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GENERAL CORRESPONDENCE

2007

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July 2, 2007
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Mr. Wayne Price
Division Chief
New Mexico Oil Conservation District
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Groundwater Data Transmittal
Former Axelson Facility
2703 W. Marland Boulevard, Hobbs, New Mexico

Dear Mr. Price:

On behalf of Beazer East, Inc., this letter presents the groundwater analytical data collected during the April 2007 monitor well sampling event at the former Axelson Facility, located at 2703 W. Marland Boulevard, Hobbs, New Mexico (Site). The Site location is presented in Figure 1.

The wells used to monitor groundwater at the Site were previously sampled in May 2004; these results were presented in the *Data Transmittal, Request to Abandon/Plug Short-term Wells, Former Axelson Facility, 2703 West Marland Boulevard, Hobbs, New Mexico*, dated July 1, 2004. During an early February 2007 telephone conversation, you requested another groundwater sampling event to evaluate the current groundwater conditions at the Site. Petroleum hydrocarbons, associated with historic operations at the Site, are the primary constituents of concern in soil and groundwater at the Site.

A brief summary of the April 2007 field activities is presented below.

Groundwater Flow Direction and Gradient
Groundwater elevations were measured in seven on-site wells (MW-1 through MW-7) and two downgradient wells (KMW-1 and KMW-2) on April 23-24, 2007. The well locations are shown on Figure 2 and well construction details are presented in Table 1.

Wells MW-1 through MW-3 were dry and groundwater elevations were not recorded at these locations. Groundwater elevations were measured and recorded at wells MW-4 through MW-7, KMW-1, and KMW-2. These elevations were used to calculate the groundwater flow direction for April 2007, as shown on Figure 2. The groundwater flow direction was calculated to be southeast (S60°E) with an average flat gradient of 0.0009 feet per foot (ft/ft). This is consistent with prior groundwater flow direction and gradient data collected at the Site. The groundwater surface elevation at the Key Facility wells is approximately 0.27 to 0.29 feet lower than the groundwater surface elevation at the Site wells.

Monitor Well Sampling and Analyses
Monitor well samples were collected from six wells (MW-4 through MW-7, KMW-1, and KMW-2) on April 24, 2007. The monitor wells were purged and sampled using a disposable bailer.

The samples were submitted to Columbia Analytical Services, in Kelso, Washington, for analysis of total petroleum hydrocarbons in the gasoline, diesel, and motor oil ranges (TPH-g, TPH-d, and TPH-mo) using EPA Method 8015M; and benzene, toluene, ethyl benzene, and total xylenes (BTEX compounds) using EPA Method 8021B.

The TPH-d and TPH-mo samples were pre-treated using a silica gel cleanup process to remove naturally occurring lipids and fats that have the potential to cause false positive results.

Analytical Results
The analytical results for the April 2007 groundwater samples are summarized in Table 3. Petroleum hydrocarbons and very low concentrations of BTEX compounds were detected in on-site wells MW-4 and MW-5; the detected concentrations are consistent with historical data for these wells. There were no detections of petroleum hydrocarbons or BTEX compounds in samples from on-site wells MW-6 and MW-7.

Very low concentrations of petroleum hydrocarbons and BTEX compounds were detected in off-site well KMW-1 during the April 2007 sampling event. The BTEX detections in well KMW-1 are below corresponding New Mexico Water Quality Control Commission Groundwater Standards (WQCCs) and USEPA Maximum Contaminant Levels (MCLs), with the exception of benzene which is very close to but slightly exceeds the MCL of 5 micrograms per liter (ug/L) and the WQCC of 10 ug/L. No petroleum hydrocarbons or BTEX compounds were detected in the April 2007 sample from well KMW-2.

Please contact me at (916) 853-1800 if you have any questions regarding the information in this groundwater data transmittal.

Sincerely,

GEOTRANS, INC.,

Jennifer Abrahamse

Associate
Senior Hydrogeologist

Attachments

cc: Dan Gibson, Key Energy Services
Mitchell Brourman, Beazer East, Inc.
Jim McGinty, Halliburton
Bill Staggs, Site Owner

Table 1
Summary of Monitor Well Construction Details
Former Axelson Facility, Hobbs, New Mexico

Well Number	Installation Date	Top of Casing Elevation (ft MSL)	Casing Diameter (inches)	Screen Interval (feet)	As Built Total Depth (feet)
On-site Wells					
MW-1	2/23/1995	3,624.76	2	25-35	35
MW-2	2/23/1995	3,624.34	2	25-35	35
MW-3	2/27/1995	3,623.94	2	25-35	35
MW-4	6/5/2001	3,624.74	2	30-45	45
MW-5	6/5/2001	3,624.46	2	29-44	44
MW-6	6/6/2001	3,623.97	2	30-45	45
MW-7	6/6/2001	3,625.32	2	30-45	45
Off-site Wells					
KMW-1	4/7/2004	3,625.26	2	28-48	48
KMW-2	4/8/2004	3,625.49	2	26-46	46

NOTE: All TOC elevations surveyed by Basin Surveys on June 8, 2001 and April 12, 2004.
Wells MW-1through MW-3 installed by Environmental Management & Engineering, Inc.
Wells MW-4 through MW-7, KMW-1 and KMW-2 installed by GeoTrans, Inc.

ft MSL = feet mean sea level

Table 2
Summary of Water Level and Flow Direction Data
Former Axelson Facility, Hobbs, New Mexico

Well Number	Date	Measured Depth to Water (feet)	Measured Depth to Product (feet)	Top of Casing Elevation (ft MSL)	Calculated Groundwater Elevation (ft MSL)	Groundwater Gradient Direction	Groundwater Gradient (ft/ft)	Notes
MW-1	6/9/2001	dry *	---	3624.76	na	---	---	---
	6/11/2001	dry *	---	3624.76	na	---	---	---
	4/6/2004	dry	---	3624.76	na	---	---	very slight petroleum odor
	4/23/2007	dry	---	3624.76	na	---	---	no odor
MW-2	6/9/2001	dry *	---	3624.34	na	---	---	---
	6/11/2001	dry *	---	3624.34	na	---	---	---
	4/6/2004	dry	---	3624.34	na	---	---	very slight petroleum odor
	4/23/2007	dry	---	3624.34	na	---	---	no odor
MW-3	6/9/2001	34.65**	none	3623.94	na	---	---	---
	6/11/2001	34.65**	none	3623.94	na	---	---	---
	4/6/2004	dry	---	3623.94	na	---	---	no odor
	4/23/2007	dry	---	3624.94	na	---	---	no odor
MW-4	6/9/2001	35.35	none	3624.74	3589.39	---	---	---
	6/11/2001	35.36	none	3624.74	3589.38	S52°E	0.0014	---
	4/6/2004	37.64	none	3624.74	3587.10	---	---	mild petroleum odor
	4/15/2004	37.69	none	3624.74	3587.05	S61°E	0.0009	mild petroleum odor
	5/18/2004	37.66	none	3624.74	3587.08	S52°E	0.0011	mild petroleum odor
	4/23/2007	36.41	none	3624.74	3588.33	S60°E	0.0009	mild petroleum odor
MW-5	6/9/2001	35.15	none	3624.46	3589.31	---	---	---
	6/11/2001	35.15	none	3624.46	3589.31	S52°E	0.0014	---
	4/6/2004	38.01	---	3624.46	3586.45	---	---	@ 2" free oil product in well
	4/15/2004	37.51	---	3624.46	3586.95	S61°E	0.0009	@ 2" free oil product in well
	5/18/2004	38.60	38.55	3624.46	3585.86	S52°E	0.0011	@ 0.5" free oil product in well
	4/23/2007	36.19	none	3624.46	3588.27	S60°E	0.0009	very little oily sheen
MW-6	6/9/2001	34.62	none	3623.97	3589.35	---	---	---
	6/11/2001	34.63	none	3623.97	3589.34	S52°E	0.0014	---
	4/6/2004	36.99	none	3623.97	3586.98	---	---	no odor
	4/15/2004	36.95	none	3623.97	3587.02	S61°E	0.0009	no odor
	5/18/2004	36.96	none	3623.97	3587.01	S52°E	0.0011	no odor
	4/23/2007	35.65	none	3623.97	3588.32	S60°E	0.0009	no odor
MW-7	6/9/2001	35.62	none	3625.11	3589.49	---	---	---
	6/11/2001	35.63	none	3625.11	3589.48	S52°E	0.0014	---
	4/6/2004	37.99	none	3625.11	3587.12	---	---	no odor
	4/15/2004	37.94	none	3625.11	3587.17	S61°E	0.0009	no odor
	5/18/2004	37.94	none	3625.11	3587.17	S52°E	0.0011	no odor
	4/23/2007	36.70	none	3625.11	3588.41	S60°E	0.0009	no odor
KMW-1	4/15/2004	38.34	none	3625.26	3586.92	---	---	no odor
	5/18/2004	38.38	none	3625.26	3586.88	S52°E	0.0011	no odor
	4/24/2007	37.14	none	3625.26	3588.12	S60°E	0.0009	no odor
KMW-2	4/15/2004	38.55	none	3625.49	3586.94	---	---	no odor
	5/18/2004	38.60	none	3625.49	3586.89	S52°E	0.0011	no odor
	4/24/2007	37.35	none	3625.49	3588.14	S60°E	0.0009	no odor

NOTE: Depth to water measured from mark or notch at top of well casing.

ft MSL = feet Mean Sea Level
na = not applicable
--- = data not available
* = approximately 0.5" to 2" of thick oily grease in bottom of well (no groundwater present).
**= Standing water collected in sump of well. Not representative of perched groundwater.

Table 3
Summary of Groundwater Analytical Results
Petroleum Hydrocarbons
Former Axelson Facility, Hobbs, New Mexico

Well	Date	Total Petroleum Hydrocarbons -			BTEX Compounds
		Diesel (TPH-d)	Gasoline (TPH-g)	Motor Oil (TPH-mo)	
MW-4	Jun-01	**13,000**	**4,500**	2,500	---
	Apr-04	**1,100**	**470**	370	---
	May-04	**2,000**	**560**	330	Ethyl benzene = 2.4 Total Xylenes = 3.7
	Apr-07	**2,800 (a)**	**600 (a)**	290 (b)	Benzene = 1.8 Ethyl benzene = 27 Total Xylenes = 7.5
MW-5	Jun-01	**490**	**140**	410	---
	Apr-04*	**210,000**	**1,900**	19,000	---
	May-04*	**72,000**	**2,200**	7,400	nd
	Apr-07	**12,000 (a)**	**350 (a)**	1,400 (b)	Ethyl benzene = 1.2
MW-6	Jun-01	**<100**	**<100**	<260	---
	Apr-04	**<110**	**<50**	<110	---
Duplicate	Apr-04	**<110**	**<50**	<110	---
	May-04	**<110**	**<50**	<110	nd
	Apr-07	<50	**<50**	<100	nd
MW-7	Jun-01	**210**	**110**	380	---
Duplicate	Jun-01	**170**	**<100**	440	---
	Apr-04	**<110**	**<50**	<110	---
	May-04	**<100**	**<50**	110	nd
	Apr-07	<50	**<50**	<100	nd
Duplicate	Apr-07	<50	**<50**	<100	nd
WSW-1	Apr-04	**<110**	**<50**	150	---
KMW-1	Apr-04	**<100**	**<50**	<100	---
	May-04	**<110**	**74**[1]	<110	Benzene = 2.8 Toluene = 2.5 Ethyl benzene = 5.0 Total Xylenes = 8.2
	Apr-07	<50	**400 (a)**	<100	**Benzene = 16** Toluene = 2.4 Ethyl benzene = 73 Total Xylenes = 30
KMW-2	Apr-04	**<110**	**<50**	<110	---
	May-04	**<110**	**<50**	<110	nd
	Apr-07	<50	**<50**	<100	nd
SNARL	---	100	5	---	---
MRL		---	---	---	Benzene = 0.5 Toluene = 1.0 Ethyl benzene = 1.0 Total Xylenes = 1.0
WQCC		---	---	---	Benzene = 10 Toluene = 750 Ethyl benzene = 750 Total Xylenes = 620
MCL		---	---	---	Benzene = 5 Toluene = 1,000 Ethyl benzene = 70 Total Xylenes = 10,000

Note: Results reported as micrograms per liter (µg/L=ppb). Only detected analytes listed.

Pre-2007: TPH analyzed using EPA Method 8015 Modified.
April 2007: TPH analyzed using EPA Method 8015 Modified with Silica Gel Treatment prior to analysis.
BTEX Compounds analyzed using EPA Method 8021B.
Concentrations in bold exceed SNARL, MRL, WQCC, and/or MCL.

* = free product present in well

SNARL = EPA Suggested No-Adverse Response Levels
WQCC = New Mexico Water Quality Control Commission Groundwater Standards
MCL = U.S. EPA Drinking Water Maximum Contaminant Level
MRL = Method Reporting Limit

(a) = The chromatic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution patter does not match the calibration standard.

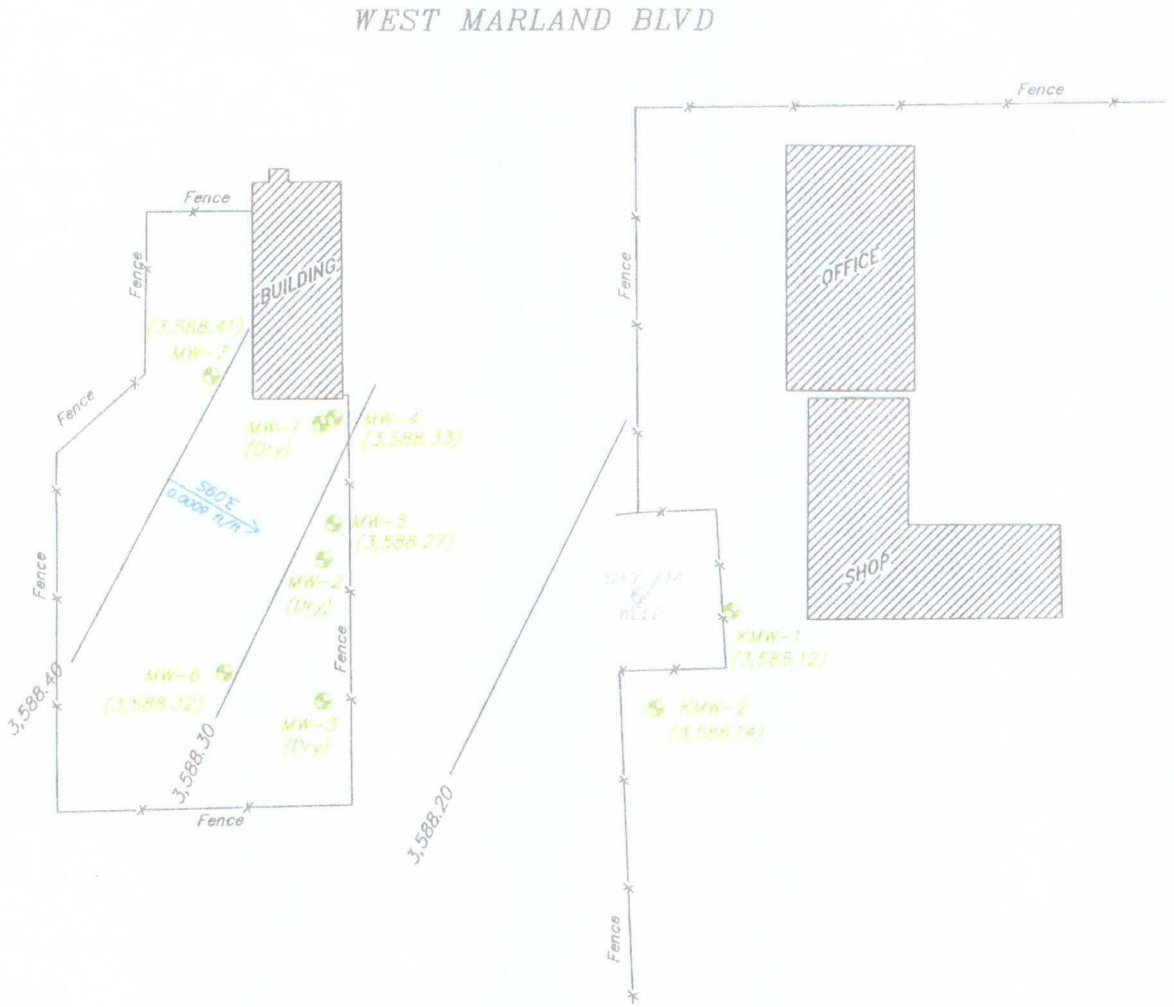
(b) = The chromatic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.

N

Title:	Site Location Map Former Axelson Facility
Location:	Hobbs, New Mexico
File Name: P:\Projects\Benzer\P253\Hobbs\Arcview\base_maps.apr	Checked By: TRA
Date: 7/6/04	Prepared By: Tim Godwin

GeoTrans, Inc.

Figure: 1



Explanation

- Monitor Well Location with groundwater elevation on 04/22/07 (ft msl)
- Groundwater flow direction with bearing and gradient
- Groundwater elevation contour (ft)

N

0 50 100

Scale: 1"=100'

TITLE: Groundwater Elevations April 2007

LOCATION: Former Axelson Facility
2703 W. Marland Boulevard, Hobbs, New Mexico

GeoTrans, Inc.

CHECKED:	JAA
DRAFTED:	TRA
DATE:	05-23-07

FIGURE: 2

(Base map surveyed by Basin Surveys, Inc.)