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www.dcpmidstream.com

June 11, 2012

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

RE: 1st Quarter 2012 Groundwater Monitoring Results Hobbs Booster Station, Lea County New Mexico (GW-044) Unit C and D, Section 4, Township 19 South, Range 38 East

Dear Mr. Lowe:

DCP Midstream, LP (DCP), is pleased to submit for your review, a one copy of the 1st Quarter 2012 Groundwater Monitoring Report for the DCP Hobbs Booster Station located in Hobbs, New Mexico (Unit C and D Section 4, T19S, R38E (32.696 degrees North, 103.156 degrees West).

If you have any questions regarding the report, please call me at 303-605-1718 or email me at <u>swweathers@dcpmidstream.com</u>.

Sincerely

DCP Midstream, LP

Stephen Weathers, P.G. Principal Environmental Specialist

cc: Larry Johnson, OCD Hobbs District Office (Copy on CD) Environmental Files

First Quarter 2012 Groundwater Monitoring and Activities Summary Report

Hobbs Booster Station Lea County, New Mexico GW-044

Prepared for:



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

Prepared by:



5690 Webster Street Arvada, CO 80002

May 8, 2012



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1. Introduction

Tasman Geosciences, LLC (Tasman) is submitting to DCP Midstream (DCP) the results of the first quarter 2012 groundwater monitoring activities conducted March 9, 2012 at the Hobbs Booster Station (Site) in Lea County, New Mexico (Figure 1). The purpose of the field activities described herein were to: a) determine the presence of light non-aqueous phase liquid (LNAPL) hydrocarbons; b) measure groundwater levels; c) obtain groundwater samples for chemical analysis; and d) evaluate and present groundwater flow and quality conditions. The field data and laboratory analytical results collected during the reporting period were used to develop a groundwater elevation contour map and an analytical results 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 Units C and D, Section 4, Township 19 South, Range 38 East (Figure 1). The facility coordinates are 32.696 degrees north and 103.156 degrees west. This facility is no longer used as an active gas compression facility or product transfer Site; currently the Site is primarily used as a DCP field office and as an overhaul shop. All ancillary equipment and buildings associated with the former Booster Station have been decommissioned and/or demolished.

The Site currently has 30 groundwater monitoring wells, which are illustrated on Figure 2. Twenty-seven of the wells are located on the Site property while the other three wells, MW-23, MW-24, and MW-25, are located to the southeast of the property boundary on land currently owned by Occidental Permian.

An LNAPL recovery and soil vapor extraction (SVE) system utilizing LNAPL "skimming" product recovery pumps and vacuum blower units is currently operated at the Site. There are 28 dual phase extraction wells (Figure 2) located on-Site including MW-4, MW-8, MW-11, and MW-13 which were previously converted from monitoring wells due to the historically high levels of LNAPL observed in those wells. Additionally, the Site operates an air-sparge (AS) cut-off system that was installed along the south-central Site boundary and includes 21 AS injection wells connected in series (Figure 2). LNAPL, AS, and SVE system operation and performance are described in Section 4.



3. Groundwater Monitoring

This section describes the field groundwater monitoring activities as well as laboratory analyses performed during the first quarter 2012 monitoring event. Monitoring activities included Site-wide groundwater gauging, LNAPL measurements, 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 recorded for subsequent use to estimate groundwater purge volumes. During the first quarter 2012 monitoring event, groundwater and LNAPL levels, if present, were measured at 24 monitoring well locations.

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

Groundwater elevations collected during the first quarter 2012 monitoring event are presented in Table 1, and a groundwater elevation contour map is illustrated on Figure 3. Groundwater elevations ranged from 3577.09 feet AMSL at monitoring well MW-7 and 3567.97 feet AMSL in monitoring well MW-19D. As illustrated on Figure 3, groundwater flow at the Site generally trends to the east with a gradient of approximately 0.004 foot per foot between monitoring wells MW-6 and MW-21.

LNAPL was detected in eight of the measured groundwater monitoring wells with thicknesses ranging between 0.22-feet in MW-18 to 7.86-feet in MW-12. Calculated groundwater elevation in these wells was corrected to account for LNAPL thickness and density.

3.2 Groundwater Quality Monitoring

Prior to collecting groundwater samples, groundwater levels, the presence of LNAPL, and the total depth of the wells (in wells without LNAPL) were measured as previously described. Subsequently, a minimum of three well casing volumes of groundwater (calculated from total depth of the well and groundwater level measurements) were purged using dedicated polyethylene bailers from the subject well prior to collecting groundwater samples. Groundwater samples were collected using dedicated polyethylene bailers, placed in clean laboratory supplied containers for the selected analytical methods and packed in an ice-filled cooler and maintained at approximately four (4) degrees Celsius (^oC) 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 15 monitoring wells during the first quarter 2012 monitoring event. MW-1, MW-2, MW-9, MW-10, MW-12, MW-17, MW-18, TW-K, and TW-N were not sampled due to the presence of measurable LNAPL detected in these wells. Water quality samples were submitted to Accutest for benzene, toluene, ethylbenzene, and xylene (BTEX) analyses by United States Environmental Protection Agency (USEPA) Method 8260B.

Table 2 summarizes BTEX concentrations in groundwater samples collected during the March 2012 event. Laboratory analytical reports for the event are included in Appendix A and analytical results are summarized on Figure 4.

Water quality parameters were collected during the first quarter 2012 monitoring event and were used to confirm groundwater stabilization prior to sample collection. 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 first quarter 2012 event.

3.3 Data Quality Assurance / Quality Control

A trip blank, matrix spike or matrix spike duplicate (MS/MSD) and two field duplicate samples (MW-15 and MW19D) were collected during the sampling event. The data were reviewed for compliance with the analytical method and the associated quality assurance/quality control (QA/QC) procedures. All samples were analyzed using the correct analytical methods and within the correct holding times. Chain of custody forms were in order and properly executed and indicate that samples were received at the proper temperature with no headspace. All data were reported using the correct method number and reporting units. The trip blank was fully in control, having no detections of targets.

Duplicate samples collected at MW-15 (Dup-1) and MW-19D (Dup-2) were in compliance with QA/QC standards. MW-15 and Dup-1 returned results for benzene of 0.0054 μ g/l and 0.0059 μ g/l respectively. MW-19D and Dup-2 returned the same results for benzene of 0.0015 μ g/l and 0.0015 μ g/l.

The overall QA/QC assessment of the data, based on the data review, indicate that both field precision and overall data precision and accuracy are acceptable.

4. Remediation System Performance

Remediation system activities are described in this section. The performance sections for the LNAPL, SVE, and AS systems are based on historic data as well as data collected during the reporting period.



4.1 Remediation System Layout

The remediation system consists of 28- dual phase extraction wells that can be configured to operate in SVE, LNAPL recovery, or combined SVE and LNAPL recovery. The recovery well array spans an area that is approximately 1,000 feet east to west and 800 feet north to south (estimated 15 acres of surface area). In addition to the extraction well network, there are 22 AS wells aligned west and east to create an 870-foot long dissolved phase hydrocarbon boundary control feature.

4.2 SVE Performance Evaluation

SVE is in operation at 17 recovery well locations including TW-O, TW-M, TW-I, TM-S, PW-AA, PW-FF, PW-HH, TW-A, TW-C, TW-R, PW-BB, MW-11, PW-II, PW-EE, MW-8, MW-4, and PW-G. Tasman collected SVE air emissions samples from the North and South equipment areas (Figure 2) on March 8, 2012. A tedlar bag was utilized to collect effluent air samples from each SVE unit. The samples were submitted to Accutest Laboratories for benzene, toluene, ethylbenzene, xylene (BTEX) and total petroleum hydrocarbons gasoline range organics analysis using United States Environmental Protection Agency (USEPA) Method SW846 8260B. Air sample results and calculated air emissions are provided in Table 2 below. Based on the operational and analytical data the SVE system removed an estimated 64.47 pounds of volatile organic compounds (VOCs) from the Site subsurface this reporting period.

4.3 LNAPL Recovery Performance Evaluation

The LNAPL recovery portion of the System remains active at eight (8) of the 28 wells at the Site. In addition, a test recovery unit (Magnum Spill Buster – manufactured by Clean Earth Technology) was installed at recovery well location PW-JJ. The test unit is being evaluated as a potential replacement LNAPL recovery technology for the existing pneumatic recovery pumps.

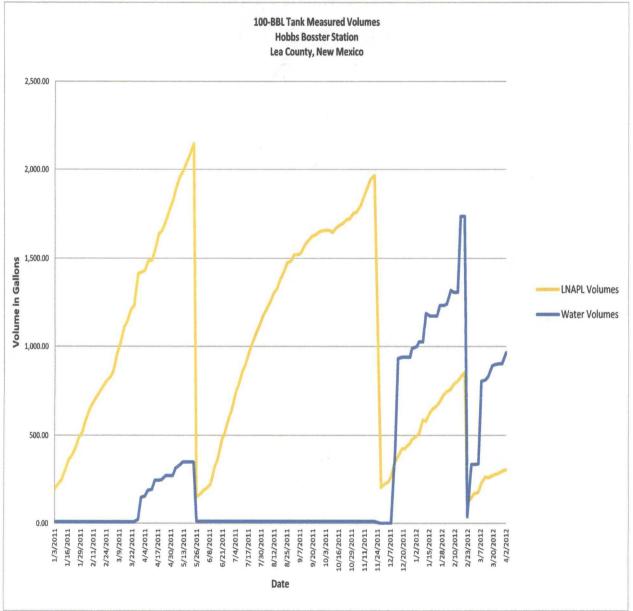
The LNAPL recovery system continues to control LNAPL migration off-Site. During the reporting period, the LNAPL recovery system extracted 368.44 gallons of product and 1,725.67 gallons of water. The water recovery value includes approximately 1,500-gallons of water generated through operation of the SVE system and removed by the knock out tank. Incremental and cumulative recovery volumes for 2011 and the first quarter 2012 are summarized in the table and figures below. LNAPL recovery rates have been decreasing through the first quarter of 2012 and water recovery has increased significantly primarily due to operation of the SVE units beginning in the fourth quarter 2011.



System Recovery Volume	Water	Product
1st Quarter 2011	146.62	1,225.63
2nd Quarter 2011	214.30	1,297.06
3rd Quarter 2011	0	1,018.85
4th Quarter 2011	977.49	789.52
1st Quarter 2012	1,725.67	368.44
	3,064.08	4,699.50



Hobbs Booster Station First Quarter 2012 GW Monitoring & Activities Summary Report



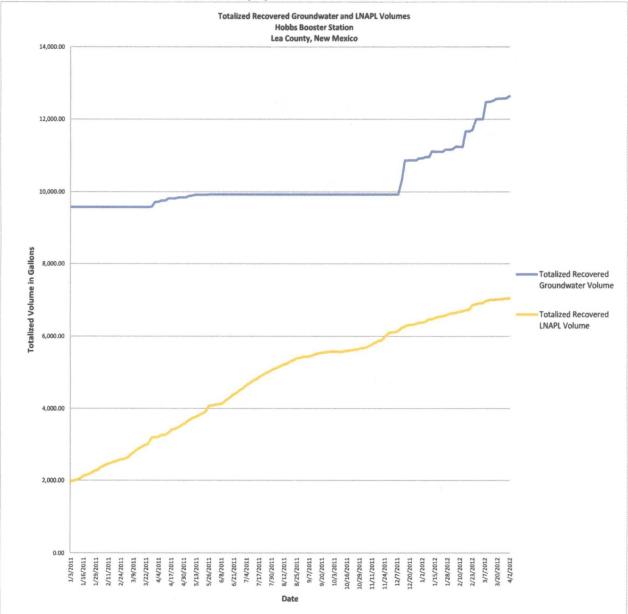
100-BBL Tank Fluid Volume Over Time

Notes:

The steep declines in water and LNAPL volumes indicate evacuation of the tank contents.



Hobbs Booster Station First Quarter 2012 GW Monitoring & Activities Summary Report



Product Recovery System - Recovered Fluid Volumes

4.4 Air Sparge Performance Evaluation

The AS system has continued to operate on a 24-hour per day basis with minor down time due to routine scheduled equipment maintenance. The primary evaluation criteria for AS performance is tied to the dissolved phase hydrocarbon concentrations present in groundwater downgradient to the AS well alignment. Monitoring wells MW-14, MW-15, and MW-23, located immediately downgradient from the sparge curtain, provide ideal monitoring locations for observing effects the AS system has on impacted groundwater as it passes through the treatment zone. On the east end of the AS system, monitoring well MW-14 continues to exhibit low dissolved benzene concentrations, however, MW-23 which is located immediately downgradient to MW-14, continues to have no detectable concentrations of



benzene or other dissolved petroleum hydrocarbons. On the west end of the AS system, lab data indicates that no dissolved phase hydrocarbon impacts are present in the vicinity of MW-15.

5. Conclusions

This section of the report presents conclusions from the findings of first quarter 2012 groundwater monitoring and remediation system O&M activities.

- Of the fifteen monitoring wells sampled this quarter, one (MW-14) had dissolved phase petroleum hydrocarbon impacts in exceedence of the New Mexico Water Quality Control Commission Standard for benzene. In addition, point-of-compliance wells located downgradient of the source area continue to indicate that LNAPL and/or dissolved phase impacts have not migrated beyond the historic area of impact. As evidenced by the information cited above, it can be concluded that the remedial approach at the Site is effectively addressing the hydrocarbon impacts in the historic release area and preventing the hydrocarbon plume from expanding downgradient;
- During the first quarter 2012 approximately two feet of LNAPL was gauged in monitoring well MW-10.
- Based on groundwater concentrations in the vicinity of the AS trench, the cut off system appears to be addressing dissolved phase hydrocarbon concentrations in groundwater along the eastern alignment of the trench. First quarter 2012 LNAPL gauging indicated an increase in LNAPL thickness at upgradient well locations along the western AS well alignment when compared to fourth quarter 2011 measurements. Four additional western AS well points were activated to increase the AS area of influence;
- LNAPL recovery rates have declined over the last three quarters, excluding the Spill Buster pump operation. Initiation of quarterly recovery well rotation will be implemented during the second quarter 2012 to determine if a groundwater barrier has formed around the active pumping wells. Active pneumatic systems would be moved to well locations toward the southern portion of the Site, as discussed in Section 6, and;
- The SVE system removed approximately 65-pounds of VOC mass during the first quarter 2012. The current mass removal rate in the vapor phase supports continued SVE operation. Air sampling will continue to be conducted each quarter to evaluate the performance of the SVE system. SVE will continue to be in operation at all wells not actively recovering LNAPL to enhance LNAPL thickness rebound after pumping and to recover vadose zone petroleum hydrocarbons.



6. Recommendations

Based on evaluation of current and historical groundwater and LNAPL data as well as remediation system performance data, recommendations have been developed for future activities, as described below:

- Ongoing quarterly groundwater monitoring and sampling activities will provide for continued monitoring of dissolved phase BTEX concentration and LNAPL trends;
- Continue AS, SVE, and LNAPL recovery system operation and maintenance, and;
- Continue product pump evaluation.

Tables

TABLE 1 FIRST QUARTER 2012 SUMMARY OF GROUNDWATER ELEVATION DATA HOBBS BOOSTER STATION 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 (feet amsl)	Groundwater Elevation (feet amsl)	Change in Groundwater Elevation Since Previous Event (3) (feet)
MW-1*	3/29/2011	54.35	49.99	4.36			3575.27	
MW-1*	6/21/2011	54.33	50.33	4.00		2/2/ 0/	3575.00	0.01
MW-1*	9/16/2011	54.68	50.17	4.51	NM	3626.06	3574.76	-0.24
MW-1*	12/8/2011	55.52	50.51	5.01	NM	3626.06	3574.30	-0.47
MW-1*	3/8/2012	55.85	50.89	4.96	<u>NM</u>	3626.06	3573.93	-0.37
MW-2*	3/29/2011	48.42	45.13	3.29			3577.41	
MW-2*	6/21/2011	48.18	45.48	2.70			3577.16	
MW-2*	9/16/2011	46.35	45.25	1.10	. NM	3623.14	3577.62	0.45
MW-2*	12/8/2011	49.10	45.69	3.41	NM	3623.14	3576.60	-1.02
MW-2*	3/8/2012	48.20	45.95	2.25	NM	3623.14	3576.63	0.03
MW-3	3/29/2011	45.42	مىغۇرىشەر مەتخىر م	an se an	3 . et el etter Herter		3577.59	esterni (<u> </u>
MW-3	6/21/2011	45.85		· ·			3577.16	· · · · · · · · · · · · · · · · · · ·
MW-3	9/16/2011	46.37		**-***=-=	55.80	3623.01	3576.64	-0.52
MW-3	12/8/2011	46.78			55.80	3623.01	3576.23	-0.32
MW-3	3/9/2012	47.10	·····	· · · ·	55.80	3623.01	3575.91	-0.32
s deter i detter i de		an Marka and San Andreas and Andreas an	ALAN ALANA AMAR	and the second	00.00	5025.01		-0.52 Sec. 35 Sec. Association (* 17
MW-5	3/29/2011	52.74					3576.42	
MW-5	6/21/2011	52.40					3576.76	
MW-5	9/15/2011	53.40			59.20	3629.16	3575.76	-0.66
MW-5	12/8/2011	54.11			· 59.20	3629.16	3575.05	-0.71
MW-5	3/9/2012	54.42			59.20	3629.16	3574.74	-0.31
MW-6	3/29/2011	48.65				Contra de la Contra da Contra	3578.28	
MW-6	6/21/2011	49.02					3577.91	
MW-6	9/16/2011	49.52			56.46	3626.93	3577.41	-0.87
MW-6	12/8/2011	49.85		<u> </u>	56.46	3626.93	3577.08	-0.33
MW-6	3/9/2012	50.16			56.46	3626.93	3576.77	-0.31
MW-7	3/29/2011	41.64	r 18 a 2. 48 . 1 . 10 . 11 . 16 . 16	15 x x 1 x 1 x 1 x 1 x 1 x 1 x 1 x 1 x 1	Taken in the second		3579.76	a contaca - contaca - ko
MW-7	6/21/2011	41.80			· · · · ·		3579.60	
MW-7	9/16/2011	NM			NM	3621.40		NM
	12/8/2011	43.94			46.21	3621.40	3577.46	NM
MW-7	3/9/2012	44.31			46.21	3621.40	3577.09	-0.37
··· · · ·	1.21	uralista en	1. 1.26 Po . 200 Sta	595. NO 50 12 1	1 10.21	5021.40 *****	1	,
MW-9*	3/29/2011	57.60	51.54	6.06			3572.56	
MW-9*	6/21/2011	57.91	51.82	6.09			3572.27	
MW-9*	9/16/2011	58.02	51.74	6.28	NM	3625.21	3571.90	-0.66
MW-9*	12/8/2011	58.44	52.16	6.28	NM	3625.21	3571.48	-0.42
MW-9*	3/9/2012	58.60	52.70	5.90	NM	3625.21	3571.04	-0.44
MW-10	3/29/2011	46.14			T		3574.93	
MW-10	6/21/2011	46.49			1		3574,58	
MW-10	9/16/2011	46.99			58.28	3621.07	3574.08	-0.85
MW-10	12/8/2011	46.92			58.28	3621.07	3574.15	0.07
MW-10*	3/12/2012	49.31	47.35	1.96	58.28	3621.07	3573.23	-0.92
MW-12*	3/29/2011	28.33	51.75	6.58	1 M. J W ROW AND	akking langun ta a	3573.64	<u>1994 - 1997 (1997)</u>
MW-12*	6/21/2011	59.20	51.84	7.36			3573.41	
MW-12*	9/16/2011	59.86	51.58	8.28	NM	3626.60	3572.95	-0,69
MW-12*	12/8/2011	60.02	52.00	8.02	NM	3626.60	3572.60	-0.36
MW-12*	3/8/2012	60.22	52.36	7.86	NM	3626.60	3572.28	-0.32
MW-14	3/29/2011	48.35	- 16 A. 26 101 19 14 A. 1944 MAR	ನಿವರ್ಷನರವಲ್ಗಿನ ಈ ಎಂಟರ್ ನಿ. ಶಾಸ	C C TO AND A LOOP A. P	american and an entropy	5	
MW-14 MW-14	6/21/2011	48.35			 		3573.07	
					(2.04	2621.42	3573.05	A 44
MW-14 MW-14	9/16/2011	49.25	. <u></u>	,	62.94	3621.42	3572.17	-0.90
		49.52			62.94	3621.42	3571.90	-0.27
MW-14	3/9/2012	50.05	1925) (())) 10 AUM ())		62.94	3621.42	3571.37	-0.53

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TABLE 1 FIRST QUARTER 2012 SUMMARY OF GROUNDWATER ELEVATION DATA HOBBS BOOSTER STATION 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 (feet amsl)	Groundwater Elevation (feet amsl)	Change in Groundwater Elevation Since Previous Event (3) (feet)
MW-15	3/29/2011	44.09					3575.30	
MW-15	6/21/2011	44.51					3574.88	
MW-15	9/16/2011	45.02			58.17	3619.39	3574.37	-0.93
MW-15	12/6/2011	45.30			58.17	3619.39	3574.09	-0.28
MW-15	3/9/2012	45.86			58.17	3619.39	3573.53	-0.56
MW-16	3/29/2011	44.37	an in the state of the site.	antigeration of the rank the	and the construction of the	n natur i territori de ante internet. I	3577.50	and the state of the
MW-16	6/21/2011	44.79					3577.08	
MW-16	9/16/2011	45.31			56.35	3621.87	3576.56	-0.94
MW-16	12/6/2011	45.55			56.35	3621.87	3576.32	-0.24
MW-16	3/9/2012	46.05		· · · · ·	56.35	3621.87	3575.82	-0.50
MW-17*	3/29/2011	54.25	53.46	0.79	Star An Strates and	ter and the second	3570.35	
MW-17*	6/21/2011	54.25 54.46	53.46	0.79			3570.35	
MW-17*	9/16/2011	53.66	54.47	0.73	NM	3623.94	3570.89	0.54
MW-17*	12/8/2011	54.82	54.10	0.72	NM	3623.94	3569.66	-1.23
MW-17*	3/8/2012	55.40	54.50	0.90	NM	3623.94	3569.22	-0.44
	an wal wat an and the state of the	4 9 W	Brandor Participation of					
MW-18*	3/29/2011	54.53	<u> </u>	0.07			3569.77	
MW-18*	6/21/2011	54.83	54.77	0.06		2(2)(2)	3569.52	
MW-18*	9/15/2011	54.51	54.71	0.20	NM	3624.30	3569.94	0.17
MW-18*	12/8/2011 3/8/2012	55.21	55.08	0.13	NM	3624.30	3569.19	-0.75
MW-18*		55.52	55.30	0.22	NM	3624.30	3568.95	-0.24
MW-19	3/29/2011	54.42					3569.70	
MW-19	6/21/2011	54.75					3569.37	
MW-19	9/15/2011	55.18			65.15	3624.12	3568.94	-0.76
MW-19	12/6/2011	55.46			65.15	3624.12	3568.66	-0.28
MW-19	3/9/2012	55.85	27 - 196 B. Andrew M. P. B.	STREET ALLOSS	65.15	3624.12	3568.27	-0.39
MW-19D	3/29/2011	54.33			T		3569.46	
MW-19D	6/21/2011	54.74					3569.05	
MW-19D	9/15/2011	55.15			78.75	3623.79	3568.64	-0.82
MW-19D	12/6/2011	55.41			78.75	3623.79	3568.38	-0.26
MW-19D	3/9/2012	55.82			78.75	3623.79	3567.97	-0.41
MW-20	3/29/2011	51.97		<u></u>	1		3569.52	
MW-20	6/21/2011	52.32					3569.17	
MW-20	9/16/2011	52.75			60.80	3621.49	3568.74	-0.78
MW-20	12/6/2011	53.00			60.80	3621.49	3568.49	-0.25
MW-20	3/9/2012	53.45	من من من من من من من م		60.80	3621.49	3568.04	-0.45
MW-21	3/29/2011	53.72			T		3570.53	
MW-21	6/21/2011	54.19					3570.06	
MW-21	9/15/2011	54.59			62.75	3624.25	3569.66	-0.87
MW-21	12/6/2011	54.84			62.75	3624.25	3569.41	-0.25
<u>MW-21</u>	3/9/2012	55.30	x - 104 - 35-25 12 - 1-1 - 1-1	L	62.75	3624.25	3568.95	-0.46
MW-22	3/29/2011	55.49		<u>,</u>			3569.67	
MW-22	6/21/2011	55.76					3569.40	
MW-22	9/15/2011	56.23			62.00	3625.16	3568.93	-0.74
MW-22	12/6/2011	56.51			62.00	3625.16	3568.65	-0.28
MW-22	3/9/2012	56.86			62.00	3625.16	3568.30	-0.35
MW-23	3/29/2011	47.94	- ANTERNAME NUMBER OF STREET	a area a sir an harre	- The same water and the	an in the second se	3573.22	<u>i a marina da a contrata a</u>
MW-23	6/21/2011	48.34			1		3572.82	
MW-23	9/15/2011	48.84			56.21	3621.16	3572.32	-0.90
MW-23	12/6/2011	49.15		<u>,</u>	56.21	3621.16	3572.01	-0.31
MW-23	3/9/2012	49.65			56.21	3621.16	3571.51	-0.50

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TABLE 1 FIRST QUARTER 2012 SUMMARY OF GROUNDWATER ELEVATION DATA HOBBS BOOSTER STATION 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 (feet amsl)	Groundwater Elevation (feet amsl)	Change in Groundwater Elevation Since Previous Event (3) (feet)
MW-24	3/29/2011	45.98					3573.29	
MW-24	3/11/2011	46.36					3572.91	
MW-24	9/15/2011	46.90			56.77	3619.27	3572.37	-0.92
MW-24	12/6/2011	47.21			56.77	3619.27	3572.06	-0.31
MW-24	3/9/2012	47.75			56.77	3619.27	3571.52	-0.54
MW-25	3/29/2011	47.04	C. A. Markar Straw (1996) B. A.	ala se na se enclassa. I	2	• _ ~	3572.69	A B T BA M SALESS STALL ST 1
MW-25	6/21/2011	47.40			<u> </u>		3572.33	· · · · · · · · · · · · · · · · · · ·
MW-25	9/15/2011	47.91			56.29	3619.73	3571.82	-0.87
MW-25	12/6/2011	48.15			56.29	3619.73	3571.58	-0.24
MW-25	3/9/2012	48.73		<u></u> .	56.29	3619.73	3571.00	-0.58
			ريخ تر هروه ور به العه		17 00 4	- A - C - K	A.27.5 N.5.	LI CT N LIATRIN S T
Т₩-Н	3/29/2011	46.02					3576.28	
TW-H	6/21/2011	46.42					3575.88	
TW-H	9/15/2011	NM			NM	3622.30	NM	NM
TW-H	12/8/2011	NM			NM	3622.30	NM	NM
TW-H	3/8/2012	NM			NM	3622.30	NM	NM
TW-K*	3/29/2011	62.66	55.51	7.15	Stall Barran 1. 1980 - 41		3572.13	ander in die in Michael ander <u>Hilderick</u> in die
TW-K*	6/21/2011	62.47	55.71	6.76	1		3572.00	
TW-K*	9/16/2011	62.10	55.67	6.43		3628.95	3571.67	-0.46
TW-K*	12/8/2011	62.15	56.04	6.11	1	3628.95	3571.38	-0.29
TW-K*	3/8/2012	62.70	57.50	5.20		3628.95	3570.15	-1.23
TW-N*	3/29/2011	55.60	54.48		1-1- ³ . <u>).</u>	Pat . 2 * 4 *	2577.20	an in the second se
TW-N*	6/21/2011	57.24	54.48	1.12			3577.29	· · · · · · · · · · · · · · · · · · ·
				2.94	· · · · · · · · · · · · · · · · · · ·	2(21.02	3577.14	0.20
TW-N*	9/16/2011	59.13	53.71	5.42		3631.98	3576.92	-0.38
TW-N*	12/8/2011	59.30	53.95	5.35	 	3631.98	3576.69	-0.22
TW-N*	3/8/2012	59.24	54.25	4.99	1	3631.98	3576.48	-0.21
			Ave	rage Change in gro	undwater elevation	on since the previou	s monitoring event	-0.45

Notes:

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

2- Total depths were collected and recorded during the first quarter 2012 monitoring event. Total depths were not collected in wells that contained LNAPL.

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

Data presented for all well locations includes previous four sampling events, when available. Historic groundwater analytical results for these locations are available upon request. Sample locations are shown on Figure 2 and and a groundwater elevation contour map is shown on Figure 3.

amsl - feet above mean sea level.

TOC - top of casing.

NM - Not Measured.

* Groundwater elevation was corrected for product thickness using the following calculation:

Groundwater elevation = (TOC Elevation - Measured Depth to Water) + (LNAPL Thickness in Well * LNAPL Density) LNAPL density was assumed to be approximately 0.75 grams per cubic centimeter

TABLE 2 FIRST QUARTER 2012 SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER HOBBS BOOSTER STATION 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-3	3/29/2011	NS	NS	NS	NS	
MW-3	9/16/2011	< 0.001	<0.002	0.0246	0.0135	
MW-3	12/6/2011	NS	NS	NS	NS	
MW-3	3/9/2012	< 0.001	< 0.002	0.0019	< 0.004	
MW-5	3/29/2011	NS	NS	NS	NS	and a second and the second a second to the second s
MW-5	9/15/2011	< 0.001	<0.002	<0.002	< 0.004	
MW-5	12/6/2011	NS	NS	NS	NS	
MW-5	3/9/2012	< 0.001	< 0.002	< 0.002	< 0.004	
a the second	्रिक, क	N.377573983, 7924 .	3 V	Alexandri (C. C. S. C.		n in a thing we are the to the court of the
MW-6	3/29/2011	NS	NS	NS	NS <0.004	
MW-6	9/16/2011 12/6/2011	<0.001 NS	<0.002 NS	<0.002 NS	<0.004 NS	·····
MW-6	3/9/2012	<0.001	<0.002	<0.002	<0.004	
	Y	· Warden Services	A CONTRACTOR AND A CONTRACT CARE	<u>\0.002</u>	5	an an and a standard and a second
MW-7	3/29/2011	NS	NS	NS	NS	······································
MW-7	9/16/2011	NS	NS	NS	NS	· · · · · · · · · · · · · · · · · · ·
MW-7	<u>12/6/2011</u> <u>3/9/2012</u>	NS	NS	NS	NS	
MW-7	3/9/2012	< 0.001	<0.002	<0.002	<0.004	and the second
MW-10	3/29/2011	NS	NS	NS	NS	
MW-10	9/16/2011	0.213	< 0.01	0.135	< 0.02	Duplicate sample collected
MW-10	12/6/2011	NS	NS	NS	NS	
MW-10	3/9/2012	NS	NS	NS	NS	a construction of the second
MW-14	3/29/2011	0.0901	0.0041	<0.002	< 0.002	
MW-14	6/21/2011	0.187	< 0.002	<.0043	< 0.004	
MW-14	9/15/2011	0.15	< 0.002	0.0024	< 0.004	
MW-14	12/6/2011	0.0787	< 0.002	0.0017	< 0.004	Duplicate sample collected
MW-14	3/9/2012	0.0523	<0.002	0.00066	< 0.004	C. Service
MW-15	3/29/2011	< 0.001	< 0.002	0.0039	< 0.002	
MW-15	6/21/2011	0.0048	< 0.002	0.0012	< 0.004	
MW-15	9/15/2011	0.0054	<0.002	0.0124	< 0.004	
MW-15	12/6/2011	0.0053	<0.002	0.0106	< 0.004	
MW-15	3/9/2012	0.0059	<0.002	0.0097	< 0.004	Duplicate-1 sample collected
MW-16	3/29/2011	< 0.001	< 0.002	<0.002	< 0.002	
MW-16	6/21/2011	< 0.001	< 0.002	< 0.002	< 0.004	
MW-16	9/15/2011	<0.001	<0.002	<0.002	< 0.004	
MW-16 MW-16	<u>12/6/2011</u> <u>3/9/2012</u>	<0.001 <0.001	<0.002 <0.002	<0.002 <0.002	<0.004 <0.004	
and the second		a start and a start	· · · · · · · · · · · · · · · · · · ·	The State of the state	1 「「「「「「「」」」」」」	and the second states and the second s
MW-19	3/29/2011	< 0.001	<0.002	< 0.002	< 0.002	
MW-19	6/21/2011	< 0.001	<0.002	< 0.002	< 0.004	
MW-19	9/15/2011	< 0.001	<0.002	<0.002	< 0.004	· · · · · · · · · · · · · · · · · · ·
MW-19 MW-19	12/6/2011 3/9/2012	<0.001	<0.002	<0.002	<0.004	
	3/9/2012	<0.001	< 0.002	<0.002	< 0.004	The second s

TABLE 2 FIRST QUARTER 2012 SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER HOBBS BOOSTER STATION 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-19D	3/29/2011	< 0.001	< 0.002	< 0.002	< 0.002	
MW-19D	6/21/2011	.0006 J	<0.002	< 0.002	< 0.004	
MW-19D	9/15/2011	0.0014	< 0.002	<0.002	< 0.004	
MW-19D	12/6/2011	0.0015	< 0.002	<0.002	< 0.004	
MW-19D	3/9/2012	0.0015	<0.002	<0.002	< 0.004	Duplicate-2 sample collected
MW-20	3/29/2011	< 0.001	< 0.002	< 0.002	<0.002	 Ale-reactions/Contraction Contraction Con
MW-20	6/21/2011	< 0.001	< 0.002	< 0.002	< 0.004	· · · · · · · · · · · · · · · · · · ·
MW-20	9/15/2011	< 0.001	< 0.002	< 0.002	< 0.004	
MW-20	12/6/2011	< 0.001	< 0.002	< 0.002	< 0.004	
MW-20	3/9/2012	0.00033	< 0.002	< 0.002	< 0.004	
MW-21	3/29/2011	< 0.001	< 0.002	< 0.002	<0.002	in the first of the first state and the state of the stat
MW-21	6/21/2011	<0.001	<0.002	<0.002	<0.002	
MW-21	9/15/2011	< 0.001	<0.002	<0.002	< 0.004	
MW-21	12/6/2011	< 0.001	< 0.002	<0.002	< 0.004	
MW-21	3/9/2012	< 0.001	< 0.002	< 0.002	< 0.004	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1	NOR DENTED	ter en ef e and∉ e	e to ceeda an	and the second
MW-22	3/29/2011	0.0034	< 0.002	<0.002	0.0022	
MW-22	6/21/2011	0.0041	<0.002	.0005 J	<0.004	· · · · · · · · · · · · · · · · · · ·
MW-22	9/15/2011	0.0037	<0.002	<0.002	< 0.004	
MW-22 MW-22	12/6/2011	0.0028	<0.002	<0.002	< 0.004	
WIW-22	3/9/2012	0.0034	<0.002	0.00046	< 0.004	A LAND FOR MARKED BELLIN AND AND AND A MARKED IN 1983
MW-23	3/29/2011	< 0.001	< 0.002	< 0.002	< 0.002	
MW-23	6/21/2011	< 0.001	< 0.002	< 0.002	< 0.004	
MW-23	9/15/2011	< 0.001	<0.002	< 0.002	< 0.004	
MW-23	12/6/2011	< 0.001	< 0.002	< 0.002	< 0.004	
MW-23	3/9/2012	< 0.001	<0.002	<0.002	< 0.004	
MW-24	3/29/2011	< 0.001	<0.002	<0.002	<0.002	1. 2011 - 2011 - 2011 - 2011 - 1 - 1 - 7 - 1 - 1 - 1 - 1 - 1 - 1 -
MW-24	6/21/2011	< 0.001	< 0.002	< 0.002	< 0.004	
MW-24	9/15/2011	< 0.001	< 0.002	<0.002	< 0.004	
MW-24	12/6/2011	< 0.001	< 0.002	< 0.002	< 0.004	
MW-24	3/9/2012	< 0.001	<0.002	< 0.002	< 0.004	
MW-25	3/29/2011	< 0.001	<0.002	<0.002	<0.002	and the second
MW-25	6/21/2011	< 0.001	< 0.002	< 0.002	< 0.002	
MW-25	9/15/2011	< 0.001	< 0.002	< 0.002	< 0.004	
MW-25	12/6/2011	< 0.001	< 0.002	< 0.002	< 0.004	
MW-25	3/9/2012	< 0.001	< 0.002	< 0.002	< 0.004	

Notes:

1.) The environmental cleanup standards for groundwater that are applicable to this Site are the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standards.

2.) Data presented for all other 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.

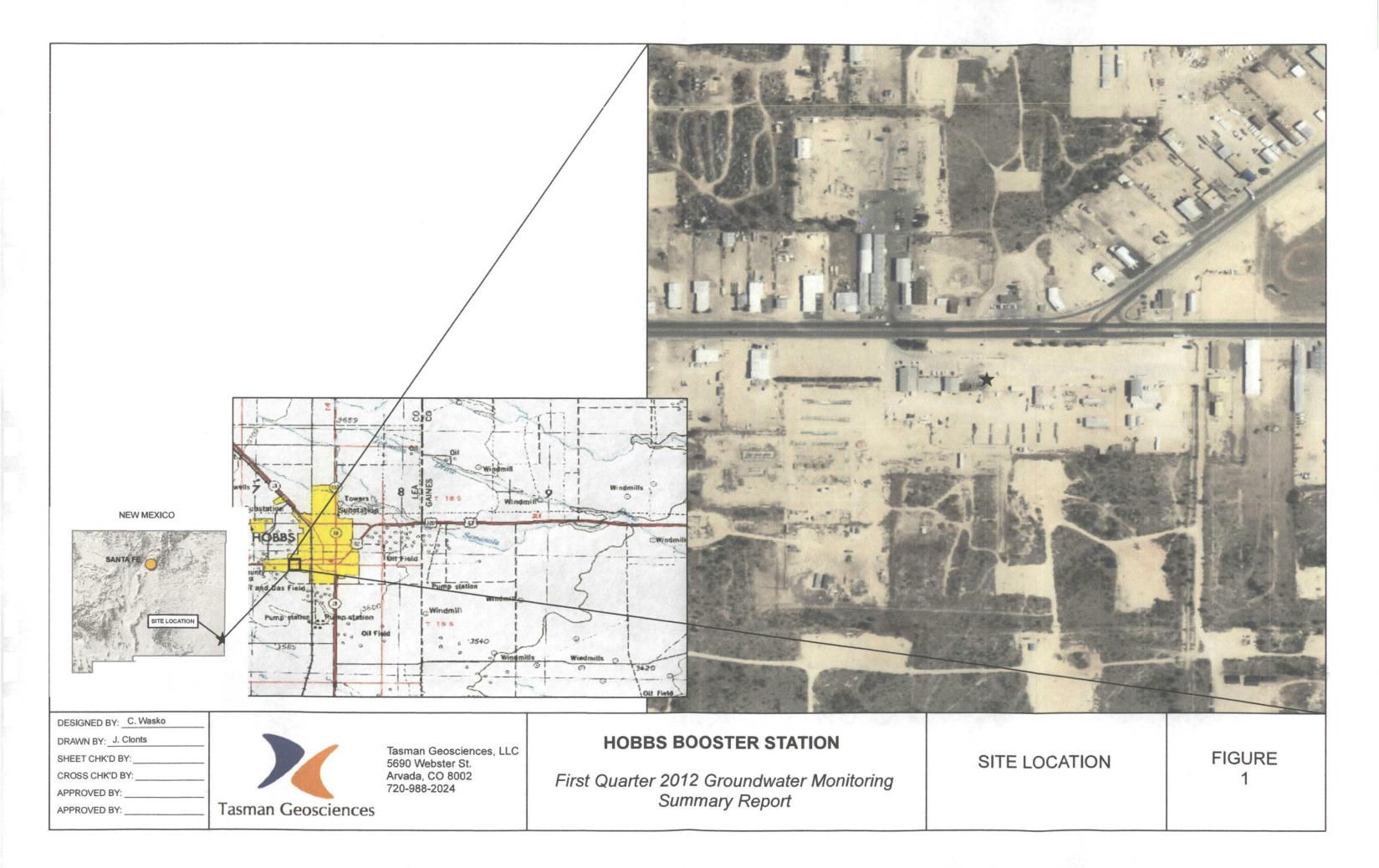
Sample locations are shown on Figure 2 and analytical results are illustrated on Figure 4.

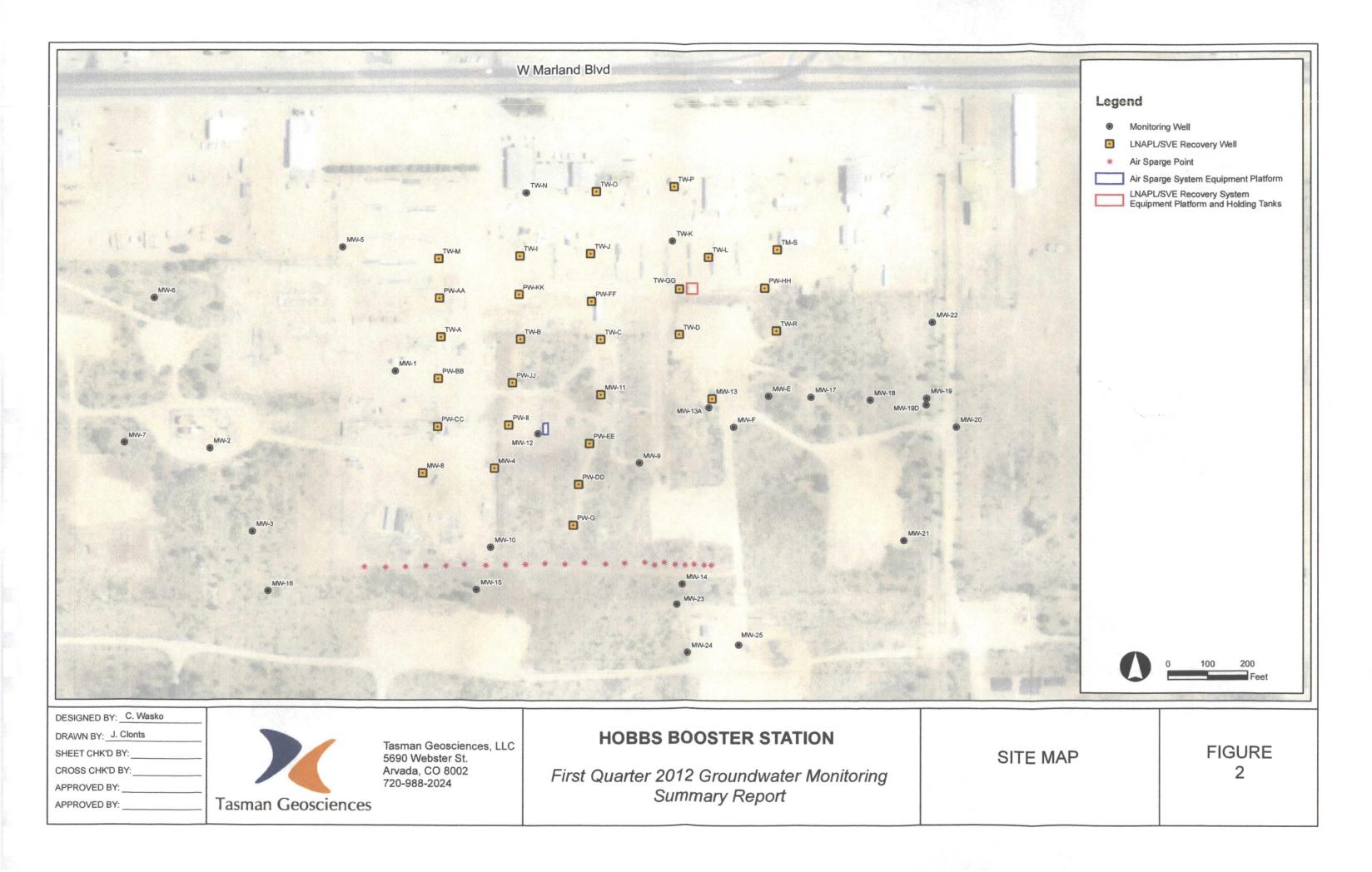
LNAPL = Light Non-Aqueous Phase Liquid

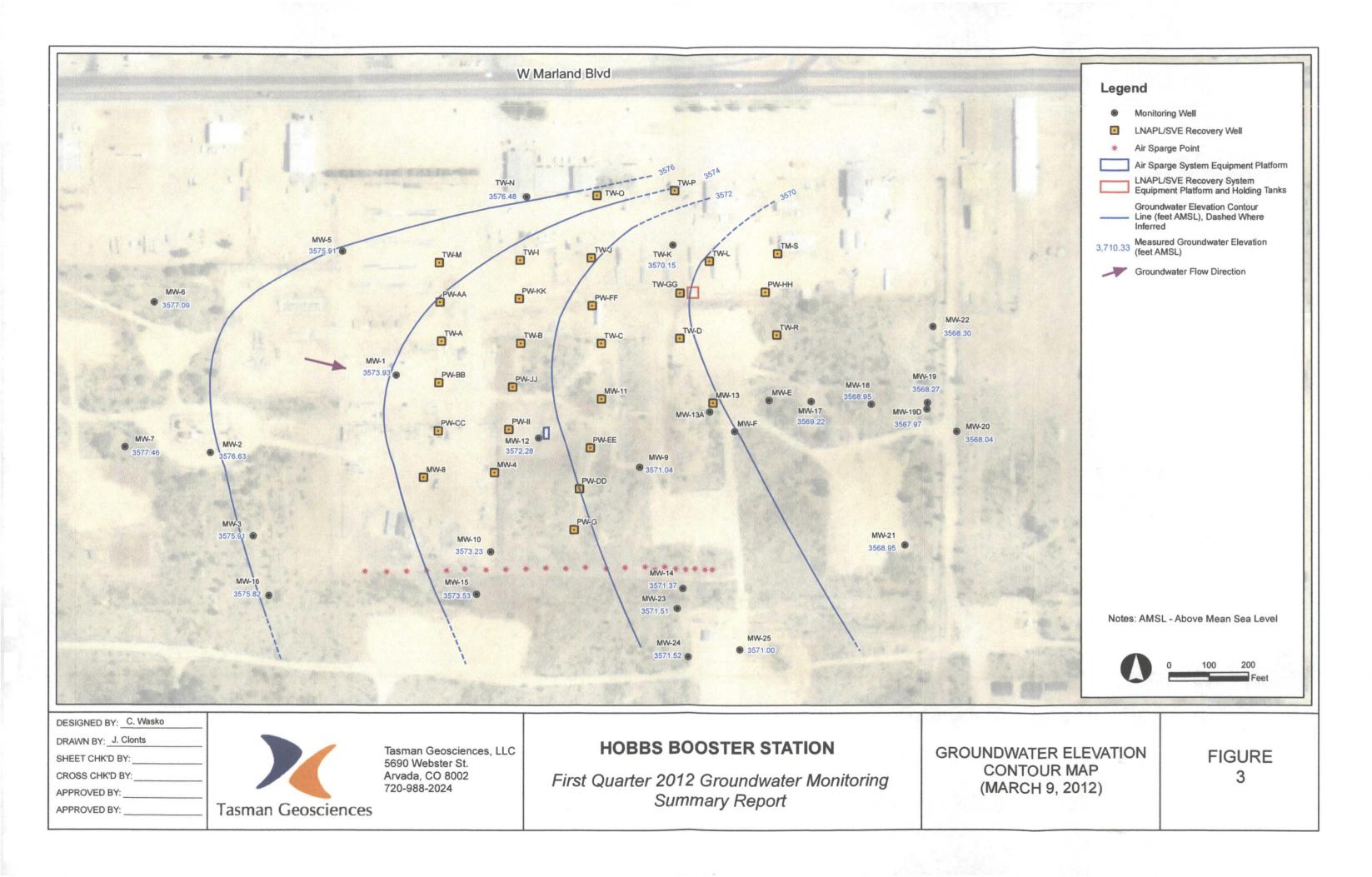
NS = Not sampled.

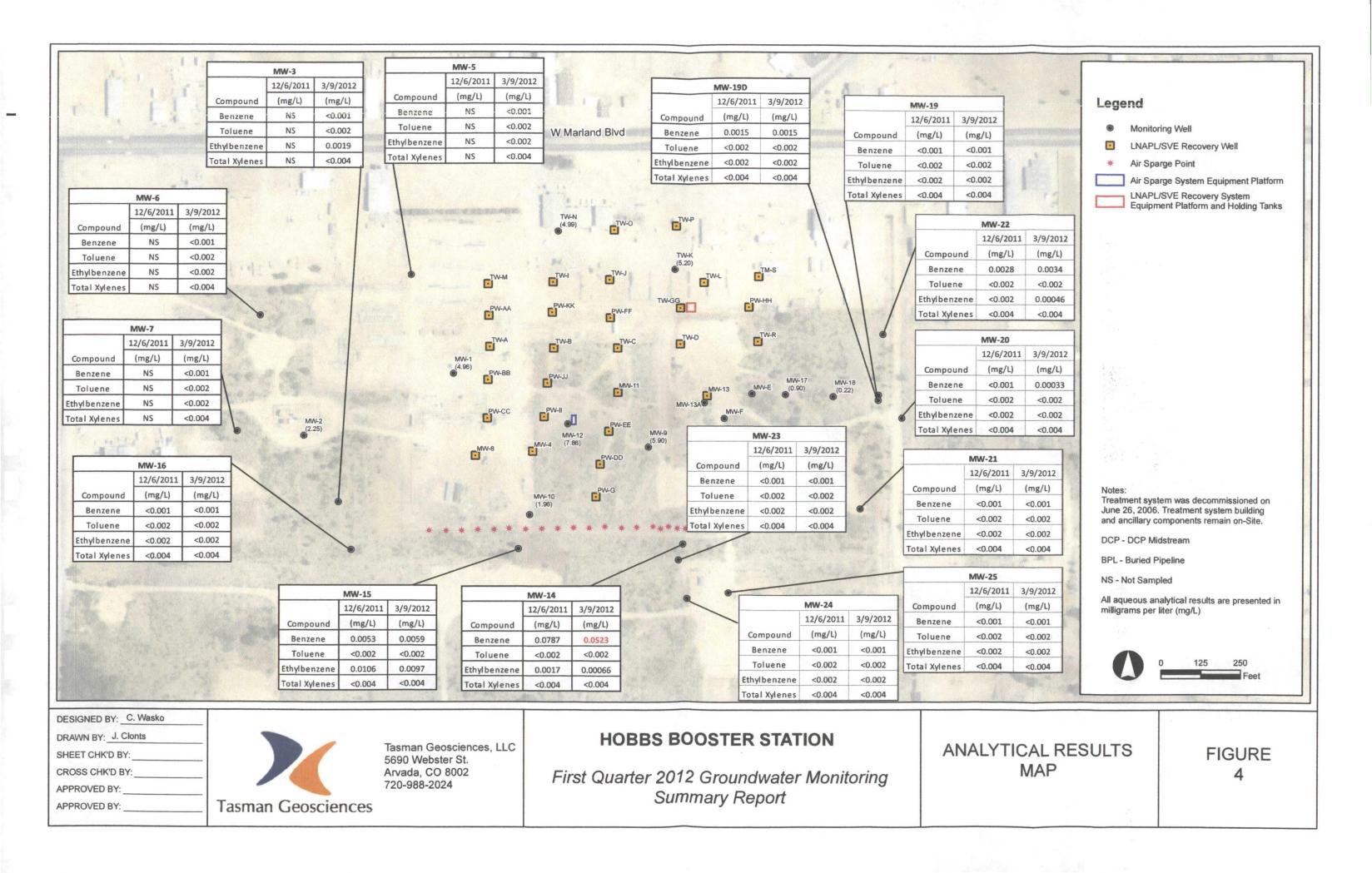
mg/L = milligrams per liter.

Figures











Laboratory Analytical Report