11	2nd / 2007	6/12/2007	<0.002	2.16	<0.0003	0.00685	0.000778	<0.00008	0.00416	<0.001
	4th / 2007	12/5/2007	<0.002	2.16	<0.0003	0.00546	<0.0003	<0.00008	<0.002	<0.001
WP-12	2nd / 2007	6/12/2007	0.0479	1.03	<0.0003	0.00783	0.00043	<0.00008	0.00722	<0.001
	4th / 2007	12/5/2007	0.0302	1.18	<0.0003	0.00648	0.000363	<0.00008	<0.002	<0.001
WP-13	2nd / 2006	07/11/2006	<0.0426	0.302	<0.0173	<0.0174	<0.0074	0.00018	<0.0751	<0.0101
	2nd / 2007	6/12/2007	0.00246	0.208	<0.0003	<0.002	0.00108	<0.00008	0.00338	<0.001
	4th / 2007	12/6/2007	<0.002	0.35	<0.0003	<0.002	<0.0003	<0.00008	<0.002	<0.001
WP-14	2nd / 2006	07/11/2006	<0.0426	0.107	<0.0173	<0.0174	<0.0074	0.00011	<0.0751	<0.0101
	2nd / 2007	6/12/2007	0.00242	0.0756	<0.0003	0.00435	<0.0003	<0.00008	0.00601	<0.001
	4th / 2007	12/5/2007	<0.002	0.0365	<0.0003	0.00343	<0.003	<0.00008	<0.002	<0.001
WP-15	2nd / 2007	6/12/2007	<0.002	0.598	<0.0003	0.00692	0.000332	<0.00008	0.00521	<0.001
	4th / 2007	12/5/2007	<0.002	0.513	<0.0003	0.00705	<0.0003	<0.00008	<0.002	<0.001

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# Summary of Dissolved Metals in Ground Water Samples from Monitoring Wells Targa Midstream Swervices, L.P., Monument Gas Plant (GW-025)

Lea County, New Mexico

Monitoring Well	Quarter/Year	Sample Date	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
NMWQCC Sta	ndard		0.1	1.0	0.01	0.05	0.05	0.002	0.05	0.05
WP-16	2nd / 2006	07/11/2006	<0.0426	0.0735	<0.0173	<0.0174	<0.0074	0.00014	<0.0751	<0.0101
	2nd / 2007	6/12/2007	0.00674	0.0953	<0.0003	<0.002	<0.0003	<0.00008	<0.002	<0.001
	4th / 2007	12/5/2007	0.00363	0.0911	<0.0003	<0.002	<0.0003	<0.00008	<0.002	<0.001
WP-17	2nd / 2006	07/11/2006	0.0991	82.9	<0.0692	<0.0698	<0.0296	<0.00025	0.29	<0.0405
	2nd / 2007	6/13/2007	0.0062	80.1	<0.0003	<0.01	0.00568	<0.00008	<0.002	<0.001
WP-18	2nd / 2006	07/11/2006	N/S	N/S	N/S	S/N	N/S	N/S	N/S	N/S
	2nd / 2007	6/13/2007	0.00774	1.46	<0.0003	<0.01	0.00182	<0.00008	<0.002	<0.001
Duplicates										
WP-1	2nd / 2006	07/11/2006	0.0265	2.08	<0.0173	<0.0174	<0.0074	0.00026	<0.0751	<0.0101
WP-16	2nd / 2007	6/12/2007	0.00605	0.0867	<0.0003	<0.002	<0.0003	<0.00008	<0.002	<0.001
WP-16	4th / 2007	12/5/2007	0.00417	0.0927	<0.0003	<0.002	<0.0003	<0.00008	<0.002	<0.001
Motor.	Anche is a cufer	and built and and	7 7 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		Jacob Tauras					

Notes:

Analysis performed by Environmental Lab of Texas, Inc., Odessa, Texas Results reported after December 2006 were performed by DHL Analytical, Inc., Round Rock, TX Results reported in milligrams/Liter (mg/L) Less than method detection limit Product in well - no sample collected

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Summary of Dissolved Metals, Chloride, Sulfate and TDS Concentrations in Ground Water Samples from Monitoring Wells Targa Midstream Services, L.P., Monument Gas Plant (GW-025) Table 4

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					Lea Co	ounty, New Me	xico				
WP-1         #th / 2006 $1/13/2006$ $6.62$ $4.51$ $90.2$ $15.2$ $5.24$ $6.18$ $764$ WP-1 $411/2007$ $1/12/2007$ $82.0$ $47.0$ $1/12/2007$ $81.0$ $608$ $52.0$ $61.3$ $764$ WP-4 $211/2007$ $12/6/2007$ $92.1$ $35.8$ $3.06$ $570$ $161.1$ $1.930$ $1.510$ WP-4 $211/2007$ $61/12/2007$ $71.4$ $3.35$ $3.06$ $570$ $161$ $1.720$ $1.510$ WP-4 $211/2007$ $61.4$ $3.35$ $3.06$ $570$ $161$ $1.720$ $1.510$ WP-4 $211/2007$ $14.5$ $5.38$ $3.06$ $32.7$ $3.59$ $37.2$ $260$ $1.720$ WP-4 $211/2007$ $14.5$ $5.38$ $3.06$ $3.72$ $4.910$ $1.720$ $1.300$ WP-4 $211/2007$ $14.5$ $5.38$ $1.26$ $1.310$ $1.310$ $1.210$	Monitoring Well	Quarter/Year	Sample Date	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Alkalinity	TDS
WP-1         4th/2006         12/13/2006         86.6         6.2.2         4.51         90.2         15.2         5.2.4         6.18         7.64 $4m/2007$ 12/16/2007         82.0         47.0         4.33         30.5         57.0         15.6         -10         6.68         50 $4m/2007$ 12/5/2007         35.8         30.6         57.0         16.1         -1.130         1.510         1.510 $4m/2007$ 13/5/2007         35.8         30.6         57.0         16.1         1.130         1.510 $4m/2007$ 13/5/2007         35.8         3.66         17.2         20.4         13.70         1.120         1.510 $4m/2007$ 13/5/2007         35.8         3.65         14.9         888         56.4         1.100         2.500 $4m/2007$ 13/12/2007         32.4         12.70         12.200         13.700         2.32         14.9         2.59         3.64         1.410         2.590 $4m/2007$ 13/12/2007         32.4         12.1         10.0         1.270         2.40         2.590         1.100         2.500         2.40         2.40         2.50	NMWQCC Sta	andard						250	600		1000
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	WP-1	4th / 2006	12/13/2006	86.6	62.2	4.51	90.2	15.2	5.24	618	764
4th $2007$ $12/6/2007$ $79.1$ $45.4$ $33.4$ $72.2$ $26.2$ $c1$ $547$ $722$ WP-4 $2nd/2007$ $6/12/2007$ $41.3$ $3.53$ $3.06$ $570$ $161$ $c10$ $1.130$ $1.530$ WP-44 $2nd/2007$ $6/12/2007$ $71.4$ $37.3$ $3.69$ $4.55$ $244$ $69.9$ $864$ $1.410$ WP-44 $2nd/2007$ $6/12/2007$ $3.24$ $1.49$ $37.3$ $3.69$ $4.55$ $2.44$ $69.9$ $864$ $1.410$ WP-5 $4th/2007$ $12/6/2007$ $2.45$ $1.21$ $1.26$ $1.290$ $1.510$ WP-5 $4th/2007$ $12/6/2007$ $2.45$ $1.24$ $1.290$ $1.240$ $2.510$ $1.72$ WP-6 $2nd/2006$ $0/11/2006$ $$ $   867$ $1.410$ WP-1 $2nd/2006$ $0/11/2006$ $   -$ <th></th> <td>2nd / 2007</td> <td>6/12/2007</td> <td>82.0</td> <td>47.0</td> <td>4.38</td> <td>92.2</td> <td>20.9</td> <td>&lt;10</td> <td>608</td> <td>620</td>		2nd / 2007	6/12/2007	82.0	47.0	4.38	92.2	20.9	<10	608	620
WP-4         2nd / 2007         6/12/2007         413         35.8         3.06         570         161         <10		4th / 2007	12/6/2007	79.1	45.4	3.84	72.2	26.2	4	547	722
$4th/2007$ $12/6/2007$ $35.8$ $2.4.4$ $2.51$ $466$ $126$ $c_1$ $1,120$ $1,120$ $1,120$ $1,120$ $1,120$ $1,120$ $1,120$ $1,120$ $1,120$ $1,120$ $1,120$ $1,120$ $1,120$ $1,120$ $1,120$ $1,120$ $1,120$ $1,120$ $1,120$ $2,180$ $1,120$ $2,180$ $1,120$ $2,180$ $1,120$ $2,180$ $1,120$ $2,180$ $2,140$ $2,290$ $1,140$ $2,140$ $2,240$ $2,140$ $2,240$ <t< th=""><th>WP-4</th><td>2nd / 2007</td><td>6/12/2007</td><td>41.3</td><td>35.8</td><td>3.06</td><td>570</td><td>161</td><td>&lt;10</td><td>1,130</td><td>1,510</td></t<>	WP-4	2nd / 2007	6/12/2007	41.3	35.8	3.06	570	161	<10	1,130	1,510
WF-4R $2nd/2007$ $6/12/2007$ $71.4$ $37.3$ $3.69$ $425$ $234$ $69.9$ $864$ $1.410$ WF-5 $4th/2007$ $12/6/2007$ $64.6$ $28.7$ $3.25$ $405$ $126$ $871$ $1.370$ WF-5 $2th/2007$ $12/6/2007$ $3.24$ $17.2$ $1.1400$ $2.600$ $4th/2007$ $6/12/2007$ $3.24$ $1.72$ $1.1400$ $2.600$ $4th/2007$ $6/13/2007$ $3.24$ $1.72$ $1.400$ $2.990$ $WF-7$ $2nd/2006$ $07/11/2006$ $$ $$ $$ $ 867$ $WF-7$ $2nd/2006$ $07/11/2006$ $$ $$ $                           -$ <t< th=""><th></th><td>4th / 2007</td><td>12/6/2007</td><td>35.8</td><td>24.4</td><td>2.51</td><td>466</td><td>126</td><td>4</td><td>1,120</td><td>1,530</td></t<>		4th / 2007	12/6/2007	35.8	24.4	2.51	466	126	4	1,120	1,530
4th / 2007         12/5/2007         64.6         28.7         3.25         405         15/6         75.9         87.1         1,370           WP-5         4th / 2006         12/3/2007         14.5         6.58         14.9         88.8         50.4         173         1,100         2,186           WP-6         2nd / 2006         12/6/2007         32.0         17.1         14.0         1,020         86.9         102         1,160         2,180           WP-6         2nd / 2006         07/11/2006           807         2,000         55.6         4,530           WP-7         2nd / 2007         6/13/2007         437         169         23.4         1,530         1440         7,140         3,650           WP-7         2nd / 2006         07/11/2006           -         10,400         4,340          12,100           WP-7         2nd / 2007         6/13/2007         733         352         140         9,140         1,4100         5,510         475         2,940           WP-1         2nd / 2007         6/13/2007         783         28.67         12,400         475         2,940           WP-11         <	WP-4R	2nd / 2007	6/12/2007	71.4	37.3	3.69	425	244	69.9	864	1,410
WF-5 $4th/2005$ $12/13/2006$ $14.5$ $6.58$ $14.9$ $888$ $50.4$ $173$ $11.00$ $2.180$ $2nd/2007$ $5/12/2007$ $32.0$ $17.2$ $11.24$ $1.240$ $172$ $11.40$ $2.360$ $4th/2007$ $112/5/2007$ $25.4$ $12.1$ $14.0$ $1.240$ $12.40$ $3.560$ $2nd/2006$ $0.513/2007$ $472$ $11.7$ $11.60$ $2.160$ $$ $8.69$ $2nd/2006$ $0.7/11/2006$ $$ $$ $$ $807$ $2.060$ $$ $8.620$ $2nd/2007$ $12/5/2007$ $472$ $12/5$ $1290$ $2.7900$ $3.740$ $$ $12.100$ $4nh/2007$ $5/13/2007$ $473$ $3522$ $1400$ $9.140$ $14,100$ $5,510$ $475$ $29,400$ $4nh/2007$ $5/12/2007$ $678$ $2382$ $1112$ $7,870$ $12,400$ $4,75$ $29,400$ $4nh/2007$ $5/12/2007$ $678$ $2322$ $14,00$ $9,140$ $14,100$ $5,510$ $475$ $29,400$ $4nh/2007$ $21/5/2007$ $678$ $2322$ $1140$ $7,140$ $7,140$ $7,140$ $21,100$ $21,100$ $21,100$ $4nh/2007$ $5/12/2007$ $773$ $3522$ $1140$ $9,140$ $14,100$ $5,510$ $475$ $29,400$ $4nh/2007$ $21/5/2007$ $71,29$ $73,200$ $7,140$ $7,140$ $7,140$ $7,140$ $4nh/2007$ $21/2/2007$ $71,29$ $23,200$ $11,100$ $21,240$ <		4th / 2007	12/6/2007	64.6	28.7	3.25	405	196	75.9	871	1,370
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	WP-5	4th / 2006	12/13/2006	14.5	6.58	14.9	888	504	173	1,100	2,180
$ \begin{array}{l l l l l l l l l l l l l l l l l l l $		2nd / 2007	6/12/2007	32.0	17.2	16.0	1,240	1,240	172	1,140	3,640
WP-6 $2nd/2006$ $07/11/2006$ 807 $2,060$ 8,620 $2nd/2007$ $6/13/2007$ $437$ $169$ $177$ $15$ $748$ $635$ $2,000$ $556$ $4,530$ $4th/2007$ $12/5/2007$ $437$ $169$ $23.4$ $1,530$ $1840$ $2.290$ $1,140$ $7,140$ $WP-7$ $2nd/2007$ $6/13/2007$ $6/13/2007$ $678$ $23.2$ $140$ $9,140$ $14,100$ $5,510$ $475$ $29,400$ $4th/2007$ $6/12/2007$ $672$ $282$ $112$ $7,870$ $12,400$ $4,990$ $2,7800$ $4th/2007$ $6/12/2007$ $672$ $282$ $112$ $7,870$ $12,400$ $4,99$ $2,7800$ $4th/2007$ $6/12/2007$ $86.9$ $64.2$ $9,75$ $505$ $433$ $5.42$ $1,240$ $2,300$ $4th/2007$ $6/12/2007$ $86.9$ $64.2$ $9,75$ $505$ $433$ $5.42$ $1,240$ $2,300$ $4th/2007$ $6/12/2007$ $86.9$ $56.8$ $9,75$ $505$ $433$ $2,240$ $2,190$ $4th/2007$ $6/12/2007$ $86.9$ $56.8$ $9,75$ $56.7$ $9,75$ $21.6$ $2,210$ $4th/2007$ $6/12/2007$ $86.6$ $5.114$ $5.92$ $1,170$ $2,120$ $2,190$ $4th/2007$ $6/12/2007$ $86.6$ $5.114$ $5.92$ $1,170$ $2,120$ $2,120$ $4th/2007$ $6/12/2007$ $86.6$ $5.114$ $1,170$		4th / 2007	12/6/2007	25.4	12.1	14.0	1,020	869	102	1,160	2,950
$ \begin{array}{l l l l l l l l l l l l l l l l l l l $	WP-6	2nd / 2006	07/11/2006	1	1	1	ł	807	2,060	ł	8,620
4th / 2007 $12/5/2007$ $437$ $169$ $23.4$ $1,530$ $1840$ $2.290$ $1,140$ $7,140$ $WP-7$ $2nd / 2006$ $(7/11/2006$ $$ $$ $$ $10,400$ $4,340$ $$ $12/100$ $2nd / 2007$ $(12/5/2007)$ $678$ $3522$ $140$ $9,140$ $14,100$ $5,510$ $475$ $29,400$ $4th / 2007$ $12/5/2007$ $678$ $282$ $112$ $7,870$ $12,400$ $4,980$ $499$ $27,800$ $4th / 2007$ $12/5/2007$ $86.9$ $64.2$ $9,75$ $505$ $43.5$ $1,240$ $2,300$ $4th / 2007$ $12/5/2007$ $86.9$ $64.2$ $9,75$ $505$ $43.5$ $1,240$ $2,100$ $4th / 2007$ $12/5/2007$ $78.8$ $9,72$ $11.4$ $644$ $523$ $21.6$ $1,190$ $2.140$ $4th / 2007$ $12/5/2007$ $78.8$ $5.68$ $9,7$ $478$ $5.59$ $1,190$ $2.140$ $4th / 2007$ $12/5/2007$ $78.8$ $5.68$ $9,7$ $478$ $5.59$ $1,190$ $2.140$ $4th / 2007$ $12/5/2007$ $78.8$ $9,7$ $1,160$ $1,170$ $4,78$ $3.200$ $4th / 2007$ $12/5/2007$ $38.8$ $26.7$ $3.25$ $478$ $5.59$ $1,190$ $2.140$ $4th / 2007$ $12/5/2007$ $78.8$ $7.8$ $1,160$ $1,170$ $4,78$ $3.200$ $4th / 2007$ $12/5/2007$ $38.8$ $26.7$ $3.216$ $1,170$ $4,76$ <		2nd / 2007	6/13/2007	429	177	15	748	635	2,000	556	4,530
WP-7 $2nd/2006$ $07/11/2006$ $$ $$ $$ $10,400$ $4,340$ $$ $12,100$ $2nd/2007$ $6/13/2007$ $773$ $352$ $140$ $9,140$ $14,100$ $5,510$ $475$ $29,400$ $4th/2007$ $12/5/2007$ $678$ $282$ $112$ $7,870$ $12/400$ $4,980$ $499$ $27,800$ $4th/2007$ $12/5/2007$ $86.9$ $64.2$ $9,75$ $505$ $433$ $5,42$ $1,240$ $2,300$ $4th/2007$ $12/5/2007$ $86.9$ $64.2$ $9,75$ $505$ $433$ $5,42$ $1,190$ $2,140$ $4th/2007$ $12/5/2007$ $77.2$ $57.2$ $11.4$ $644$ $523$ $21.6$ $1,190$ $2,140$ $4th/2007$ $12/5/2007$ $75.8$ $56.8$ $9.7$ $585$ $478$ $5.59$ $1,190$ $2,140$ $4th/2007$ $12/5/2007$ $75.8$ $56.8$ $9.7$ $585$ $478$ $5.59$ $1,190$ $2,140$ $4th/2007$ $12/5/007$ $38.8$ $26.7$ $3.25$ $1,150$ $1,170$ $<10$ $1,530$ $3.300$ $4th/2007$ $12/5/007$ $38.8$ $26.7$ $3.256$ $1,170$ $<10$ $1,530$ $3.300$ $4th/2007$ $12/5/007$ $38.8$ $26.7$ $3.256$ $1,170$ $<10$ $1,530$ $3.300$ $4th/2007$ $12/5/007$ $136$ $86.6$ $5.21$ $226$ $146$ $1030$ $1,460$ $4th/2007$ $12/5/2007$ $136$ $8.7$		4th / 2007	12/5/2007	437	169	23.4	1,530	1840	2,290	1,140	7,140
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	WP-7	2nd / 2006	07/11/2006	;	-	1	1	10,400	4,340	1	12,100
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WP-10 $2nd/2007$ $6/12/2007$ $90.2$ $58.6$ $10.6$ $648$ $552$ $43.5$ $1,240$ $2,300$ $4th/2007$ $12/5/2007$ $86.9$ $64.2$ $9,75$ $505$ $433$ $5.42$ $1,190$ $2,140$ $4th/2007$ $6/12/2007$ $77.2$ $57.2$ $11.4$ $644$ $523$ $21.6$ $1,190$ $2,140$ $4th/2007$ $12/5/2007$ $77.2$ $57.2$ $11.4$ $644$ $523$ $21.6$ $1,190$ $2,140$ $4th/2007$ $12/5/007$ $75.8$ $56.8$ $9.7$ $585$ $478$ $5.59$ $1,190$ $2,210$ $4th/2007$ $12/5/007$ $38.8$ $26.7$ $3.25$ $1,160$ $1,170$ $<10$ $1,530$ $3,320$ $4th/2007$ $12/5/007$ $38.8$ $26.7$ $3.25$ $1,160$ $1,170$ $<10$ $1,530$ $3,300$ $4th/2007$ $12/5/007$ $38.8$ $26.7$ $3.25$ $1,150$ $1,070$ $<1$ $1,530$ $3,300$ $4th/2007$ $12/6/2007$ $136$ $86.6$ $5.21$ $286$ $168$ $248$ $883$ $1,580$ $4th/2007$ $12/6/2007$ $98.7$ $61.7$ $4.90$ $375$ $166$ $1,44$ $1030$ $1,500$ $4th/2007$ $12/6/2007$ $98.7$ $130$ $3760$ $1,40$ $1,300$ $1,500$ $9,180$ $4th/2007$ $6/12/2007$ $210$ $108$ $27$ $3,160$ $4,560$ $1,40$ $1,300$ $9,180$ $4th/2007$ <th></th> <td>4th / 2007</td> <td>12/5/2007</td> <td>678</td> <td>282</td> <td>112</td> <td>7,870</td> <td>12,400</td> <td>4,980</td> <td>499</td> <td>27,800</td>		4th / 2007	12/5/2007	678	282	112	7,870	12,400	4,980	499	27,800
4th/2007 $12/5/2007$ $86.9$ $64.2$ $9.75$ $505$ $433$ $5.42$ $1,250$ $2,190$ $WP-11$ $2nd/2007$ $6/12/2007$ $77.2$ $57.2$ $11.4$ $644$ $523$ $21.6$ $1,190$ $2,140$ $4th/2007$ $12/5/2007$ $77.2$ $56.8$ $9.7$ $585$ $478$ $5.59$ $1,190$ $2,140$ $WP-12$ $2nd/2007$ $6/12/2007$ $47.8$ $31.5$ $4.18$ $1,170$ $<10$ $1,530$ $3,320$ $WP-13$ $2nd/2007$ $6/12/2007$ $38.8$ $26.7$ $3.25$ $1,150$ $1,070$ $<1$ $1,530$ $3,320$ $WP-13$ $2nd/2006$ $07/11/2006$ $$ $$ $$ $$ $209$ $186$ $$ $1,460$ $WP-14$ $4th/2007$ $6/12/2007$ $136$ $86.6$ $5.21$ $286$ $168$ $248$ $883$ $1,580$ $WP-14$ $4th/2007$ $12/6/2007$ $98.7$ $61.7$ $4.90$ $375$ $165$ $144$ $1030$ $1,580$ $WP-14$ $4th/2007$ $12/6/2007$ $98.7$ $61.7$ $4.90$ $375$ $165$ $144$ $1030$ $8,790$ $WP-14$ $4th/2007$ $12/6/2007$ $210$ $108$ $27$ $3,160$ $4,560$ $1,100$ $1,300$ $8,790$ $WP-14$ $4th/2007$ $12/6/2007$ $210$ $108$ $27$ $3,160$ $4,560$ $1,430$ $1,180$ $9,180$ $WP-14$ $10/2007$ $12/6/2007$ $126$ <	WP-10	2nd / 2007	6/12/2007	90.2	58.6	10.6	648	552	43.5	1,240	2,300
WP-11 $2nd/2007$ $6/12/2007$ $77.2$ $57.2$ $11.4$ $644$ $523$ $21.6$ $1,190$ $2.140$ $4th/2007$ $12/5/2007$ $75.8$ $56.8$ $9.7$ $585$ $478$ $5.59$ $1,190$ $2.140$ $wP-12$ $2nd/2007$ $6/12/2007$ $47.8$ $31.5$ $4.18$ $1,160$ $1,170$ $<10$ $1,530$ $3,320$ $wP-13$ $2nd/2006$ $07/11/2006$ $$ $$ $$ $209$ $186$ $$ $1,460$ $wP-13$ $2nd/2007$ $136$ $86.6$ $5.21$ $286$ $168$ $248$ $883$ $1,580$ $wP-13$ $2nd/2007$ $6/12/2007$ $98.7$ $61.7$ $4.90$ $375$ $165$ $144$ $1030$ $1,580$ $wP-14$ $4th/2007$ $12/6/2007$ $98.7$ $61.7$ $4.90$ $375$ $165$ $144$ $1030$ $1,580$ $wP-14$ $4th/2006$ $12/13/2006$ $198$ $130$ $41$ $2,970$ $3,800$ $1,100$ $1,900$ $8,790$ $wP-14$ $2nd/2007$ $6/12/2007$ $210$ $108$ $27$ $3,160$ $4,560$ $1,44$ $1030$ $9,180$ $wP-14$ $2nd/2007$ $126$ $108$ $130$ $3,500$ $1,410$ $1,100$ $1,900$ $9,180$ $wP-14$ $2nd/2007$ $12/13/2007$ $108$ $130$ $3,500$ $1,410$ $1,100$ $9,180$ $wP-14$ $2nd/2007$ $126$ $108$ $27$ $3,160$ $4,560$ $1,110$ <		4th / 2007	12/5/2007	86.9	64.2	9.75	505	433	5.42	1,250	2,190
	WP-11	2nd / 2007	6/12/2007	77.2	57.2	11.4	644	523	21.6	1,190	2,140
WP-12         Znd / Z007         6/12/2007         47.8         31.5         4.18         1,160         1,170         <10		4th / 2007	12/5/2007	75.8	56.8	9.7	585	478	5.59	1,190	2,210
4th / 2007         12/5/007         38.8         26.7         3.25         1,150         1,070         <1	WP-12	2nd / 2007	6/12/2007	47.8	31.5	4.18	1,160	1,170	<10	1,530	3,320
WP-13         2nd / 2006         07/11/2006             1.460           2nd / 2007         6/12/2007         136         86.6         5.21         286         168          1,460           4th / 2007         12/6/2007         98.7         61.7         4.90         375         165         144         1030         1,580           WP-14         4th / 2006         12/13/2006         198         130         41         2,970         3,800         1,100         1,300         8,790           WP-14         4th / 2007         6/12/2007         210         108         27         3,160         4,560         1,430         1,180         9,180           4th / 2007         12/5/2007         126         75.8         24         3,500         1,430         1,180         9,180		4th / 2007	12/5/007	38.8	26.7	3.25	1,150	1,070	4	1,530	3,300
2nd / 2007         6/12/2007         136         86.6         5.21         286         168         248         883         1,580           4th / 2007         12/6/2007         98.7         61.7         4.90         375         165         144         1030         1,580           WP-14         4th / 2006         12/13/2006         198         130         41         2,970         3,800         1,100         1,300         8,790           2nd / 2007         6/12/2007         210         108         27         3,160         4,560         1,430         1,180         9,180           4th / 2007         6/12/2007         126         75.8         24         2,740         3,500         1,430         1,180         9,180	WP-13	2nd / 2006	07/11/2006	1		1	I	209	186	ł	1,460
4th / 2007         12/6/2007         98.7         61.7         4.90         375         165         144         1030         1,580           WP-14         4th / 2006         12/13/2006         198         130         41         2,970         3,800         1,100         1,300         8,790           Znd / 2007         6/12/2007         210         108         27         3,160         4,560         1,430         1,180         9,180           4th / 2007         12/5/2007         126         75.8         24         2,740         3,500         925         1,310         8,700		2nd / 2007	6/12/2007	136	86.6	5.21	286	168	248	883	1,580
WP-14         4th / 2006         12/13/2006         198         130         41         2,970         3,800         1,100         1,300         8,790           2nd / 2007         6/12/2007         210         108         27         3,160         4,560         1,430         1,180         9,180           4th / 2007         12/5/2007         126         75.8         24         2,740         3,500         925         1,310         8,700		4th / 2007	12/6/2007	98.7	61.7	4.90	375	165	144	1030	1,580
2nd / 2007         6/12/2007         210         108         27         3,160         4,560         1,430         1,180         9,180           4th / 2007         12/5/2007         126         75.8         24         2,740         3,500         925         1,310         8,700	WP-14	4th / 2006	12/13/2006	198	130	41	2,970	3,800	1,100	1,300	8,790
4th / 2007 12/5/2007 126 75.8 24 2,740 3,500 925 1,310 8,700		2nd / 2007	6/12/2007	210	108	27	3,160	4,560	1,430	1,180	9,180
		4th / 2007	12/5/2007	126	75.8	24	2,740	3,500	925	1,310	8,700

Page 1 of 2

# Summary of Dissolved Metals, Chloride, Sulfate and TDS Concentrations in Ground Water Samples from Monitoring Wells

# Targa Midstream Services, L.P., Monument Gas Plant (GW-025) Lea County, New Mexico

Monitoring	Quarter/Year	Sample	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Alkalinity	TDS
Well		Date								
NMWQCC Sta	andard						250	600		1000
WP-15	2nd / 2007	6/12/2007	6.69	54.4	7.83	925	1,000	76.4	1,240	2,950
	4th / 2007	12/5/2007	55.2	48.4	6.84	790	986	70.6	1,160	2,570
WP-16	4th / 2006	12/13/2006	13.8	12.6	6.6	1,710	680	182	1,360	2,900
	2nd / 2007	6/12/2007	9.7	10.1	3.78	912	577	120	1,350	2,630
	4th / 2007	12/5/2007	8.97	7.41	2.96	905	553	91.7	1,290	2,470
WP-17	4th / 2006	12/13/2006	249	399	21.4	3,240	4,770	178	1,960	9,110
	2nd / 2007	6/13/2007	227	346	9.99	2,550	4,750	<10	918	8,280
WP-18	4th / 2006	12/13/2006	285	162	46.2	5,060	7,510	493	1,160	14,400
	2nd / 2007	12/13/2006	71.7	174	12.5	5,080	7,510	523	2,190	13,200
Duplicates										
WP-14	4th/2006	12/13/2006	1	1		1	4,860	1,500	1	11,400
WP-16	2nd / 2007	6/12/2007	6	11	4	696	592	119	1,350	2,590
WP-16	4th / 2007	12/5/2007	8.95	7.88	3.15	895	547	91.8	1,300	2,470
Notes:	Analvsis nerfor	med hv Environ	mental Lab of	Texas Inc. Oc	lessa. Texas					

Ariarysis perrormed by Environmental Lab of Texas, Inc., Odessa, Texas Results reported after December 2006 were performed by DHL Analytical, Inc., Round Rock, TX Results reported in milligrams/Liter (mg/L) Less than method detection limit Sample not collected

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**FIGURES** 

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Y`}PROJECTS\TARGA\2-0108-MONUMENT GAS PLANT\2007 REPORT\FIGURE #12.dwg, 9/29/2008 10:2849 AM
## **APPENDIX A**

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# Laboratory Reports



July 17, 2007

Mr. Wayne Price Environmental Bureau Chief New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

#### Re: 2006 Annual Report, Monument Plant Ground Water Monitoring (GW-025), Targa Midstream Services, L. P., Unit N (SE/4, SW/4), Section 36, Township 19 South, Range 36 East, Lea County, New Mexico

Dear Wayne,

The enclosed report is submitted to the New Mexico Oil Conservation Division (OCD) on behalf of Targa Midstream Services, L. P. (Targa) by Larson & Associates, Inc. (LAI). The report presents the results of quarterly ground water monitoring at the Monument Gas Plant (GW-025) for 2006. Please call myself or Cal Wrangham with Targa at (432) 687-0901 or (432) 688-0452, respectively, if you have questions. We may also be reached by email at <u>mark@laenvironmental.com</u> or CWrangham@targaresources.com. Sincerely,

Larson & Associates, Inc.

Mark J. Larson Sr. Project Manager / /President

cc: Cal Wrangham - Targa Todd Young - Targa Larry Johnson – OCD District 1

### 2006 ANNUAL EPORT MONUMENT GAS PLANT GROUND WATER MONITORING LEA COUNTY, NEW MEXICO

**Prepared for:** 

Targa Midstream Services, L.P. P.O. Box 67 Monument, New Mexico 88265 (505) 393-2823

Prepared by:

Larson & Associates, Inc. 507 North Marienfeld Street Suite 202 Midland, Texas 79701 (432) 687-0901

July 17, 2007

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Mark J. Larson, P.G., C.P.G., C.G.W.P.

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- 3. Summary of Dissolved Metals in Ground Water Samples from Monitoring Wells
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### A. Laboratory Reports

2006 Annual Ground Water Monitoring Report Targa Midstream Services, L.P. Monument Gas Plant (GW-025) Lea County, New Mexico

#### **1.0 INTRODUCTION**

Targa Midstream Services, L.P. (Targa), as successor company to Dynegy Midstream Services, L.P. (Dynegy), has retained Larson & Associates, Inc. (LAI) to conduct ground water monitoring at its Monument Gas Plant (Facility) located approximately 2.6 miles southeast of Monument, in unit N (SE/4, SW/4), Section 36, Township 19 South, Range 36 East in Lea County, New Mexico. The Facility operates under New Mexico Oil Conservation Division (OCD) ground water discharge permit GW-025 and requires the Facility to monitor ground water on a quarterly (4 times per year) schedule. Figure 1 presents a location and topographic map. Figure 2 presents a Facility drawing.

#### 1.1 <u>Background</u>

On March 5, 1998, the OCD approved a request to modify the ground water monitoring program to include the following:

- Measure depth-to-groundwater and hydrocarbon product thickness in twelve (12) monitoring wells (WP-1, WP-2, WP-4, WP-5, WP-6, WP-7, WP-10, WP-11, WP-12, WP-13, WP-14 and WP-15) quarterly (4 times per year);
- Collect and analyze groundwater samples from six (6) monitoring wells (WP-1, WP-5, WP-6, WP-7, WP-13 and WP-14) during the second (2<sup>nd</sup>) quarter (April through June) for benzene, toluene, ethylbenzene, xylene ("BTEX"), dissolved metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver), chloride, sulfate and total dissolved solids ("TDS");
- Collect and analyze groundwater samples from three (3) monitoring wells (WP-1, WP-5 and WP-14) during the fourth (4<sup>th</sup>) quarter (October through December) for BTEX, chloride, sulfate and TDS; and
- Prepare an annual report.

#### 2.0 GROUND WATER MONITORING

1.1.8.3

#### 2.1 Depth-to-Ground Water and Product Thickness Measurements

On March 28, 2006, July 11, 2006, September 12, 2006 and December 12, 2006, LAI personnel collected depth-to-ground water and hydrocarbon product (PSH) thickness measurements from sixteen (16) monitoring wells (WP-1, WP-2, WP-4, WP-4R, WP-5, WP-6, WP-7, WP-10 and WP-11 through WP-18). Wells WP-3, WP-8 and WP-9 have been converted to cathodic (corrosion) protection wells and could not be accessed.

The measurements were collected using an electronic interface probe, which distinguishes water from oil based on product density. The measurements were obtained at the top of the PVC well casing and recorded in a dedicated bound field notebook. The interface probe was thoroughly cleaned between wells using a solution of water and laboratory-grade detergent, and rinsed with distilled water. Table 1 presents a summary of the depth to ground water measurements.

Referring to Table 1, no significant variation in depth to ground water was observed during the reporting period. Only minor fluctuations were observed and suggest seasonal variations due to aquifer recharge and discharge. The depth-to-ground water measurements from the 2<sup>nd</sup> quarter (July 11, 2006) and fourth (4<sup>th</sup>) quarter (December 12, 2006) were used to prepare ground water potentiometric surface maps presented as Figure 3 and Figure 4, respectively.

On July 11, 2006, the elevation of the ground water surface ranged from approximately 3,556.63 feet above mean sea level (AMSL) in well WP-6 (upgradient) to 3,540.88 feet AMSL in well WP-16 (downgradient). Ground water flow was from northwest to southeast at an approximate hydraulic gradient of 0.01 feet per foot (ft/ft). On December 12, 2006, the elevation of the ground water surface ranged from approximately 3,556.65 feet AMSL in well WP-6 (upgradient) to 3,541.19 feet AMSL in well WP-16 (downgradient). Ground water flow was from northwest to southeast to southeast with an approximate hydraulic gradient of 0.01 ft/ft. No significant variations in groundwater flow

direction or gradient was observed during the reporting period.

On March 28, 2006, hydrocarbon product (PSH) was measured at 0.04 feet in well WP-18. On July 11, 2006, PSH was measured in wells WP-17 and WP-18 at 0.04 feet and 0.21 feet, respectively. During the reporting period, a GeoTech Product Recovery System (PRS) pneumatic pumping system was used to remove approximately three (3) gallons of PSH that was consistent with natural gas condensate from well WP-18. The PSH was placed in the Facility's slop oil tank. Figure 5 presents a Facility drawing showing the observed PSH thickness.

#### 2.2 Ground Water Samples

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On July 11, 2006, ground water samples were collected for the second (2<sup>nd</sup>) quarter from wells WP-1, WP-5, WP-6, WP-7, WP-13, WP-14 and WP-16 through WP-18. These samples were analyzed for benzene, toluene, ethyl benzene and xylene (collectively referred to as BTEX). On December 12 and 13, 2006, ground water samples were collected for the fourth (4<sup>th</sup>) quarter from wells WP-1, WP-5, WP-14 and WP-16 through WP-18. These samples were analyzed for BTEX. dissolved metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver), chloride, sulfate and TDS. The samples were collected after each well was purged dry or until approximately three (3) casing volumes of ground water was removed. The wells were purged using dedicated disposable PVC bailers and the purged ground water was placed in the Facility's waste water system for disposal in an OCD permitted well. The samples were carefully poured from the bailers into laboratory prepared containers that were preserved, labeled, chilled in an ice chest and hand delivered under chain-of-custody control to Environmental Lab of Texas, Inc. (ELTI), located in Odessa, Texas. No ground water samples were collected from well WP-18 on July 11, 2006, due to PSH in the well. Table 2 presents a summary of the BTEX analysis. Table 3 presents a summary of the dissolved metals analysis. Table 4 presents a summary of the chloride, sulfate and TDS analysis. Appendix A presents the laboratory reports.

On July 11, 2006, benzene was reported above the New Mexico Water Quality Control Commission (WQCC) human health standard of 0.01 milligrams per liter (mg/L) in samples from wells WP-1 (1.53 mg/L), WP-5 (5.31 mg/L), WP-13 (0.415 mg/L), WP-14 (0.105 mg/L) and WP-17 (6.35 mg/L). During the previous reporting period (December 12, 2005) benzene was reported in samples from wells WP-1 (0.131 mg/L), WP-5 (0.128 mg/L), WP-14 (0.221 mg/L), WP-17 (5.38 mg/L) and WP-18 (0.428 mg/L). On December 12 and 13, 2006, benzene was reported above the WQCC human health standard in samples from wells WP-1 (0.131 mg/L), WP-5 (0.128 mg/L), WP-5 (0.128 mg/L), WP-5 (0.128 mg/L), WP-14 (0.221 mg/L), WP-14 (0.221 mg/L), WP-17 (5.38 mg/L). On July 11, 2006, ethyl benzene was reported above the WQCC human health standard of 0.75 mg/L in the sample from well WP-17. Ethyl benzene was not previously reported at concentrations above the WQCC human health standard. Toluene or xylene was not reported above the WQCC human health standard of 0.75 mg/L in the sample from well WP-17. Ethyl benzene was not previously reported at concentrations above the WQCC human health standard. Toluene or xylene was not reported above the WQCC human health standard. Toluene or xylene was not reported above the WQCC human health standard. Toluene or xylene was not reported above the WQCC human health standard. Toluene or xylene was not reported above the WQCC human health standard. Toluene or xylene was not reported above the WQCC human health standard during the reporting period. Figure 6 presents a Facility drawing showing benzene concentrations in ground water on July 11, 2006 and December 12 and 13, 2006.

On July 11, 2006, dissolved barium was reported above the WQCC human health standard of 0.1 mg/L in samples from wells WP-1 (2.02 mg/L) and WP-17 (82.9 mg/L). The current barium concentration in well WP-1 is less than the concentration previously reported on June 14, 2005 (12.1 mg/L). On July 11, 2006, dissolved chromium was reported below the WQCC human health threshold of 0.05 mg/L in all samples. Previously (June 14, 2005) the laboratory reported dissolved chromium above the WQCC human health standard in samples from wells WP-5 (0.0816 mg/L) and WP-7 (0.2 mg/L). On July 11, 2006, selenium was reported at 0.29 mg/L in the sample from well WP-17, which exceeded the WQCC human health standard of 0.05 mg/L. No previous data is available for well WP-17.

Referring to Table 4, on July 11, 2006, chloride, sulfate and TDS in background (upgradient) monitoring well WP-6 were 806 mg/L, 2,060 mg/L and 8,620 mg/L, respectively. On June 14, 2005, chloride, sulfate and TDS were 1,100 mg/L, 1,980 mg/L and 4,670 mg/L, respectively. The

background concentrations of chloride, sulfate and TDS exceed the WQCC domestic water quality standard of 250 mg/L, 600 mg/L and 1000 mg/L, respectively. During 2006, the WQCC domestic water quality standard for chloride was exceeded in samples from wells WP-5, WP-6, WP-7, WP-14, WP-16, WP-17 and WP-18. During 2006, the WQCC domestic water quality standard for sulfate was exceeded in samples from wells WP-6, WP-7 and WP-14. During 2006, the WQCC domestic water quality standard for TDS was exceeded in samples from wells WP-5, WP-6, WP-7, WP-13, WP-14, WP-16, WP-17 and WP-18. The former Climax Chemical plant, which manufactured hydrochloric acid is located northwest (upgradient) of the Facility is considered to be the probable source for the elevated chloride and TDS. Figures 7, 8 and 9 present Facility drawings showing the concentrations of chloride, sulfate and TDS, respectively.

#### 4.0 CONLUSIONS

- No significant variation in depth to ground water was observed during the reporting period except minor fluctuations that may be the result of seasonal variation due to recharge and discharge;
- The groundwater flow direction and gradient remained generally the same as in previous reporting periods and was from northwest to southeast at a gradient of approximately 0.01 ft/ft;
- 3. Hydrocarbon product was observed in wells WP-17 at 0.04 feet (July 11, 2006) and well WP-18 at 0.04 feet (March 28, 2006) and 0.21 feet (July 11, 2006). A GeoTech PRS pneumatic pumping system was used in well WP-18 to remove approximately three (3) gallons of hydrocarbon product that was consistent with natural gas condensate and placed in the Facility's slop oil tank;
- On July 11, 2006, benzene exceeded the WQCC human health standard of 0.01 mg/L in samples from wells WP-1 (1.53 mg/L), WP-5 (5.31 mg/L), WP-13 (0.415 mg/L), WP-14 (0.105 mg/L) and WP-17 (6.35 mg/L). These data are consistent with data from the previous reporting period;

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- 5. Ethyl benzene was reported above the WQCC human health standard of 0.75 mg/L in ground water from well WP-17 and had not been reported above the WQCC human health standard in previous reporting periods;
- 6. Toluene or xylene were below the WQCC human health standards in all samples during the reporting period, which is consistent with the previous reporting periods;
- On July 11, 2006, dissolved barium was reported above the WQCC human health standard (0.1 mg/L) in samples from wells WP-1 (2.02 mg/L) and WP-17 (82.9 mg/L). The current barium concentration for well WP-1 is lower than previous reported on June 14, 2005 (12.1 mg/L). No historical data is available for well WP-17;
- Current laboratory analysis of ground water samples reports no chromium above the WQCC human health standard of 0.05 mg/L. During the previous reporting period (June 14, 2005) dissolved chromium was reported above the WQCC human health standard in samples from wells WP-5 (0.0816 mg/L) and WP-7 (0.2 mg/L);
- On July 11, 2006, selenium was reported above the WQCC human health standard of 0.05 mg/L in the sample from well WP-17 (0.29 mg/L). No previous data is available for well WP-17.
- 10. During the current reporting period, chloride (806 mg/L), sulfate (2,060 mg/L) and TDS (8,620 mg/L) were reported above the WQCC domestic water quality standards of 250 mg/L, 600 mg/L and 1,000 mg/L in ground water samples from background well WP-6. The previous analysis (June 14, 2005) reported chloride, sulfate and TDS in well WP-6 at 1,100 mg/L, 1,980 mg/L and 4,670 mg/L, respectively. During 2006, the WQCC domestic water quality standard for chloride was exceeded in samples from wells WP-5, WP-6, WP-7, WP-14, WP-16, WP-17 and WP-18. The WQCC domestic water quality standard for sulfate was also exceeded in samples from wells WP-6, WP-7, WP-14, WP-16, WP-17 and WP-18. The former Climax Chemical plant, which manufactured hydrochloric acid, is located northwest (upgradient) of the Facility and

considered the probable source for the elevated chloride and TDS.

#### 5.0 **RECOMMENDATIONS**

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Targa will continue quarterly ground water monitoring in accordance with the current sampling schedule, including wells WP-16, WP-17 and WP-18. Targa will continue to recover PSH removal when detected in the monitoring wells.

## TABLES

Summary of Depth to Ground Water and Hydrocarbon Product Thickness Measuurements Targa Midstream Services, L.P., Monument Gas Plant (GW-025)

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			Lea	County, New Mi	exico			Page 1 of 2
Date	WP-1	WP-2	WP-4	WP-4R	WP-5	WP-6	WP-7	WP-10
12/12/2005	25.82 (3552.19)	28.91 (3548.86)	33.15 (3544.00)	33.28 (3545.07)	30.36 (3549.14)	28.90 (3556.46)	27.87 (3555.17)	25.24 (3554.84)
12/19/05	ł	1	33.19 (3543.96)	33.31 (3544.04)	1	1	ł	1
01/16/06	1	1	33.16 (3543.99)	33.33 (3545.02)	I	ł	ł	1
01/23/06	1	1	33.27 (3543.88)	33.43 (3544.92)	I	I	ł	-
02/22/06	1	1	33.59 (3543.56)	33.43 (3544.92)	I	1	ł	ł
03/15/06	1	1	33.69 (3543.46)	33.55 (3544.80)	I	8	ł	ł
03/28/06	27.72 (3550.29)	30.52 (3547.25)	33.68 (3543.47)	33.82 (3544.53)	31.38 (3548.12)	28.73 (3556.63)	30.12 (3552.92)	26.16 (3553.92)
07/11/06	28.84 (3549.17)	31.52 (3546.25)	34.38 <i>(3542.77)</i>	34.56 (3543.79)	32.42 (3547.08)	28.73 (3556.63)	31.27 (3551.77)	26.63 (3553.45)
09/12/06	16.50 (3561.51)	29.46 (3548.31)	34.04 (3543.11)	34.13 (3344.22)	31.31 (3548.19)	*28.66 (0.01') (*3556.70)	31.02 (3552.02)	25.38 (3554.70)
12/12/06	24.98 (3553.03)	31.25 (3546.52)	ł	33.69 (3544.66)	32.40 (3547.10)	28.71 (3556.65)	31.21 (3551.83)	24.75 (3555.33)
02/21/07	26.91 (3554.96)	31.65 (3546.92)	34.32 (3544.01)	34.45 (3545.42)	33.20 (3547.90)	*28.70 (0.05) (3556.64)	31.72 (3552.34)	25.59 (3556.17)

Summary of Depth to Ground Water and Hydrocarbon Product Thickness Measuurements

Targa Midstream Services, L.P., Monument Gas Plant (GW-025) Lea County, New Mexico

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Date	WP-11	WP-12	WP-13	WP-14	WP-15	WP-16	WP-17	WP-18
12/12/2005	26.39 (3554.84)	33.69 (3548.20)	26.38 (3554.18)	35.11 (3546.70)	31.51 (3550.76)	34.32 (3541.51)	35.79 (3543.55)	*35.19 (0.06') (*3544.05)
03/28/06	27.29 (3553.94)	34.48 (3547.41)	27.77 (3552.79)	36.87 (3544.94)	31.83 (3550.44)	34.24 (3541.59)	36.81 (3542.53)	*35.68 (0.04') (*3543.56)
07/11/06	27.84 (3553.39)	34.87 (3547.02)	28.45 (3552.11)	36.78 (3545.03)	32.15 (3550.12)	34.95 (3540.88)	*36.57 (0.04') (*3578.38)	*36.32 (0.21') (*3542.92)
09/12/06	26.75 (3554.48)	35.10 (3546.79)	26.33 (3554.23)	37.58 (3544.23)	1	34.78 (3541.05)	37.05 (*3542.71)	36.92 (3542.32)
12/12/06	25.93 (3555.30)	34.11 (3547.78)	26.12 (3554.44)	35.70 (3546.11)	31.21 (3551.06)	34.64 (3541.19)	36.85 (3542.49)	36.49 (3542.75)
Notes: 1.*: 2.( <i>3554.18</i> ): 3:	All measurements Hydrocarbon prod Groundwater elevi No data available	in feet below top o fuct in well and thic ation in feet above 1	f PVC well casing. kness in parenthesi mean sea level (Alv	is. ASL)				· .

Summary of BTEX Concentrations in Ground Water Samples Targa Midstream Services, L.P., Monument Gas Plant (GW-025) Lea County, New Mexico

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Monitoring	Quarter/Year	Sample	Benzene	Toluene	Ethylbenzene	Xylene
Well		Date	(mg/L)	(mg/L)	(mg/L)	(mg/L)
<b>NMWQCC Standar</b>	rd		0.01	0.75	0.75	0.62
WP-1	4th / 2005	12/12/2005	1.92	<0.05	0.0179	<0.100
	2nd / 2006	07/11/2006	1.53	0.00297	0.0331	0.0154
	4th / 2006	12/13/2006	0.131	0.00292	0.00495	0.00404
WP-5	4th / 2005	12/12/2005	6.26	<0.050	0.0147	< 0.100
	2nd / 2006	07/11/2006	5.31	<0.05	<0.05	<0.1
	4th/2006	12/13/2006	0.128	<0.005	<0.005	<0.01
WP-6	2nd / 2005	06/14/2005	0.00808	0.0105	0.0155	0.0344
	2nd / 2006	07/11/2006	0.00351	0.00816	0.00444	0.01801
WP-7	2nd / 2005	06/14/2005	<0.001	<0.001	<0.001	<0.002
	2nd / 2006	07/11/2006	<0.001	<0.001	<0.001	<0.002
WP-13	2nd / 2005	06/14/2005	0.804	0.00721	0.064	0.01491
	2nd / 2006	07/11/2006	0.415	0.00553	0.0331	0.0154
WP-14	4th / 2005	12/12/2005	0.274	<0.005	<0.005	<0.010
	2nd / 2006	07/11/2006	0.105	0.00214	0.00426	0.00797
	4th/2006	12/13/06	0.221	0.00265	0.00354	0.00769
WP-16	2nd / 2005	08/09/2005	0.00438	<0.001	<0.001	<0.002
	2nd / 2006	07/11/2006	<0.001	0.000518	<0.001	<0.002
	4th/2006	12/13/06	0.000416	0.00242	0.00065	0.004301
WP-17	2nd / 2005	08/09/2005	5.28	0.0909	1.22	0.2828
	2nd / 2006	07/11/2006	6.35	0.0399	0.794	0.214
	4th/2006	12/13/2006	5.38	<0.100	0.438	<0.200
WP-18	2nd / 2005	2002/60/80	1.03	0.0294	0.354	0.2329
	2nd / 2006	07/11/2006	N/S	N/S	N/S	N/S

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Summary of BTEX Concentrations in Ground Water Samples from Monitoring Wells Targa Midstream Services, L.P., Monument Gas Plant (GW-025) Lea County, New Mevico Table 2

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		Trea	COULITY, NEW INE	XICO		
Monitoring	Quarter/Year	Sample	Benzene	Toluene	Ethylbenzene	Xylene
Well		Date	(mg/L)	(mg/L)	(mg/L)	(mg/L)
<b>NMWQCC Standa</b>	p.		0.01	0.75	0.75	0.62
WP-18	4th/2006	12/12/2006	0.428	<0.100	0.0735	0.049
Duplicates						
WP-14	4th/2005	12-Dec-05	0.274	<0.005	<0.005	<0.005
WP-1	2nd / 2006	07/11/2006	1.62	<0.01	0.0288	<0.02
WP-14	4th/2006	12/13/2006	0.2	0.00301	0.00371	0.00758
Notes:	Analysis performed by	y Environmental Lab	of Texas, Inc., Odess	t, Texas		
1. mg/L:	Milligrams per liter					
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2. <: 3. N/S:

Less than method detection limit Product in well - no sample collected

Table 3	ved Metals in Ground Water Samples from Monitoring Wells	tream Swervices I. D. Monument Cas Plant (CW-075)
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Monitoring	Quarter/Year	Sample	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
Well		Date	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
NMWQCC S	Standard		0.1	1.0	0.01	0.05	0.05	0.002	0.05	0.05
WP-1	2nd / 2005	06/14/2005	0.0422	12.1	0.0052	<0.005	0.0347	<0.001	<0.004	<0.005
	2nd / 2006	07/11/2006	0.0354	2.02	<0.0173	<0.0174	<0.0074	0.00021	<0.0751	<0.0101
WP-5	2nd / 2005	06/14/2005	<0.008	0.188	0.0013	0.0816	0.0421	<0.001	<0.004	<0.005
	2nd / 2006	07/11/2006	<0.0426	0.755	<0.0173	<0.0174	<0.0074	0.00014	<0.0751	<0.0101
WP-6	2nd / 2005	06/14/2005	<0.008	0.132	<0.001	<0.005	<0.011	<0.001	<0.004	<0.005
	2nd / 2006	07/11/2006	<0.0426	0.101	<0.0173	<0.0174	<0.0074	0.00017	<0.0751	<0.0101
WP-7	2nd / 2005	06/14/2005	0.0401	0.0325	<0.001	0.2	0.0251	<0.001	<0.004	<0.005
	2nd / 2006	07/11/2006	0.0161	0.0315	<0.0173	<0.0174	<0.0074	0.00012	<0.0751	<0.0101
WP-13	2nd / 2005	06/14/2005	0.0094	0.487	<0.001	<0.005	0.0306	<0.001	<0.004	<0.005
	2nd / 2006	07/11/2006	<0.0426	0.302	<0.0173	<0.0174	<0.0074	0.00018	<0.0751	<0.0101
WP-14	2nd / 2005	06/14/2005	0.0335	0.142	<0.001	<0.005	0.0063	<0.001	<0.004	<0.005
	2nd / 2006	07/11/2006	<0.0426	0.107	<0.0173	<0.0174	<0.0074	0.00011	<0.0751	<0.0101
WP-16	2nd / 2006	07/11/2006	<0.0426	0.0735	<0.0173	<0.0174	<0.0074	0.00014	<0.0751	<0.0101
WP-17	2nd / 2006	07/11/2006	0.0991	82.9	<0.0692	<0.0698	<0.0296	<0.00025	0.29	<0.0405
WP-18	2nd / 2006	07/11/2006	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Duplicate										
WP-1	2nd / 2006	07/11/2006	0.0265	2.08	<0.0173	<0.0174	<0.0074	0.00026	<0.0751	<0.0101
Notes:	L Analysis perform	ned by Environm	ental Lab of Tex	vas. Inc Odessa	. Texas					
1. mg/L:	Milligrams per l	iter		5 5	×					
2. <: 2 N/S.	Less than metho	d detection limit	bataall							
J. 14/J.	FIULUL HI WOL	1 - IIU Saliipic VI	Dilected							

Summary of Dissolved Metals in Ground Monument Gas Plant (GW-025) Targa Midstream Swervices, L.P., Monument Gas Plant (GW-025) Lea County, New Mexico

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Summary of Chloride, Sulfate and TDS Concentrations in Ground Water Samples from Monitoring Wells Targa Midstream Services, L.P., Monument Gas Plant (GW-025)

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Monitoring	Quarter / Year	Sample	Chloride	Sulfate	TDS
Well		Date	(mg/L)	(mg/L)	(mg/L)
NMWQCC Standard			250	600	1000
Duplicates					
WP-14	4th/2005	1212/05	4,770	1,590	10,400
WP-1	2nd / 2006	07/11/2006	20.1	<5	654
WP-14	4th/2006	12/13/2006	4860	1500	11,400
Notes:	Analysis performed by Envi	ironmental Lab of Texas, In-	c., Odessa, Texas		
1. mg/L:	Milligrams per liter				

Less than method detection limit

Product in well - no sample collected

2. <: 3. N/S:

Summary of Chloride, Sulfate and TDS Concentrations in Ground Water Samples from Monitoring Wells Targa Midstream Services, L.P., Monument Gas Plant (GW-025) **Table 4** 

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Monitoring	Quarter / Year	Sample	Chloride	Sulfate	TDS
Well		Date	(mg/L)	(mg/L)	(mg/L)
NMWQCC Standard			250	600	1000
Duplicates					
WP-14	4th/2005	1212/05	4,770	1,590	10,400
WP-1	2nd / 2006	07/11/2006	20.1	<5	654
WP-14	4th/2006	12/13/2006	4860	1500	11,400
Notes: 1. mg/L: 2. <: 3. N/S:	Analysis performed by Env Milligrams per liter Less than method detectior Product in well - no sample	/ironmental Lab of Texas, Ir 1 limit e collected	ic., Odessa, Texas		

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### APPENDIX A

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Section 5

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# Laboratory Reports



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# Analytical Report

**Prepared for:** 

Mark Larson Larson & Associates, Inc. P.O. Box 50685 Midland, TX 79710

Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Location: None Given

Lab Order Number: 6G12009

Report Date: 07/25/06

Larson & Associates, Inc. P.O. Box 50685 Midland TX, 79710

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Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson Fax: (432) 687-0456

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WP-16	6G12009-01	Water	07/11/06 10:25	07/12/06 12:51
WP-17	6G12009-02	Water	07/11/06 10:42	07/12/06 12:51
WP-1	6G12009-03	Water	07/11/06 12:01	07/12/06 12:51
WP-13	6G12009-04	Water	07/11/06 12:46	07/12/06 12:51
WP-14	6G12009-05	Water	07/11/06 13:32	07/12/06 12:51
WP-5 .	6G12009-06	Water	07/11/06 14:08	07/12/06 12:51
WP-7	6G12009-07	Water	07/11/06 14:45	07/12/06 12:51
WP-6	6G12009-08	Water	07/11/06 15:53	07/12/06 12:51
DUP	6G12009-09	Water	07/11/06 00:00	07/12/06 12:51

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Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson Fax: (432) 687-0456

### Organics by GC

**Environmental Lab of Texas** 

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-16 (6G12009-01) Water									
Benzene	ND	0.00100	mg/L	1	EG61316	07/13/06	07/13/06	EPA 8021B	
Toluene	J [0.000518]	0.00100	"		"	"	н	•	
Ethylbenzene	ND	0.00100	"	**		"		н	
Xylene (p/m)	ND	0.00100	"	"		n		"	
Xylene (0)	ND	0.00100	"	11	"	"	"	н	
Surrogate: a.a,a-Trifluorotoluene		108 %	80	-120	"	"	"	"	_
Surrogate: 4-Bromofluorobenzene		83.5 %	80-120		"	"	"	• н	
WP-17 (6G12009-02) Water									
Benzene	6.35	0.100	mg/L	100	EG61316	07/13/06	07/13/06	EPA 8021B	
Toluene	J [0.0399]	0.100	"	"	"	n	a	н	
Ethylbenzene	0.794	0.100	"	"	"	u	Ħ	11	
Xylene (p/m)	0.214	0.100	۳.	**	"	u	"	n	
Xylene (o)	ND	0.100	•	17	"	"	•	"	
Surrogate: a,a,a-Trifluorotoluene		117 %	80	-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.0 %	80-120		"	"	"	"	
WP 1 (6C12000 02) Water									
								· · · •••	
Benzene	1.53	0.0100	mg/L	10	EG61316	07/13/06	07/13/06	EPA 8021B	
Toluene	J [0.00297]	0.0100	••	"	11	"	"	H	
Ethylbenzene	0.0331	0.0100	"		**	**	"	"	
Xylene (p/m)	0.0154	0.0100	"	"		"	"	"	
Xylene (o)	ND	0.0100			"		"	- "	
Surrogate: a,a,a-Trifluorotoluene		113 %	80	-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		82.8 %	80	-120	"	"	"	"	
WP-13 (6G12009-04) Water									
Benzene	0.415	0.0100	mg/L	10	EG61316	07/13/06	07/13/06	EPA 8021B	
Toluene	J [0.00553]	0.0100	**	11	*	"	"	"	
Ethylbenzene	0.0551	0.0100	"	"			"	"	
Xylene (p/m)	0.0158	0.0100	n	"	"	"	"		
Xylene (o)	J [0.00443]	0.0100	"	"	11	**	"	**	
Surrogate: a,a,a-Trifluorotoluene		97.8 %	80	-120	"	"	"	u	
Surrogate: 4-Bromofluorobenzene		91.0 %	80	-120	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.
Larson & Associates, Inc. P.O. Box 50685

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Midland TX, 79710

Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson Fax: (432) 687-0456

### Organics by GC

**Environmental Lab of Texas** 

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-14 (6G12009-05) Water									
Benzene	0.105	0.00500	mg/L	5	EG61316	07/13/06	07/13/06	EPA 8021B	
Toluene	J [0.00214]	0.00500	"	"	"	"	"	18	
Ethylbenzene	J [0.00426]	0.00500	.,	n		n	"		
Xylene (p/m)	0.00690	0.00500	"	"	"	"	н		
Xylene (o)	J [0.00107]	0.00500	"	"	"	"	"		
Surrogate: a.a,a-Trifluorotoluene		98.5 %	80-	120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.0 %	80-	120	"	"	"	"	
WP-5 (6G12009-06) Water									
Benzene	5.31	0.0500	mg/L	50	EG61316	07/13/06	07/13/06	EPA 8021B	
Toluene	ND	0.0500	**	"		"	"		
Ethylbenzene	ND	0.0500		"	"	*		"	
Xylene (p/m)	ND	0.0500	"		11	"	"	**	
Xylene (0)	ND	0.0500	н	"	"	"	."	"	
Surrogate: a.a,a-Trifluorotoluene		84.5 %	80-	120	. "	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.8 %	80-	120	"	"	"	"	
WP-7 (6G12009-07) Water									
Benzene	ND	0.00100	mg/L	1	EG61316	07/13/06	07/13/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	*	. 11		
Xylene (p/m)	ND	0.00100	"	"	н	"	."	ti	
Xylene (o)	ND	0.00100	н	"	11	"	n	"	
Surrogate: a,a,a-Trifluorotoluene		89.8 %	80-	120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.5 %	80-	120	"	"	"	n	
WP-6 (6G12009-08) Water —									
Benzene	0.00351	0.00100	mg/L	1	EG61316	07/13/06	07/14/06	EPA 8021B	
Toluene	0.00816	0.00100	"	"	"	"	н		
Ethylbenzene	0.00444	0.00100	н	"	11	"	"	"	
Xylene (p/m)	0.0122	0.00100		"		"	"	"	
Xylene (o)	0.00581	0.00100	"	"		"	<u> </u>	"	
Surrogate: a,a,a-Trifluorotoluene		262 %	80-	120	"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		163 %	80-	120	• #	"	н	"	S-04

Environmental Lab of Texas

Larson & Associates, Inc. P.O. Box 50685 Midland TX, 79710

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Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson Fax: (432) 687-0456

## Organics by GC

**Environmental Lab of Texas** 

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DUP (6G12009-09) Water								·	
Benzene	1.62	0.0100	mg/L	10	EG61316	07/13/06	07/14/06	EPA 8021B	
Toluene	ND	0.0100	н				"	"	
Ethylbenzene	0.0288	0.0100	"		"	"	"	"	
Xylene (p/m)	ND	0.0100	"		"		ч.	"	
Xylene (o)	ND	0.0100	n	"	"		"	"	
Surrogate: a,a,a-Trifluorotoluene		120 %	80-1	20	"	"	"	n	
Surrogate: 4-Bromofluorobenzene		88.8 %	80-1	20	"	"	"	"	

Environmental Lab of Texas

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### Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project'Manager: Mark Larson

### General Chemistry Parameters by EPA / Standard Methods

### **Environmental Lab of Texas**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzar	Method	Notae
WP-16 (6G12009-01) Water				Diffution	Datun	ricpated		MCUIOU	
	1.110		~					EDA 210 114	
I otat Alkalinity	1410	4.00	mg/L "	2	EG61704	07/17/06	07/17/06	EPA 310.1M	
Unioride	690	25.0		50	EG62119	07/21/06	07/21/06	EPA 300.0	
Total Dissolved Solids	2940	5.00		1	EG61409	07/13/06	07/14/06	EPA 160.1	
Sulfate	202	25.0	"	50	EG62119	07/21/06	. 07/21/06	EPA 300.0	
WP-17 (6G12009-02) Water									
Total Alkalinity	876	4.00	mg/L	2	EG61704	07/17/06	07/17/06	EPA 310.1M	
Chloride	4700	100		200	EG62119	07/21/06	07/21/06	EPA 300.0	
Total Dissolved Solids	7150	5.00	"	1	EG61409	07/13/06	07/14/06	EPA 160.1	
Sulfate	ND	50.0	"	100	EG62119	07/21/06	07/21/06	EPA 300.0	
WP-1 (6G12009-03) Water									
Total Alkalinity	604	4.00	mg/L	2	EG61704	07/17/06	07/17/06	EPA 310.1M	
Chloride	19.9	5.00	"	10	EG62119	07/21/06	07/21/06	EPA 300.0	
Total Dissolved Solids	672	5.00	"	1	EG61409	07/13/06	07/14/06	EPA 160.1	
Sulfate	ND	5.00	"	10	EG62119	07/21/06	07/21/06	EPA 300.0	
WP-13 (6G12009-04) Water									
Total Alkalinity	876	4.00	mg/L	2	EG61704	07/17/06	07/17/06	EPA 310.1M	
Chloride	209	12.5	"	25	EG62119	07/21/06	07/21/06	EPA 300.0	
Total Dissolved Solids	1460	5.00	. 11	1	EG61409	07/13/06	07/14/06	EPA 160.1	
Sulfate	186	12.5	"	25	EG62119	07/21/06	07/21/06	EPA 300.0	
WP-14 (6G12009-05) Water									
Total Alkalinity	1230	4.00	mg/L	2	EG61704	07/17/06	07/17/06	EPA 310.1M	
Chloride	5050	100	"	200	EG62119	07/21/06	07/21/06	EPA 300.0	
Total Dissolved Solids	11000	5.00	"	1	EG61409	07/13/06	07/14/06	EPA 160.1	
Sulfate	1720	100	11	200	EG62119	07/21/06	07/21/06	EPA 300.0	
WP-5 (6G12009+06) Water									
Total Alkalinity	578	4.00	mg/L	2	EG61704	07/17/06	07/17/06	EPA 310.1M	
Chloride	1320	25.0	"	50	EG62119	07/21/06	07/21/06	EPA 300.0	
Total Dissolved Solids	3980	5.00	н	1	EG61409	07/13/06	07/14/06	EPA 160.1	
Sulfate	431	25.0	"	50	EG62119	07/21/06	07/21/06	EPA 300.0	

Environmental Lab of Texas

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### General Chemistry Parameters by EPA / Standard Methods

### Environmental Lab of Texas

		Reporting					2		
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-7 (6G12009-07) Water									
Total Alkalinity	456	4.00	mg/L	2	EG61704	07/17/06	07/17/06	EPA 310.1M	
Chloride	10400	250	н	500	EG62119	07/21/06	07/21/06	EPA 300.0	
Total Dissolved Solids	12100	5.00	"	1	EG61409	07/13/06	07/14/06	EPA 160.1	
Sulfate	4340	250	u	500	EG62119	07/21/06	07/21/06	EPA 300.0	
WP-6 (6G12009-08) Water									
Total Alkalinity	588	4.00	mg/L	2	EG61704	07/17/06	07/17/06	EPA 310.1M	
Chloride	807	25.0	"	50	EG62119	07/21/06	07/21/06	EPA 300.0	
Total Dissolved Solids	8620	5.00	11	1	EG61409	07/13/06	07/14/06	EPA 160.1	
Sulfate	2060	25.0	"	50	EG62119	07/21/06	07/21/06	EPA 300.0	
DUP (6G12009-09) Water									
Total Alkalinity	576	4.00	mg/L	2	EG61704	07/17/06	07/17/06	EPA 310.1M	• .
Chloride	20.1	5.00	u	10	EG62119	07/21/06	07/21/06	EPA 300.0	
Total Dissolved Solids	654	5.00	11	1	EG61409	07/13/06	07/14/06	EPA 160.1	
Sulfate	ND	5.00	"	10	EG62119	07/21/06	07/21/06	EPA 300.0	

Environmental Lab of Texas

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Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson

### Total Metals by EPA / Standard Methods

### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-16 (6G12009-01) Water								,	
Calcium	11.3	0.100	mg/L	10	EG61907	07/19/06	07/19/06	EPA 6010B	·····
Magnesium	12.4	0.0100	"	"	"	"		"	
Potassium	7.85	0.500	**		"	"	11	"	
Sodium	1070	5.00		500	u	"	11	"	
Mercury	J [0.000140]	0.000250	11	1	EG61314	07/13/06	07/13/06	EPA 7470A	J
Chromium	ND	0.0174	"	25	EG61810	07/13/06	07/18/06	EPA 6020A	
Arsenic	ND	0.0426			"	"	11	"	
Selenium	ND	0.0751	"	11		*	н	"	
Silver	ND	0.0101	17	**	"	"	*	"	
Cadmium	ND	0.0173	"	"		"	"	**	
Barium	0.0735	0.0122		н		"	**	n <sup>*</sup>	
Lead	ND	0.00740	"	u	"	"	"	n	
WP-16 (6G12009-01RE1) Water									
Chromium	ND	0.0174	mg/L	25	EG62107	07/13/06	07/21/06	EPA 6020A	
Arsenic	ND	0.0426	"	"	"	n	"	n	
Selenium	ND	0.0751	**	. "	*		۰.	•	
Silver	ND	0.0101		"	"	u	"	••	
Cadmium	ND	0.0173		"	"	"	"	"	
Barium	0.0735	0.0122		"	**		"	"	
Lead	ND	0.00740	"	"	"		"	"	
WP-17 (6G12009-02) Water									
Calcium	244	0.500	mg/L	50	EG61907	07/19/06	07/19/06	EPA 6010B	
Magnesium	324	0.0500		n		. "		11	
Potassium	19.1	2.50		u	"	. "	"	**	
Sodium	2170	5.00	"	500	۳.		"	**	
Mercury	ND	0.000250	"	1	EG61314	07/13/06	07/13/06	EPA 7470A	
Chromium	ND	0.0698	**	100	EG62107	07/13/06	07/21/06	EPA 6020A	
Arsenic	J [0.0991]	0.170	n			H	"	n	J
Selenium	J [0.290]	0.300	"		•	"	"		
Silver	ND	0.0405		"	"		"	u	
Cadmium	ND	0.0692	"	"	"		"	"	
Barium	82.9	0.0489	n	**		"	"	15	
Lead	ND	0.0296	n		"	"			

Environmental Lab of Texas

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Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson

### Total Metals by EPA / Standard Methods

**Environmental Lab of Texas** 

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-1 (6G12009-03) Water									
Calcium	61.1	0.100	mg/L	10	EG61907	07/19/06	07/19/06	EPA 6010B	
Magnesium	37.8	0.0100		"	n	"	n	"	
Potassium	4.51	0.500	"	"		"		"	
Sodium	101	0.500	"	50	"	11	"	м	
Mercury	J [0.000210]	0.000250	"	1	EG61314	07/13/06	07/13/06	EPA 7470A	J
Chromium	ND	0.0174	11	25	EG61810	07/13/06	07/18/06	EPA 6020A	
Arsenic	J [0.0354]	0.0426	"	11	"	"		"	J
Selenium	ND	0.0751		u	"	۳.,	"	<b>n</b> .	
Silver	ND	0.0101	11	n	"	"		17	
Cadmium	ND	0.0173	"	"	"	"		"	
Barium	2.02	0.0122	"	"	' u	*		u	
Lead	ND	0.00740	"	u	"	"	"	**	
WP-13 (6G12009-04) Water						_			
Calcium	70.0	0.100	mg/L	10	EG61907	07/19/06	07/19/06	EPA 6010B	
Magnesium	74.4	0.0500	н	50	н	"	"	"	
Potassium	6.14	0.500	"	- 10	"	. и	"	н	•
Sodium	338	0.500	**	50	"	н	"	"	
Mercury	J [0.000180]	0.000250	**	1	EG61314	07/13/06	07/13/06	EPA 7470A	J
Chromium	ND	0.0174	"	25	EG61810	07/13/06	07/18/06	EPA 6020A	
Arsenic	ND	0.0426	"	"	"	"	"	**	
Selenium	ND	0.0751	11	"	н	u	11	n	
Silver	ND	0.0101	14	"	"	"			
Cadmium	ND	0.0173	"		"	"	"	"	
Barium	0.302	0.0122	11	"	"	"	"	"	
Lead	ND	0.00740	n	"		"	"	n	
WP-14 (6G12009-05) Water	· · · · · · · · · · · · · · · · · · ·								
Calcium	250	0.500	mg/L	50	EG61907	07/19/06	07/19/06	EPA 6010B	
Magnesium	144	0.0500	"	"	ų	"			
Potassium	51.3	2.50	"	· 11	"	"	"		
Sodium	3530	5.00	"	500	"	"	11	"	
Mercury	J [0.000110]	0.000250	"	1	EG61314	07/13/06	07/13/06	EPA 7470A	j
Chromium	ND	0.0174	"	25	EG61810	07/13/06	07/18/06	EPA 6020A	
Arsenic	ND	0.0426	"		ų	"	п	"	
Selenium	ND	0.0751	"	11	"	"	"	**	
Silver	ND	0.0101		**	"	"	"	"	
Cadmium	ND	0.0173	"	"	"	"	"		

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

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		Project Ma	nager: M	ark Larson					
	Tot	al Metals by Environn	EPA / nental 1	Standaro Lab of Ta	d Methoo	ls			
		Reporting			AUS				
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-14 (6G12009-05) Water									
Barium	0.107	0.0122	mg/L	25	EG61810	07/13/06	07/18/06	EPA 6020A	
Lead	ND	0.00740	11			11	Η .	"	
WP-5 (6G12009-06) Water									
Calcium	17.8	0.100	mg/L	10	EG61907	07/19/06	07/19/06	EPA 6010B	
Magnesium	18.5	0.0100		"	"	. "	u	"	
Potassium	31.7	0.500	"			n	н	"	
Sodium	1570	5.00	н	500	"	"	н	"	
Mercury	J [0.000140]	0.000250		1	EG61314	07/13/06	07/13/06	EPA 7470A	J
Chromium	ND	0.0174		25	EG61810	07/13/06	07/18/06	EPA 6020A-	
Arsenic	ND	0.0426		"	"	n	"	"	
Selenium	ND	0.0751	"	, <b>n</b>	"	M	51	"	
Silver	ND	0.0101	"	"			"	"	
Cadmium	ND	0.0173	м		п	"	н	"	
Barium	0.0755	0.0122	"	"	11	"	·	"	
Lead	ND	0.00740		**	*	n	11	u	
WP-7 (6G12009-07) Water						•			•
Calcium	661	1.00	mg/L	100	EG61907	07/19/06	07/19/06	EPA 6010B	
Magnesium	242	0.100		n	"	"	H	"	
Potassium	223	5.00	"	. н	"	"		11	
Sodium	8320	25.0	"	2500	"	"	11	"	
Mercury	l [0.000120]	0.000250	"	1	EG61314	07/13/06	07/13/06	EPA 7470A	J
Chromium	ND	0.0174	*	25	EG61810	07/13/06	07/18/06	EPA 6020A	
Arsenic	J [0.0161]	0.0426	"	"	"		n	H	J
Selenium	ND	0.0751	"	"	"		"	n	
Silver	ND	0.0101	Ħ	u	"		"	u	
Cadmium	ND	0.0173	۳	"	u		11	**	
Barium	0.0315	0.0122	"	"	"		"	n	
Lead	ND	0.00740	11		n	*	"	• ••	

Environmental Lab of Texas

Larson & Associates, Inc. P.O. Box 50685 Midland TX, 79710

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Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson Fax: (432) 687-0456

### Total Metals by EPA / Standard Methods

**Environmental Lab of Texas** 

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prenared	Analyzed	Method	Notes
WP-6 (6G12009-08) Water									
Calcium	381	0.500	mg/L	50	EG61907	07/19/06	07/19/06	EPA 6010B	
Magnesium	181	0.0500	"		"	**			
Potassium	22.2	0.500	"	10	"	"	*	**	
Sodium	777	5.00	"	500	"	"	"	"	
Mercury	J [0.000170]	0.000250		1	EG61314	07/13/06	07/13/06	EPA 7470A	J
Chromium	ND	0.0174	"	25	EG61810	07/13/06	07/18/06	EPA 6020A	
Arsenic	ND	0.0426		"	"			"	
Selenium	ND	0.0751	"		"	54	18	"	
Silver	ND	0.0101	"	"	"	"		"	
Cadmium	ND	0.0173	"	"	"	n	"	17	
Barium	0.101	0.0122		"	"	"	u	n	
Lead	ND	0.00740	"	"	"		**	11	
DUP (6G12009-09) Water									
Calcium	44.7	0.100	mg/L	10	EG61907	07/19/06	07/19/06	EPA 6010B	
Magnesium	37.7	0.0100			"	11	"	11	
Potassium	3.92	0.500		. 11	"	· "	п.	н	
Sodium	91.0	0.500	"	50	"	"	"		
Mercury	0.000260	0.000250	"	1	EG61314.	07/13/06	07/13/06	EPA 7470A	
Chromium	ND	0.0174		25	EG61810	07/13/06	07/18/06	EPA 6020A	
Arsenic	J [0.0265]	0.0426	"	п	"	"		11	j
Selenium	ND	0.0751	"	"	**	"	"		
Silver	ND	0.0101	"	Ħ	"	"	"	u	
Cadmium	ND	0.0173	"		"	"	"	"	
Barium	2.08	0.0122	"	"	"	11	11	"	
Lead	ND	0.00740		"			14	н	

Environmental Lab of Texas

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### Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson

### **Organics by GC - Quality Control**

### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EG61316 - EPA 5030C (GC)										
Blank (EG61316-BLK1)				Prepared &	k Analyzed:	07/13/06				,
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							

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Xylene (p/m)	ND	0.00100	"					
Xylene (0)	ND	0.00100	"					
Surrogate: a,a,a-Trifluorotoluene	38.5		ug/l	40.0	96.2	80-120		
Surrogate: 4-Bromofluorobenzene	32.6		"	40.0	81.5	80-120		
LCS (EG61316-BS1)				Prepared & Anal	yzed: 07/13/06			
Benzene	0.0497	0.00100	mg/L	0.0500	99.4	80-120	100	
Toluene	0.0562	0.00100	"	0.0500	112	80-120		
Ethylbenzene	0.0540	0.00100	"	0.0500	108	80-120		
Xylene (p/m)	0.117	0.00100		0.100	117	80-120		
Xylene (o)	0.0589	0.00100	*	0.0500	118	80-120		
Surrogate: a,a,a-Trifluorotoluene	34.8		ug/l	40.0	87.0	80-120	<u> </u>	_
Surrogate: 4-Bromofluorobenzene	35.4		"	40.0	88.5	80-120		

Calibration Check (EG61316-CCV1)			Prepared: 07/13/	06 Anałyzed: 0'	7/14/06
Benzene	0.0596	mg/L	0.0500	119	80-120
Toluene	0.0568	**	0.0500	114	80-120
Ethylbenzene	0.0560		0.0500	112	80-120
Xylene (p/m)	0.113	**	0.100	113	80-120
Xylene (0)	0.0545	"	0.0500	109	80-120
Surrogate: a,a,a-Trifluorotoluene	39.2	ug/l	40.0	98.0	80-120
Surrogate: 4-Bromofluorobenzene	33.1	"	40.0	82.8	80-120

Matrix Spike (EG61316-MS1)	Source: 6G12009-01			Prepared: 07/13/06 Analyzed: 07/14/06			
Benzene	0.0516	0.00100	mg/L	0.0500	ND	103	80-120
Toluene	0.0534	0.00100		0.0500	0.000518	106	80-120
Ethylbenzene	0.0495	0.00100		0.0500	ND	99.0	80-120
Xylene (p/m)	0.104	0.00100	n	0.100	ND	104	80-120
Xylene (0)	0.0512	0.00100	"	0.0500	ND	102	80-120
Surrogate: a,a,a-Trifluorotoluene	46.1		ug/l	40.0		115	80-120
Surrogate: 4-Bromofluorobenzene	35.5		"	40.0		88.8	80-120

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Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson

### **Organics by GC - Quality Control**

**Environmental Lab of Texas** 

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

#### Batch EG61316 - EPA 5030C (GC)

Matrix Spike Dup (EG61316-MSD1)	Source: 6G12009-01			Prepared: 07/13/06 Analyzed: 07/14/06					
Benzene	0.0428	0.00100	mg/L	0.0500	ND	85.6	80-120	18.5	20
Toluene	0.0439	0.00100	"	0.0500	0.000518	86.8	80-120	19.9	20
Ethylbenzene	0.0488	0.00100	11	0.0500	ND	97.6	80-120	1.42	20
Żylene (p/m)	0.0898	0.00100	н	0.100	ND	89.8	80-120	14.7	20
Xylene (o)	0.0427	0.00100	"	0.0500	ND	85.4	80-120	17.7	20
Surrogate: a,a,a-Trifluorotoluene	36.4		ug/l	40.0		91.0	80-120		
Surrogate: 4-Bromofluorobenzene	32.2		"	40.0		80.5	80-120		

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### General Chemistry Parameters by EPA / Standard Methods - Quality Control

### **Environmental Lab of Texas**

Analyta	Dogult	Reporting	Unita	Spike	Source	1/DEC	%REC	PPD	RPD Limit	Notos
	Result	Limit	Units	Level	Result	76KEU	Limits	KPD		notes
<b>Batch EG61409 - Filtration Preparation</b>										
Blank (EG61409-BLK1)				Prepared: (	07/13/06 A	nalyzed: 07	7/14/06			
Total Dissolved Solids	ND	5.00	mg/L							
Duplicate (EG61409-DUP1)	Sou	ırce: 6G12009-	-01	Prepared: (	07/13/06 A	nalyzed: 07	7/14/06			
Total Dissolved Solids	2920	5.00	mg/L		2940			0.683	5	
Batch EG61704 - General Preparation (We	tChem)								•	
Blank (EG61704-BLK1)				Prepared 8	k Analyzed	07/17/06				
Total Alkalinity	ND	2.00	mg/L							
LCS (EG61704-BS1)				Prepared 8	k Analyzed	07/17/06				
Bicarbonate Alkalinity	224	2.00	mg/L	200	- ^	112	85-115			
Duplicate (EG61704-DUP1)	Sou	irce: 6G14001	-01	Prepared 8	k Analyzed	07/17/06				
Total Alkalinity	262	. 2.00	mg/L		260			0.766	20	
Reference (EG61704-SRM1)				Prepared &	& Analyzed	: 07/17/06				
Total Alkalinity	82.0		mg/L	82.7		. 99.2	90-110			
Batch EG62119 - General Preparation (We	tChem)									
Blank (EG62119-BLK1)				Prepared &	k Analyzed	07/21/06				
Sulfate	ND	0.500	mg/L							
Chloride	0.0870	0.500	"							
LCS (EG62119-BS1)				Prepared &	2 Analyzed	: 07/21/06				
Sulfate	12.2	0.500	mg/L	10.0		122	80-120			S-(
Chloride	10.4	0.500	"	10.0		104	80-120			

Environmental Lab of Texas

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Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson

### General Chemistry Parameters by EPA / Standard Methods - Quality Control

### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EG62119 - General Preparation (V	VetChem)									
Calibration Check (EG62119-CCV1)				Prepared &	z Analyzed:	07/21/06				
Sulfate	10.4		mg/L	10.0		104	80-120			
Chloride	10.0		"	10.0		100	80-120			
Duplicate (EG62119-DUP1)	Sourc	e: 6G12009-	01	Prepared &	Analyzed:	07/21/06				
Chloride	696	25.0	mg/L		690			0.866	20	
Sulfate	208	25.0	"		202			2.93	20	
Matrix Spike (EG62119-MS1)	Sour	e: 6G12009-	01	Prepared &	Analyzed:	07/21/06				
Chloride	1240	25.0	mg/L	500	690	110	80-120			
Sulfate	732	25.0		500	202	106	75-125			

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Project: Targa Midstream/ Monument GWM

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P.O. Box 50685		Project Nu	mber: 2-	0108						
Midland TX, 79710		Project Mar	nager: M	ark Larson	_					
	Total Metals b	y EPA / St	andard	Methods	5 - Qualit	ty Contr	ol			
·		Environm	iental I	Lab of Te	xas					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EG61314 - EPA 7470A										
	<u> </u>	<u> </u>		Prepared &	k Analyzed:	07/13/06				
Mercury	ND	0.000250	mg/L							
LCS (EG61314-BS1)				Prepared &	2 Analyzed:	07/13/06				
Mercury	0.00104	0.000250	mg/L	0.00100		104	85-115		4	
LCS Dup (EG61314-BSD1)				Prepared 8	2 Analyzed:	07/13/06				
Mercury	0.000910	0.000250	mg/L	0.00100		91.0	85-115	13.3	20	
Calibration Check (EG61314-CCV1)				Prepared 8	¿ Analyzed:	07/13/06				
Mercury	0.00107		mg/L	0.00100		107	90-110			
Matrix Spike (EG61314-MS1)	Sou	rce: 6G12009	-01	Prepared &	& Analyzed:	07/13/06				
Mercury	0.00116	0.000250	mg/L	0.00100	0.000140	102	75-125			
Batch EG61810 - EPA 3005A				_						
Blank (EG61810-BLK1)				Prepared &	k Analyzed:	07/18/06				
Chromium	ND	0.000698	mg/L							
Arsenic	ND	0.00170	"							
Selenium	ND	0.00300	"							
aliver Cadmium	· ND	0.000405						k.		
Barium	ND	0.000092								
Lead	ND	0.000296	H							
LCS (FG61810-BS1)				Prenared &	& Analyzed:	07/18/06				
Chromium	0.188	0.000698	mg/L	0.200	- Thay 200.	94.0	85-115			
Arsenic	0.701	0.00170		0.800		87.6	85-115			
Selenium	0.401	0.00300	"	0.400		100	85-115			
Silver	0.0988	0.000405	"	0.100		98.8	85-115			
Cadmium	0.195	0.000692		0.200		97.5	85-115			
Barium	0.211	0.000489	"	0.200		106	85-115			
Lead	0.949	0.000296		1.10		86.3	85-115			
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### Project: Targa Midstream/ Monument GWM Project Number: 2-0108

Project Manager: Mark Larson

### Total Metals by EPA / Standard Methods - Quality Control

**Environmental Lab of Texas** 

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EG61810 - EPA 3005A								<u>.</u>		
LCS Dup (EG61810-BSD1)				Prepared &	Analyzed:	07/18/06				
Chromium	0.190	0.000698	mg/L	0.200		95.0	85-115	1.06	20	
Arsenic	0.694	0.00170	"	0.800		86.8	85-115	1.00	20	
Selenium	0.397	0.00300	"	0.400		99.2	85-115	1.00	20	
Silver	0.0993	0.000405	"	0.100		99.3	85-115	0.505	20	
Cadmium	0.195	0.000692		0.200		97.5	85-115	0.00	20	
Barium	0.212	0.000489	•	0.200		106	85-115	0.473	20	
Lead	0,954	0.000296	"	1.10		86.7	85-115	0.525	20	
Calibration Check (EG61810-CCV1)				Prepared &	: Analyzed:	07/18/06				
Chromium	0.0506		mg/L	0.0500		101	90-110			
Arsenic	0.0492		"	0,0500		98.4	90-110			
Selenium	0.0485		"	0.0500		97.0	90-110			
Silver	0.0528			0.0500		106	90-110			
Cadmium	0.0515			0.0500		103	90-110			
Barium	0.0523		"	0.0500		105	90-110			
Lead	0.0512		"	0.0500		102	90-110			
Matrix Spike (EG61810-MS1)	Sou	rce: 6G12009-	-01	Prepared &	z Analyzed:	07/18/06				
Chromium	0.152	0.0174	mg/L	0.200	ND	. 76.0	75-125			
Arsenic	0.750	0.0426	"	0.800	ND	93.8	75-125			
Selenium	0.351	0.0751	"	0.400	ND	87.8	75-125			
Silver	0.117	0.0101	"	0.100	ND	117	75-125			
Cadmium	0.166	0.0173	**	0.200	ND	83.0	75-125			
Barium	0.246	0.0122	"	0.200	0.0735	86.2	75-125			
Lead	0.909	0.00740	"	1.10	ND	82.6	75-125			
Matrix Spike Dup (EG61810-MSD1)	Sou	rce: 6G12009	-01	Prepared &	Analyzed:	07/18/06.				
Chromium	0.156	0.0174	mg/L	0.200	ND	78.0	75-125	2.60	20	
Arsenic	0.747	0.0426	*	0.800	ND	93.4	75-125	0.401	20	
Selenium	0.358	0.0751	"	0.400	ND	89.5	75-125	1.97	20	
Silver	0.116	0.0101	"	0.100	ND	116	75-125	0.858	20	
Cadmium	0.165	0.0173	"	0.200	ND	82.5	75-125	0.604	20	
Barium	0.247	0.0122	"	0.200	0.0735	86.8	75-125	0.406	20	
Lead	0.913	0.00740	"	1.10	ND	83.0	75-125	0.439	20	

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Project: Targa Midstream/ Monument GWM

Project Number: 2-0108

Project Manager: Mark Larson

### Total Metals by EPA / Standard Methods - Quality Control

### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EG61907 - 6010B/No Digestion										
Blank (EG61907-BLK1)				Prepared &	k Analyzed:	07/19/06				
Calcium	ND	0.0100	mg/L							
Magnesium	ND	0.00100	".							
Potassium	ND	0.0500	н							
Sodium	ND	0.0100	n							
Calibration Check (EG61907-CCV1)				Prepared &	k Analyzed:	07/19/06				
Calcium	2.05		mg/L	2.00		102	85-115			
Magnesium	2.15		"	2.00		108	85-115			
Potassium	1.87		"	2.00		93.5	85-115			
Sodium	1.95		и	2.00		97.5	85-115			
Duplicate (EG61907-DUP1)	Sou	rce: 6G12009	-01	Prepared &	k Analyzed:	07/19/06				
Calcium	13.4	0.100	mg/L		11.3			17.0	20	
Magnesium	12.6	0.0100	"		12.4			1.60	20	
Potassium	8.01	0.500			7.85			2,02	20	

### Batch EG62107 - EPA 3005A

Blank (EG62107-BLK1)				Prepared: 07/13/06 Analyzed: 07/21/06
Chromium	ND	0.000698	mg/L	
Arsenic	ND	0.00170	**	
Selenium	ND	0.00300	м	
Silver	ND	0.000405	"	
Cadmium	ND	0.000692	"	
Barium	ND	0.000489	"	
Lead	ND	0.000296	"	

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Environmental Lab of Texas

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### Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson

### Total Metals by EPA / Standard Methods - Quality Control

### **Environmental Lab of Texas**

·····					~					
Angleta	D 14	Reporting	T lesites	Spike	Source	0/ BEC	%REC	רומס	RPD	Notes
Analyte	Kesult	Limit	Units	Level	Kesult	%REC	Limits	KPD	Limit	Notes
Batch EG62107 - EPA 3005A										
LCS (EG62107-BS1)				Prepared: 0	07/13/06 A	nalyzed: 07	//21/06	•		
Chromium	0.194	0.000698	mg/L	0.200		97.0	85-115			
Arsenic	0.694	0.00170		0.800		86.8	85-115			
Selenium	0.389	0.00300	"	0.400		97.2	85-115			
Silver	0.0986	0.000405	n	0.100		98.6	85-115			
Cadmium	0.198	0.000692	"	0.200		99.0	85-115			
Barium	0.222	0.000489		0.200		111	85-115			
Lead	0.966	0.000296	"	1.10		87.8	85-115			
LCS Dup (EG62107-BSD1)				Prepared: (	07/13/06 A	nalyzed: 07	//21/06			
Chromium	0.192	0.000698	mg/L	0.200		96.0	85-115	1.04	20	
Arsenic	0.695	0.00170		0.800		86.9	85-115	0.144	20	
Selenium	0.386	0.00300		0.400		96.5	85-115	0.774	20	
Silver	0.0971	0.000405	"	0.100		97.1	85-115	1,53	20	
Cadmium	0.196	0.000692	"	0.200		98.0	85-115	1.02	20	
Barium	0.226	0.000489	"	0.200		113	85-115	1.79	20	
Lead	0.964	0.000296	"	1.10		87.6	85-115	0.207	20	
Calibration Check (EG62107-CCV1)				Prepared: (	07/13/06 A	nalyzed: 07	7/21/06			
Chromium	0.0491		mg/L	0.0500		. 98.2	90-110			
Arsenic	0.0504		"	0.0500		101	90-110			
Selenium	0.0501			0.0500		100	90-110			
Silver	0.0505			0.0500		101	90-110			
Cadmium	0.0503		"	0.0500		101	90-110			
Barium	0.0531		"	0.0500		106	90-110			
Lead	0.0509		"	0.0500		102	90-110			
Matrix Spike (EG62107-MS1)	Sou	urce: 6G12009	-01RE1	Prepared: (	)7/13/06 A	nalyzed: 07	7/21/06			
Chromium	0.146	0.0174	mg/L	0.200	ND	73.0	75-125			MS-3
Arsenic	0.638	0.0426	н	0.800	ND	79.8	75-125			
Selenium	0.319	0.0751	н	0.400	ND	79.8	75-125			
Silver	0.0575	0.0101	"	0.100	ND	57.5	75-125			MS-1
Cadmium	0.157	0.0173		0.200	ND	78.5	75-125			
Barium	0.239	0.0122	"	0.200	0.0735	82.8	75-125			
Lead	0.871	0.00740	"	1.10	ND	79.2	75-125			

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### Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson

### Total Metals by EPA / Standard Methods - Quality Control

**Environmental Lab of Texas** 

	Reporting		Spike	Source		%REC		RPD	
Analyte Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

### Batch EG62107 - EPA 3005A

Matrix Spike Dup (EG62107-MSD1)	Sou	Prepared: 07/13/06 Analyzed: 07/21/06								
Chromium	0.144	0.0174	mg/L	0.200	ND	72.0	75-125	1.38	20	MS-3
Arsenic	0.635	0.0426		0.800	ND	79.4	75-125	0.471	20	
Selenium	0.324	0.0751		0.400	ND	81.0	75-125	1.56	20	
Silver	0.0570	0.0101		0.100	ND	57.0	75-125	0.873	20	MS-1
Cadmium	0.157	0.0173		0.200	ND	78.5	75-125	0.00	20	
Barium	0.235	0.0122		0.200	0.0735	80.8	75-125	1.69	20	
Lead	0.868	0.00740	"	1.10	ND	78.9	75-125	0.345	20	
Post Spike (EG62107-PS1)	Sou	rce: 6G12009	-01RE1	Prepared:	07/13/06 Ai	nalyzed: 0	7/21/06			
Chromium	24.3	0.0872	mg/L	25.0	ND	97.2	85-115			

Environmental Lab of Texas

Larson & Associates, Inc. P.O. Box 50685 Midland TX, 79710

Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson

#### Notes and Definitions

- S-07 Recovery outside Laboratory historical or method prescribed limits.
- ·S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- MS-3 Matrix spike and/or matrix spike duplicate outside 75-125% limits. Serial dilution (x5) outside 10% RPD limits. Post spike for the serial dilution sample was within 75-125% recovery, therefore data accepted based on method requirements.
- MS-1 Recovery of sample outside of historical limits due to matrix interference.
- J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
- DET Analyte DETECTED
- Analyte NOT DETECTED at or above the reporting limit ND
- NR Not Reported
- Sample results reported on a dry weight basis đry
- RPD Relative Percent Difference
- LCS Laboratory Control Spike
- Matrix Spike MS
- Duplicate Dup

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Report Approved By:

Peggy Allen, QA Officer

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7/25/2006

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director

Jeanne Mc Murrey, Inorg. Tech Director LaTasha Cornish, Chemist Sandra Sanchez, Lab Tech.

Date:

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 20 of 21

Larson & Associates, Inc.	Project:	Targa Midstream/ Monument GWM	Fax: (432) 687-0456
P.O. Box 50685	Project Number:	2-0108	
Midland TX, 79710	Project Manager:	Mark Larson	

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If you have received this material in error, please notify us immediately at 432-563-1800.

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Environmental Lab of Texas

### Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

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	Report -	- 00	mpie Log-In	
Client: Larson + Associates				
Date/Fime: 07-12-04 C 1251				
Lef lot m				
Order #:				
nitials: JMM				
Sample Receipt	Checklis	st		
Femperature of container/cooler?	(Yes)	No	4.0 C I	
Shipping container/cooler in good condition?	(Yes)	No		
Custody Seals intact on shipping container/cooler?	Yes	No	Alot present >	
Custody Seals intact on sample bottles?	Yes	No	Not present>	
Chain of custody present?	(TES)	No	<u> </u>	
Semple Instructions complete on Chain of Custody?	(Tes)	No		
Chain of Custody signed when relinquished and received?	125	NO		
Unain or custody agrees with sample label(s)		NO		
Container labels legible and intact?		NO	······	
Sample Matrix and properties same as on chain of custody?		No		
Samples in proper container/control		No		
Sample bottles intact?		No		
Preservations documented on Chain of Custody?		No		
Containers documented on Chain of Custody?	Yes	No		
Sufficient sample amount for indicated test?	Kes	No		
All samples received within sufficient hold time?	2031	No		
VOC samples have zero headspace?	Yes )	No	Nct Applicable	
Other chapping				
Other observations:				
Other observations:				••••••••••••••••••••••••••••••••••••••
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Other observations: Variance Docu Contact Person: Date/Time: Regarding:	mentatio	n:	Contacted by:	1
Other observations: Variance Docu Contact Person: Date/Time: Regarding:	mentatio	n:	Contacted by:	i
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Other observations: Variance Docu Contact Person: Date/Time: Regarding: Corrective Action Taken:	mentation	n:	Contacted by:	1
Other observations: Variance Docu Contact Person: Date/Time: Regarding: Corrective Action Taken:	mentatio	n:	Contacted by:	1
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# Analytical Report

**Prepared for:** 

Mark Larson Larson & Associates, Inc. P.O. Box 50685 Midland, TX 79710

Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Location: None Given

Lab Order Number: 6L15005

Report Date: 01/03/07

Larson & Associates, Inc. P.O. Box 50685 Midland TX, 79710

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Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson Fax: (432) 687-0456

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WP-18	6L15005-01	Water	12/12/06 12:40	12-15-2006 09:35
WP-17	6L15005-02	Water	12/13/06 12:05	12-15-2006 09:35
WP-16	6L15005-03	Water	12/13/06 09:30	12-15-2006 09:35
WP-5	6L15005-04	Water	12/13/06 10:30	12-15-2006 09:35
WP-1	6L15005-05	Water	12/13/06 10:50	12-15-2006 09:35
WP-14	6L15005-06	Water	12/13/06 11:15	12-15-2006 09:35
DUP #1	6L15005-07	Water	12/13/06 00:00	12-15-2006 09:35

Page 1 of 13

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Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson Fax: (432) 687-0456

### Organics by GC

**Environmental Lab of Texas** 

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-18 (6L15005-01) Water									
Benzene	0.428	0.100	mg/L	100	EL62008	12/20/06	12/20/06	EPA 8021B	
Toluene	ND	0.100	"	**	"	n	"	"	
Ethylbenzene	J [0.0735]	0.100	"	"		n	"		
Xylene (p/m)	J [0.0490]	0.100	"	"	"	n		"	
Xylene (0)	ND	0.100	11	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		81.8 %	80-	120	"	"	"	н	
Surrogate: 4-Bromofluorobenzene		80.8 %	80-	-120	"	"	n	"	
WP-17 (6L15005-02) Water									
Benzene	5.38	0.100	mg/L	100	EL62008	12/20/06	12/20/06	EPA 8021B	
Toluene	ND	0.100	. "	"	"	"		"	
Ethylbenzene	0.438	0.100	"	н	•	"	*	ч	
Xylene (p/m)	ND	0.100	"	"		"	"	"	
Xylene (o)	ND	0.100	"	"	н	"	"	11	
Surrogate: a,a,a-Trifluorotoluene		91.5 %	80-	-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.0 %	80-	-120	"	"	"	"	
WP-16 (6L15005-03) Water					- 1881				
Benzene	J [0.000416]	0.00100	mg/L	1	EL62008	12/20/06	12/21/06	EPA 8021B	
Toluene	0.00242	0.00100	**	11		"	"	"	
Ethylbenzene	J [0.000650]	0.00100	ę	14	11	"	"	11	
Xylene (p/m)	0.00346	0.00100	"	"	*		"	79	
Xylene (0)	J [0.000841]	0.00100	"	u	"	"	"	**	
Surrogate: a,a,a-Trifluorotoluene		105 %	80	-120	"	"	"	17	
Surrogate: 4-Bromofluorobenzene		90.2 %	80	-120	"	"	"	"	
WP-5 (6L15005-04) Water									
Benzene	0.128	0.00500	mg/L	5	EL62008	12/20/06	12/21/06	EPA 8021B	
Toluene	ND	0.00500	"		"	34	"	"	
Ethylbenzene	ND	0.00500	"	"	"		"	"	
Xylene (p/m)	ND	0.00500	"	"		•	"	"	
Xylene (o)	ND	0.00500	"	11	"	"		"	
Surrogate: a,a,a-Trifluorotoluene		99.5 %	80	-120	"	"	n	"	<u>_</u>
Surrogate: 4-Bromofluorobenzene		102 %	80	-120	"	"	"	"	

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### Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson

### Organics by GC

**Environmental Lab of Texas** 

Analyte	Dasult	Reporting	Linite	D'1-1'	D-1-1	D	A	A ford and	×7 .
WD 1 (61 15005 05) Water	Keşuli			Dilution	Batch	Prepared	Analyzed	Method	Note
w1-1 (01/15005-05) water									
Benzene	0.131	0.0100	mg/L	10	EL62008	12/20/06	12/21/06	EPA 8021B	
Toluene	J [0.00292]	0.0100			11	**	"	"	
Ethylbenzene	J [0.00495]	0.0100	"	"	"	*	"		
Xylene (p/m)	ND	0.0100		"	"		"	"	
Xylene (0)	J [0.00404]	0.0100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		119 %	80-1	20	"	"	"	".	
Surrogate: 4-Bromofluorobenzene		87.0 %	80-1	20	"	"	"	"	
WP-14 (6L15005-06) Water									
Benzene	0.221	0.00100	mg/L	1	EL62008	12/20/06	12/21/06	EPA 8021B	,
Toluene	0.00265	0.00100	"			"			
Ethylbenzene	0.00354	0.00100	*			"	н	н	
Xylene (p/m)	0.00493	0.00100	"		. "	"	"	"	
Xylene (0)	0.00276	0.00100	11	**	"	11	11	n	
Surrogate: a,a,a-Trifluorotoluene	-	120 %	80-1	20	. "	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.2 %	80-1	20	"	"	"	"	
DUP #1 (6L15005-07) Water		•							
Benzene	0.200	0.00100	mg/L	1	EL62008	12/20/06	12/22/06	EPA 8021B	
Toluene	0.00301	0.00100	"			"	11	н	
Ethylbenzene	0.00371	0.00100	"	н	"	"	ti	H	
Xylene (p/m)	0.00477	0.00100	"	"		"	"	*	
Xylene (0)	0.00281	0.00100			"	"	"	11	
Surrogate: a,a,a-Trifluorotoluene		85.5 %	80-1	20	"	"	'n	"	
Surrogate: 4-Bromofluorobenzene		85.2 %	80-1	20	"	"	"	"	

Environmental Lab of Texas

Larson & Associates, Inc. P.O. Box 50685 Midland TX, 79710

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### Project: Targa Midstream/ Monument GWM Project Number: 2-0108

Project Manager: Mark Larson

### General Chemistry Parameters by EPA / Standard Methods

### **Environmental Lab of Texas**

Analyte	Dacult	Reporting	Unite	Dilator	D-+-1	Dural	414		Notes
WD 19 (CI 15005 01) Water			Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	<u> </u>				<u> </u>		· · · · · · · · · · · · · · · · · · ·		<u> </u>
Total Alkalinity	1960	20.0	mg/L	10	EL61901	12/19/06	12/19/06	EPA 310.1M	В
Chloride	7510	125		250	EL62105	12/20/06	12/21/06	EPA 300.0	
Total Dissolved Solids	14400	10.0	"	1	EL61530	12/18/06	12/19/06	EPA 160.1	
Sulfate	493	125		250	EL62105	12/20/06	12/21/06	EPA 300.0	
WP-17 (6L15005-02) Water									
Total Alkalinity	868	8.00	mg/L	4	EL61901	12/19/06	12/19/06	EPA 310.1M	В
Chloride	4770	100	"	200	EL62105	12/20/06	12/21/06	EPA 300.0	
Total Dissolved Solids	9110	10.0		1	EL61530	12/18/06	12/19/06	EPA 160.1	
Sulfate	178	100	"	200	EL62105	12/20/06	12/21/06	EPA 300.0	
WP-16 (6L15005-03) Water									
Total Alkalinity	1360	8.00	mg/L	4	EL61901	12/19/06	12/19/06	EPA 310.1M	В
Chloride	680	25.0	"	50	EL62105	12/20/06	12/21/06	EPA 300.0	
Total Dissolved Solids	2900	10.0		1	EL61530	12/18/06	12/19/06	EPA 160.1	
Sulfate	182	25.0	"	50	EL62105	12/20/06	12/21/06	EPA 300.0	
WP-5 (6L15005-04) Water									
Total Alkalinity	1100	40.0	mg/L	20	EL61901	12/19/06	12/19/06	EPA 310.1M	В
Chloride	504	25.0	**	50	EL62105	12/20/06	12/21/06	EPA 300.0	
Total Dissolved Solids	2180	10.0	"	1	EL61530	12/18/06	12/19/06	EPA 160.1	
Sulfate	173	25.0	"	50	EL62105	12/20/06	12/21/06	EPA 300.0	
WP-1 (6L15005-05) Water									<u>.</u>
Total Alkalinity	618	4.00	mg/L	2	EL61901	12/19/06	12/19/06	EPA 310.1M	E
Chloride	15.2	5.00	"	10	EL62105	12/20/06	12/21/06	EPA 300.0	
Total Dissolved Solids	764	10.0	"	1	EL61530	12/18/06	12/19/06	EPA 160.1	
Sulfate	5.24	5.00	u	10	EL62105	12/20/06	12/21/06	EPA 300.0	
WP-14 (6L15005-06) Water									
Total Alkalinity	1300	8.00	mg/L	4	EL61901	12/19/06	12/19/06	EPA 310.1M	E
Chloride	3800	50.0	"	100	EL62105	12/20/06	12/21/06	EPA 300.0	
<b>Total Dissolved Solids</b>	8790	10.0	"	1	EL61530	12/18/06	12/19/06	EPA 160.1	
Sulfate	1100	50.0	"	100	EL62105	12/20/06	12/21/06	EPA 300.0	

Environmental Lab of Texas

Larson & Associates, Inc. P.O. Box 50685 Midland TX, 79710

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Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson

### General Chemistry Parameters by EPA / Standard Methods

### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DUP #1 (6L15005-07) Water									
Total Alkalinity	1160	8.00	mg/L	4	EL61901	12/19/06	12/19/06	EPA 310.1M	В
Chloride	4860	100	"	200	EL62105	12/20/06	12/21/06	EPA 300.0	
Total Dissolved Solids	11400	10.0	п	1	EL61530	12/18/06	12/19/06	EPA 160.1	
Sulfate	1500	100	"	200	EL62105	12/20/06	12/21/06	EPA 300.0	

Environmental Lab of Texas

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### Total Metals by EPA / Standard Methods

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-18 (6L15005-01) Water									
Calcium	95.0	4.05	mg/L	50	EL61906	12/19/06	12/19/06	EPA 6010B	
Magnesium	199	1.80	"		"	14	"	*	
Potassium	39.3	0.600		10	"	'n	**	••	
Sodium	5060	43.0	**	1000	"	*	"	и	
WP-17 (6L15005-02) Water									
Calcium	249	8.10	mg/L	100	EL61906	12/19/06	12/19/06	EPA 6010B	
Magnesium	399	3.60	"	11	"	"	"	<b>11</b>	
Potassium	21.4	0.600	"	10	"		"	17	
Sodium	3240	43.0	"	1000	"				
WP-16 (6L15005-03) Water									
Calcium	13.8	0.810	mg/L	10	EL61906	12/19/06	12/19/06	EPA 6010B	
Magnesium	12.6	0.360			**	"	11	"	
Potassium	6.60	0.600	"	•	**	۳.	"	"	
Sodium	1710	43.0	**	1000	"	"	•	"	
WP-5 (6L15005-04) Water									
Calcium	14.5	0.810	mg/L	10	EL61906	12/19/06	12/19/06	EPA 6010B	
Magnesium	6.58	0.360	"	"		"	"	"	
Potassium	14.9	0.600	*	"		"	"	"	
Sodium	888	21.5		500	"	"	11	и	
WP-1 (61.15005-05) Water									
Calcium	86.6	4.05	mg/L	50	EL61906	12/19/06	12/19/06	EPA 6010B	
Magnesium	62.2	1.80	"	n		"	"	11	
Potassium	4.51	0.600	"	10	"	"	"	"	
Sodium	90.2	2.15	"	50	**			н	
WP-14 (6L15005-06) Water									
Calcium	198	4.05	mg/L	50	EL61906	12/19/06	12/19/06	EPA 6010B	
Magnesium	130	1.80	H	Ħ	"	"	"	14	
Potassium	41.0	3.00	"	n	11	"	۳.	*1	
Sodium	2970	43.0	"	1000	"	"	"	"	

Environmental Lab of Texas

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Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson

### Total Metals by EPA / Standard Methods

### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DUP #1 (6L15005-07) Water									
Calcium	285	4.05	mg/L	50	EL61906	12/19/06	12/19/06	EPA 6010B	
Magnesium	162	1.80	*	н	"	"	•		
Potassium	46.2	3.00		н	"	"	"	*	
Sodium	5060	108	"	2500	"	"		**	

Environmental Lab of Texas

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### Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson

### Organics by GC - Quality Control

**Environmental Lab of Texas** 

Analyte	Result	Reporting	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
					Result	////				
Batch EL62008 - EPA 5030C (GC)										
Blank (EL62008-BLK1)				Prepared &	k Analyzed:	12/20/06				
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	11							
Xylene (p/m)	ND	0.00100	**							
Xylene (0)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	41.7		ug/l	40.0		104	80-120			
Surrogate: 4-Bromofluorobenzene	32.6		n	40.0		81.5	80-120			
LCS (E1.62008-BS1)				Prepared 8	k Analyzed:	12/20/06				
Benzene	0.0468	0.00100	mg/L	0,0500		93.6	80-120			
Toluene	0.0469	0.00100	"	0.0500		93.8	80-120			
Ethylbenzene	0.0500	0.00100	"	0.0500		100	80-120			
Xylene (p/m)	0.0893	0.00100	**	0.100		89.3	80-120			
Xylene (o)	0.0431	0.00100	н	0.0500		86.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	34.7		ug/l	40.0		86.8	80-120			
Surrogate: 4-Bromofluorobenzene	40.0		"	40.0		100	80-120			
Calibration Check (EL62008-CCV1)				Prepared &	& Analyzed:	12/20/06				
Benzene	56.0		ug/l	50.0		112	80-120		· · ·	
Toluene	48.1		"	50.0		96.2	80-120			
Ethylbenzene	42.2		Ħ	50.0		84.4	80-120			
Xylene (p/m)	81.5		н	100		81.5	80-120			
Xylene (o)	41.4		"	50.0		82.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	39.4		"	40.0		98.5	80-120			
Surrogate: 4-Bromofluorobenzene	33.9		"	40.0		84.8	80-120			
Matrix Spike (EL62008-MS1)	Sou	irce: 6L15012-	-01	Prepared:	12/20/06 Ai	nalyzed: 12	2/21/06			
Benzene	0.0482	0.00100	mg/L	0.0500	0.00450	87.4	80-120			
Toluene	0.0434	0.00100	"	0.0500	0.000269	86.3	80-120			
Ethylbenzene	0.0438	0.00100	"	0.0500	ND	87.6	80-120			
Xylene (p/m)	0.0882	0.00100		0.100	0.000759	87.4	80-120			
Xylene (o)	0.0432	0.00100		0.0500	ND	86.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	32.0		ug/l	40.0		80.0	80-120			
Surrogate: 4-Bromofluorobenzene	34.7		"	40.0		86.8	80-120			

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### Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson

### **Organics by GC - Quality Control**

**Environmental Lab of Texas** 

			Reporting		Spike	Source		%REC		RPD	
Analyte	R	esult	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

### Batch EL62008 - EPA 5030C (GC)

Matrix Spike Dup (EL62008-MSD1)	Sou	rce: 6L15012-	01	Prepared:	12/20/06 An	alyzed: 12	2/21/06		
Benzene	0.0455	0.00100	mg/L	0.0500	0.00450	82.0	80-120	6.38	20
Toluene	0.0421	0.00100		0.0500	0.000269	83.7	80-120	3.06	20
Ethylbenzene	0.0431	0.00100	"	0.0500	ND	86.2	80-120	1.61	20
Xylene (p/m)	0.0853	0.00100	"	0.100	0.000759	84.5	80-120	3.37	20
Xylene (o)	0.0425	0.00100		0.0500	ND	85.0	80-120	1.63	20
Surrogate: a,a,a-Trifluorotoluene	34.1		ug/l	40.0		85.2	80-120		
Surrogate: 4-Bromofluorobenzene	34.9		"	40.0		87.2	80-120		

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### General Chemistry Parameters by EPA / Standard Methods - Quality Control

### **Environmental Lab of Texas**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EL61530 - Filtration Preparatio	n									
Blank (EL61530-BLK1)				Prepared:	12/18/06 A	nałyzed: 12	2/19/06			
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (EL61530-DUP1)	Sourc	e: 6L14006-	01	Prepared:	12/18/06 A	nalyzed: 12	2/19/06			
Total Dissolved Solids	9510	10.0	mg/L		9600			0.942	20	
Duplicate (EL61530-DUP2)	Sourc	e: 6L15006-	03	Prepared:	12/18/06 A	nalyzed: 12	2/19/06			
Total Dissolved Solids	1250	10.0	mg/L		1300			3.92	20	·
Batch EL61901 - General Preparation	(WetChem)					-				
Blank (EL61901-BLK1)				Prepared &	Analyzed:	: 12/19/06				
Total Alkalinity	8.00	4.00	mg/L							
Carbonate Alkalinity	ND	0.100	"							
Bicarbonate Alkalinity	8.00	4.00	"							
Hydroxide Alkalinity	ND	0.100	"							
LCS (EL61901-BS1)				Prepared 8	k Analyzed:	: 12/19/06				
Total Alkalinity	196	4.00	mg/L	200		98.0	85-115			
Duplicate (EL61901-DUP1)	Sour	e: 6L15005-	01	Prepared &	z Analyzed:	: 12/19/06				
Total Alkalinity	2000	20.0	mg/L	····- •	1960			2.02	20	
Reference (EL61901-SRM1)				Prepared 8	2 Analyzed:	: 12/19/06				
Total Alkalinity	248	4.00	mg/L	250		99.2	90-110			
Batch EL62105 - General Preparation	(WetChem)					_				
Blank (EL62105-BLK1)				Prepared:	12/20/06 A	nalyzed: 12	2/21/06			
Sulfate	ND	0,500	mg/L					-		
Chloride	ND	0.500	"							

Environmental Lab of Texas

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### Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson

### General Chemistry Parameters by EPA / Standard Methods - Quality Control

### **Environmental Lab of Texas**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EL62105 - General Preparation (V	VetChem)							<u> </u>		
LCS (EL62105-BS1)				Prepared:	12/20/06 A	nalyzed: 12	2/21/06			
Sulfate	10.2	0.500	mg/L	10.0		102	80-120			
Chloride	10.5	0.500	"	10.0		105	80-120			
Calibration Check (EL62105-CCV1)				Prepared:	12/20/06 A	nalyzed: 12	2/21/06			
Sulfate	11.0		mg/L	10.0		110	80-120			
Chloride	9.93		"	10.0		99.3	80-120			
Duplicate (EL62105-DUP1)	Sourc	e: 6L15005-	01	Prepared:	12/20/06 A	nalyzed: 12	2/21/06			
Sulfate	505	125	mg/L		493			2.40	20	
Chloride	7610	125	"		7510			1.32	20	
Duplicate (EL62105-DUP2)	Sour	ce: 6L15006-	04	Prepared:	12/20/06 A	nalyzed: 12	2/21/06			
Sulfate	173	5.00	mg/L		172			0,580	20	
Chloride	114	5.00	"		115			0.873	20	
Matrix Spike (EL62105-MS1)	Sour	ce: 6L15005-	01	Prepared:	12/20/06 A	nalyzed: 12	2/21/06			
Sulfate	3490	125	mg/L	2500	493	120	80-120			
Chloride	10500	125	"	2500	7510	120	80-120			
Matrix Spike (EL62105-MS2)	Sour	ce: 6L15006-	04	Prepared:	12/20/06 A	nalyzed: 12	2/21/06			
Sulfate	277	5.00	mg/L	100	172	105	80-120			
Chloride	221	5.00	"	100	115	106	80-120			

Environmental Lab of Texas

### Total Metals by EPA / Standard Methods - Quality Control

### Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL61906 - 6010B/No Digestion										
Blank (EL61906-BLK1)				Prepared &	Analyzed:	12/19/06				
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	11							
Potassium	ND	0.0600	11							
Sodium	ND	0.0430	м							

Calibration Check (EL61906-CCV1)				Prepared & Ana	alyzed: 12/19/06				
Calcium	2.26		mg/L	2.00	113	85-115			
Magnesium	1.87			2.00	93.5	85-115			
Potassium	1.70			2.00	85.0	85-115			
Sodium	1.93		"	2.00	96.5	85-115			
Duplicate (EL61906-DUP1)	Sour	e: 6L15005-	01	Prepared & Ana	alyzed: 12/19/06				
Calcium	96.1	4.05	mg/L	9	95.0		1.15	20	
Magnesium	186	1.80	"		199		6.75	20	
Potassium	39.2	0,600	"	3	39.3		0.255	20	
Sodium	4870	43.0		5	5060		3.83	20	

Environmental Lab of Texas

Larson & Associates, Inc. P.O. Box 50685 Project: Targa Midstream/ Monument GWM Project Number: 2-0108 Project Manager: Mark Larson Fax: (432) 687-0456

	Notes and Definitions
В	Analyte is found in the associated blank as well as in the sample (CLP B-flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By:

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Raland K Junes Date:

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director LaTasha Cornish, Chemist Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas. Page 13 of 13

1/3/2007

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

CLIENT NAME: - T A-R (-A-	SITE MANAGER:	PARAMETERS/METHOD NUMBER	CHAIN-OF-CUSTODY	RECO
	M. LARSON			
PROJECT NO.: 2 ~ O   O &	PROJECT NAME, CAS MONUTINE ENT PLANT	J LL ESP CT KRY NIVINEKS	A grson & A grson & A sociotes, Inc. Fax: 432-6 Environmental consultants 432-6	17-0456 17-0901
PAGE OF LA	B. PO#	۲ در ۲ در ۲ در	507 N. Marienfeld, Ste. 202 • Midla	d, TX 797C
Arie of Rank ST WATER	SAMPLE IDENTIFICATION	¥v) \ ⊥D Z B⊥E	LAB. I.D. REMARKS NUMBER I.E. FILTERED, UNFI RESERVED, UNPRE (LAB. USE ONLY) CAMPAGE	ERED, "Rved, Ei
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12/13/12:05 5	6-13 M		20-	
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SAMPLED BY: (Signature)	DATE: 12 13 RELINQUISHE	D BY: (Signature) DATE. TIME:	RECEIVED BY: (Signature)	date: Time:
RELINQUISHED BY: (Signature)	DATE: 12-115 RECEIVED BY:	(Signature) DATE *	SAMPLE SHIPPED BY: (Circle)	
Draw Com	~ TIME: 4.35	TIME:	FEDEX BUS AIRBILL#	
COMMENTS:	· · · · ·	TURNAROUND TIME NEEDED	HAND DELIVERED UPS OTHER. WHITE - RECEIVING LAB VELICINI - RECEIVING I AB ITO BE DETI IDNED	
RECEIVING LABORATORY: ADDRESS:	RE	CEIVED BY: (Signature)	LELEUT - RECEIVING 200 (10 DE RELONNED LA AFTER RECEIPT) DINK - DROTECT MANAGER	
CITY: CONTACT:	PHONE: ZIP: D	ATE: 2115 DO TIME: 7.750	GOLD - QA/QC COORDINATOR	
SAMPLE CONDITION WHEN RECEIVED:		A CONTACT DEPSON.	SAMDIE TYPE.	

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## Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client:	Larson				
Date/ Time:	12/15/06 9:35				
Lab ID #	46-15005				
Initials.	CK				

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## Sample Receipt Checklist

				I	Client Initials
#1	Temperature of container/ cooler?	Yes	No	0.5 °C	
#2	Shipping container in good condition?	YES	No		1
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	(XFES	No	· · · · · · · · · · · · · · · · · · ·	
#7	Chain of Custody signed when relinquished/ received?	Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	Jes	No 😽	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	des.	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	¥E3	No		
#11	Containers supplied by ELOT?	(ES)	No		
#12	Samples in proper container/ bottle?	Xeş	No	See Below	
#13	Samples properly preserved?	(es	No	See Below	
#14	Sample bottles intact?	Yeş	No		
#15	Preservations documented on Chain of Custody?	×	No		
#16	Containers documented on Chain of Custody?	Yes	No		
# #17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	1
#18	All samples received within sufficient hold time?	CTES	No	See Below	1
#19	Subcontract of sample(s)?	Yes	No	Not Apolicable	
#20	VOC samples have zero headspace?	(es	No	Not Applicable	

## Variance Documentation

Contact:	Scott	Contacted by:	Carnie	Date/ Ti	me: <u>12/15/0U</u>	l
Regarding	Add DUP	to coc & r	UM		······································	
<b>,</b>	▲ WP-18-	use coe nau	re q time (	latel is di	itevent	
	Action Taken:					

Check all that Apply:

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See attached e-mail/ fax

Client understands and would like to proceed with analysis

Cooling process had begun shortly after sampling event

## Jeanne McMurrey

From:"Michelle Green" <michelle@LAenvironmental.com>To:"Jeanne McMurrey" <jeanne@elabtexas.com>Sent:Wednesday, January 03, 2007 3:49 PMSubject:Revised lab report

Jeanne,

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Can you please correct the sample ID for WP-3 (6L15005-04) to WP-5 and re-issue a revised report.

Thank you,

Michelle Green

This message has been scanned for viruses and dangerous content by Basin Broadband, Inc., utilizing DefenderMX technology, and is believed to be clean.

1/3/2007