ARCADIS Design & Consultancy for natural and built assets

REVIEWED
By Mike Buchanan at 8:22 am, Feb 25, 2025

Review of the Proposed Groundwater Monitoring and LNAPL O&M Reduction Workplan is satisfactory for approval.
1. Reduce LNAPL Recovery as proposed, from bi-weekly to quarterly in order to establish a more efficient removal method.
2. Based on historical trends, reduce site wells from the semi-annual sampling event: MW3, MW-4, MW-5, MW-7, MW-8, MW-9R, WW-1, and WW-2.
3. Cease sampling for recovery wells, as analytical sampling trends have been established. Continue to sample MW-6 on a quarterly basis as proposed.
4. Submit the annual groundwater monitoring report to OCD by, or before April 1, 2025

Mr. Bradford Billings
Project Manager
EMNRD/OCD
5200 Oakland, NE, Suite 100
Albuquerque, NM 87113

Arcadis U.S., Inc.
10205 Westheimer Road
Suite 800
Houston
Texas 77042
Tel 713 953 4800
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ENVIRONMENT

Subject:
Proposed Groundwater Monitor… …eduction Workplan
Chevron Environmental Managen…
Former F-State Tank Battery
Lea County, New Mexico
Case No. 1RP-258

Date:
July 16, 2020

Contact:
Scott Foord

Phone:
713.953.4853

Email:
William.foord@arcadis.com

ARCADIS U.S., Inc.
TX Engineering License # F-533
Geoscientist License # 50158

Dear Mr. Billings:

At the request of Chevron Enviror…mpany (CEMC), Arcadis U.S., Inc. (Arcadis) is pro…quest the reduction of groundwater monitoring frequency…non-aqueous phase liquid (LNAPL) recovery event fre…State Tank Battery site (Site).

The Former F-State Tank Battery …y Road 41 (Maddox Road), approximately three miles …New Mexico, in the northeast quarter (NE/4) of the so…ection 24, Township 19 South, Range 36 East, Lea County, New Mexico. The Site's coordinates are latitude 32.643018 and longitude -103.301158.

Groundwater monitoring began at the Site in July 1998, and the Site is currently monitored semi-annually from a network of 7 monitoring wells, 4 recovery wells, and 2 off-site water wells (two full site groundwater sampling events are currently being conducted). Sentry well MW-6 is additionally sampled quarterly to ensure the dissolved-phase plume is not migrating southwest towards the off-site water wells (WW-1 and WW-2). At the request of the NMOCD, LNAPL samples are collected annually from recovery wells containing measurable LNAPL. Two recovery wells (RW-1 and RW-4) currently contain LNAPL and bi-weekly LNAPL gauging and hand-bailing activities are currently conducted. All monitoring wells without LNAPL are currently sampled during both semi-annual (full site) sampling events. The constituents of concern (COCs) in groundwater currently being

analyzed for include benzene, ethylbenzene, toluene, xylenes (BTEX) and chloride. Neither BTEX or chloride have been detected above New Mexico Water Quality Control Commission (NMWQCC) screening standards or typically above the laboratory method detection limits in site monitoring or water wells for the life of the project. The BTEX plume has remained stable and within the proximity of the four recovery wells only. The Site groundwater flow is generally to the southeast.

For additional site-specific background information please refer to the GHD, 2018 Annual Groundwater Monitoring Report, dated February 2019. The 2019 Annual Groundwater Monitoring Report will be submitted by the end of the third quarter 2020.

PROPOSED REDUCED SAMPLING PLAN

The following Workplan outlines the specifics of the proposed reduced sampling plan and the methodology for the selection of those monitoring wells. One semi-annual monitoring event (full site) will include sampling all site wells as currently conducted. The second semi-annual sampling event will be reduced to only sampling monitoring wells based on the following proposed sampling methodology. Sentry well MW-6 will continue to be sampled quarterly to ensure the dissolved-phase plume is not migrating southwest towards the off-site water wells. The groundwater sampling frequency of all other wells will be assessed yearly based on the results of the sampling events for the lifespan of the project and will increase to quarterly for a minimum of eight consecutive quarters prior to closure request for the Site.

Additionally, CEMC requests the reduction of current LNAPL gauging and hand-bailing activities schedule from bi-weekly to quarterly gauging only (no hand-bailing) for one year (through August 2021), to allow the current LNAPL conditions at the Site to equilibrate so that a more practical/efficient LNAPL recovery method can be evaluated and initiated.

CEMC also request to discontinue the annual collection of LNAPL samples from recovery wells for analytical analyses as data trends for these wells have been established.

The following sections provide specifics for the proposed reduced groundwater monitoring plan:

Sampling Reduction for Non-impacted Monitoring Wells

Site monitoring wells with COC concentrations reported below NMWQCC exceedance standards for two consecutive years or longer will not be gauged or sampled during the second semi-annual monitoring event except for sentry well MW-6.

The Site wells currently selected for reduction from the second semi-annual sampling event include: MW-3, MW-4, MW-5, MW-7, MW-8, MW-9R, WW-1, and WW-2.

The previously referenced wells have been evaluated based on historical concentration trends, historical concentration trends of nearby monitoring wells, potential receptors, and the groundwater gradient.

The proposed list of Site monitoring wells that will be sampled during each semi-annual event are presented on attached **Table 1** (Sampling and Analysis Plan).

Mr. Bradford Billings
EMNRD/OCD
July 16, 2020

The Site monitoring wells that will be sampled during the reduced event are presented on **Figure 1** (Potentiometric Surface Map), and with current groundwater constituent concentrations on **Figure 2** (Proposed Groundwater Monitoring Reduction Plan).

The Summary of Historical Groundwater Analytical Results is presented in **Table 2**.

Request to Reduce LNAPL Recovery and Gauging

As stated previously, CEMC additionally requests the reduction of the current bi-weekly LNAPL gauging and hand-bailing activities schedule to quarterly gauging only (no hand-bailing) for one year through August 2021 to allow the current LNAPL conditions at the Site to equilibrate so that a more practical/efficient LNAPL recovery method can be evaluated and initiated. CEMC will assess findings from the LNAPL gauging data collected through August 2021 to evaluate more practical and effective LNAPL recovery system alternatives.

CONTACT

Arcadis is prepared to initiate the scope of work immediately. If you have any questions or comments, please contact either Scott Foord by phone at 713 953 4853 or by e-mail at william.foord@arcadis.com or Greg Cutshall by phone at 859 327 4626 or by email at greg.cutshall@arcadis.com.

Sincerely,

Arcadis U.S., Inc.

Scott Foord
Project Manager

Copies:
Greg Cutshall, Program Manager

Enclosures:
Tables

1 Sampling and Analysis Plan
2 Summary of Historical Groundwater Analytical Results

Figures

1 Potentiometric Surface Map
2 Proposed Groundwater Monitoring Reduction Plan

TABLES

Table 1
Sampling and Analysis Plan
Chevron Environmental Management Company
Former F-State Tank Battery
Lea County, New Mexico
Case No. 1RP-258

	1st Quarter Sentry Well MW-6 only		2nd Quarter First Semi-Annual Event		3rd Quarter Sentry Well MW-6 only		4th Quarter Second Semi-Annual Event	
Well ID	**BTEX**	**Chloride**	**BTEX**	**Chloride**	**BTEX**	**Chloride**	**BTEX**	**Chloride**
MW-3	--	--	X	X	--	--	--	--
MW-4	--	--	X	X	--	--	--	--
MW-5	--	--	X	X	--	--	--	--
MW-6	X	X	X	X	X	X	X	X
MW-7	--	--	X	X	--	--	--	--
MW-8	--	--	X	X	--	--	--	--
MW-9R	--	--	X	X	--	--	--	--
RW-1	--	--	--	--	--	--	--	--
RW-2	--	--	X	X	--	--	X	X
RW-3	--	--	X	X	--	--	X	X
RW-4	--	--	--	--	--	--	--	--
WW-1	--	--	X	X	--	--	--	--
WW-2	--	--	X	X	--	--	--	--

Notes:
USEPA = United States Environmental Protection Agency
X = Sample be collected at monitoring well during respective event.
-- = Sample will not be collected at monitoring well
Bold = LNAPL currently present in well

Table 2
Cumulative Groundwater Analytical Data
Chevron Environmental Management Company
Former New Mexico "F" State Tank Battery
Lea County, New Mexico

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Chloride
New Mexico Water Quality Control Commission Groundwater Standard		0.005[1]	1.0[1]	0.7[1]	0.62[1]	250[2]
MW-3	7/28/98	**0.003**	<0.001	<0.001	**0.002**	**36**
MW-3	2/16/01	<0.005	<0.005	<0.005	<0.005	**31**
MW-3	6/12/02	<0.005	<0.005	<0.005	<0.005	**27.1**
MW-3	11/26/03	<0.001	<0.001	<0.001	<0.001	**31.9**
MW-3	6/6/03	<0.001	<0.001	<0.001	<0.001	**27.5**
MW-3	12/4/03	<0.001	<0.001	<0.001	**0.0017**	**26.1**
MW-3	7/2/04	<0.005	<0.005	<0.005	<0.005	**28**
MW-3	12/21/04	<0.005	<0.005	<0.005	<0.005	**32.3**
MW-3	6/6/05	<0.00100	<0.00100	<0.00100	<0.00100	**34.3**
MW-3	12/13/05	<0.005	<0.005	<0.005	<0.010	**29.3**
MW-3	6/27/06	<0.005	<0.005	<0.005	<0.010	**31.1**
MW-3	12/19/06	<0.005	<0.005	<0.005	<0.001	**28**
MW-3	6/27/07	<0.005	<0.005	<0.005	<0.010	**31**
MW-3	12/14/07	<0.005	<0.005	<0.005	<0.010	**31**
MW-3	6/5/08	<0.00037	<0.00039	<0.00042	<0.00035	**30**
MW-3	11/14/08	<0.00037	<0.00039	<0.00042	<0.00035	**32**
DUP	11/14/08	<0.00037	<0.00039	<0.00042	<0.00035	**32**
MW-3	6/16/09	<0.00037	<0.00039	<0.00042	<0.00035	**35**
MW-3	11/20/09	<0.00037	<0.00039	<0.00042	<0.00035	**40**
MW-3	7/1/10	<0.00020	<0.00020	<0.00020	<0.00070	**50.4**
MW-3	11/9/10	<0.0001	<0.0001	<0.0001	<0.0003	**64**
MW-3	6/2/11	**0.00053J**	**0.00061J**	<0.0010	<0.0030	**90.7**
MW-3	12/2/11	<0.0001	<0.0001	<0.0001	<0.0003	**85.0**
DUP	12/2/11	<0.0001	<0.0001	<0.0001	<0.0003	**85.7**
MW-3	6/26/12	<0.0001	<0.0001	<0.0001	<0.0001	**114**
MW-3	11/26/12	<0.0001	<0.0002	**0.00116**	**0.00345**	**94.6**
MW-3	6/14/13	<0.001	<0.002	<0.001	<0.001	**79**
MW-3	11/27/13	<0.001	<0.002	<0.001	<0.001	**101**
MW-3	8/1/14	<0.001	<0.002	<0.001	<0.003	**75.6**
MW-3	12/12/14	<0.001	<0.002	<0.001	<0.003	**137**
MW-3	6/9/15	<0.001	<0.002	<0.001	<0.003	**89.1**
MW-3	12/9/15	<0.001	<0.002	<0.001	<0.003	**67.8**
MW-3	6/21/16	<0.002	<0.002	<0.002	<0.002	**57.9**
MW-3	12/8/16	<0.002	<0.002	<0.002	<0.002	**60.6**
MW-3	6/14/17	<0.002	<0.002	<0.002	<0.002	**55.0**
MW-3	11/29/17	<0.002	<0.002	<0.002	<0.002	**49.8**
MW-3	6/14/18	<0.002	<0.002	<0.002	<0.002	**50.6**
MW-3	12/13/18	<0.0020	<0.0020	<0.002	<0.002	**50.0**
MW-3	5/6/19	<0.0020	<0.0020	<0.0020	<0.0020	**53.0**
MW-3	11/19/19	<0.0010	<0.0010	<0.0010	<0.0020	**59.0**

Table 2
Cumulative Groundwater Analytical Data
Chevron Environmental Management Company
Former New Mexico "F" State Tank Battery
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Chloride
New Mexico Water Quality Control Commission Groundwater Standard						
		0.005[1]	1.0[1]	0.7[1]	0.62[1]	250[2]
MW-4	7/28/98	<0.001	<0.001	<0.001	<0.001	**94**
MW-4	2/16/01	<0.005	<0.005	<0.005	**0.008**	**170**
MW-4	6/12/02	<0.005	<0.005	<0.005	<0.005	**85.6**
MW-4	11/26/03	**0.002**	<0.001	<0.001	<0.005	**160**
MW-4	6/6/03	<0.001	<0.001	<0.001	**0.0026**	**111**
MW-4	12/4/03	**0.0015**	<0.001	<0.001	<0.001	**104**
MW-4	7/2/04	<0.001	<0.001	<0.001	<0.001	**72.4**
MW-4	12/21/04	<0.005	<0.005	<0.005	<0.005	**59.7**
MW-4	6/6/05	<0.001	<0.001	<0.001	<0.001	**58.4**
MW-4	12/13/05	<0.005	<0.005	<0.005	<0.010	**55.3**
MW-4	6/27/06	**0.000597**	<0.0005	<0.0005	<0.001	**48.8**
MW-4	12/19/06	<0.005	<0.005	<0.005	<0.001	**34**
MW-4	6/27/07	<0.005	<0.005	<0.005	<0.010	**39**
MW-4	12/13/07	**0.000968**	<0.000500	<0.000500	**0.00254**	**63.1**
MW-4	6/5/08	<0.00037	<0.00039	<0.00042	<0.00035	**61**
MW-4	11/14/08	<0.00037	<0.00039	<0.00042	<0.00035	**52**
MW-4	6/16/09	<0.00037	<0.00039	<0.00042	<0.00035	**59**
MW-4	11/20/09	<0.00037	<0.00039	<0.00042	<0.00035	**58**
MW-4	7/1/10	**0.00032J**	<0.00020	<0.00020	<0.00070	**54.5**
MW-4	11/9/10	<0.0001	<0.0001	<0.0001	<0.0003	**57.5**
DUP	11/9/10	<0.0001	<0.0001	<0.0001	<0.0003	**58.4**
MW-4	6/2/11	<0.0001	<0.0001	<0.0001	<0.0003	**49.8**
MW-4	12/2/11	<0.0001	<0.0001	<0.0001	<0.0003	**142**
MW-4	6/26/12	<0.0001	<0.0001	<0.0001	<0.0001	**73.7**
MW-4	11/26/12	<0.0001	<0.0001	<0.0001	<0.0001	**69.3**
MW-4	6/14/13	<0.001	<0.002	<0.001	<0.001	**59.5**
MW-4	11/27/13	<0.001	<0.002	<0.001	<0.001	**65.1**
MW-4	8/1/14	<0.001	<0.002	<0.001	<0.003	**71.8**
MW-4	12/12/14	<0.001	<0.002	<0.001	<0.003	**104**
MW-4	6/9/15	<0.0001	<0.0001	<0.0001	<0.0003	**98.5**
MW-4	12/9/15	<0.0001	<0.0001	<0.0001	<0.0003	**70.6**
MW-4	6/21/16	<0.002	<0.002	<0.002	<0.002	**60.9**
MW-4	12/8/16	<0.002	<0.002	<0.002	<0.002	**86.2**
MW-4	6/14/17	<0.002	<0.002	<0.002	<0.002	**86.4**
MW-4	11/29/17	<0.002	<0.002	<0.002	<0.002	**81.7**
MW-4	6/14/18	<0.002	<0.002	<0.002	<0.002	**96.4**
MW-4	12/13/18	<0.002	<0.002	<0.002	<0.002	**77.6**
MW-4	5/6/19	<0.002	<0.002	<0.002	<0.002	**54.6**
MW-4	11/19/19	<0.0010	<0.0010	<0.0010	<0.002	**99**

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Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Chloride
New Mexico Water Quality Control Commission Groundwater Standard						
		0.005[1]	1.0[1]	0.7[1]	0.62[1]	250[2]
MW-5	7/28/98	<0.001	<0.001	<0.001	<0.001	**360**
MW-5	2/16/01	<0.005	<0.005	<0.005	<0.005	**120**
MW-5	6/12/02	<0.005	<0.005	<0.005	<0.005	**90.2**
MW-5	11/26/03	**0.002**	<0.001	**0.003**	<0.002	**59.1**
MW-5	6/6/03	<0.001	<0.001	<0.001	<0.001	**48.6**
MW-5	12/4/03	<0.001	<0.001	<0.001	<0.001	**36.5**
MW-5	7/2/04	<0.005	<0.005	<0.005	<0.005	**32.9**
MW-5	12/21/04	<0.005	<0.005	<0.005	<0.005	**39.8**
MW-5	6/6/05	<0.001	<0.001	<0.001	<0.001	**41.1**
MW-5	12/13/05	<0.005	<0.005	<0.005	<0.010	**39.7**
MW-5	6/27/06	<0.0005	<0.0005	<0.0005	<0.001	**43.2**
MW-5	12/19/06	<0.005	<0.005	<0.005	<0.001	**51**
MW-5	6/27/07	<0.005	<0.005	<0.005	<0.001	**67**
MW-5	12/14/07	<0.005	<0.005	<0.005	<0.001	**101**
MW-5	6/4/08	<0.00037	<0.00039	<0.00042	<0.00035	**78.7**
MW-5	11/14/08	<0.00037	<0.00039	<0.00042	<0.00035	**100**
MW-5	6/16/09	<0.00037	<0.00039	<0.00042	<0.00035	**140**
MW-5	11/20/09	<0.00037	<0.00039	<0.00042	<0.00035	**110**
MW-5	7/1/10	<0.0002	<0.0002	<0.0002	<0.0007	**115**
MW-5	11/9/10	<0.0001	<0.0001	<0.0001	<0.0003	**168**
MW-5	6/2/11	<0.0001	<0.0001	<0.0001	<0.0003	**134**
MW-5	12/2/11	<0.0001	<0.0001	<0.0001	<0.0003	**172**
MW-5	6/26/12	<0.0001	<0.0001	<0.0001	<0.0001	**137**
MW-5	11/26/12	<0.0001	<0.0001	<0.0001	<0.0001	**110**
MW-5	6/14/13	<0.001	<0.002	<0.001	<0.001	**66.6**
MW-5	11/27/13	<0.001	<0.002	<0.001	<0.001	**72.3**
MW-5	8/1/14	<0.001	<0.002	<0.001	<0.003	**69.5**
MW-5	12/12/14	<0.001	<0.002	<0.001	<0.003	**66.9**
MW-5	6/9/15	<0.001	<0.002	<0.001	<0.003	**69.1**
MW-5	12/9/15	<0.001	<0.002	<0.001	<0.003	**44**
MW-5	6/21/16	<0.002	<0.002	<0.002	<0.002	**39.9**
MW-5	12/8/16	<0.002	<0.002	<0.002	<0.002	**39.1**
MW-5	6/14/17	<0.002	<0.002	<0.002	<0.002	**42.1**
MW-5	11/29/17	<0.002	<0.002	<0.002	<0.002	**35.6**
MW-5	6/14/18	<0.002	<0.002	<0.002	<0.002	**37.6**
MW-5	12/13/18	<0.002	<0.002	<0.002	<0.002	**37.4**
MW-5	5/6/19	<0.002	<0.002	<0.002	<0.002	**114.0**
MW-5	11/19/19	<0.0010	<0.0010	<0.0010	<0.002	**49.0**

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Former New Mexico "F" State Tank Battery
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ARCADIS Design & Consultancy for natural and built assets

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Chloride
New Mexico Water Quality Control Commission Groundwater Standard						
		0.005[1]	1.0[1]	0.7[1]	0.62[1]	250[2]
MW-6	7/28/98	<0.001	<0.001	<0.001	<0.001	**43.0**
MW-6	2/16/01	<0.005	<0.005	**0.006**	**0.006**	**52**
MW-6	6/12/02	<0.001	<0.001	<0.001	<0.001	**54.1**
MW-6	11/26/03	<0.001	<0.001	<0.001	<0.002	**65**
MW-6	6/6/03	<0.001	<0.001	<0.001	<0.001	**43.7**
MW-6	12/4/03	<0.001	<0.001	<0.001	<0.001	**45.3**
MW-6	7/2/04	<0.001	<0.001	<0.001	<0.001	**57.5**
MW-6	12/21/04	<0.005	<0.005	<0.005	<0.005	**61.3**
MW-6	6/6/05	<0.001	<0.001	<0.001	<0.001	**66.7**
MW-6	12/13/05	<0.005	<0.005	<0.005	<0.010	**80.9**
MW-6	6/27/06	<0.0005	<0.0005	<0.0005	<0.001	**86.4**
MW-6	12/19/06	<0.005	<0.005	<0.005	<0.001	**88**
MW-6	3/16/07	<0.0005	<0.0005	<0.0005	<0.001	**92.2**
MW-6	6/27/07	<0.0005	<0.0005	<0.0005	<0.001	**110**
MW-6	9/27/07	<0.0005	<0.0005	<0.0005	<0.001	**99.5**
MW-6	12/14/07	<0.0005	<0.0005	<0.0005	<0.001	**99.2**
MW-6	3/6/08	<0.00037	<0.00039	<0.00042	<0.00035	**88.8**
MW-6	6/4/08	<0.00037	<0.00039	<0.00042	<0.00035	**117**
MW-6	9/4/08	<0.00037	<0.00039	<0.00042	<0.00035	**130**
MW-6	11/14/08	<0.00037	<0.00039	<0.00042	<0.00035	**130**
MW-6	3/5/09	<0.00037	<0.00039	<0.00042	<0.00035	**140**
MW-6	6/16/09	<0.00037	<0.00039	<0.00042	<0.00035	**160**
MW-6	9/9/09	<0.00037	<0.00039	<0.00042	<0.00035	**160**
MW-6	11/20/09	<0.00037	<0.00039	<0.00042	<0.00035	**140**
MW-6	3/23/10	<0.0002	<0.0002	<0.0002	<0.0007	**169**
MW-6	7/1/10	<0.0002	<0.0002	<0.0002	<0.0007	**161**
DUP	7/1/10	<0.0002	<0.0002	<0.0002	<0.0007	**169**
MW-6	9/22/10	**0.00033J**	<0.0001	<0.0001	<0.0003	**157**
MW-6	11/9/10	<0.0001	<0.0001	**0.0010**	<0.0003	**182**
MW-6	3/3/11	<0.0001	<0.0001	<0.0001	<0.0003	**225**
MW-6	6/2/11	<0.0001	<0.0001	<0.0001	<0.0003	**215**
DUP	6/2/11	<0.0001	<0.0001	<0.0001	<0.0003	**221**
MW-6	9/27/11	<0.0001	<0.0001	<0.0001	<0.0003	**222**
MW-6	12/2/11	<0.0001	<0.0001	<0.0001	<0.0003	**198**
MW-6	3/7/12	<0.0001	<0.0001	<0.0001	<0.0001	**189**
MW-6	6/26/12	<0.0001	<0.0001	<0.0001	<0.0001	**259**
DUP	6/26/12	<0.0001	<0.0001	<0.0001	<0.0001	**260**
MW-6	9/20/12	<0.0001	<0.0001	<0.0001	<0.0001	**221**
MW-6	11/26/12	<0.0001	<0.0001	<0.0001	<0.0001	**176**
MW-6	3/14/13	<0.001	<0.002	<0.001	<0.001	**195**

Table 2
Cumulative Groundwater Analytical Data
Chevron Environmental Management Company
Former New Mexico "F" State Tank Battery
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Chloride
New Mexico Water Quality Control Commission Groundwater Standard						
		0.005[1]	1.0[1]	0.7[1]	0.62[1]	250[2]
MW-6	6/14/13	<0.001	<0.002	<0.001	<0.001	**219**
MW-6	9/13/13	<0.001	<0.002	<0.001	<0.001	**209**
MW-6	11/27/13	<0.001	<0.002	<0.001	<0.001	**220**
MW-6	3/21/14	<0.001	<0.002	<0.001	<0.003	**231**
MW-6	8/1/14	<0.001	<0.002	<0.001	<0.003	**220**
MW-6	9/22/14	<0.001	<0.002	<0.001	<0.003	**186**
MW-6	12/12/14	<0.001	<0.002	<0.001	<0.003	**217**
MW-6	3/31/15	<0.001	<0.002	<0.001	<0.003	**201**
MW-6	6/9/15	<0.001	<0.002	<0.001	<0.003	**209**
MW-6	9/16/15	<0.001	<0.002	<0.001	<0.003	**212**
MW-6	12/9/15	<0.001	<0.002	<0.001	<0.003	**175**
MW-6	3/7/16	<0.001	<0.002	<0.001	<0.001	**218**
MW-6	6/21/16	<0.002	<0.002	<0.002	<0.002	**201**
MW-6	8/31/16	<0.002	<0.002	<0.002	<0.002	**222**
MW-6	12/8/16	<0.002	<0.002	<0.002	<0.002	**190**
MW-6	3/9/17	<0.002	<0.002	<0.002	<0.002	**182**
MW-6	6/14/17	<0.002	<0.002	<0.002	<0.002	**168**
MW-6	9/5/17	<0.002	<0.002	<0.002	<0.002	**151**
MW-6	11/29/17	<0.002	<0.002	<0.002	<0.002	**124**
MW-6	3/22/18	<0.002	<0.002	<0.002	<0.002	**127**
MW-6	6/14/18	<0.002	<0.002	<0.002	<0.002	**110**
MW-6	9/6/18	<0.002	<0.002	<0.002	<0.002	**106**
MW-6	12/14/18	<0.002	<0.002	<0.002	<0.002	**78.7**
MW-6	2/7/19	<0.002	<0.002	<0.002	<0.002	**100.0**
MW-6	5/6/19	<0.002	<0.002	<0.002	<0.002	**108.0**
MW-6	8/2/19	<0.002	<0.002	<0.002	<0.002	**112.0**
DUP	8/2/19	<0.002	<0.002	<0.002	<0.002	**115.0**
MW-6	11/19/19	<0.0010	<0.0010	<0.0010	<0.002	**80.0**
MW-7	7/28/98	<0.001	<0.001	<0.001	<0.001	**82**
MW-7	2/16/01	<0.005	<0.005	<0.005	<0.005	**150**
MW-7	6/12/02	<0.005	<0.005	<0.005	<0.005	**96.7**
MW-7	11/26/03	<0.001	<0.001	<0.001	<0.002	**133**
MW-7	6/6/03	<0.001	<0.001	<0.001	<0.001	**199**
MW-7	12/4/03	<0.001	<0.001	<0.001	<0.001	**230**
MW-7	7/2/04	<0.001	<0.001	<0.001	<0.001	**215**
MW-7	12/21/04	<0.005	<0.005	<0.005	<0.005	**274**
MW-7	6/6/05	<0.001	<0.001	<0.001	<0.001	**221**
MW-7	12/13/05	<0.005	<0.005	<0.005	<0.010	**204**
MW-7	6/27/06	<0.0005	<0.0005	<0.0005	<0.001	**158**
MW-7	12/19/06	<0.005	<0.005	<0.005	<0.001	**130**
MW-7	6/27/07	<0.0005	<0.0005	<0.0005	<0.001	**110**
MW-7	12/13/07	<0.0005	<0.0005	<0.0005	<0.001	**135**
MW-7	6/5/08	<0.00037	<0.00039	<0.00042	<0.00035	**72.4**

Table 2
Cumulative Groundwater Analytical Data
Chevron Environmental Management Company
Former New Mexico "F" State Tank Battery
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Chloride
New Mexico Water Quality Control Commission Groundwater Standard						
		0.005[1]	1.0[1]	0.7[1]	0.62[1]	250[2]
MW-7	11/14/08	<0.00037	<0.00039	<0.00042	<0.00035	**66**
MW-7	6/16/09	<0.00037	<0.00039	<0.00042	<0.00035	**58**
MW-7	11/20/09	<0.00037	<0.00039	<0.00042	<0.00035	**47**
MW-7	7/1/10	<0.0002	<0.0002	<0.0002	<0.0007	**51.2**
MW-7	11/9/10	<0.0001	<0.0001	<0.0001	<0.0003	**67.1**
MW-7	6/2/11	<0.0001	<0.0001	<0.0001	<0.0003	**69.4**
MW-7	12/2/11	<0.0001	<0.0001	<0.0001	<0.0003	**76.6**
MW-7	6/26/12	<0.0001	<0.0001	<0.0001	<0.0001	**91.5**
MW-7	11/26/12	<0.0001	<0.0001	<0.0001	<0.0001	**67.7**
MW-7	6/14/13	<0.001	<0.002	<0.001	<0.001	**56.4**
MW-7	11/27/13	<0.001	<0.002	<0.001	<0.001	**78.1**
MW-7	8/1/14	<0.001	<0.002	<0.001	<0.003	**68.3**
MW-7	12/12/14	<0.001	<0.002	<0.001	<0.003	**122**
MW-7	6/9/15	<0.001	<0.002	<0.001	<0.003	**79.2**
MW-7	12/9/15	<0.001	<0.002	<0.001	<0.003	**94**
MW-7	6/21/16	<0.002	<0.002	<0.002	<0.002	**52.3**
MW-7	12/8/16	<0.002	<0.002	<0.002	<0.002	**69.0**
MW-7	6/14/17	<0.002	<0.002	<0.002	<0.002	**68.6**
MW-7	11/29/17	<0.002	<0.002	<0.002	<0.002	**62.6**
MW-7	6/14/18	<0.002	<0.002	<0.002	<0.002	**58.5**
MW-7	12/13/18	<0.002	<0.002	<0.002	<0.002	**49.9**
MW-7	5/6/19	<0.002	<0.002	<0.002	<0.002	**58.7**
MW-7	11/19/19	<0.0010	<0.0010	<0.0010	<0.002	**50.0**
MW-8	7/28/98	<0.001	<0.001	<0.001	<0.001	**29**
MW-8	2/16/01	<0.005	<0.005	<0.005	<0.005	**94**
MW-8	6/12/02	<0.005	<0.005	<0.005	<0.005	**180**
MW-8	11/26/03	<0.001	<0.001	<0.001	<0.002	**239**
MW-8	6/6/03	<0.001	<0.001	<0.001	<0.001	**244**
MW-8	12/4/03	<0.001	<0.001	<0.001	<0.001	**251**
MW-8	7/2/04	<0.005	<0.005	<0.005	<0.005	**206**
MW-8	12/21/04	<0.005	<0.005	<0.005	<0.005	**244**
MW-8	6/6/05	<0.0001	<0.0001	<0.0001	<0.0001	**227**
MW-8	12/13/05	<0.005	<0.005	<0.005	<0.010	**144**
MW-8	6/27/06	<0.0005	<0.0005	<0.0005	<0.001	**92.6**
MW-8	12/19/06	<0.005	<0.005	<0.005	<0.001	**83.0**
MW-8	6/27/07	<0.0005	<0.0005	<0.0005	<0.001	**79**
MW-8	12/13/07	<0.0005	<0.0005	<0.0005	<0.001	**82.9**
MW-8	6/4/08	<0.00037	<0.00039	<0.00042	<0.00035	**54.9**
MW-8	11/14/08	<0.00037	<0.00039	<0.00042	<0.00035	**47**
MW-8	6/16/09	<0.00037	<0.00039	<0.00042	<0.00035	**45**

Table 2
Cumulative Groundwater Analytical Data
Chevron Environmental Management Company
Former New Mexico "F" State Tank Battery
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Chloride
New Mexico Water Quality Control Commission Groundwater Standard						
		0.005[1]	1.0[1]	0.7[1]	0.62[1]	250[2]
MW-8	11/20/09	<0.00037	<0.00039	<0.00042	<0.00035	**36**
MW-8	7/1/10	<0.0002	<0.0002	<0.0002	<0.0007	**38.4**
MW-8	11/9/10	<0.0001	<0.0001	<0.0001	<0.0003	**47.6**
MW-8	6/2/11	<0.0001	<0.0001	<0.0001	<0.0003	**51.8**
MW-8	12/2/11	<0.0001	<0.0001	<0.0001	<0.0003	**72.7**
MW-8	6/26/12	<0.0001	<0.0001	<0.0001	<0.0001	**95.7**
MW-8	11/26/12	<0.0001	<0.0001	<0.0001	<0.0001	**77.6**
MW-8	6/14/13	<0.001	<0.002	<0.001	<0.001	**83.3**
DUP	6/14/13	<0.001	<0.002	<0.001	<0.001	**84.3**
MW-8	11/27/13	<0.001	<0.002	<0.001	<0.001	**72.2**
DUP	11/27/13	<0.001	<0.002	<0.001	<0.001	**71.3**
MW-8	8/1/14	<0.001	<0.002	<0.001	<0.003	**63.2**
MW-8	12/12/14	<0.001	<0.002	<0.001	<0.003	**82.8**
MW-8	6/9/15	<0.0001	<0.0001	<0.0001	<0.0003	**79.8**
DUP	6/9/15	<0.0001	<0.0001	<0.0001	<0.0003	**84.6**
MW-8	12/9/15	<0.0001	<0.0001	<0.0001	<0.0003	**69.9**
DUP	12/9/15	<0.0001	<0.0001	<0.0001	<0.0003	**68.0**
MW-8	6/21/16	<0.002	<0.002	<0.002	<0.002	**74.4**
DUP	6/21/16	<0.002	<0.002	<0.002	<0.002	**68.0**
MW-8	12/8/16	<0.002	<0.002	<0.002	<0.002	**71.4**
DUP	12/8/16	<0.002	<0.002	<0.002	<0.002	**72.2**
MW-8	6/14/17	<0.002	<0.002	<0.002	<0.002	**67.1**
DUP	6/14/17	<0.002	<0.002	<0.002	<0.002	**63.8**
MW-8	11/29/17	<0.002	<0.002	<0.002	<0.002	**58.7**
MW-8	6/14/18	<0.002	<0.002	<0.002	<0.002	**68.0**
DUP	6/14/18	<0.002	<0.002	<0.002	<0.002	**67.9**
MW-8	12/13/18	<0.002	<0.002	<0.002	<0.002	**62.6**
DUP	12/13/18	<0.002	<0.002	<0.002	<0.002	**61.5**
MW-8	5/6/19	<0.002	<0.002	<0.002	<0.002	**102.0**
MW-8	11/19/19	<0.0010	<0.0010	<0.0010	<0.002	**65.0**
MW-9R	6/9/15	<0.0001	<0.0001	<0.0001	<0.0003	**145**
MW-9R	12/9/15	<0.0001	<0.0001	<0.0001	<0.0003	**119**
MW-9R	6/21/16	<0.002	<0.002	<0.002	<0.002	**109**
MW-9R	12/8/16	<0.002	<0.002	<0.002	<0.002	**120**
MW-9R	6/14/17	<0.002	<0.002	<0.002	<0.002	**115**
MW-9R	11/29/17	<0.002	<0.002	<0.002	<0.002	**98**
MW-9R	6/15/18	<0.002	<0.002	<0.002	<0.002	**92.2**
MW-9R	12/13/18	<0.002	<0.002	<0.002	<0.002	**84.0**
MW-9R	5/6/19	<0.002	<0.002	<0.002	<0.002	**94.1**
MW-9R	11/19/19	<0.0010	<0.0010	<0.0010	<0.002	**110.0**

Table 2
Cumulative Groundwater Analytical Data
Chevron Environmental Management Company
Former New Mexico "F" State Tank Battery
Lea County, New Mexico

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Chloride
New Mexico Water Quality Control Commission Groundwater Standard						
		0.005[1]	1.0[1]	0.7[1]	0.62[1]	250[2]
WW-1	7/28/98	<0.001	<0.001	<0.001	<0.001	**100**
WW-1	6/12/02	<0.001	<0.001	<0.001	<0.001	**43.6**
WW-1	11/26/02	<0.001	<0.001	<0.001	<0.002	**80**
WW-1	6/6/03	<0.001	<0.001	<0.001	<0.001	**73.4**
WW-1	12/4/03	<0.001	<0.001	<0.001	<0.001	**65.3**
WW-1	7/2/04	<0.001	<0.001	<0.001	<0.001	**66.5**
WW-1	12/21/04	<0.005	<0.005	<0.005	<0.005	**74.3**
WW-1	6/6/05	<0.0001	<0.0001	<0.0001	<0.0001	**63.4**
WW-1	12/13/05	<0.005	<0.005	<0.005	<0.010	**41.1**
WW-1	6/27/06	<0.0005	<0.0005	<0.0005	<0.001	**50**
WW-1	12/19/06	<0.005	<0.005	<0.005	<0.001	**80.0**
WW-1	6/27/07	<0.0005	<0.0005	<0.0005	<0.001	**52**
WW-1	12/14/07	<0.0005	<0.0005	<0.0005	<0.001	**59.8**
WW-1	6/4/08	<0.00037	<0.00039	<0.00042	<0.00035	**64.1**
DUP	6/4/08	<0.00037	<0.00039	<0.00042	<0.00035	**64.4**
WW-1	11/14/08	<0.00037	<0.00039	<0.00042	<0.00035	**73**
WW-1	6/17/09	<0.00037	<0.00039	<0.00042	<0.00035	**60**
WW-1	11/20/09	<0.00037	<0.00039	<0.00042	<0.00035	**64**
WW-1	7/1/10	<0.0002	<0.0002	<0.0002	<0.0007	**41**
WW-1	11/9/10	<0.0001	<0.0001	<0.0001	<0.0003	**77**
WW-1	6/2/11	<0.0001	<0.0001	<0.0001	<0.0003	**73.6**
WW-1	12/2/11	<0.0001	<0.0001	<0.0001	<0.0003	**50.2**
WW-1	6/26/12	<0.0001	<0.0001	<0.0001	<0.0001	**90**
WW-1	11/26/12	<0.0001	<0.0001	<0.0001	<0.0001	**69.9**
WW-1	6/14/13	<0.001	<0.002	<0.001	<0.001	**53.7**
WW-1	11/27/13	---------- not sampled ----------				
WW-1	8/1/14	<0.001	<0.002	<0.001	<0.003	**56.4**
WW-1	12/12/14	<0.001	<0.002	<0.001	<0.003	**71.6**
WW-1	6/9/15	<0.0001	<0.0001	<0.0001	<0.0003	**64.8**
WW-1	12/9/15	<0.0001	<0.0001	<0.0001	<0.0003	**45**
WW-1	6/21/16	<0.002	<0.002	<0.002	<0.002	**37.0**
WW-1	12/8/16	<0.002	<0.002	<0.002	<0.002	**42.1**
WW-1	6/14/17	<0.002	<0.002	<0.002	<0.002	**34.0**
WW-1	11/29/17	<0.002	**0.0559**	**0.225**	**0.0411**	**49.4**
DUP	11/29/17	<0.002	**0.059**	**0.241**	**0.0456**	**49.0**
WW-1	12/21/17	<0.002	<0.002	<0.002	<0.002	**--**
WW-1	6/15/18	<0.002	<0.002	<0.002	<0.002	**42.6**
WW-1	12/18/18	<0.002	<0.002	<0.002	<0.002	**45.3**
WW-1	5/6/19	<0.002	<0.002	<0.002	<0.002	**60.4**
DUP	5/6/19	<0.002	<0.002	<0.002	<0.002	**55.5**

Table 2
Cumulative Groundwater Analytical Data
Chevron Environmental Management Company
Former New Mexico "F" State Tank Battery
Lea County, New Mexico

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Chloride
New Mexico Water Quality Control Commission Groundwater Standard		0.005[1]	1.0[1]	0.7[1]	0.62[1]	250[2]
WW-2	6/12/02	<0.001	<0.001	<0.001	<0.001	**53.7**
WW-2	11/26/02	<0.001	<0.001	<0.001	<0.002	**70.9**
WW-2	6/6/03	<0.001	<0.001	<0.001	<0.001	**71.1**
WW-2	12/4/03	<0.001	<0.001	<0.001	<0.001	**52.4**
WW-2	7/2/04	<0.001	<0.001	<0.001	<0.001	**51.0**
WW-2	12/21/04	<0.005	<0.005	<0.005	<0.005	**55.6**
WW-2	6/6/05	<0.001	<0.001	<0.001	<0.001	**55.3**
WW-2	12/13/05	<0.005	<0.005	<0.005	<0.010	**75.3**
WW-2	6/27/06	<0.0005	<0.0005	<0.0005	<0.001	**69.7**
WW-2	12/19/06	<0.005	<0.005	<0.005	<0.001	**57.0**
WW-2	6/27/07	<0.0005	<0.0005	<0.0005	<0.001	**46**
WW-2	12/14/07	<0.0005	<0.0005	<0.0005	<0.001	**83.1**
WW-2	6/4/08	<0.00037	<0.00039	<0.00042	<0.00035	**65.9**
WW-2	11/14/08	<0.00037	<0.00039	<0.00042	<0.00035	**73**
WW-2	6/17/09	<0.00037	<0.00039	<0.00042	<0.00035	**60**
WW-2	11/20/09	---------- not sampled ----------				
WW-2	7/1/10	<0.0002	<0.0002	<0.0002	<0.0007	**66.3**
WW-2	11/9/10	<0.0001	<0.0001	<0.0001	<0.0003	**77.2**
WW-2	6/2/11	<0.0001	<0.0001	<0.0001	<0.0003	**74.9**
WW-2	12/2/11	<0.0001	<0.0001	<0.0001	<0.0003	**76.5**
WW-2	6/26/12	<0.0001	<0.0001	<0.0001	<0.0001	**63.1**
WW-2	11/26/12	<0.0001	<0.0001	<0.0001	<0.0001	**50.3**
WW-2	6/14/13	<0.001	<0.002	<0.001	<0.001	**81.1**
WW-2	11/27/13	---------- not sampled ----------				
WW-2	8/1/14	<0.001	<0.002	<0.001	<0.003	**95.5**
WW-2	12/12/14	<0.001	<0.002	<0.001	<0.003	**112**
WW-2	6/9/15	<0.001	<0.002	<0.001	<0.003	**108**
WW-2	12/9/15	<0.001	<0.002	<0.001	<0.003	**45.8**
WW-2	6/21/16	<0.002	<0.002	<0.002	<0.002	**28.9**
WW-2	12/8/16	<0.002	<0.002	<0.002	<0.002	**39.1**
WW-2	6/14/17	<0.002	<0.002	<0.002	<0.002	**29.8**
WW-2	11/29/17	<0.002	<0.002	<0.002	<0.002	**39.8**
WW-2	6/13/18	---------- not sampled ----------				
WW-2	12/14/18	<0.002	**0.00715**	<0.0020	**0.0828**	**45.9**
WW-2	2/7/19	<0.002	<0.002	<0.002	<0.002	**41.5**
WW-2	5/6/19	<0.002	<0.002	<0.002	<0.002	**97.5**
RW-1	6/5/08	**0.0119**	<0.0039	<0.0042	<0.0035	**36.2**
RW-1	6/17/09	**0.012**	**0.0055**	**0.0018**	**0.012**	**49**
RW-1	7/1/10	**0.022**	**0.00070J**	**0.0027**	**0.017**	**41.1**
RW-1	6/26/12	**0.0113**	<0.00100	**0.00514**	**0.0350**	**44.1**
RW-1	6/27/13	**0.00745**	**0.00963**	**0.0101**	**0.0549**	**33.8**
RW-1	8/1/14	**0.0172**	**0.00226**	**0.00499**	**0.0237**	**36.2**

Table 2
Cumulative Groundwater Analytical Data
Chevron Environmental Management Company
Former New Mexico "F" State Tank Battery
Lea County, New Mexico

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Chloride
New Mexico Water Quality Control Commission Groundwater Standard		0.005[1]	1.0[1]	0.7[1]	0.62[1]	250[2]
RW-1	6/9/15	**0.0109**	<0.00200	**0.00373**	**0.0182**	**43.7**
RW-1	12/9/15	---------- not sampled ----------				
RW-1	6/21/16	---------- not sampled ----------				
RW-1	12/8/16	**0.0137**	<0.002	<0.002	**0.0089**	**74.9**
RW-1	6/14/17	---------- not sampled ----------				
RW-1	11/29/17	**0.0148**	<0.002	**0.00372**	**0.0108**	**101**
RW-1	6/14/18	---------- not sampled ----------				
RW-1	12/14/18	<0.002	**0.00363**	<0.002	**0.0137**	**131**
RW-2	6/27/07	**0.00287**	<0.0025	<0.0025	**0.0303**	**60**
RW-2	6/5/08	<0.0037	<0.0039	<0.0042	<0.0035	**51.1**
RW-2	6/17/09	<0.00037	**0.0046**	<0.00042	**0.016**	**44**
RW-2	7/1/10	**0.0016**	<0.0002	<0.0002	**0.0067**	**30.1**
RW-2	6/26/12	<0.00100	<0.001	<0.001	**0.00362**	**43.9**
RW-2	6/14/13	**0.00178**	**0.00268**	**0.00171**	**0.0262**	**30**
RW-2	8/1/14	**0.00103**	**0.00106**	<0.001	**0.00788**	**41**
RW-2	12/12/14	**0.00154**	<0.002	<0.001	**0.00348**	**52.7**
RW-2	6/9/15	**0.00112**	<0.002	<0.001	<0.003	**49.5**
RW-2	12/9/15	<0.00100	<0.002	**0.00102**	**0.00725**	**48**
RW-2	6/21/16	<0.002	<0.002	<0.002	<0.002	**44**
RW-2	12/8/16	<0.002	<0.002	<0.002	<0.002	**55.8**
RW-2	6/14/17	**0.00408**	**0.00219**	<0.002	<0.002	**62.3**
RW-2	11/29/17	<0.002	<0.002	<0.002	<0.002	**65.0**
RW-2	6/15/18	**0.00306**	<0.002	<0.002	<0.002	**72.4**
RW-2	12/14/18	<0.002	<0.002	<0.002	**0.00215**	**73.4**
RW-3	6/11/02	<0.005	<0.005	<0.005	<0.005	**25.9**
RW-3	12/3/04	<0.001	<0.001	<0.001	<0.001	**36.6**
RW-3	6/27/07	**0.00855**	<0.0025	**0.0122**	**0.027**	**130**
RW-3	6/5/08	<0.0037	<0.0039	<0.0042	**0.0129**	**90.6**
RW-3	6/17/09	**0.0052**	**0.0042**	**0.011**	**0.025**	**74**
RW-3	11/20/09	<0.00037	**0.001**	**0.0027**	**0.0076**	**60**
DUP	11/20/09	<0.00037	**0.0013**	**0.003**	**0.008**	**60**
RW-3	7/1/10	**0.0065**	<0.0002	**0.0066**	**0.003**	**68.3**
RW-3	6/26/12	**0.00682**	<0.001	<0.001	<0.001	**55.4**
RW-3	6/14/13	**0.0092**	**0.0291**	**0.0253**	**0.138**	**37.3**
RW-3	8/1/14	**0.00709**	<0.002	<0.001	**0.132**	**41.5**
RW-3	12/12/14	**0.00588**	<0.002	<0.001	**0.00691**	**47.7**
RW-3	6/9/15	**0.00512**	<0.002	<0.001	**0.00309**	**40**
RW-3	12/9/15	**0.00432**	<0.002	<0.001	<0.003	**39**
RW-3	6/21/16	**0.00408**	<0.002	<0.002	<0.002	**36.3**
RW-3	12/8/16	**0.00574**	<0.002	<0.002	**0.00265**	**45.3**
RW-3	6/14/17	**0.00850**	<0.002	<0.002	<0.002	**43.4**
RW-3	11/29/17	**0.00563**	<0.002	<0.002	<0.002	**49.1**
RW-3	6/15/18	<0.002	<0.002	<0.002	<0.002	**53.1**
RW-3	12/14/18	**0.00262**	<0.002	<0.002	**0.00322**	**55.4**

Table 2
Cumulative Groundwater Analytical Data
Chevron Environmental Management Company
Former New Mexico "F" State Tank Battery
Lea County, New Mexico

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Chloride
New Mexico Water Quality Control Commission Groundwater Standard		0.005[1]	1.0[1]	0.7[1]	0.62[1]	250[2]
RW-4	6/26/12	**0.00221**	<0.001	**0.00410**	**0.0188**	**65.1**
RW-4	6/27/13	**0.0245**	**0.0396**	**0.0779**	**0.196**	**43.1**
RW-4	8/1/14	**0.0155**	**0.00107**	**0.00766**	**0.0286**	**34.2**
RW-4	6/9/15	**0.0127**	<0.002	**0.00752**	**0.030**	**39.5**
RW-4	12/9/15	---------- not sampled ----------				
RW-4	6/21/16	---------- not sampled ----------				
RW-4	12/8/16	**0.0139**	<0.002	**0.00758**	**0.03070**	**45.7**
RW-4	6/14/17	---------- not sampled ----------				
RW-4	11/29/17	**0.0268**	**0.00761**	**0.03040**	**0.1310**	**48.9**
RW-4	6/14/18	---------- not sampled ----------				
RW-4	12/14/18	**107**	**390**	**47.6**	**252**	<5.0

Notes:

Results shown in mg/L.

Data through June 6, 2005 provided by Larson & Associates, Inc.

Bold indicates detection above method detection limit.

Shaded cells indicate New Mexico Water Quality Control Commission (NMWQCC) exceedance.

[1]Human Health Standards for Groundwater.

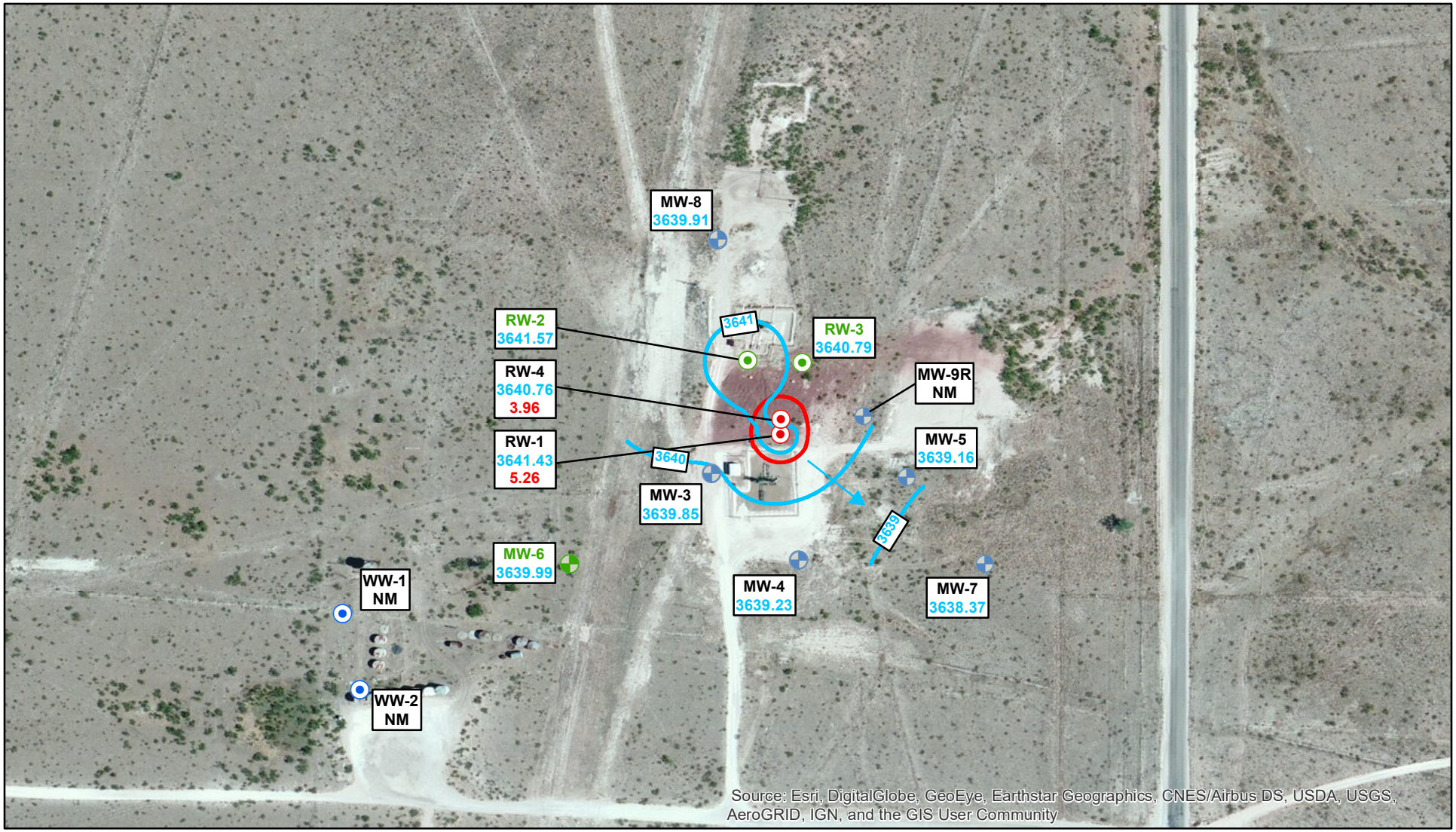
[2]Other Standards for Domestic Water Supply.

[3]RW-1 and RW-4 were sampled by dropping a disposable PVC bailer below the level of LNAPL.

[4]MW-9R was installed May 19, 2015.

[5] Sample was analyzed as a solid instead of a water due to oily nature of sample and results are in mg/kg.

FIGURES



Legend

- Monitoring Well Location
- Recovery Well Location
- Water Well Location
- 3640 Potentiometric Contour and Elevation
- Infered Potentiometric Contour
- 3640.02 Groundwater Elevation (ft above mean sea level)
- Approximate Groundwater Flow
- Approximate LNAPL Contour
- Monitoring Well Location Sampled During Reduced Event
- Recovery Well Location Sampled During Reduced Event
- 2.89 LNAPL Thickness (ft)

Notes:
1. Datum: D_WGS_1984
2. Site Location: 32.643018, -103.301158
3. NM: Not Measured
4. RW-1 was ommitted when developing potentiometric surface for Quarter 1 2019
5. Monitoring wells and recovery wells in green are proposed to be sampled during the reduced sampling event (one semi-annual event)

N

0 125 250 500 Feet

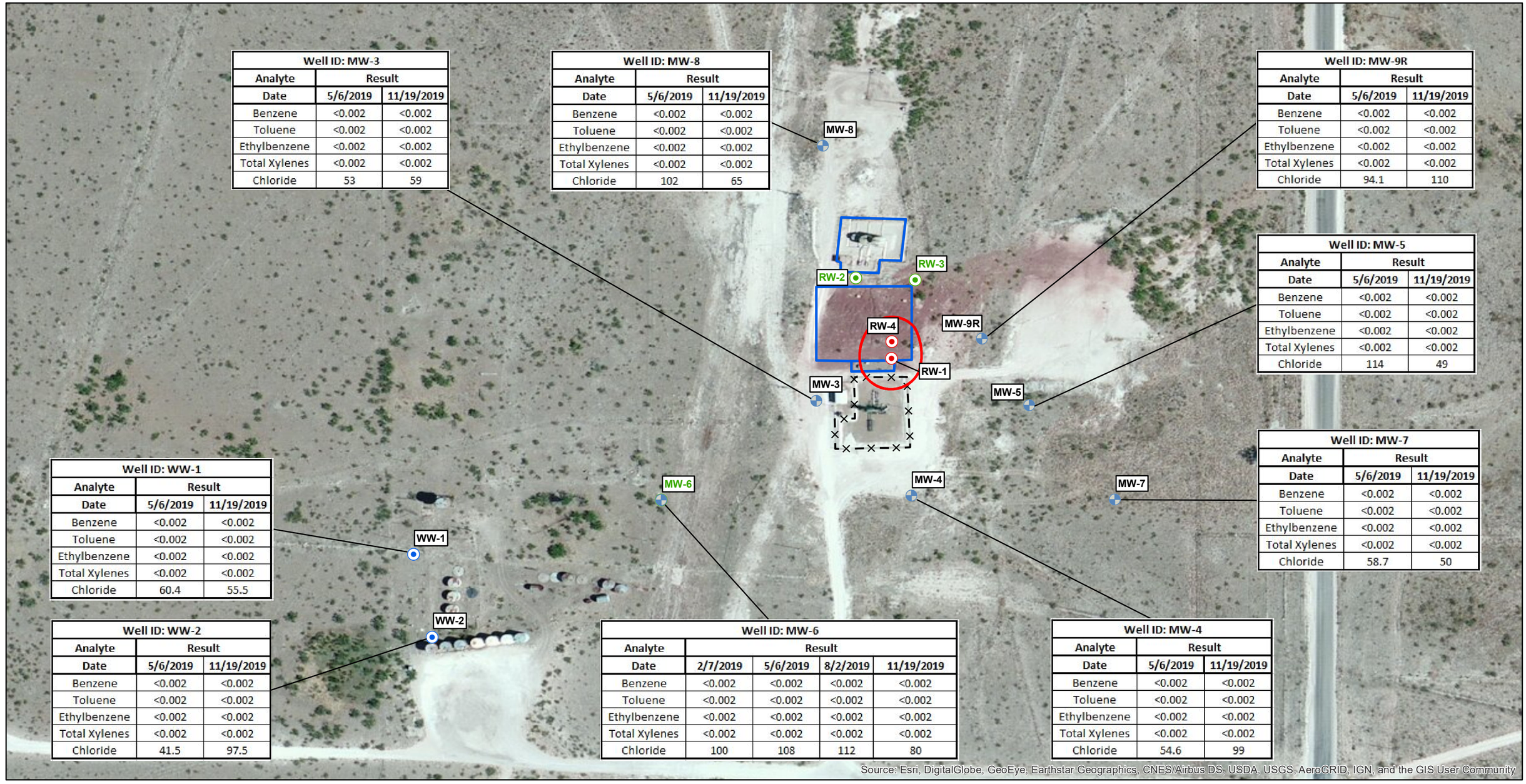
Chevron Environmental Management Company
Former New Mexico "F" State Tank Battery
Lea County, New Mexico

POTENTIOMETRIC SURFACE MAP NOVEMBER 2019

ARCADIS

FIGURE 1

Document Path: \\arcadis-us\officedata\Houston-TX\ENV\ChevronTexaco TX8\HES Transfer\F-State\GIS Files\GIS - F-State



Well ID: MW-3		
Analyte	Result	
Date	5/6/2019	11/19/2019
Benzene	<0.002	<0.002
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.002	<0.002
Chloride	53	59

Well ID: MW-8		
Analyte	Result	
Date	5/6/2019	11/19/2019
Benzene	<0.002	<0.002
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.002	<0.002
Chloride	102	65

Well ID: MW-9R		
Analyte	Result	
Date	5/6/2019	11/19/2019
Benzene	<0.002	<0.002
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.002	<0.002
Chloride	94.1	110

Well ID: MW-5		
Analyte	Result	
Date	5/6/2019	11/19/2019
Benzene	<0.002	<0.002
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.002	<0.002
Chloride	114	49

Well ID: MW-7		
Analyte	Result	
Date	5/6/2019	11/19/2019
Benzene	<0.002	<0.002
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.002	<0.002
Chloride	58.7	50

Well ID: WW-1		
Analyte	Result	
Date	5/6/2019	11/19/2019
Benzene	<0.002	<0.002
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.002	<0.002
Chloride	60.4	55.5

Well ID: WW-2		
Analyte	Result	
Date	5/6/2019	11/19/2019
Benzene	<0.002	<0.002
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.002	<0.002
Chloride	41.5	97.5

Well ID: MW-6				
Analyte	Result			
Date	2/7/2019	5/6/2019	8/2/2019	11/19/2019
Benzene	<0.002	<0.002	<0.002	<0.002
Toluene	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	<0.002	<0.002	<0.002	<0.002
Total Xylenes	<0.002	<0.002	<0.002	<0.002
Chloride	100	108	112	80

Well ID: MW-4		
Analyte	Result	
Date	5/6/2019	11/19/2019
Benzene	<0.002	<0.002
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.002	<0.002
Chloride	54.6	99

Legend

- Monitoring Well Location
- Monitoring Well Location Sampled During Reduced Event
- Recovery Well Location
- Recovery Well Location Sampled During Reduced Event
- Water Well
- Site Details
- Fench Line
- Approximate LNAPL Countour (November 2019)

N

0 75 150 300 Feet

Note:
1. Datum: D_WGS_1984
2. Site Location: 32.643018, -103.301158
3. All wells sampled semi-annually.
4. MW-6 is sampled quarterly.
5. BTEX: Benzene, Toluene, Ethylbenzene, Total Xylenes
6. Monitoring wells and recovery wells in green are proposed to be sampled during the reduced sampling event (one semi-annual event)

Chevron Environmental Management Company
Former New Mexico "F" State Tank Battery
Lea County, New Mexico

PROPOSED GROUNDWATER MONITORING REDUCTION PLAN

ARCADIS

FIGURE 2

Document Path: \\arcadis-us\officedata\Houston-TX\ENV\Chevron\Texaco TX8\HES Transfer\F-State\GIS Files\GIS - F-State

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Operator: Arcadis U.S., Inc 630 Plaza Drive Highlands Ranch, CO 80129	OGRID: 329073
	Action Number: 9407
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the Proposed Groundwater Monitoring and LNAPL O&M Reduction Workplan is satisfactory for approval. 1. Reduce LNAPL Recovery as proposed, from bi-weekly to quarterly in order to establish a more efficient removal method. 2. Based on historical trends, reduce site wells from the semi-annual sampling event: MW3, MW-4, MW-5, MW-7, MW-8, MW-9R, WW-1, and WW-2. 3. Cease sampling for recovery wells, as analytical sampling trends have been established. Continue to sample MW-6 on a quarterly basis as proposed. 4. Submit the annual groundwater monitoring report to OCD by, or before April 1, 2025	2/25/2025