DCP Midstream
370 17th Street, Suite 2500
Denver, CO 80202
303-595-3331
303-605-2226 *FAX*

January 16, 2012

Mr. Leonard Lowe
Environmental Engineer
New Mexico Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

RE: 3rd Quarter 2011 Groundwater Monitoring Results
DCP X-Line Pipeline Release (1RP-400-0)
Unit B, Section 7, T15S, R34E (Lat 33° 02' 11", Long 103° 32' 48")

Dear Mr. Lowe:

DCP Midstream, LP (DCP) is pleased to submit for your review, one copy of the 3rd Quarter 2011 Groundwater Monitoring Results for the DCP X-Line Pipeline Release located within the Etcheverry Ranch, Lea County, New Mexico.

If you have any questions regarding the report, please call at 303-605-1718 or e-mail me swweathers@dcpmidstream.com .

Sincerely

DCP Midstream, LP

Stephen Weathers, PG
Principal Environmental Specialist

cc: Mrs. Etcheverry, Landowner - Certified Mail **91 7108 2133 3938 9761 6601**
Larry Johnson, OCD Hobbs District Office (Copy on CD)
Environmental Files

Third Quarter 2011 Groundwater Monitoring and Activities Summary Report

X-Line Pipeline Release – Etcheverry Ranch
Lea County, New Mexico

1RP-400-0

Prepared for:

370 17th St., Suite 2500
Denver, CO 80202

Prepared by:

Tasman Geosciences

5690 Webster, Ave
Arvada, CO 80002

November 30, 2011

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1. Introduction

Tasman Geosciences, LLC (Tasman) is submitting to DCP Midstream (DCP) the results of the third quarter 2011 groundwater monitoring activities conducted September 18, 2011 at the X-Line Pipeline Release (Site) at the Etcheverry Ranch in Lea County, New Mexico (Figure 1). The purpose of the field activities described herein were to; a) determine the presence, if any, of light non-aqueous phase liquid (LNAPL) hydrocarbons; b) measure groundwater levels; c) obtain groundwater samples for chemical analysis; and d) subsequently evaluate and present groundwater flow and quality conditions. Previous groundwater monitoring activities, up to and including Second Quarter 2011, were performed by American Environmental Consulting LLC (AEC) after which project responsibilities were transferred to Tasman. The field data and laboratory analytical results were used to develop a groundwater elevation contour map, analytical results table and map to evaluate current conditions at the Site.

2. Site Location and Background

The Site is located in New Mexico Oil Conservation Division (OCD) designated Unit B, Section 7, Township 15 South, Range 34 East (Figure 1). The OCD reference for the Site is 1R-0400. The facility coordinates are 33.036389 degrees north and 103.546667 degrees west. This area is sparsely populated and land use is primarily associated with livestock grazing and oil and gas extraction and conveyance.

Historical documents note a pipeline release occurred at the Site location during the latter part of 2001. Subsequent to soil boring activities conducted by Environmental Plus Incorporated (EPI), it was estimated that the contaminated soil column was approximately 40-feet in diameter at the surface tapering to approximately 20-feet in diameter at 37-feet below ground surface (bgs) and persisted at that diameter to the top of water table at approximately 75-feet bgs. EPI conducted soil excavation activities between January and March of 2002 which included the removal and disposal of approximately 6,746 cubic yards (yd^3) of impacted material to a depth of 37 feet bgs. The material was then disposed of at the OCD approved and permitted Artesia Aeration Landfarm in Maljamar, New Mexico. Subsequent to excavation activities, the open pit was backfilled and compacted with overburden and unaffected materials. It was estimated that approximately 560 yd^3 of impacted material remained in place.

Seven groundwater monitoring wells were installed at the site which are illustrated on Figure 2 (MW-1 through MW-7). Additionally, one light non-aqueous phase liquid (LNAPL) recovery well was installed and used to extract LNAPL material from the groundwater table. LNAPL recovery was conducted between July 2003 and 2004 and the well has since been re-drilled and is now used as a groundwater monitoring well MW-8.

Currently, the Site remediation components include an operational soil vapor extraction (SVE) and air sparge (AS) system (System). System installation activities were completed by EPI and the System was

tested and became fully functional by mid-June of 2003. Since that time, the System has had minimal downtime due, in part, to routine maintenance and minor equipment failures.

3. Groundwater Monitoring

This section describes the field groundwater monitoring activities as well as the laboratory analyses performed during the third quarter 2011 monitoring event. Monitoring activities included Site-wide groundwater gauging, groundwater purging and sampling, and subsequent packaging and shipping of the samples to the laboratory for chemical analyses. Figure 2 illustrates the groundwater monitoring network utilized to perform these activities at the Site.

3.1 Groundwater and LNAPL Elevation Monitoring

Groundwater and LNAPL levels were measured in order to evaluate hydraulic characteristics and provide information regarding fluctuations in groundwater and LNAPL elevations at the Site. In addition, wells that did not have LNAPL present were measured for total depth and a groundwater purge volume calculated. During the third quarter 2011 monitoring event, groundwater levels were measured at all eight monitoring well locations.

Groundwater levels were measured on the north side of the well casing to the nearest 0.01-foot using an oil-water interface probe (IP) and were then converted to elevations (feet above mean sea level [AMSL])

Groundwater elevations collected during the third quarter 2011 monitoring event as well as the previous quarters groundwater elevations are presented in Table 1 and a third quarter 2011 groundwater elevation contour map is illustrated on Figure 3. Groundwater elevations ranged from 4,089.40 feet AMSL at monitoring well MW-1 and 4088.68 feet AMSL in monitoring well MW-5. Surveyed top of casing (TOC) elevations are not available for monitoring wells MW-7 and MW-8. Therefore, groundwater elevations could not be calculated for those wells. As illustrated on Figure 3, groundwater flow at the Site generally trends to the southeast with a gradient of approximately 0.002 foot per foot between monitoring wells MW-1 and MW-5.

3.2 Groundwater Quality Monitoring

Prior to collecting groundwater samples, groundwater levels and total depth were measured in Site monitoring wells. A minimum of three well casing volumes of groundwater (calculated from total depth of the well and groundwater level measurements) were purged using polyethylene bailers prior to collecting groundwater samples. Groundwater samples were collected using dedicated polyethylene bailers, placed in clean laboratory supplied containers and packed in an ice-filled cooler and maintained at approximately four (4) degrees Celsius (^{0}C) for transportation. Groundwater samples were then

shipped under chain-of-custody procedures to Accutest Laboratories (Accutest) in Wheat Ridge, Colorado, for analysis.

Water quality samples were collected from the eight monitoring wells during the third quarter 2011 monitoring event and were submitted to Accutest for benzene, toluene, ethylbenzene, and xylene (BTEX) analyses utilizing United States Environmental Protection Agency (USEPA) Method 8260B.

Table 2 summarizes BTEX concentrations in groundwater samples collected during the reporting period. Laboratory analytical reports for the event are included in Appendix A and analytical results are summarized on Figure 4. During the third quarter 2011 monitoring event, benzene was detected above the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standard of 0.01 milligrams per liter (mg/L) in monitoring well MW-8 at a reported concentration of 0.682 mg/L. Total xylenes were detected above the NMWQCC Groundwater Standard of 0.62 mg/L in monitoring well MW-8 at a concentration of 3.03 mg/L. Toluene and ethylbenzene were not detected above their respective NMWQCC Groundwater Standards in any of the sampled monitoring wells.

Water quality parameters were not collected during the monitoring event due to a malfunctioning field instrument. However, based on evaluation of previous monitoring field data sheets (first quarter 2011), the site monitoring wells did not require collection of more than three (3) purge volumes to achieve parameter stabilization. As such, the analytical data are considered to be representative of site conditions in that a minimum 3 purge volumes were evacuated from all sampled monitoring wells during the third quarter 2011 event.

4. Conclusions

Analysis of the 3rd Quarter 2011 groundwater data indicate dissolved phase benzene and total xylene impacts exceeded the regulatory limits in monitoring well MW-8. Analytical results were reported above the laboratory detection limits for total xylenes and ethylbenzene in monitoring well MW-2, these results are below the NMWQC Groundwater Standards. The location of monitoring well MW-2 is therefore considered within close proximity to the subsurface lateral extent of the dissolved phase BTEX plume. The minimal extent of dissolved-phase hydrocarbons at those wells and the continued non-detect concentrations in the surrounding point of compliance wells indicate that the residual constituents of concern are well defined and not highly mobile and that natural attenuation continues to persist at the Site.

Ongoing operation and maintenance (O&M) of the SVE and AS System will provide for continued extraction of the residual mass and aid in the natural attenuation of dissolved phase hydrocarbon impacts at the Site. Continued operation of the SVE and AS System has been shown to reduce the residual contaminant mass within the subsurface.

5. Recommendations

Based on evaluation of data obtained during the reporting period, historical Site observations and the remediation system operational parameters, the following recommendations have been developed for future activities at the Site:

- Continue quarterly groundwater monitoring and sampling activities at the monitoring well locations listed in Table 1;
- Install air sparge equipment within monitoring well MW-8 and tie into the current System.

Tables

TABLE 1
THIRD QUARTER 2011
SUMMARY OF GROUNDWATER ELEVATION DATA
X-LINE PIPELINE RELEASE - ETCHEVERRY RANCH
LEA COUNTY, NEW MEXICO

Location	Date	Depth to Groundwater (1) (feet)	Depth to Product (1) (feet)	Free Phase Hydrocarbon Thickness (feet)	Total Depth (2) (feet)	TOC Elevation (3) (feet amsl)	Groundwater Elevation (feet amsl)	Change in Groundwater Elevation Since Previous Event (4) (feet)
MW-1	6/30/10					4166.82	4089.34	
MW-1	9/16/10					4166.82	4089.34	0.00
MW-1	12/9/10					4166.82	4089.40	0.06
MW-1	3/28/11					4166.82	4089.39	-0.01
MW-1	6/22/2011					4166.82	4089.35	-0.04
MW-1	9/18/2011	77.42			91.00	4166.82	4089.40	0.05
MW-2	6/30/10					4166.66	4089.20	
MW-2	9/16/10					4166.66	4089.20	0.00
MW-2	12/9/10					4166.66	4089.25	0.05
MW-2	3/28/11					4166.66	NM	-
MW-2	6/22/2011					4167.66	4089.18	-
MW-2	9/18/2011	77.42			88.00	4166.66	4089.24	0.06
MW-3	6/30/10					4166.17	4088.92	
MW-3	9/16/10					4166.17	4088.97	0.05
MW-3	12/9/10					4166.17	4089.03	0.06
MW-3	3/28/11					4166.17	NM	-
MW-3	6/22/2011					4166.17	4088.97	-
MW-3	9/18/2011	78.42			91.00	4166.17	4087.75	-1.22
MW-4	6/30/10					4166.40	4088.85	
MW-4	9/16/10					4166.40	4088.84	-0.01
MW-4	12/9/10					4166.40	4088.89	0.05
MW-4	3/28/11					4166.40	NM	-
MW-4	6/22/2011					4166.40	4088.83	-
MW-4	9/18/2011	77.55			91.00	4166.40	4088.85	0.02
MW-5	6/30/10					4165.90	4088.73	
MW-5	9/16/10					4165.90	4088.72	-0.01
MW-5	12/9/10					4165.90	4088.82	0.10
MW-5	3/28/11					4165.90	NM	-
MW-5	6/22/2011					4165.90	4088.74	-
MW-5	9/18/2011	77.22			89.00	4165.90	4088.68	-0.06
MW-6	6/30/10					4165.94	4088.78	
MW-6	9/16/10					4165.94	4088.82	0.04
MW-6	12/9/10					4165.94	4088.85	0.03
MW-6	3/28/11					4165.94	NM	-
MW-6	6/22/2011					4165.94	4088.82	-
MW-6	9/18/2011	77.14			90.00	4165.94	4088.80	-0.02
MW-7	6/30/10						4087.87	
MW-7	9/16/10						4087.79	-0.08
MW-7	12/9/10						4087.83	0.04
MW-7	3/28/11						NM	-
MW-7	6/22/2011						4088.82	-
MW-7	9/18/2011	76.69			85.00		NM	-
MW-8	6/30/10							
MW-8	9/16/10							
MW-8	12/9/10							
MW-8	3/28/11							
MW-8	6/22/2011							
MW-8	9/18/2011	78.15			81.35		NM	NM
Average Change in groundwater elevation since the previous monitoring event								-0.20

Notes:

1- Depths measured from the north edge of the well casing.

2- Total depths were collected and recorded during the third quarter 2011 monitoring event.

3-TOC elevations for monitoring wells MW-7, & MW-8 were not available at the time this report was generated. Therefore, groundwater elevations for those wells could not be calculated.

4- Changes in groundwater elevation were calculated by subtracting the measurement collected during the previous monitoring even from the measurement collected during the most recent monitoring event.

Data presented for the well locations includes previous four sampling events, when available. Historic groundwater elevation data for these locations are available upon request.

Sample locations are shown on Figure 2 and a groundwater elevation contour map is shown on Figure 3.

amsl - feet above mean sea level.

TOC - top of casing

NM - not measured

TABLE 2
THIRD QUARTER 2011
SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER
X-LINE PIPELINE RELEASE - ETCHEVERRY RANCH
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		0.01	0.75	0.75	0.62	
MW-1	6/30/2010	<0.0003	<0.0003	<0.001	<0.0006	
MW-1	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-1	12/9/2010	<0.001	<0.002	<0.002	<0.004	
MW-1	3/28/2011	<0.001	<0.002	<0.002	<0.004	
MW-1	6/22/2011	<0.001	<0.002	<0.002	<0.004	
MW-1	9/19/2011	<0.001	<0.002	<0.002	<0.004	
MW-2	6/30/2010	<0.0003	0.0062	<0.001	0.0417	
MW-2	9/16/2010	<0.001	0.007	<0.002	0.0786	
MW-2	12/9/2010	0.00049	0.0147	<0.002	0.1317	
MW-2	3/28/2011	<0.001	0.005	<0.002	0.0455	
MW-2	6/22/2011	<0.002	1.002	<0.0164	1.185	
MW-2	9/18/2011	<0.001	<0.002	0.0123	0.14	
MW-3	6/30/2010	<0.0003	<0.0003	<0.001	<0.0006	
MW-3	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-3	12/9/2010	<0.001	<0.002	<0.002	<0.004	
MW-3	3/28/2011	<0.001	<0.002	<0.002	<0.004	
MW-3	6/22/2011	<0.001	<0.002	<0.002	<0.004	
MW-3	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-4	6/30/2010	<0.0003	<0.0003	<0.001	<0.0006	
MW-4	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-4	12/9/2010	<0.001	<0.002	<0.002	<0.004	
MW-4	3/28/2011	<0.001	<0.002	<0.002	<0.004	
MW-4	6/22/2011	<0.001	<0.002	<0.002	<0.004	
MW-4	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-5	6/30/2010	<0.0003	<0.0003	<0.001	<0.0006	
MW-5	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-5	12/9/2010	<0.001	<0.002	<0.002	<0.004	
MW-5	3/28/2011	<0.001	<0.002	<0.002	0.012	
MW-5	6/22/2011	<0.001	<0.002	<0.002	<0.004	
MW-5	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-6	6/30/2010	<0.0003	<0.0003	<0.001	<0.0006	
MW-6	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-6	12/9/2010	<0.001	<0.002	<0.002	<0.004	
MW-6	3/28/2011	<0.001	<0.002	<0.002	<0.004	
MW-6	6/22/2011	<0.001	<0.002	<0.002	<0.004	
MW-6	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-7	6/30/2010	<0.0003	<0.002	<0.001	<0.0006	
MW-7	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-7	12/9/2010	<0.001	<0.003	<0.002	<0.004	
MW-7	3/28/2011	<0.001	<0.002	<0.002	<0.004	
MW-7	6/22/2011	<0.001	<0.002	<0.002	<0.004	
MW-7	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-8	6/30/2010	**0.549**	0.145	**1.48**	**3.49**	
MW-8	9/16/2010	**0.653**	0.165	**1.07**	**6.37**	
MW-8	12/9/2010	NS	NS	NS	NS	
MW-8	3/28/2011	**0.443**	0.0817	0.717	**2.34**	
MW-8	6/22/2011	**0.204**	0.444	0.0822	**2.72**	
MW-8	9/18/2011	**0.682**	0.699	0.112	**3.03**	

Notes:

The environmental cleanup standards for water that are applicable to the X-Line Pipeline Release site are the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standards.

Data presented for the well locations includes previous four sampling events, when available. Historic groundwater analytical results for these locations are available upon request.

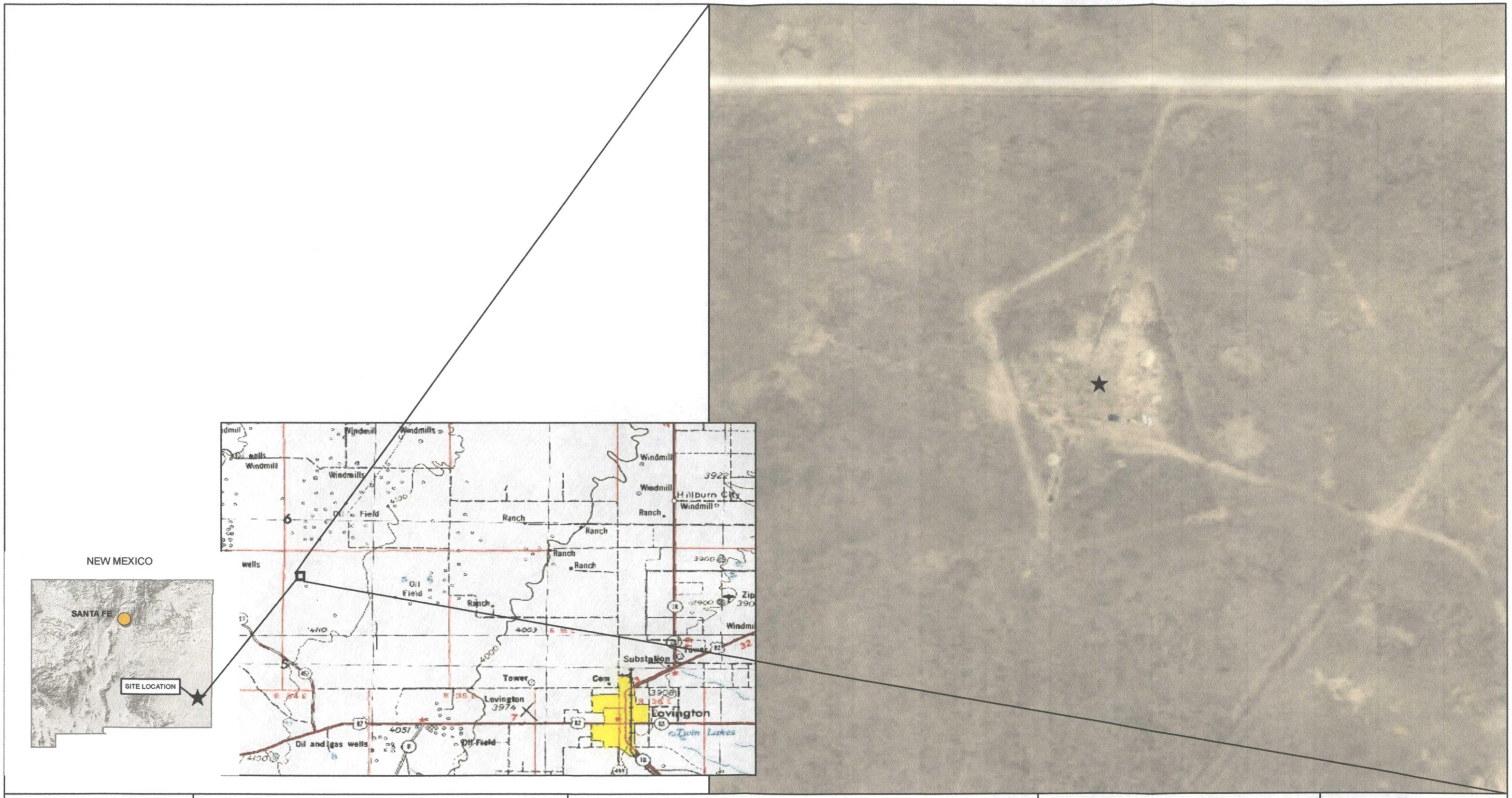
Bold red values indicate an exceedance of the NMWQCC groundwater standards for the Site.

Sample locations are shown on Figure 2 and analytical results are illustrated on Figure 4.

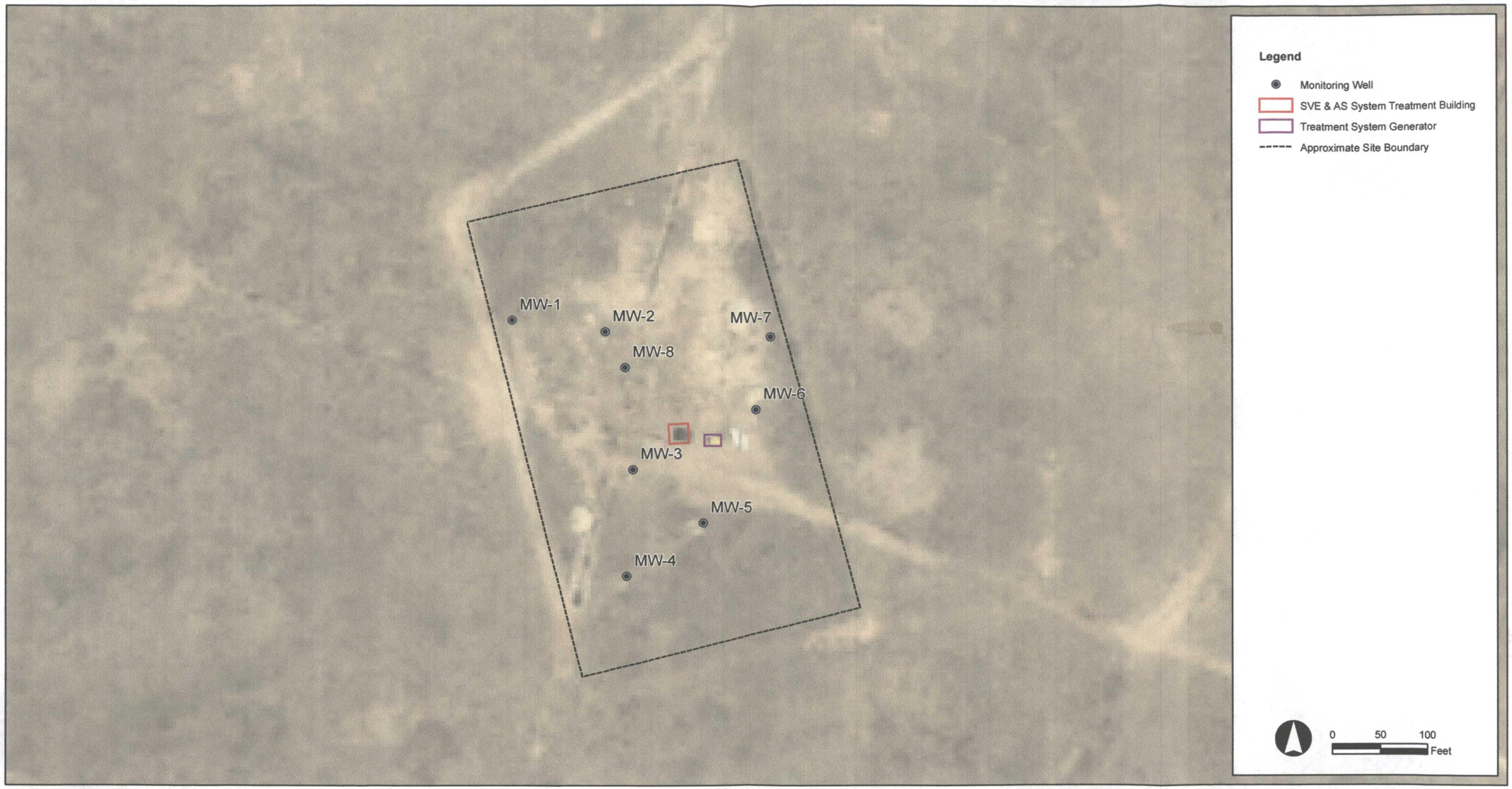
NS = Not Sampled.

mg/L = milligrams per liter.

Figures



DESIGNED BY: B. Humphrey DRAWN BY: J. Clonts SHEET CHK'D BY: CROSS CHK'D BY: APPROVED BY: APPROVED BY:	Tasman Geosciences	Tasman Geosciences, LLC 5690 Webster St. Arvada, CO 8002 720-988-2024	**X-LINE PIPELINE RELEASE** *Third Quarter 2011* *Groundwater Monitoring* *Summary Report*	SITE LOCATION	FIGURE 1



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Tasman Geosciences

Tasman Geosciences, LLC
5690 Webster St.
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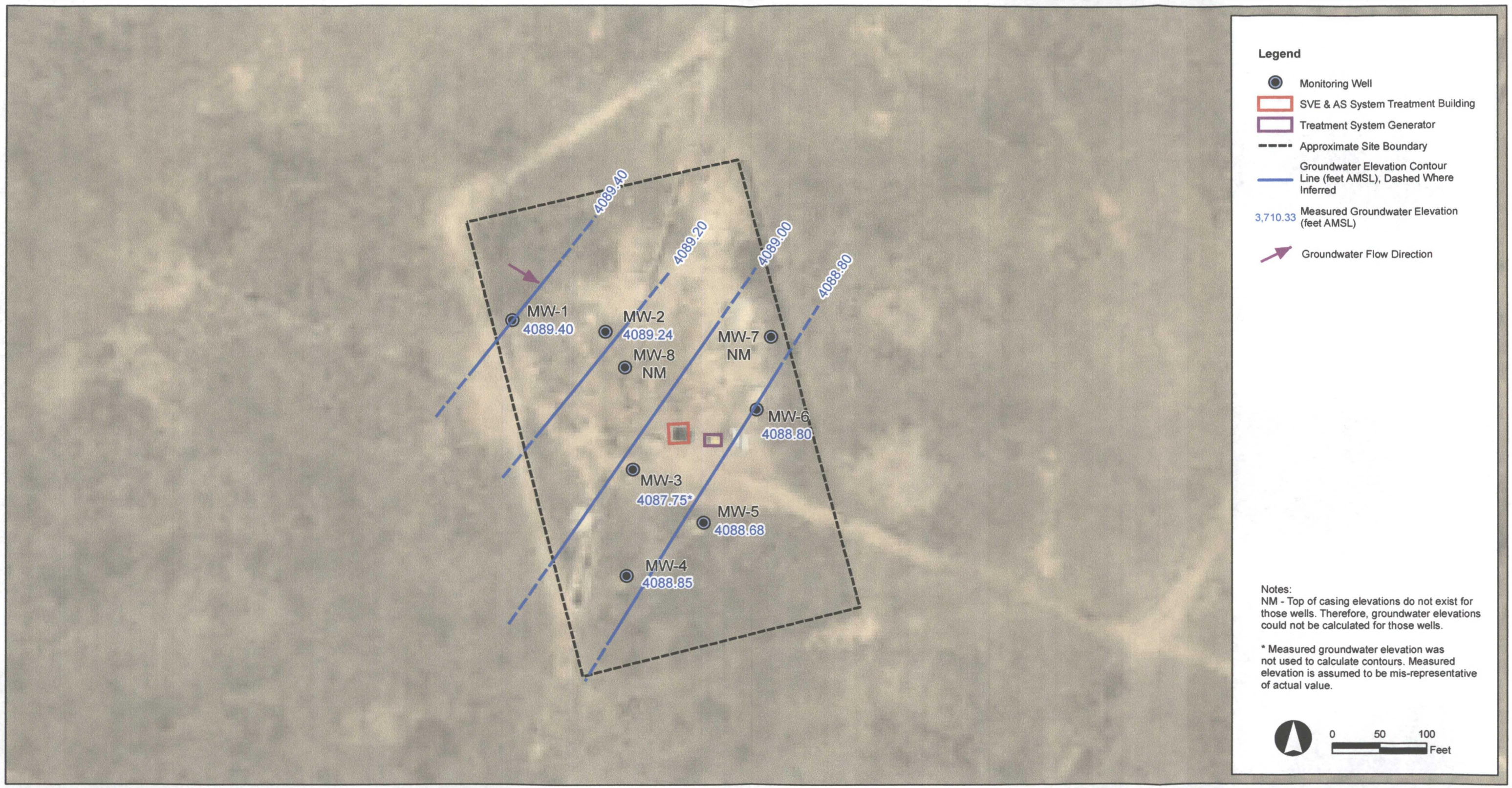
720-988-2024

X-LINE PIPELINE RELEASE

Third Quarter 2011
Groundwater Monitoring
Summary Report

SITE MAP

FIGURE
2



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Tasman Geosciences, LLC
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720-988-2024

X-LINE PIPELINE RELEASE

Third Quarter 2011
Groundwater Monitoring
Summary Report

GROUNDWATER ELEVATION CONTOUR MAP

FIGURE
3

MW-1		
Compound	6/22/2011 (mg/L)	9/18/2011 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.004	<0.004

MW-2		
Compound	6/22/2011 (mg/L)	9/18/2011 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	0.0164	0.123
Total Xylenes	0.185	0.14

MW-7		
Compound	6/22/2011 (mg/L)	9/18/2011 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.004	<0.004

MW-8		
Compound	6/22/2011 (mg/L)	9/18/2011 (mg/L)
Benzene	0.204	0.682
Toluene	0.444	0.699
Ethylbenzene	0.0822	0.112
Total Xylenes	2.72	3.03

MW-6		
Compound	6/22/2011 (mg/L)	9/18/2011 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.004	<0.004

MW-3		
Compound	6/22/2011 (mg/L)	9/18/2011 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.004	<0.004

MW-5		
Compound	6/22/2011 (mg/L)	9/18/2011 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.004	<0.004

MW-4		
Compound	6/22/2011 (mg/L)	9/18/2011 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.004	<0.004

Legend

- Monitoring Well
- SVE & AS System Treatment Building
- Treatment System Generator
- Approximate Site Boundary

Notes:
Data reported for the March 28, 2011 monitoring event were collected by AEC and provided in the first quarter 2011 groundwater monitoring summary report.

All aqueous analytical results are presented in milligrams per liter (mg/L)

0 50 100 Feet

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X-LINE PIPELINE RELEASE

Third Quarter 2011 Groundwater Monitoring Summary Report

ANALYTICAL RESULTS MAP

FIGURE 4

Appendix A

Laboratory Analytical Report