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EA Engineering, Science, and Technology, Inc., PBC
EA is a 100% Employee-Owned Public Benefit Corporation
IMPROVING THE QUALITY OF THE ENVIRONMENT IN WHICH WE LIVE, ONE PROJECT AT A TIME®

April 11, 2023

Mr. Tim Noger
Project Manager/Geoscientist Supervisor
New Mexico Environment Department
Petroleum Storage Tank Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505

RE: As-Built Report for the PetroFix® Injection Pilot Test in the De Vargas Plume
Santa Fe County Judicial Complex, 327 Sandoval Street, Santa Fe, New Mexico
Contract: 19-667-3200-0007
Facility ID: 53763 Release ID: 4597 Deliverable ID: 4260-3

Dear Mr. Noger:

EA Engineering, Science, and Technology, Inc., PBC (EA) is pleased to submit the enclosed As-Built Report documenting the PetroFix® injection pilot test in the West De Vargas plume of the Santa Fe County Judicial Complex. Work was completed in accordance with the *Change of Scope of Work for Injection Pilot Test – West De Vargas Plume, dated June 3, 2022,* approved by the New Mexico Environment Department (NMED) Petroleum Storage Tank Bureau (PSTB) on June 29, 2022.

If you have questions or comments, please feel free to contact us.

Thank you,

Respectfully,

Vener Mustafin, P.E.
Senior Engineer

Michael D. McVey, P.G., C.P.G.
Project Manager/Senior Hydrogeologist

Enclosure: As-Built Report

Cc: Ms. Katherine MacNeil, P.E., NMED PSTB

As-Built Report
PetroFix® Injection Pilot Test
In the De Vargas Plume

Santa Fe County Judicial Complex
327 Sandoval Street, Santa Fe, New Mexico

PSTB Facility #53763
Release ID #4597
Work Plan ID #4260
Deliverable ID #4260-3
Contract #19-667-3200-0007

Submitted to:

New Mexico Environment Department
Petroleum Storage Tank Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico, 87505

Submitted by:

EA Engineering, Science,
and Technology, Inc., PBC

320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102
Telephone: 505-224-9013

April 11, 2023

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Signed Electronically by
V. Mustafin on April 11, 2023

1.0 Introduction

1.1. Regulatory and Contractual

EA Engineering, Science, and Technology, Inc. PBC (EA) has prepared this As-Built Report to document the PetroFix™ Injection Pilot Test in the De Vargas Plume of the Santa Fe County Judicial Complex (SFCJC) to address groundwater contamination. The site layout is shown in ***Drawing G-1***. The As-Built Report was prepared in accordance with the following code, contract, and work plan:

Regulatory and Contractual	
Document	**Description**
NMAC	New Mexico Petroleum Storage Tank Regulations, New Mexico Administrative Code (NMAC) 20.5.119.1925.D
Contract	New Mexico Environment Department State Lead Contract number 19-667-3200-0007
Work Plan	Work Plan identification (WPID) number 4260; Deliverable ID 4260-3

1.2. Site Setting

The site is a consolidation of several underground storage tank (UST) sites and other potential sources defined by Sandoval Street to the west, West De Vargas Street to the north, Galisteo Street to the east, and Montezuma Avenue to the south. The site was divided into four groundwater plumes listed below:

Groundwater Plumes
De Vargas plume in the northern portion of the site
SFCJC plume in the central portion of the site
Design Center plume in the south-west portion of the site
Capital 66 plume in the south-east portion of the site

The SFCJC, the District Attorney Building, Design Center, the Old Santa Fe Inn hotel, offices, and retail buildings are located within the area of the site.

1.3. Previous Corrective Actions

Corrective Actions since 2009
Thermally enhanced soil vapor extraction (SVE)
Ozone injection
Chemical oxidation using hydrogen peroxide
Mobile dual-phase extraction (MDPE) followed by installation of Regenesis Oxygen Releasing Compound-Advanced (ORC-A) socks

1.4. Salient Historical Events

Salient Historical Events
Between 2003 and 2009, Phase 1 and 2 corrective action activities were performed at the 210 & 218 Montezuma Avenue UST site (Montezuma Avenue) under contract to the responsible party.
In 2009, the Montezuma Avenue site was included in a State Lead remediation procurement that included the Former Capital 66 UST site (Capital 66), the SFCJC, and surrounding properties. The site was collectively referred to as the SFCJC.
In 2009, following the award of the State Lead contract, three separate phases of SVE system operation were implemented at the site.
Between November 2012 and November 2013, SVE-1, SVE-3, SVE-4, and SVE-6 were used for ozone sparging to address elevated dissolved-phase contaminant concentrations.
In February 2015, the ozone sparge equipment was dismantled.
Between September 2013 and May 2014, five hydrogen peroxide injection events were conducted.
In October 2017, three 48-hour MDPE events were conducted. MDPE was focused on the residual dissolved-phase recalcitrant areas in the vicinity of the Design Center (using MW-1R, MW-4R, and TWS-4 as extraction wells), Montezuma Avenue (using SFCMW-01, SFCMW-10, MW-6, and SVE-3 as extraction wells), and the West De Vargas Condominiums (using MW-11, MW-14, TWN-2 and TWN-3 as extraction wells). Results showed generally low petroleum concentrations in soil vapor of 11 to 42 micrograms per liter (µg/L) total petroleum hydrocarbons gasoline-range organics (TPH-GRO) and that soil was clean. A total of approximately 17,000 gallons of petroleum-contaminated groundwater were extracted and disposed of during the MDPE events.
In October 2017, after the completion of the MDPE events, ORC-A socks were installed in each of the MDPE wells, except the two Santa Fe County wells (SFCMW-01 and SFCMW10). Wells SVE-1 and SVE-5 had socks installed as substitutes for the Santa Fe County wells.
Groundwater monitoring has been ongoing at the SFCJC State Lead Site, since 2009. Investigation and groundwater monitoring activities were conducted before 2009 at individual sites that were later rolled into the SFCJC State Lead Site, such as Montezuma Avenue and Capital 66.

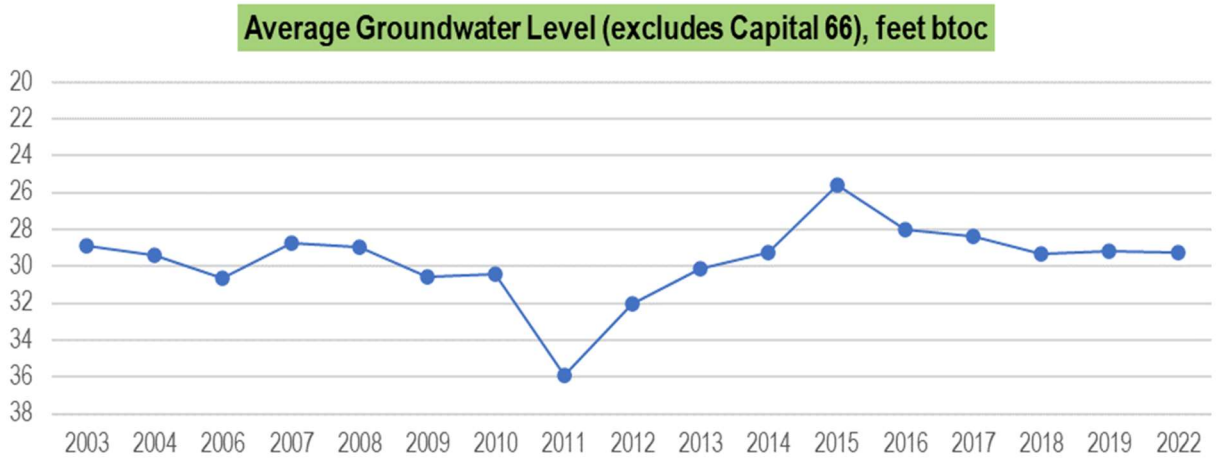
1.5. Site Geology and Hydrogeology

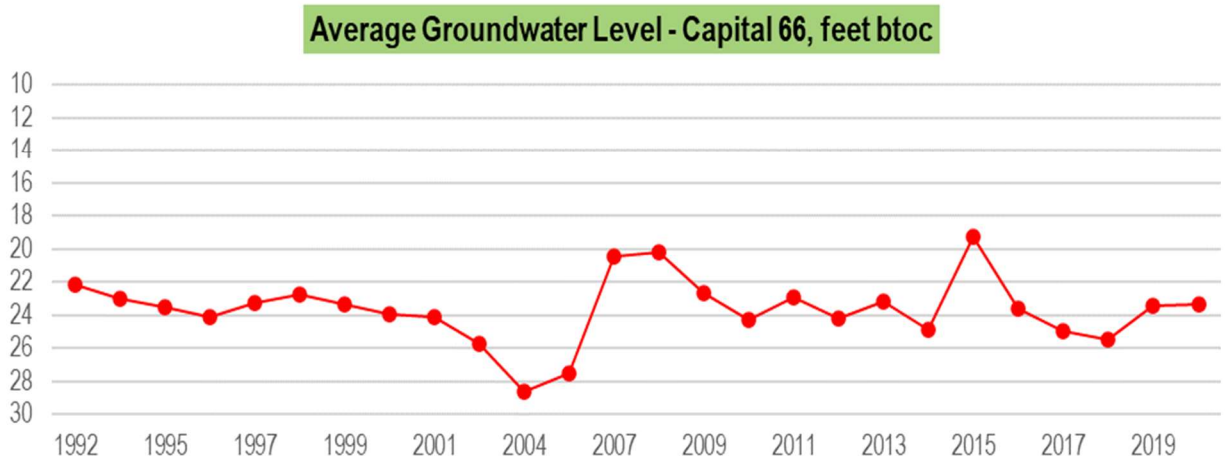
The site is underlain by Quaternary Alluvium, which is comprised of brown, poorly sorted, weakly cemented, sand and gravel that unconformably overlies the Nambe Member in the Tesuque Formation of the Santa Fe Group. The Tesuque Formation consists of pinkish-red, weakly cemented, silty sand, clayey sand, and fine-grained sand (see ***Drawing G-2***).

The Tesuque Formation Aquifer serves as the City of Santa Fe's principal source of groundwater. Shallow groundwater in the Santa Fe area occurs either at or within 20 feet of the contact between the Quaternary alluvium and Tesuque Formation sediments. This shallow groundwater is locally controlled by buried channels, faults, and higher permeability zones at the top of the Tesuque Formation. The shallow aquifer has an estimated ***hydraulic conductivity of 0.2 to 0.4 feet per day*** (ft/day). The shallow groundwater is vulnerable to contamination by near-surface sources, most commonly by leaking USTs. ***Groundwater flow velocities range from 0.015 to 0.09 ft/day (5.5 to***

33 ft/year). At locations where a strong vertical gradient exists, the shallow, contaminated groundwater may migrate vertically through high-permeability faults, fractures, and bedding planes to deeper portions of the Tesuque Formation aquifer.

At the site, groundwater is present at depths ranging from ***20 feet to 36 feet below ground surface*** (bgs). Groundwater depths differ on either side of Cerrillos Road (see average groundwater level graphs below). To the west of Cerrillos Road, the depth to groundwater is 10 feet deeper than on the east side with a shallow ***gradient of about 0.001*** compared to ***0.03*** on the east side of Cerrillos Road. The predominant groundwater ***flow direction is to the north-northwest***. Groundwater flow is restricted from east to west by a subsurface discontinuity, which is believed to be a fault based on published reports (Spiegel and Baldwin, 1963). A historical summary of fluid level measurements is provided in ***Table G-1*** and groundwater surface contours are shown in ***Drawing G-3*** for the latest groundwater monitoring event in November 2022**.**





ft btoc = feet below top of casing

2.0 Contaminated Media

The primary contaminants of concern (COCs) at the site are petroleum hydrocarbons including ***benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tertiary-butyl ether (MTBE), ethylene dibromide (EDB), ethylene dichloride (EDC), and total naphthalenes***. MTBE has not been detected in groundwater since 2014. Historically, contamination has existed in a narrow north-south corridor between Sandoval Street to the west and Galisteo Street to the east. Contamination is believed to have been conveyed through the more conductive, poorly sorted sands of a paleo-channel, as opposed to tighter, well-sorted silty sands and gravels located outside of the known extent of the contamination.

2.1. Contaminated Soil

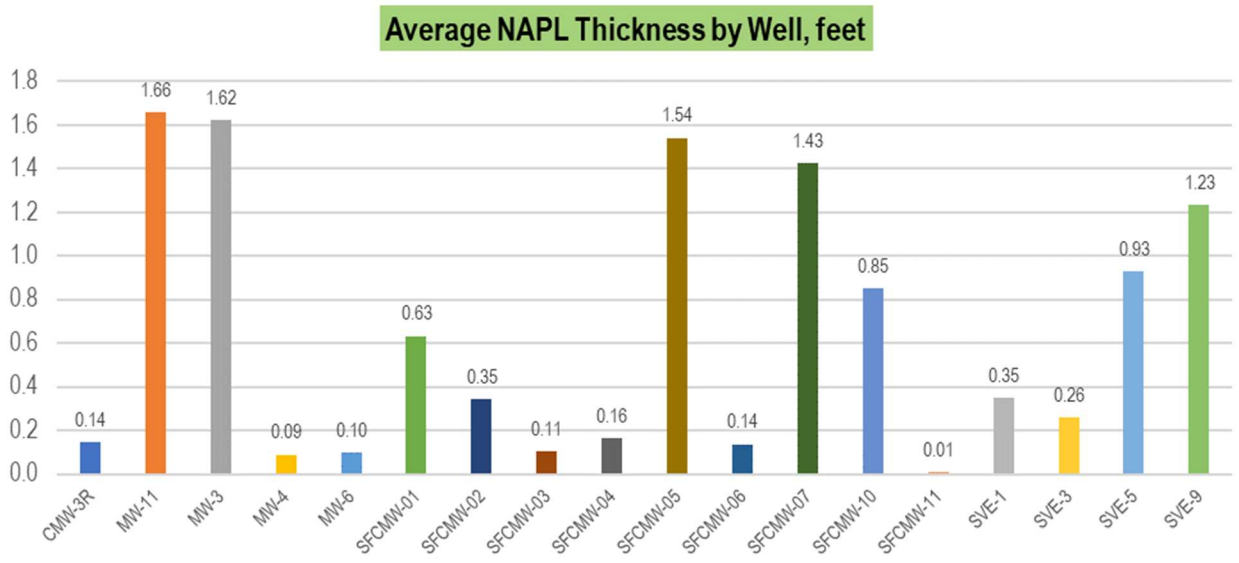
Historically, soil contamination represented by photoionization detector (PID) headspace readings above 100 parts per million by volume (ppmv) was encountered at depths of 25 to 35 feet bgs, or within 5 feet of the water table interface. During 2014 site investigations, based on field screening and laboratory analytical results for soil samples collected below the water table, residual contamination was typically present at depths of 35 to 45 feet bgs or 5 to 15 feet below the water table interface (***Drawing G-2***).

2.2. Non-aqueous-Phase Liquid (NAPL)

NAPL was detected in a number of site wells between 2004 and 2013 at the average thicknesses by year shown below. The NAPL thickness decreased over time, and has not been detected in any of the wells since 2013.

NAPL Thickness Statistics, feet			
Year	Average	Minimum	Maximum
2004	2.59	2.20	3.03
2005	1.42	0.78	2.75
2006	2.16	0.22	3.44
2007	1.02	0.03	2.19
2008	0.13	0.02	0.43
2009	0.61	0.01	2.54
2010	0.70	0.01	1.84
2011	0.19	0.03	0.61
2012	0.04	0.01	0.07
2013	0.08	0.06	0.11

The average NAPL thickness by well from 2004 through 2013 is displayed in the graph below.



2.3. Contaminated Groundwater

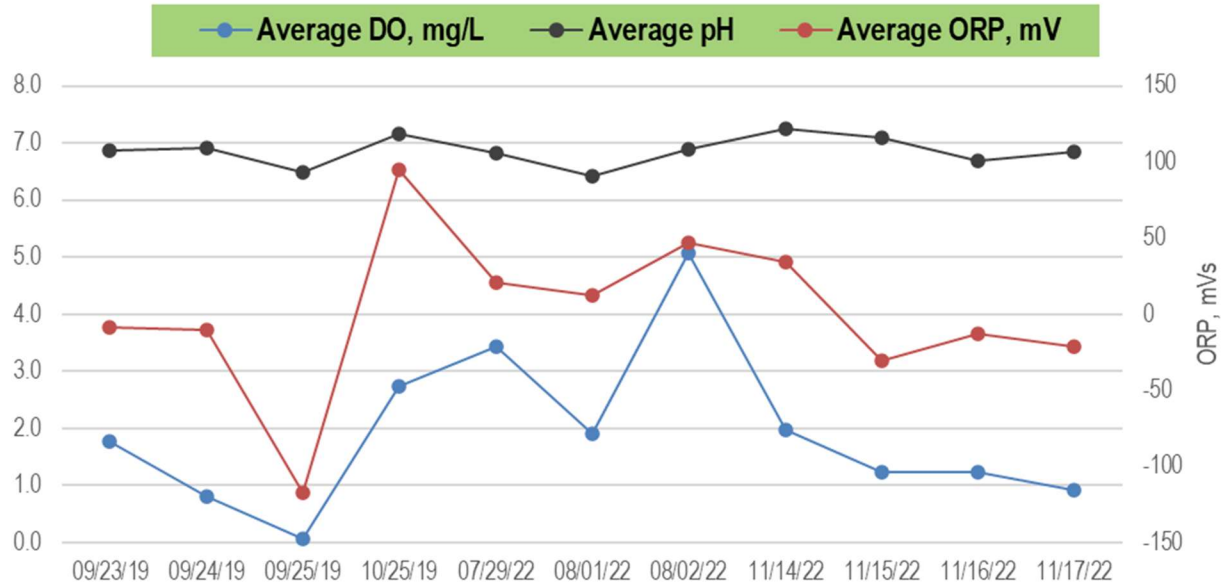
The most recent groundwater monitoring event was conducted in November 2022. During the event, benzene, toluene, ethylbenzene, total xylenes, EDB, EDC, and/or total naphthalenes were detected in groundwater samples at concentrations above the standards. The results are presented in ***Drawings G-4 through G-8, and are summarized in Table G-2***.

November 2022 Volatile Organic Compounds in the Groundwater, micrograms per liter

NMWQCC Standard		*5*	*1,000*	*700*	*620*	*100*	*0.05*	*5*	*30*
Plume	**Well**	**Benzene**	**Toluene**	**Ethyl benzene**	**Total Xylenes**	**MTBE**	**EDB**	**EDC**	**Total Naphthalenes**
Capital 66	CMW-1	83	< 1.0	< 1.0	2.1	< 1.0	0.10	< 1.0	9.7
Capital 66	CMW-3R	88	58	62	1,000	< 5.0	0.079	< 5.0	840
Capital 66	CMW-4	< 5.0	32	140	310	< 5.0	< 0.0094	< 5.0	39
De Vargas	MW-11	< 5.0	< 5.0	130	150	< 5.0	0.085	< 5.0	301
De Vargas	MW-15	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 0.0093	25	< 4.0
De Vargas	SFCMW-07	< 1.0	< 1.0	< 1.0	3.1	< 1.0	0.080	< 1.0	52
De Vargas	TWN-2	24	5.7	31	100	< 1.0	0.39	5.9	624
De Vargas	TWN-3	13	< 1.0	< 1.0	< 1.5	< 1.0	0.020	4.4	5.2
Design Center	MW-4R	870	10,000	1,100	6,800	< 20	0.90	< 20	673
Design Center	TWS-1	< 1.0	< 1.0	2.3	5.9	< 1.0	< 1.0	< 1.0	48
Design Center	TWS-4	110	610	620	1,500	< 10	< 0.0094	< 10	281
SFCJC	MW-6	< 10	12	410	440	< 10	< 10	< 10	375
SFCJC	MW-1R	240	1,200	1,300	8,800	< 10	< 0.0095	< 10	960
SFCJC	SFCMW-01	< 5.0	< 5.0	35	19	< 5.0	< 5.0	< 5.0	376
SFCJC	SFCMW-02	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0	< 4.0
SFCJC	SFCMW-03	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0	< 4.0
SFCJC	SFCMW-10	19	< 10	< 10	25	< 10	< 10	< 10	2,810
SFCJC	SVE-1	< 1.0	< 1.0	< 1.0	1.6	< 1.0	< 1.0	< 1.0	11
SFCJC	SVE-11D	< 1.0	< 1.0	1.1	2.2	< 1.0	< 1.0	< 1.0	27
SFCJC	SVE-3	53	180	580	2,600	< 10	< 10	< 10	607

2.4. Geochemical Groundwater Parameters

The groundwater at the site is mostly aerobic with oxidation-reduction potential (ORP) ranging from oxidizing to reducing and the Potential of Hydrogen (pH) near neutral (***Table G-3***). The graph below presents average DO, pH, and ORP measurements over time.



mg/L = milligrams per liter
mv = millivolts

3.0 Remediation Goals

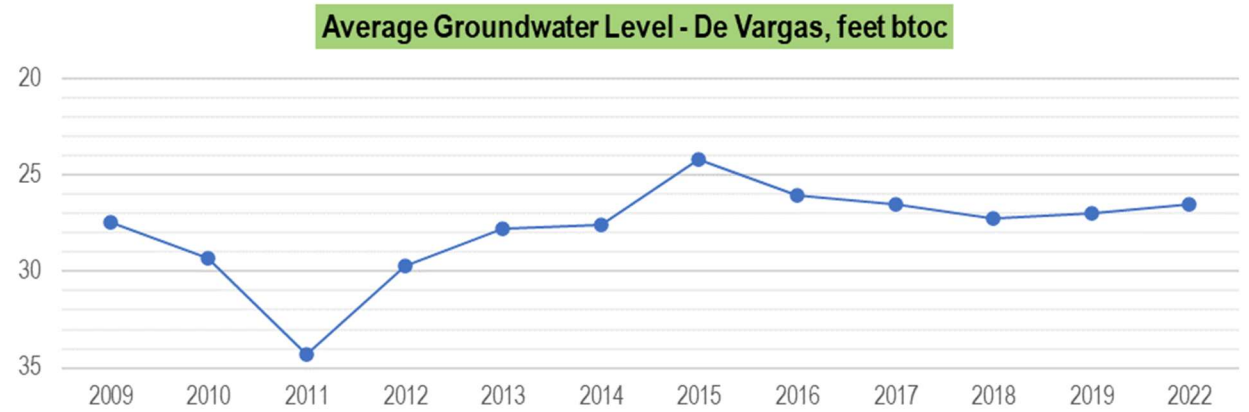
Remediation goals for groundwater are based on NMAC 20.6.2.3103 human health standards (New Mexico Water Quality Control Commission standards) for groundwater, as follows:

NMAC 20.6.2.3103 Human Health Standards for Groundwater	
Compound	**Standard**
Benzene	5 µg/L
Toluene	1,000 µg/L
Total Naphthalenes	30 µg/L
EDB	0.05 µg/L
EDC	5 µg/L

4.0 De Vargas Plume Background and Baseline

4.1. Groundwater Levels

In 2011, dewatering during construction of the First Judicial District Courthouse depressed groundwater levels by 7-8 feet to 34 feet bgs. Since 2016, groundwater levels in De Vargas plume wells have been steady at 26 – 27 feet bgs as shown below.



ft btoc = feet below top of casing

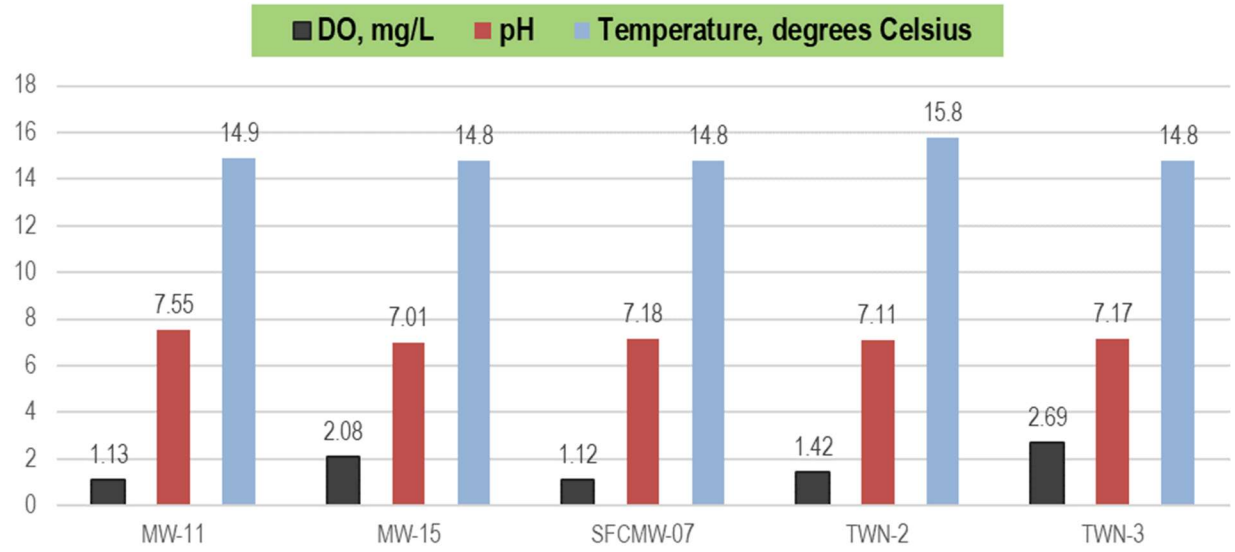
4.2. NAPL

NAPL was encountered in 2009-2010 in De Vargas plume monitoring wells MW-11, SFCMW-07, SFCMW-11, and SVE-9 in the thicknesses shown in the table below.

NAPL Thickness, feet				
	MW-11	SFCMW-07	SFCMW-11	SVE-9
05/11/09		1.46		
06/26/09		1.88		
06/30/09		1.88		
07/10/09		1.38		
07/17/09		1.37		
07/21/09		1.45		
07/24/09		1.40		
07/31/09		1.35		
08/07/09		1.22		
08/14/09		1.26		
08/21/09		1.23		
10/24/09				0.15
10/31/09				1.94
11/07/09				1.60
03/23/10		1.25	0.01	1.24
09/27/10	1.66		0.01	

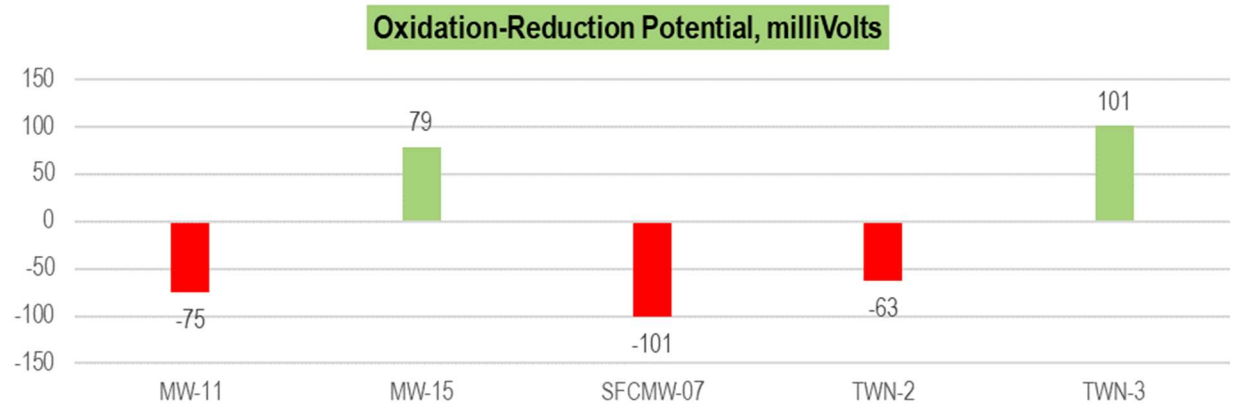
4.3. Geochemical Parameters

In November 2022, before the injection of PetroFix®, groundwater in the De Vargas plume was slightly aerobic, pH was slightly basic, and temperatures ranged from 14.8 to 15.8 degrees Celsius as shown below.



mg/L = Milligrams per liter

In November 2022, before the injection of PetroFix®, the ORP in De Vargas plume wells varied from reducing in MW-11 (-75 mV), SFCMW-07 (-101 mV), and TWN-2 (-63 mV) to oxidizing in MW-15 (79 mV) and TWN-3 (101 mV).



mv = millivolts

4.4. Volatile Organic Compounds

In November 2022, before the injection of PetroFix®, concentrations of benzene, EDB, EDC, and total naphthalenes exceeded the NMAC 20.6.2.3103 human health standards for groundwater in

De Vargas plume wells MW-11, MW-15, SFCMW-07, TWN-2, and/or TWN-3. A summary of the analytical results is presented below.

November 2022 Volatile Organic Compounds in the Groundwater, micrograms per liter

NMWQCC Standard		*5*	*1000*	*700*	*620*	*100*	*0.05*	*5*	*30*
Well	Date	Benzene	Toluene	Ethyl benzene	Total Xylenes	MTBE	EDB	EDC	Total Naphthalenes
MW-11	11/14/22	< 5.0	< 5.0	130	150	< 5.0	0.085	< 5.0	301
MW-15	11/14/22	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 0.0093	25	< 4.0
SFCMW-07	11/15/22	< 1.0	< 1.0	< 1.0	3.1	< 1.0	0.080	< 1.0	52
TWN-2	11/15/22	24	5.7	31	100	< 1.0	0.39	5.9	624
TWN-3	11/14/22	13	< 1.0	< 1.0	< 1.5	< 1.0	0.020	4.4	5.2

5.0 Injection of PetroFix® in the De Vargas Plume

5.1. PetroFix®

To remediate the recalcitrant areas within the De Vargas plume, PetroFix® and electron acceptors were injected in July 2022 and February 2023.

PetroFix® is a concentrated water-based suspension of micron-scale activated carbon and biostimulating electron acceptors (***Appendix A***). Activated carbon sorbs contaminants, retards propagation, and allows biodegradation to destroy the contaminants in place. Biostimulation is used to accelerate biodegradation processes.

Four 250-gallon plastic totes of PetroFix® stored in the NMED PSTB storage facility in Santa Fe were picked up and delivered to the site. The corresponding mass of PetroFix® in the four totes was 9,780 pounds. Twenty-five 20-pound pales of 50/50 by mass blend of Sodium Nitrate and Ammonium Sulfate (***Appendix A***) were also picked up from the NMED PSTB storage facility and injected into the subsurface with PetroFix®.

Injection well locations and the target treatment area are shown in ***Drawing C-1*** and PetroFix® injected volumes are shown in ***Drawing C-2***. Photographs are presented in ***Appendix B***. Field records are provided in ***Appendix C***. The design quantities are shown in ***Table C-1***. February 2023 injection details are provided in ***Table C-2*** and the injection summaries by well and day are provided in ***Table C-3***.

5.2. Organizations, Entities, and Personnel

Provided below are the organizations, entities, and personnel that participated in the execution of this project.

Organization/Entity	Name	Title
NMED PSTB	Tim Noger	Project Manager
NMED PSTB	Katherine MacNeil, P.E.	Bureau Engineer
EA Engineering	Mike McVey, P.G., C.P.G.	Project Manager
EA Engineering	Vener Mustafin, P.E.	Engineer
EA Engineering	Daniel O'Brien	Scientist
Cascade Environmental	Cisco Gutierrez	Operations Manager
Cascade Environmental	Mike Martin	Project Manager
Cascade Environmental	Aaron Zapf	Driller
Cascade Environmental	Jose Mendoza	Helper

Cascade Environmental was subcontracted to perform the PetroFix® injection pilot test. Mike McVey, EA project manager, procured contractors and arranged access, schedule, and personnel. Daniel O'Brien, EA scientist, oversaw and documented the work. Vener Mustafin, EA engineer, visited the site on the first night of the injection, maintained daily phone contact with the crew, reviewed daily injection logs, directed the work, and provided daily updates to NMED PSTB.

5.3. Planning and Preparation

Task	Description
Procurement	EA procured Cascade Environmental to perform the injection.
Access	EA obtained access and coordinated with the affected parties.
Water Source	Cascade Environmental obtained permission from the City of Santa Fe to use potable water from a city's fire hydrant on the west site of the courthouse building on Sandoval Street and a potable water faucet at the 200 West De Vargas Condominium Complex.
Storage	PetroFix® and equipment were stored onsite.
HASP	EA updated the Health and Safety Plan.
Traffic Plan	Cascade delineated the work area with traffic barrels and tape.
PetroFix®	EA coordinated with NMED PSTB to pick up the PetroFix® totes from the NMED PSTB storage facility in Santa Fe and transport them to the site.
PetroFix® Delivery	Cascade picked up 1,000 gallons of PetroFix® and 500 pounds of Electron Acceptors from the NMED PSTB storage facility in Santa Fe and delivered them to the site.
Mobilization	Cascade Environmental and EA mobilized to the site on February 3, 2023.
Demobilization	Cascade Environmental and EA demobilized from the site on February 7, 2023.

5.4. Equipment, Tools, and Materials

Equipment	Details
Support Trucks	Ford F350 and Ford F250
Injection Module	Trailer-Mounted Custom
Generator	Trailer-Mounted Multiquip 150 kVA
Injection Tool	Custom wellhead assembly with a sight glass, control valve, and pressure gauge
Injection Pump	Liberty Progressive Cavity LL6 SSB
Mixing Vessel	300-gallon steel
Mixer Type and Model	Paddle Mixer with Leeson E57946 Motor
Manifold - Flowmeter	Flowmec 1" Digital, TM Series, Totalizing
Manifold - Pressure Gauge	Ashcroft 200 psi
Concrete Type and Container Size	Quikrete Ready-Mix® Concrete, 60-pound bags
Asphalt Patch Type and Container Size	Sack Cold Patch, 50-pound bags
Water Source	City of Santa Fe Fire Hydrant
Water Container Type and Volume	Plastic tote, 275-gallon capacity
PetroFix®	Four 250-gallon plastic totes
Electron Acceptor	Twenty-five 20-pound pales for a total of 500 pounds

5.5. Methodology

Process	Description
Injection	Injection into pre-installed injection wells through a manifold using a custom wellhead assembly. Several points were manifolded together, and fluids were injected simultaneously.
Mixer	Mixing was performed within a 300-gallon mixing vessel using an integral paddle mixer.
PetroFix® Homogenization	PetroFix® was homogenized within the 250-gallon totes using a handheld mechanical mixer before adding it to the mixing vessel. The PetroFix® had been stored since May 2021; the freezing temperatures further influenced the viscosity.
Water Source	Potable water was obtained from a fire hydrant on the east side of the courthouse building along Sandoval Street and a potable water faucet at the 200 West De Vargas Condominium Complex.
Mixing	Water was added to the mixing vessel and then the homogenized PetroFix® was transferred using a transfer pump; finally, the electron acceptor was added before the injection.
Injection	The injection was performed using a progressive cavity pump.
Injection Monitoring	The flow rate was monitored using a totalizing flowmeter. The pressure was monitored using a fixed pressure gauge. Mixing volumes were measured using gradations on the mixing tank.
Site Cleanup	Plastic was placed under pumps and around the equipment. When spills occurred, they were mitigated by vacuuming liquids and washing surfaces. Filtered fluids were reused for the injection.
Asphalt Restoration	Asphalt was restored using a cold patch.
Washing	Surfaces were pressure washed after completion of the injection.

5.6. Injection Wells

To remediate the recalcitrant areas within the De Vargas plume, PetroFix® was injected into the subsurface using injection wells DV-1 through DV-25 installed on 7.5-foot centers (***Drawing C-1***). Well construction details are provided below:

	inches	*feet bgs*	*feet bgs*	*inch*	*inch*					
Well	**Borehole Diameter**	**Well Depth**	**Top of Well Screen**	**Well Diameter**	**Screen Slot**	**Method**	**Material**	**Filter Pack**	**Bentonite Plug**	**Well Seal**
DV-1	8	38.3	23.3	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-2	8	38.5	23.5	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-3	8	35.2	20.2	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-4	8	37.9	22.9	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-5	8	39.6	24.6	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout

DV-6	8	32.5	17.5	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-7	8	33.2	18.2	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-8	8	39.0	24.0	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-9	8	37.2	22.2	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-10	8	39.9	24.9	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-11	8	38.5	23.5	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-12	8	39.7	24.7	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-13	8	37.2	22.2	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-14	8	38.1	23.1	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-15	8	32.8	17.8	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-16	8	38.1	23.1	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-17	8	36.6	21.6	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-18	8	37.5	22.5	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-19	8	38.7	23.7	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-20	8	37.7	22.7	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-21	8	38.4	23.4	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-22	8	38.2	23.2	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-23	8	38.0	23.0	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-24	8	38.8	23.8	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout
DV-25	8	38.5	23.5	2	0.020	HSA	Sch. 40 PVC	10/20	3/8-inch	Grout

The filter pack was placed 1.5-2 feet above the top of the well casing.
The bentonite plug was 1.5-2.0 feet thick and placed above the filter pack.
HSA = hollow-stem auger
PVC = polyvinyl chloride
Well vaults were steel 12-inch diameter round, bolted, 12-inch steel skirt

Well Construction Specifications

Item	Specification
Contractor	Enviro-Drill Inc.
Drill Rig	CME-75 Hollow Stem Auger Drill Rig
Augers	7-inch Nominal Diameter Hollow-Stem
Well Casing	Campbell MonoFlex, 2" x 10' Schedule 40, Flush-Threaded Enviro-Wrapped
Well Screen	Campbell MonoFlex, 2", Schedule 40 PVC, 0.020-slot, Flush-Threaded, Enviro-Wrapped
Filter Pack	Gillibrand Co. 10/20 Silica Sand
Bentonite Chips	Halliburton Hole Plug 3/8-inch Coarse-Grade Wyoming Sodium Bentonite
Bentonite	Baroid Quick-Grout Bentonite Grout
Cement	Salt River Materials Group Phoenix Type I/II/V Cement
Concrete	Quikrete ProFinish 5,000-psi High-Strength Concrete Mix

5.7. Scope, Variance, and Injection by Well

In July 2022 and February 2023, the following quantities of PetroFix® were injected into injection wells DV-1 through DV-25 in the De Vargas plume (***Drawing C-2***). Provided below are the injected totals, design quantities for 20% target pore volume and 20% effective porosity, and the variance between the injected quantities and the design.

Units	*gallons*	*pounds*	*gallons*		*feet bgs*	
Parameter	**PetroFix® Volume**	**Electronic Acceptor Mass**	**Total Solution Volume**	**Number of Points**	**Target Zone**	**Method**
July 2022	91	45	1,569	3	25-40	Injection Wells
February 2023	999	502	9,382	25	25-40	Injection Wells
Total Injected	***1,090***	***547***	***10,951***	***25***	***25-40***	***Injection Wells***
Design	***998***	***489***	***10,922***	***25***	***25-40***	***Injection Wells***
Variance	***92***	***58***	***29***	***No Variance***	***No Variance***	***No Variance***

feet bgs = feet below ground surface

5.8. July 2022 Injection

The initial injection took place in July 2023. At that time, PetroFix® solution was injected into DV-1, DV-5, and DV-12, as follows:

Units	*gallons*	*pounds*	*gallons*	*gallons*	*gallons*
Well	**PetroFix®**	**Electron Acceptor**	**Injectate Volume**	**Chase Water**	**Total Volume**
DV-1	30.2	15	423	100	523
DV-5	30.2	15	423	100	523
DV-12	30.2	15	423	100	523

5.9. February 2023 Injection

In February 2023, the target volume could not be injected into wells DV-1 through DV-5. After injection of 60-75 gallons, the injection pressure spiked to 60-80 pounds per square inch by the gauge (psig), and flow seized. The assembly on DV-4 was blown off the wellhead. The first injection at these points was performed on February 3, 2023, the second injection was performed on February 4, 2023, and the third on February 6, 2023. All attempts resulted in a similar performance. PetroFix® and electron acceptors designated for DV-1 through DV-5 were reapportioned into DV-7 through DV-15. Therefore, the total design volume/mass of PetroFix® and electron acceptors was injected at the site; however, the volume of water was less than projected. The details are provided below:

			Design	39.92	19.56	434.9
	Actual			Variance		
Units	*gallons*	*pounds*	*gallons*	*gallons*	*pounds*	*gallons*
Well	**PetroFix® Volume Actual**	**Electron Acceptor Mass Actual**	**Total Solution Volume Actual**	**PetroFix® Volume**	**Electron Acceptor Mass**	**Total Solution Volume**
DV-1	15.3	7.7	158	-25	-12	-277
DV-2	15.3	7.7	158	-25	-12	-277
DV-3	15.3	7.7	158	-25	-12	-277
DV-4	7.0	3.5	68	-33	-16	-367
DV-5	3.5	1.0	20	-36	-19	-415
DV-6	58.7	29.7	515	19	10	80
DV-7	50	25.3	420	10	6	-15
DV-8	56.9	28.8	495	17	9	60
DV-9	56.9	28.8	495	17	9	60
DV-10	56.9	28.8	495	17	9	60
DV-11	53	26.6	410	13	7	-25
DV-12	53	26.6	410	13	7	-25
DV-13	53	26.6	410	13	7	-25
DV-14	52.8	26.6	555	13	7	120
DV-15	53	26.7	410	13	7	-25
DV-16	40	20	290	0	0	-145
DV-17	40	20	435	0	0	0
DV-18	39.8	20	435	0	0	0
DV-19	39.8	20	435	0	0	0
DV-20	39.8	20	435	0	0	0
DV-21	40	20	435	0	0	0
DV-22	39.4	20	435	-0.5	0	0
DV-23	40	20	435	0	0	0
DV-24	40	20	435	0	0	0
DV-25	40	20	435	0	0	0
Grand Total	**999**	**502**	**9,382**	**1.4**	**13**	**-1,490**

5.10. Injection Pressure and Flowrates

Units	*pounds per square inch*	*gallons per minute*
Well ID	**Average of Sustained Pressure**	**Average of Average Flow Rate**
DV-1	60	0.9
DV-2	60	0.7
DV-3	60	0.8
DV-4	80	1.0
DV-5	60	0.3
DV-6	20	1.1
DV-7	15	1.0

DV-8	20	1.2
DV-9	20	1.0
DV-10	20	1.2
DV-11	20	1.4
DV-12	20	1.4
DV-13	20	1.4
DV-14	10	1.7
DV-15	20	1.3
DV-16	20	1.2
DV-17	5	1.6
DV-18	15	1.7
DV-19	5	1.7
DV-20	10	1.7
DV-21	10	1.6
DV-22	10	1.7
DV-23	10	1.6
DV-24	15	1.6
DV-25	10	1.6
Average	**16.8**	**1.4**

5.11. Daily Injection Summary

Units	*gallons*	*pounds*	*gallons*
Date	**PetroFix® Volume**	**Electron Acceptor Mass**	**Total Solution Volume**
02/03/23	28	14	305
02/04/23	248	125	1,975
02/05/23	399	200	4,350
02/06/23	195	97	1,552
02/07/23	130	66	1,200
Grand Total	**999**	**502**	**9,382**

6.0 Groundwater Monitoring and Annual Evaluation

To evaluate post-injection remediation progress and effectiveness, groundwater monitoring should be conducted. Under the current contract, EA will perform one post-injection groundwater monitoring event and evaluate groundwater levels, geochemical indicators, concentrations of COCs, electron acceptors, and microbial analysis.

Per ***20.5.12.119.1927 NMAC***, the effectiveness of the injection must be evaluated annually. The evaluation should contain an analysis of the trend of contaminant concentrations in groundwater, project trends for contaminant concentration decline, an evaluation of the effectiveness of the remediation based on contaminant concentration trends, an estimated time to achieve remediation goals, and recommendations for remediation enhancements. Optimization of remediation and contingency measures if needed will be recommended in the annual evaluation.

7.0 References

EA Engineering, Science, and Technology, Inc. PBC (EA), 2019. Baseline Groundwater Monitoring Report. Santa Fe Country Judicial Complex, Santa Fe, New Mexico. December 10.

EA, 2020. In Situ Microcosm Study Report. Santa Fe Country Judicial Complex, Santa Fe, New Mexico. February 28.

EA, 2020. Benzene Plume Delineation, Contingency Set-Aside for Soil Borings, and Injection Target Depths Determination. Santa Fe Country Judicial Complex, Santa Fe, New Mexico. April 16.

EA, 2020. Final Remediation Plan. Santa Fe County Judicial Complex, Santa Fe, New Mexico. December 1.

EA, 2022. Change in Scope of Work for Injection Pilot Test – De Vargas Plume - Santa Fe County Judicial Complex, Santa Fe, New Mexico. June 3.

EA, 2023. 3rd Quarterly Groundwater Monitoring Report. Santa Fe County Judicial Complex, Santa Fe, New Mexico. January 30.

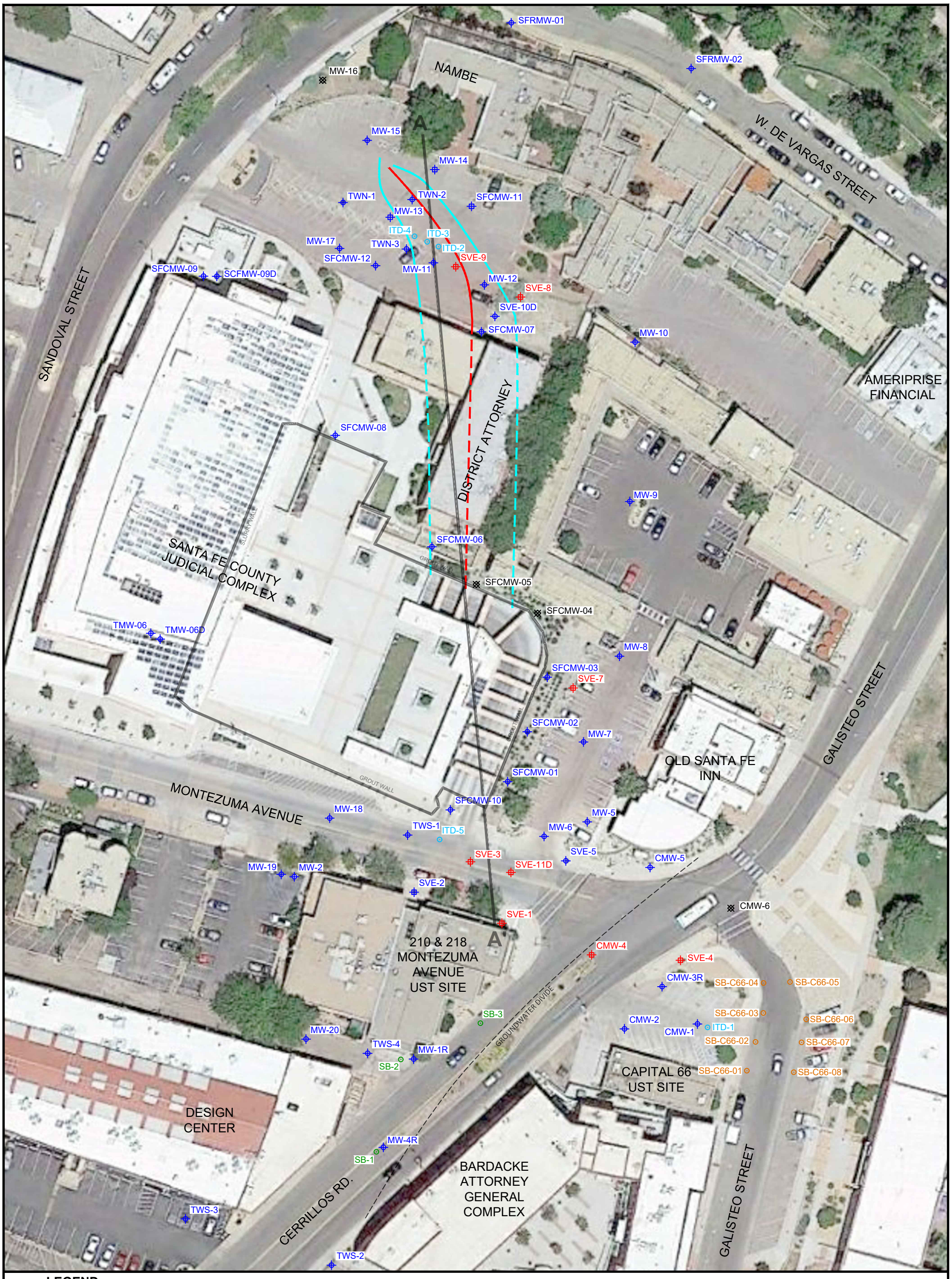
EA, 2023. PetroFix® Injection Pilot Test Letter Report. Santa Fe County Judicial Complex, Santa Fe, New Mexico. March 7.

New Mexico Environment Department (NMED), 2019. Risk Assessment Guidance for Investigations and Remediation, Vol. 1, February 2019, Rev. 2. June 19, 2019.

NMED, 2023. Continued Phase 4 Fixed-Price Workplan Approval for Santa Fe County Judicial Complex, 327, Sandoval Street, Santa Fe, New Mexico. February 23.

Drawings

P:\Active Projects\PSTB State lead\Santa Fe County Judicial Complex_SFCJC\Reports\4072-4, -5, -13 Ben Plume Del_Cont Soil Borings_Inj Target Depth Det\Figures



LEGEND:

- MONITORING WELL
- DESTROYED MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- BENZENE PLUME DELINEATION GEOPROBE BORING
- CONTINGENCY HOLLOW STEM AUGER BORING
- INJECTION TARGET DEPTH BORING
- HORIZONTAL SVE WELL
- HORIZONTAL HOT AIR INJECTION WELL
- A—A' CROSS SECTION LOCATION

SOURCE: SOUDER, MILLER & ASSOCIATES. 2018 AUGUST.

60 30 0 60

SCALE IN FEET

SANTA FE COUNTY JUDICIAL COMPLEX
SANTA FE, NEW MEXICO

DRAWING G-1
SITE LAYOUT

PROJECT #:	WORK PLAN	PROJECT PHASE:	05	PROJECT MANAGER:	MM

320 Gold Avenue, SW Suite 1300
Albuquerque, NM 87102
Phone: (505) 224-9013

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC. PBC

A
NORTH

A'
SOUTH

ELEVATION, FEET AMSL

6,985
6,980
6,975
6,970
6,965
6,960
6,955
6,950
6,945
6,940
6,935

MW-15 | MW-14 | TWN-2 | SFMW-11 MW-13 | TWN-3 | SVE-9 | SFCMW-07 | SFMW-08 | DPB-04 | DPB-05/TMW-03 | DPB-06 | DPB-07/TMW-01 | SFCMW-10 | TWS-1 MW-5 | MW-6 | SVE-3 | MW-3/SVE-1

GW - GRAVEL WITH SAND
SM/GW - SILTY SAND WITH COBBLES
SM - SILTY SAND
SP - POORLY GRADED SAND
UNDERGROUND PARKING GARAGE
GW GRAVEL WITH SAND
SW SAND WITH GRAVEL
SW/GW FINE SAND AND GRAVEL
SM
SC

AUGUST 2018 WATER LEVEL
JUNE 2011 DEWATERING WATER LEVEL

PID ABOVE 100 AFTER SYSTEM DEWATERING

TARGET REMEDIATION SATURATED ZONE BASED ON HISTORICAL 100 PPMV PID LEVELS

PID ABOVE 100 AFTER SYSTEM DEWATERING

HISTORICAL 100 PPMV PID LEVEL EXTENT IN VADOSE ZONE. BASED ON DPE PILOT TEST DATA, VADOSE ZONE HAS BEEN CLEANED UP BY SOIL VAPOR EXTRACTION

0 30 60 90 120 150 180 210 240 270 300 330 360 390 420 450 480 510 540

TWN-2 ← SOIL BORING ID AND/OR MONITORING WELL ID
133.6 ← PID READING, PPMV
SOIL BORING AND/OR MONITORING WELL
STATIC GROUNDWATER LEVEL
WELL SCREEN

0.9 BELOW 100 PPMV
704 ABOVE 100 PPMV
1,829 ABOVE 100 PPMV AFTER DE-WATERING
PPMV = PARTS PER MILLION BY VOLUME

10 5 0 10
VERTICAL SCALE IN FEET

40 20 0 40
HORIZONTAL SCALE IN FEET

SOURCE: DBS&A

SANTA FE COUNTY JUDICIAL COMPLEX
SANTA FE, NEW MEXICO

DRAWING G-2
GEOLOGIC CROSS-SECTION A-A'

PROJECT #:	6347001	PROJECT PHASE:	02	PROJECT MANAGER:	MM

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC. PBC
320 Gold Avenue, SW Suite 1300
Albuquerque, NM 87102
Phone: (505) 224-9013
Fax:(505) 224-9016

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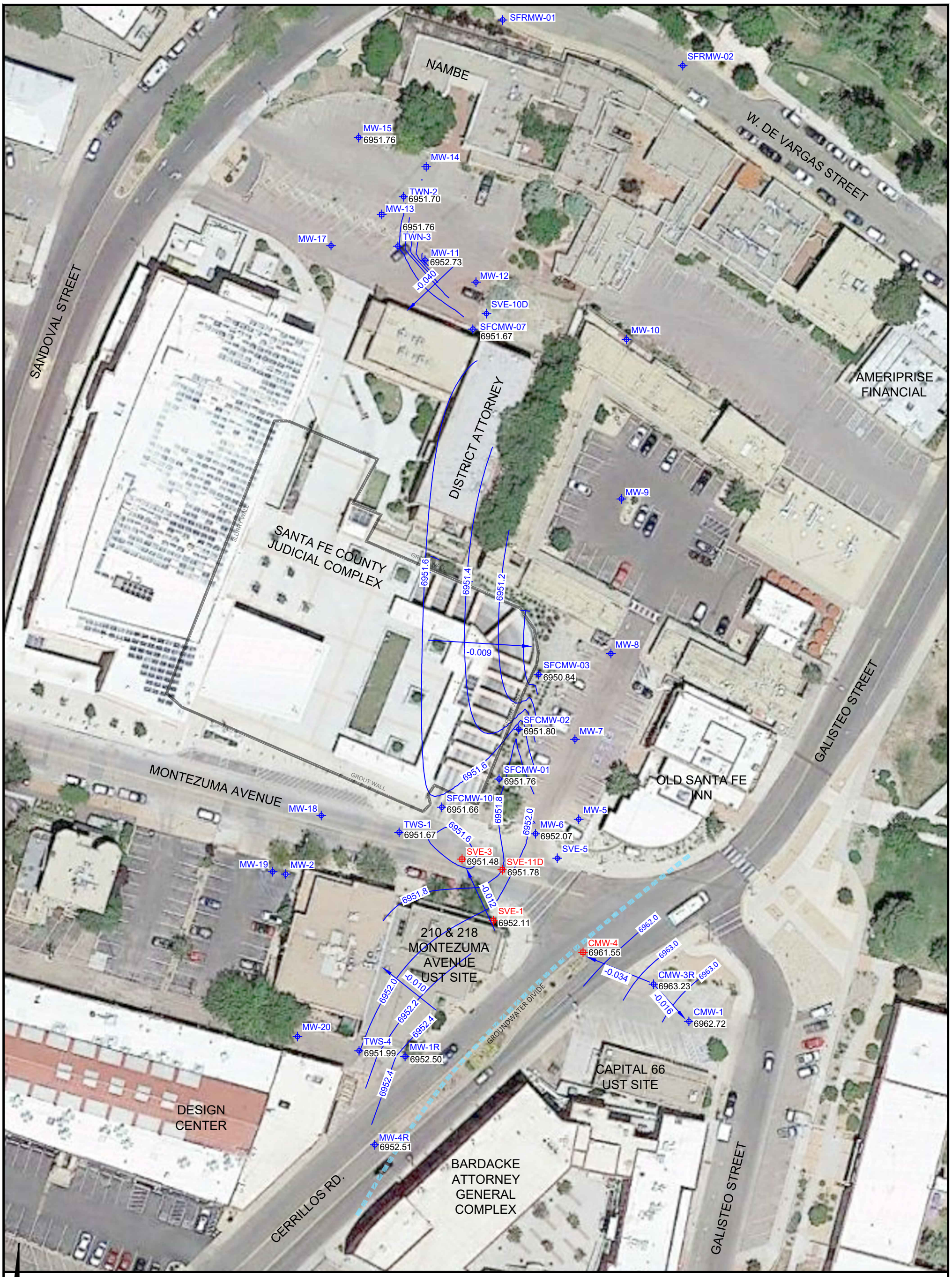
December 30, 2022 C:\Users\vmustafin\OneDrive - EA Engineering, Science, and Technology, Inc., PBC\Desktop\Corona\SFCJC\4268-3_3rd Qtrly GWM and Report\Figures\4268-3 SFCJ Vener.dwg



LEGEND:

- MONITORING WELL
- DESTROYED MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- GROUNDWATER CONTOUR, FEET AMSL

NOTES:

6951.85 POTENTIOMETRIC SURFACE ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL (AMSL)

SOURCE: SOUDER, MILLER & ASSOCIATES. 2018 AUGUST.

60 30 0 60

SCALE IN FEET

SANTA FE COUNTY JUDICIAL COMPLEX
SANTA FE, NEW MEXICO

DRAWING G-3
POTENTIOMETRIC SUFACE MAP
NOVEMBER 14, 15, 16, AND 17, 2022

PROJECT #:	6347006	PROJECT PHASE:	02	PROJECT MANAGER:	MM

320 Gold Avenue, SW Suite 1300
Albuquerque, NM 87102
Phone: (505) 224-9013

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC. PBC

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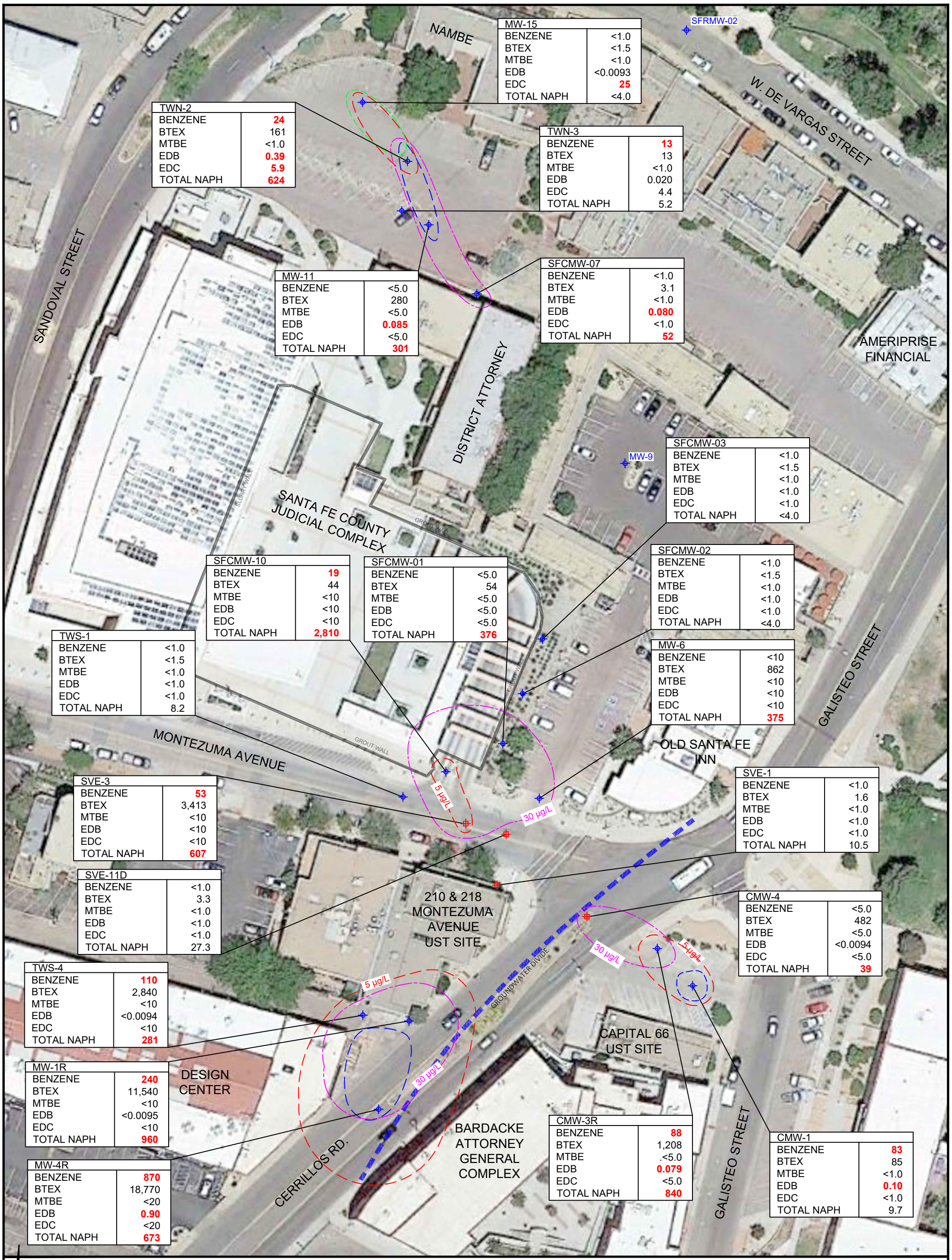


MW-15	
BENZENE	<1.0
BTEX	<1.5
MTBE	<1.0
EDB	<0.0093
EDC	**25**
TOTAL NAPH	<4.0

TWN-2	
BENZENE	**24**
BTEX	161
MTBE	<1.0
EDB	**0.39**
EDC	**5.9**
TOTAL NAPH	**624**

TWN-3	
BENZENE	**13**
BTEX	13
MTBE	<1.0
EDB	0.020
EDC	4.4
TOTAL NAPH	5.2

MW-11	
BENZENE	<5.0
BTEX	280
MTBE	<5.0
EDB	**0.085**
EDC	<5.0
TOTAL NAPH	**301**

SFCMW-07	
BENZENE	<1.0
BTEX	3.1
MTBE	<1.0
EDB	**0.080**
EDC	<1.0
TOTAL NAPH	**52**

SFCMW-03	
BENZENE	<1.0
BTEX	<1.5
MTBE	<1.0
EDB	<1.0
EDC	<1.0
TOTAL NAPH	<4.0

SFCMW-10	
BENZENE	**19**
BTEX	44
MTBE	<10
EDB	<10
EDC	<10
TOTAL NAPH	**2,810**

SFCMW-01	
BENZENE	<5.0
BTEX	54
MTBE	<5.0
EDB	<5.0
EDC	<5.0
TOTAL NAPH	**376**

SFCMW-02	
BENZENE	<1.0
BTEX	<1.5
MTBE	<1.0
EDB	<1.0
EDC	<1.0
TOTAL NAPH	<4.0

TWS-1	
BENZENE	<1.0
BTEX	<1.5
MTBE	<1.0
EDB	<1.0
EDC	<1.0
TOTAL NAPH	8.2

MW-6	
BENZENE	<10
BTEX	862
MTBE	<10
EDB	<10
EDC	<10
TOTAL NAPH	**375**

SVE-3	
BENZENE	**53**
BTEX	3,413
MTBE	<10
EDB	<10
EDC	<10
TOTAL NAPH	**607**

SVE-1	
BENZENE	<1.0
BTEX	1.6
MTBE	<1.0
EDB	<1.0
EDC	<1.0
TOTAL NAPH	10.5

SVE-11D	
BENZENE	<1.0
BTEX	3.3
MTBE	<1.0
EDB	<1.0
EDC	<1.0
TOTAL NAPH	27.3

CMW-4	
BENZENE	<5.0
BTEX	482
MTBE	<5.0
EDB	<0.0094
EDC	<5.0
TOTAL NAPH	**39**

TWS-4	
BENZENE	**110**
BTEX	2,840
MTBE	<10
EDB	<0.0094
EDC	<10
TOTAL NAPH	**281**

MW-1R	
BENZENE	**240**
BTEX	11,540
MTBE	<10
EDB	<0.0095
EDC	<10
TOTAL NAPH	**960**

CMW-3R	
BENZENE	**88**
BTEX	1,208
MTBE	.<5.0
EDB	**0.079**
EDC	<5.0
TOTAL NAPH	**840**

CMW-1	
BENZENE	**83**
BTEX	85
MTBE	<1.0
EDB	**0.10**
EDC	<1.0
TOTAL NAPH	9.7

MW-4R	
BENZENE	**870**
BTEX	18,770
MTBE	<20
EDB	**0.90**
EDC	<20
TOTAL NAPH	**673**

LEGEND:

- MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- 5 µg/L — BENZENE CONTOUR
- 30 µg/L — TOTAL NAPHTHALENES CONTOUR
- 0.05 µg/L — EDB CONTOUR
- 5 µg/L — EDC CONTOUR

NOTES:

ALL CONCENTRATIONS ARE REPORTED IN MICROGRAMS (µg/L)

BOLD INDICATES CONCENTRATION ABOVE THE NEW MEXICO WATER QUALITY CONTROL COMMISSION (NMWQCC) STANDARD

BTEX	BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES
MTBE	METHYL TERTIARY-BUTYL ETHER
EDB	ETHYLENE DIBROMIDE
EDC	ETHYLENE DICHLORIDE
TOTAL NAPH	TOTAL NAPHTHALENES

60 30 0 60

SCALE IN FEET

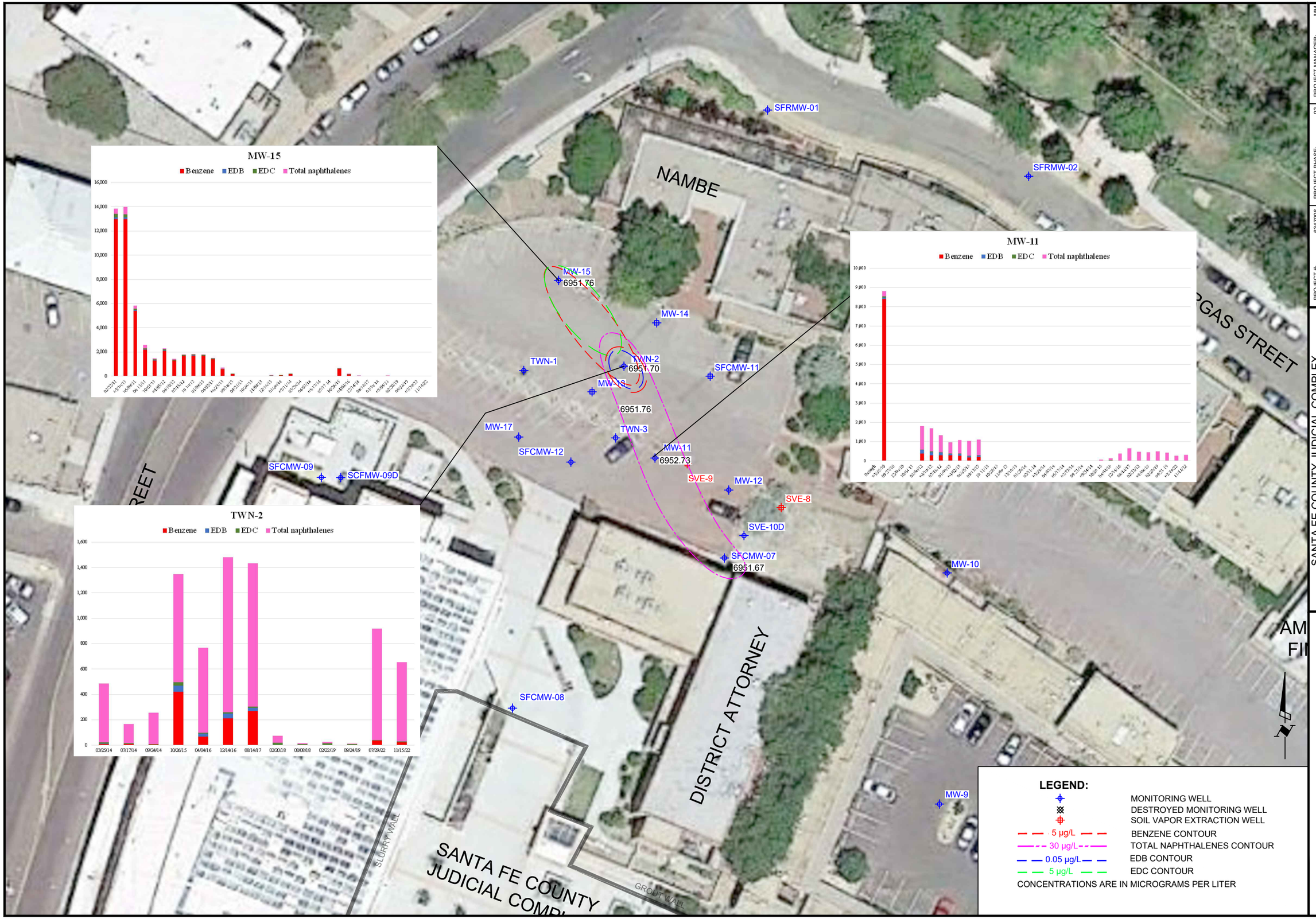
SANTA FE COUNTY JUDICIAL COMPLEX
SANTA FE, NEW MEXICO

DRAWING G-4
DISTRIBUTION OF DISSOLVED PHASE HYDROCARBONS
NOVEMBER 2022

PROJECT #:	6347006	PROJECT PHASE:	02	PROJECT MANAGER:	MM

320 Gold Avenue, SW Suite 1300
Albuquerque, NM 87102
Phone: (505) 224-9013

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC. PBC



PROJECT #: 63470006 | PROJECT PHASE: 02 | PROJECT MANAGER: MM

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC. PBC
320 Gold Avenue, SW Suite 1300
Albuquerque, NM 87102
Phone: (505) 224-9013

SANTA FE COUNTY JUDICIAL COMPLEX
SANTA FE, NEW MEXICO

DRAWING G-5
CONTAMINANT CONCENTRATION TRENDS - DE VARGAS PLUME

January 2, 2023 C:\Users\vmustafin\OneDrive - EA Engineering, Science, and Technology, Inc., PBC\Desktop\Corona\SFC\JC\4268-3_3rd Qtrly GWM and Report\Figures\4268-3 SFCJ Vener.dwg

PROJECT #: 63477006 | PROJECT PHASE: 02 | PROJECT MANAGER: MM

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC. PBC
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Albuquerque, NM 87102
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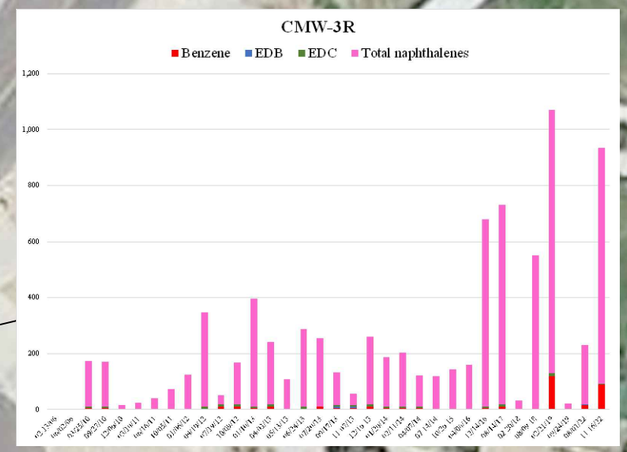
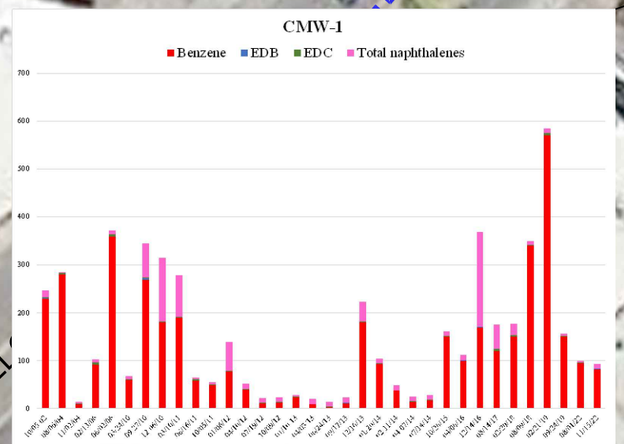
SANTA FE COUNTY JUDICIAL COMPLEX
SANTA FE, NEW MEXICO

DRAWING G-6
CONTAMINANT CONCENTRATION TRENDS - SFCJC PLUME

SVE-7
SFCMW-02
6951.80
MW-7
GROUT WALL
GALISTEO STR
SFCMW-01
6951.76
OLD SANTA FE
INN
GROUT WALL
A AVENUE
MW-18
SFCMW-10
6951.66
MW-5
TWS-1
6951.67
MW-6
6952.07
SVE-3
6951.48
SVE-5
CMW-5
MW-19
MW-2
SVE-11D
6951.78
SVE-1
6952.11
210 & 218
MONTEZUMA
AVENUE
UST SITE
CMW-4
6961.55
SVE-4
CMW-3R
6963.23
GROUNDWATER DIVIDE
CMW-2
CMW-1
6962.72
MW-20
TWS-4
6951.99
MW-1R
6952.50
CAPITAL 66
UST SITE
CERRILL
GALISTEO STREET
TWS-2





LEGEND:

- MONITORING WELL
- DESTROYED MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- 5 µg/L — BENZENE CONTOUR
- 30 µg/L — TOTAL NAPHTHALENES CONTOUR
- 0.05 µg/L — EDB CONTOUR
- 5 µg/L — EDC CONTOUR

CONCENTRATIONS ARE IN MICROGRAMS PER LITER

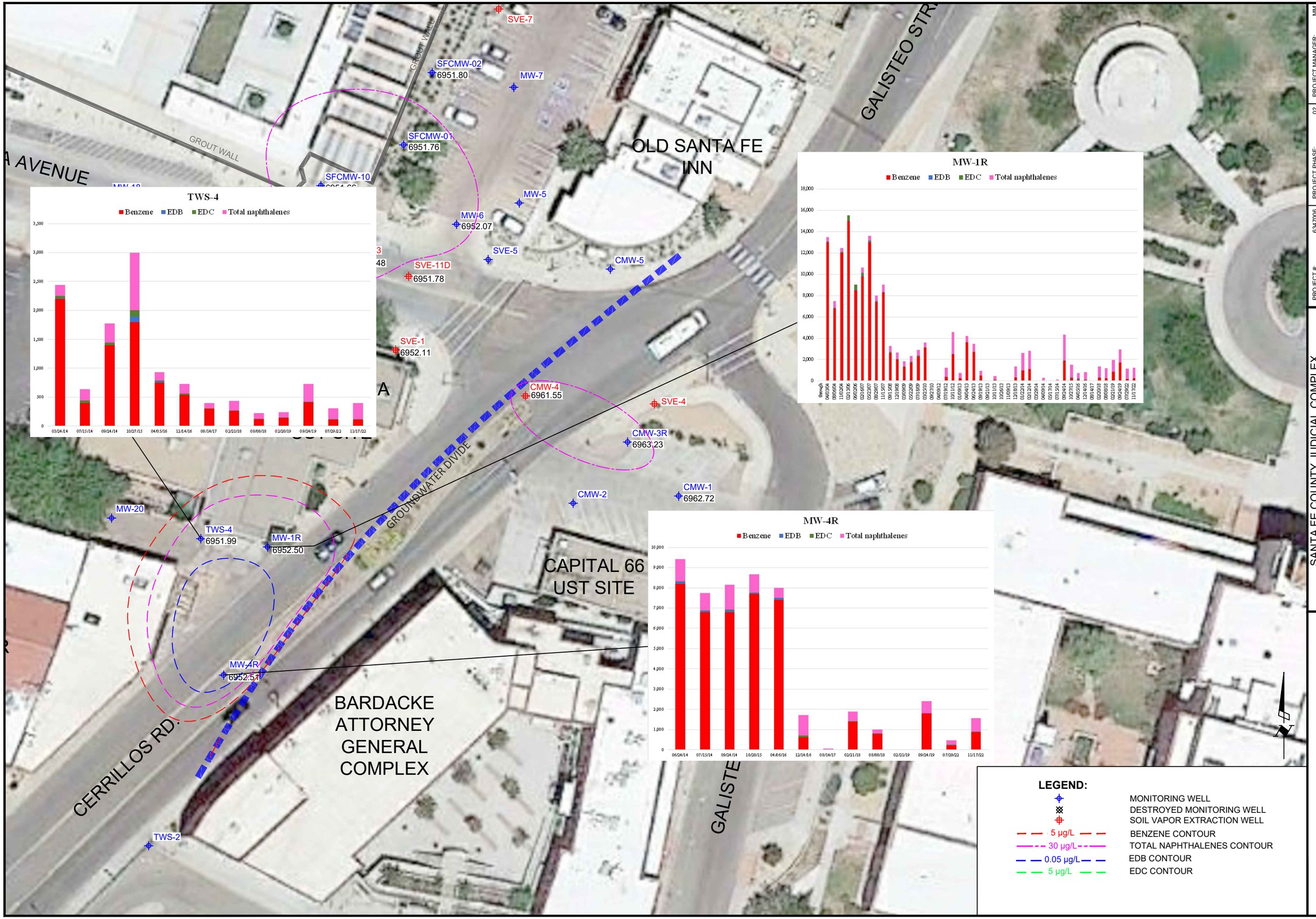
40 20 0 40
SCALE IN FEET

PROJECT #: 63470006 | PROJECT PHASE: 02 | PROJECT MANAGER: MM

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC. PBC
320 Gold Avenue, SW Suite 1300
Albuquerque, NM 87102
Phone: (505) 224-9013

SANTA FE COUNTY JUDICIAL COMPLEX
SANTA FE, NEW MEXICO

DRAWING G-7
CONTAMINANT CONCENTRATION TRENDS - CAPITAL 66 PLUME



PROJECT #: 6347006
PROJECT PHASE: 02
PROJECT MANAGER: MM

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC. PBC
320 Gold Avenue, SW Suite 1300
Albuquerque, NM 87102
Phone: (505) 224-9013

SANTA FE COUNTY JUDICIAL COMPLEX
SANTA FE, NEW MEXICO

DRAWING G-8
CONTAMINANT CONCENTRATION TRENDS - DESIGN CENTER PLUME

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STAMPED ELECTRONICALLY BY
VENER MUSTAFIN ON APRIL 10, 2023

SCALE IN FEET 10 5 0 10

- MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- DV-1 INJECTION WELL
- TARGET TREATMENT AREA

VENER M. MUSTAFIN NEW MEXICO 17630 LICENSED PROFESSIONAL ENGINEER

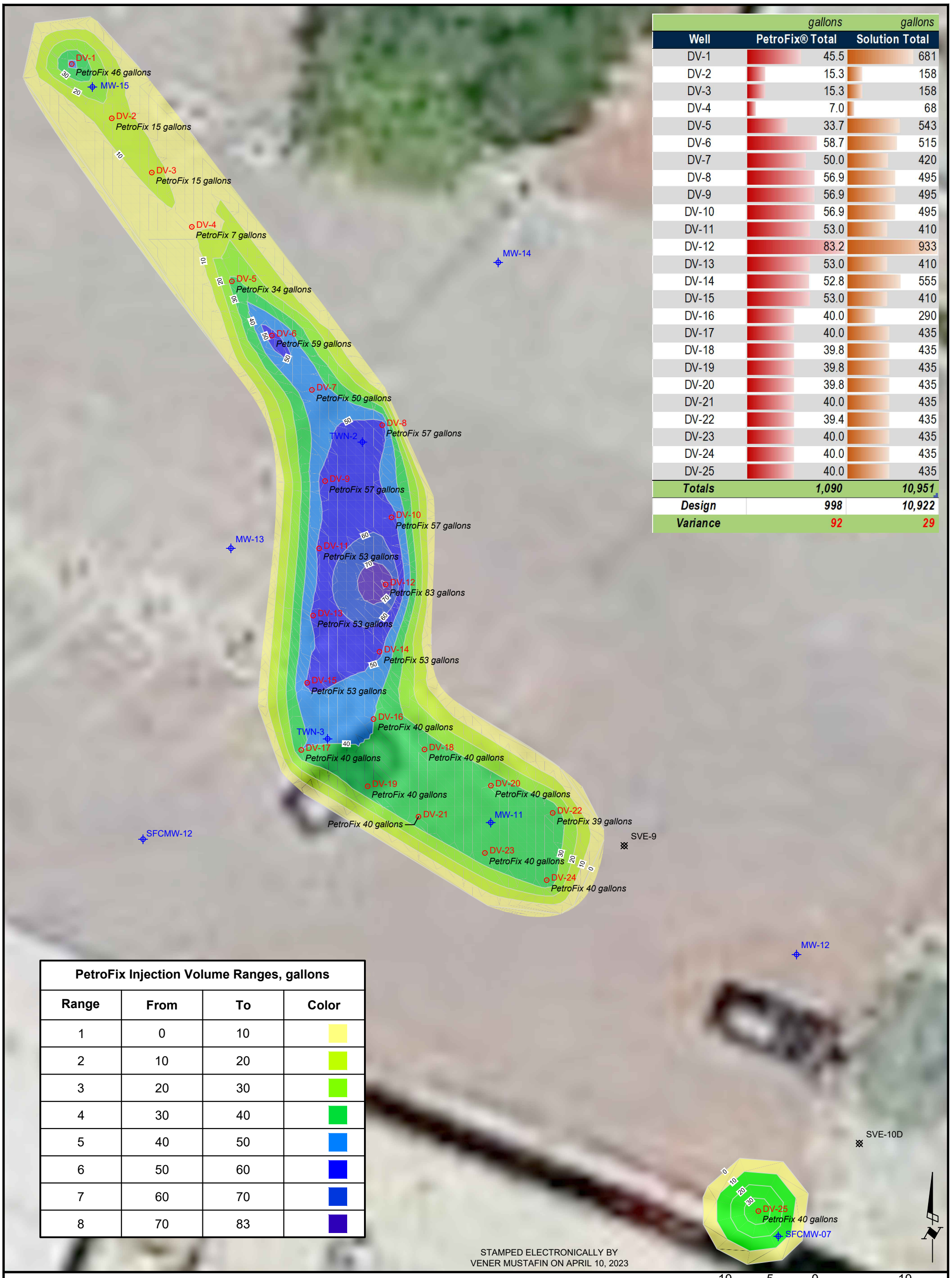
SANTA FE COUNTY JUDICIAL COMPLEX
SANTA FE, NEW MEXICO

DRAWING C-1 - DE VARGAS PLUME INJECTION WELL LAYOUT

PROJECT #:	6347005	PROJECT PHASE:	01	PROJECT MANAGER:	MM

320 Gold Avenue, SW Suite 1300
Albuquerque, NM 87102
Phone: (505) 224-9013
EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC. PBC

Vener Mustafin 4/8/2023 7:12 PM C:\Users\vmustafin\OneDrive - EA Engineering, Science, and Technology, Inc., PBC\Desktop\Corona\SFCJC\4260-3 As-Built Report - De Vargas Injection\Figures\4260-3 De Vargas Injection Layout.dwg



Well	PetroFix® Total (gallons)	Solution Total (gallons)
DV-1	45.5	681
DV-2	15.3	158
DV-3	15.3	158
DV-4	7.0	68
DV-5	33.7	543
DV-6	58.7	515
DV-7	50.0	420
DV-8	56.9	495
DV-9	56.9	495
DV-10	56.9	495
DV-11	53.0	410
DV-12	83.2	933
DV-13	53.0	410
DV-14	52.8	555
DV-15	53.0	410
DV-16	40.0	290
DV-17	40.0	435
DV-18	39.8	435
DV-19	39.8	435
DV-20	39.8	435
DV-21	40.0	435
DV-22	39.4	435
DV-23	40.0	435
DV-24	40.0	435
DV-25	40.0	435
Totals	**1,090**	**10,951**
Design	**998**	**10,922**
Variance	**92**	**29**

PetroFix Injection Volume Ranges, gallons			
Range	From	To	Color
1	0	10	
2	10	20	
3	20	30	
4	30	40	
5	40	50	
6	50	60	
7	60	70	
8	70	83	

SCALE IN FEET 10 5 0 10

MONITORING WELL

SOIL VAPOR EXTRACTION WELL

DV-1 INJECTION WELL

SHOWN RANGES ARE BASED ON INJECTED PETROFIX VOLUMES, ESTIMATED EXTENT, AND ASSUMED UNIFORM DISTRIBUTION.

STAMPED ELECTRONICALLY BY
VENER MUSTAFIN ON APRIL 10, 2023

VENER M. MUSTAFIN NEW MEXICO 17630 LICENSED PROFESSIONAL ENGINEER

SCALE IN FEET 10 5 0 10

SANTA FE COUNTY JUDICIAL COMPLEX
SANTA FE, NEW MEXICO

DRAWING C-2 - DE VARGAS PLUME
PETROFIX® INJECTED VOLUME

PROJECT #:	6347005	PROJECT PHASE:	01	PROJECT MANAGER:	MM

320 Gold Avenue, SW Suite 1300
Albuquerque, NM 87102
Phone: (505) 224-9013

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC. PBC

Tables

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
CMW-1	09/22/92	21.11			6,985.59	6,964.48	
CMW-1	01/28/94	22.32			6,985.59	6,963.27	
CMW-1	02/25/94	22.69			6,985.59	6,962.90	
CMW-1	03/21/94	22.79			6,985.59	6,962.80	
CMW-1	04/26/94	22.67			6,985.59	6,962.92	
CMW-1	05/19/94	22.07			6,985.59	6,963.52	
CMW-1	06/21/94	22.08			6,985.59	6,963.51	
CMW-1	07/25/94	22.30			6,985.59	6,963.29	
CMW-1	08/30/94	21.87			6,985.59	6,963.72	
CMW-1	09/15/94	22.14			6,985.59	6,963.45	
CMW-1	10/12/94	22.33			6,985.59	6,963.26	
CMW-1	11/17/94	22.40			6,985.59	6,963.19	
CMW-1	12/06/94	22.60			6,985.59	6,962.99	
CMW-1	01/25/95	23.08			6,985.59	6,962.51	
CMW-1	04/12/95	23.42			6,985.59	6,962.17	
CMW-1	05/25/95	23.31			6,985.59	6,962.28	
CMW-1	07/27/95	23.00			6,985.59	6,962.59	
CMW-1	11/07/95	22.91			6,985.59	6,962.68	
CMW-1	01/28/96	23.84			6,985.59	6,961.75	
CMW-1	10/30/96	24.42			6,985.59	6,961.17	
CMW-1	03/06/97	23.90			6,985.59	6,961.69	
CMW-1	09/03/97	22.29			6,985.59	6,963.30	
CMW-1	01/06/98	22.90			6,985.59	6,962.69	
CMW-1	03/26/98	23.42			6,985.59	6,962.17	
CMW-1	11/20/98	22.10			6,985.59	6,963.49	
CMW-1	02/18/99	23.41			6,985.59	6,962.18	
CMW-1	05/05/99	23.75			6,985.59	6,961.84	
CMW-1	08/10/99	22.00			6,985.59	6,963.59	
CMW-1	03/09/00	24.20			6,985.59	6,961.39	
CMW-1	06/14/00	24.78			6,985.59	6,960.81	
CMW-1	09/06/00	23.20			6,985.59	6,962.39	
CMW-1	12/12/00	23.71			6,985.59	6,961.88	
CMW-1	03/29/01	24.47			6,985.59	6,961.12	
CMW-1	12/05/01	24.33			6,985.59	6,961.26	
CMW-1	03/04/02	25.86			6,985.59	6,959.73	
CMW-1	06/03/02	26.67			6,985.59	6,958.92	
CMW-1	10/05/02	26.62			6,985.59	6,958.97	
CMW-1	04/03/04	29.48			6,985.59	6,956.11	
CMW-1	08/06/04	30.41			6,985.59	6,955.18	
CMW-1	11/02/04	30.80			6,985.59	6,954.79	
CMW-1	02/13/06	27.29			6,985.59	6,958.30	
CMW-1	06/02/06	28.73			6,985.59	6,956.86	
CMW-1	05/23/07	22.65			6,985.59	6,962.94	
CMW-1	10/15/07	19.92			6,985.59	6,965.67	
CMW-1	11/29/07	19.70			6,985.59	6,965.89	
CMW-1	02/26/08	20.35			6,985.59	6,965.24	
CMW-1	06/26/09	23.39			6,985.59	6,962.20	
CMW-1	07/10/09	23.40			6,985.59	6,962.19	
CMW-1	07/20/09	22.91			6,985.59	6,962.68	
CMW-1	08/06/09	21.95			6,985.59	6,963.64	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
CMW-1	08/18/09	21.36			6,985.59	6,964.23	
CMW-1	11/13/09	20.93			6,985.59	6,964.66	
CMW-1	03/23/10	23.62			6,985.59	6,961.97	
CMW-1	09/27/10	19.81			6,985.59	6,965.78	
CMW-1	12/06/10	20.46			6,985.59	6,965.13	
CMW-1	03/09/11	23.21			6,985.59	6,962.38	
CMW-1	06/14/11	24.49			6,985.59	6,961.10	
CMW-1	10/03/11	20.54			6,985.59	6,965.05	
CMW-1	01/03/12	21.40			6,985.59	6,964.19	
CMW-1	04/09/12	23.80			6,985.59	6,961.79	
CMW-1	07/16/12	23.20			6,985.59	6,962.39	
CMW-1	10/08/12	20.79			6,985.59	6,964.80	
CMW-1	01/07/13	21.72			6,985.59	6,963.87	
CMW-1	04/01/13	24.11			6,985.59	6,961.48	
CMW-1	06/24/13	25.51			6,985.59	6,960.08	
CMW-1	08/01/13	24.80			6,985.59	6,960.79	
CMW-1	08/15/13	24.40			6,985.59	6,961.19	
CMW-1	09/17/13	22.20			6,985.59	6,963.39	
CMW-1	09/26/13	21.25			6,985.59	6,964.34	
CMW-1	10/10/13	19.60			6,985.59	6,965.99	
CMW-1	10/24/13	20.45			6,985.59	6,965.14	
CMW-1	11/14/13	20.53			6,985.59	6,965.06	
CMW-1	11/26/13	21.35			6,985.59	6,964.24	
CMW-1	12/16/13	22.00			6,985.59	6,963.59	
CMW-1	01/20/14	23.25			6,985.59	6,962.34	
CMW-1	02/10/14	23.80			6,985.59	6,961.79	
CMW-1	04/07/14	25.31			6,985.59	6,960.28	
CMW-1	07/14/14	24.43			6,985.59	6,961.16	
CMW-1	10/26/15	18.40			6,985.59	6,967.19	
CMW-1	04/06/16	23.09			6,985.59	6,962.50	
CMW-1	12/14/16	21.66			6,985.59	6,963.93	
CMW-1	08/14/17	24.78			6,985.59	6,960.81	
CMW-1	02/20/18	25.33			6,985.59	6,960.26	
CMW-1	08/09/18	23.97			6,985.59	6,961.62	
CMW-1	02/22/19	24.82			6,985.59	6,960.77	
CMW-1	09/24/19	21.40			6,985.59	6,964.19	
CMW-1	08/01/22	26.69			6,985.59	6,958.90	
CMW-1	11/15/22	22.87			6,985.59	6,962.72	
CMW-2	09/22/92	23.06			6,984.43	6,961.37	
CMW-2	01/28/94	23.85			6,984.43	6,960.58	
CMW-2	02/25/94	24.17			6,984.43	6,960.26	
CMW-2	03/21/94	24.24			6,984.43	6,960.19	
CMW-2	04/26/94	24.11			6,984.43	6,960.32	
CMW-2	05/19/94	23.81			6,984.43	6,960.62	
CMW-2	06/21/94	23.68			6,984.43	6,960.75	
CMW-2	07/25/94	23.98			6,984.43	6,960.45	
CMW-2	08/30/94	23.55			6,984.43	6,960.88	
CMW-2	09/15/94	23.71			6,984.43	6,960.72	
CMW-2	10/12/94	23.90			6,984.43	6,960.53	
CMW-2	11/17/94	24.02			6,984.43	6,960.41	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
CMW-2	12/06/94	24.21			6,984.43	6,960.22	
CMW-2	01/25/95	24.42			6,984.43	6,960.01	
CMW-2	04/12/95	24.75			6,984.43	6,959.68	
CMW-2	05/25/95	24.61			6,984.43	6,959.82	
CMW-2	06/26/95	24.55			6,984.43	6,959.88	
CMW-2	07/27/95	24.37			6,984.43	6,960.06	
CMW-2	11/07/95	24.13			6,984.43	6,960.30	
CMW-2	10/30/96	24.46			6,984.43	6,959.97	
CMW-2	03/06/97	24.42			6,984.43	6,960.01	
CMW-2	09/03/97	22.48			6,984.43	6,961.95	
CMW-2	01/06/98	23.08			6,984.43	6,961.35	
CMW-2	03/26/98	23.18			6,984.43	6,961.25	
CMW-2	11/20/98	22.33			6,984.43	6,962.10	
CMW-2	02/18/99	23.38			6,984.43	6,961.05	
CMW-2	05/05/99	23.79			6,984.43	6,960.64	
CMW-2	08/10/99	22.30			6,984.43	6,962.13	
CMW-2	03/09/00	23.75			6,984.43	6,960.68	
CMW-2	06/14/00	24.56			6,984.43	6,959.87	
CMW-2	06/14/00	24.56			6,984.43	6,959.87	
CMW-2	09/06/00	23.78			6,984.43	6,960.65	
CMW-2	09/06/00	23.78			6,984.43	6,960.65	
CMW-2	12/12/00	24.02			6,984.43	6,960.41	
CMW-2	03/29/01	23.45			6,984.43	6,960.98	
CMW-2	12/05/01	25.97			6,984.43	6,958.46	
CMW-2	03/04/02	25.33			6,984.43	6,959.10	
CMW-2	06/03/02	25.86			6,984.43	6,958.57	
CMW-2	10/05/02	25.77			6,984.43	6,958.66	
CMW-2	04/03/04	28.13			6,984.43	6,956.30	
CMW-2	08/06/04	28.91			6,984.43	6,955.52	
CMW-2	11/02/04	29.17			6,984.43	6,955.26	
CMW-2	02/13/06	27.37			6,984.43	6,957.06	
CMW-2	06/02/06	27.40			6,984.43	6,957.03	
CMW-2	05/23/07	21.70			6,984.43	6,962.73	
CMW-2	10/15/07	20.59			6,984.43	6,963.84	
CMW-2	11/29/07	20.71			6,984.43	6,963.72	
CMW-2	02/26/08	21.00			6,984.43	6,963.43	
CMW-2	06/26/09	23.07			6,984.43	6,961.36	
CMW-2	07/10/09	23.12			6,984.43	6,961.31	
CMW-2	07/20/09	22.85			6,984.43	6,961.58	
CMW-2	08/06/09	22.44			6,984.43	6,961.99	
CMW-2	08/17/09	22.23			6,984.43	6,962.20	
CMW-2	11/13/09	21.58			6,984.43	6,962.85	
CMW-2	03/23/10	23.25			6,984.43	6,961.18	
CMW-2	09/27/10	21.35			6,984.43	6,963.08	
CMW-2	12/06/10	21.37			6,984.43	6,963.06	
CMW-2	03/09/11	23.16			6,984.43	6,961.27	
CMW-2	06/14/11	23.82			6,984.43	6,960.61	
CMW-2	07/18/11	24.11			6,984.43	6,960.32	
CMW-2	07/22/11	24.00			6,984.43	6,960.43	
CMW-2	07/25/11	24.00			6,984.43	6,960.43	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
CMW-2	08/01/11	23.88			6,984.43	6,960.55	
CMW-2	08/08/11	23.75			6,984.43	6,960.68	
CMW-2	08/22/11	23.35			6,984.43	6,961.08	
CMW-2	09/06/11	22.78			6,984.43	6,961.65	
CMW-2	09/19/11	22.33			6,984.43	6,962.10	
CMW-2	10/03/11	22.02			6,984.43	6,962.41	
CMW-2	10/17/11	21.77			6,984.43	6,962.66	
CMW-2	11/01/11	21.64			6,984.43	6,962.79	
CMW-2	11/15/11	21.80			6,984.43	6,962.63	
CMW-2	01/03/12	22.46			6,984.43	6,961.97	
CMW-2	04/09/12	23.81			6,984.43	6,960.62	
CMW-2	07/16/12	23.51			6,984.43	6,960.92	
CMW-2	10/08/12	22.00			6,984.43	6,962.43	
CMW-2	01/07/13	22.67			6,984.43	6,961.76	
CMW-2	04/01/13	24.68			6,984.43	6,959.75	
CMW-2	06/24/13	25.00			6,984.43	6,959.43	
CMW-2	08/01/13	25.03			6,984.43	6,959.40	
CMW-2	08/15/13	24.58			6,984.43	6,959.85	
CMW-2	09/17/13	23.55			6,984.43	6,960.88	
CMW-2	09/26/13	23.10			6,984.43	6,961.33	
CMW-2	10/10/13	22.30			6,984.43	6,962.13	
CMW-2	10/24/13	22.10			6,984.43	6,962.33	
CMW-2	11/14/13	22.10			6,984.43	6,962.33	
CMW-2	11/26/13	22.54			6,984.43	6,961.89	
CMW-2	12/16/13	22.80			6,984.43	6,961.63	
CMW-2	01/20/14	23.35			6,984.43	6,961.08	
CMW-2	02/10/14	23.70			6,984.43	6,960.73	
CMW-2	04/07/14	24.80			6,984.43	6,959.63	
CMW-2	07/14/14	24.80			6,984.43	6,959.63	
CMW-2	10/27/15	16.83			6,984.43	6,967.60	
CMW-2	04/07/16	23.46			6,984.43	6,960.97	
CMW-2	12/14/16	22.32			6,984.43	6,962.11	
CMW-2	08/14/17	24.10			6,984.43	6,960.33	
CMW-2	02/20/18	24.63			6,984.43	6,959.80	
CMW-3	09/22/92	22.14			6,984.85	6,962.71	
CMW-3	01/28/94	22.65			6,984.85	6,962.20	
CMW-3	02/25/94	22.80			6,984.85	6,962.05	
CMW-3	03/21/94	22.88			6,984.85	6,961.97	
CMW-3	04/26/94	22.75			6,984.85	6,962.10	
CMW-3	05/19/94	22.36			6,984.85	6,962.49	
CMW-3	06/21/94	22.35			6,984.85	6,962.50	
CMW-3	07/25/94	22.64			6,984.85	6,962.21	
CMW-3	08/30/94	22.36			6,984.85	6,962.49	
CMW-3	09/15/94	22.44			6,984.85	6,962.41	
CMW-3	10/12/94	22.55			6,984.85	6,962.30	
CMW-3	11/17/94	22.62			6,984.85	6,962.23	
CMW-3	12/06/94	22.77			6,984.85	6,962.08	
CMW-3	01/25/95	22.92			6,984.85	6,961.93	
CMW-3	04/12/95	23.12			6,984.85	6,961.73	
CMW-3	05/25/95	22.93			6,984.85	6,961.92	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
CMW-3	06/26/95	22.85			6,984.85	6,962.00	
CMW-3	07/27/95	22.71			6,984.85	6,962.14	
CMW-3	11/07/95	22.73			6,984.85	6,962.12	
CMW-3	01/28/96	23.18			6,984.85	6,961.67	
CMW-3	10/30/96	24.60			6,984.85	6,960.25	
CMW-3	03/06/97	24.42			6,984.85	6,960.43	
CMW-3	09/03/97	22.20			6,984.85	6,962.65	
CMW-3	01/06/98	22.71			6,984.85	6,962.14	
CMW-3	03/26/98	22.61			6,984.85	6,962.24	
CMW-3	11/20/98	22.24			6,984.85	6,962.61	
CMW-3	02/18/99	23.86			6,984.85	6,960.99	
CMW-3	05/05/99	23.83			6,984.85	6,961.02	
CMW-3	03/09/00	23.79			6,984.85	6,961.06	
CMW-3	06/14/00	23.67			6,984.85	6,961.18	
CMW-3	09/06/00	23.90			6,984.85	6,960.95	
CMW-3	12/12/00	22.98			6,984.85	6,961.87	
CMW-3	03/29/01	21.87			6,984.85	6,962.98	
CMW-3	12/05/01	24.26			6,984.85	6,960.59	
CMW-3	03/04/02	24.51			6,984.85	6,960.34	
CMW-3	06/03/02	25.34			6,984.85	6,959.51	
CMW-3	10/05/02	25.47			6,984.85	6,959.38	
CMW-3	04/03/04	26.38			6,984.85	6,958.47	
CMW-3	08/06/04	27.15			6,984.85	6,957.70	
CMW-3	11/02/04	27.10			6,984.85	6,957.75	
CMW-3	02/04/06				6,984.85		Well plugged and abandoned
CMW-3R	02/13/06	26.17	**25.95**	**0.22**	6,984.85	6,958.85	
CMW-3R	06/02/06	28.27	**27.17**	**1.10**	6,984.85	6,957.41	
CMW-3R	05/23/07	21.61	**21.56**	**0.05**	6,984.85	6,963.28	
CMW-3R	10/15/07	18.79	**18.75**	**0.04**	6,984.85	6,966.09	
CMW-3R	11/29/07	18.57	**18.54**	**0.03**	6,984.85	6,966.30	
CMW-3R	02/26/08	19.08	**19.05**	**0.03**	6,984.85	6,965.79	
CMW-3R	06/26/09	22.07	**22.00**	**0.07**	6,984.85	6,962.83	
CMW-3R	07/10/09	22.04	**21.97**	**0.07**	6,984.85	6,962.86	
CMW-3R	07/20/09	21.56	**21.54**	**0.02**	6,984.85	6,963.31	
CMW-3R	08/06/09	20.45	**20.43**	**0.02**	6,984.85	6,964.42	
CMW-3R	08/17/09	19.90	**19.88**	**0.02**	6,984.85	6,964.97	
CMW-3R	11/13/09	19.47			6,984.85	6,965.38	
CMW-3R	03/23/10	22.20			6,984.85	6,962.65	
CMW-3R	09/27/10	18.53			6,984.85	6,966.32	
CMW-3R	12/06/10	19.46			6,984.85	6,965.39	
CMW-3R	03/09/11	21.87			6,984.85	6,962.98	
CMW-3R	06/14/11	23.11			6,984.85	6,961.74	
CMW-3R	10/03/11	19.45			6,984.85	6,965.40	
CMW-3R	01/03/12	21.00			6,984.85	6,963.85	
CMW-3R	04/09/12	22.67			6,984.85	6,962.18	
CMW-3R	07/16/12	21.81			6,984.85	6,963.04	
CMW-3R	10/08/12	20.08			6,984.85	6,964.77	
CMW-3R	01/07/13	20.73			6,984.85	6,964.12	
CMW-3R	04/01/13	23.00			6,984.85	6,961.85	
CMW-3R	06/24/13	24.16	**24.10**	**0.06**	6,984.85	6,960.74	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
CMW-3R	07/20/13	23.64			6,984.85	6,961.21	
CMW-3R	08/01/13	23.32			6,984.85	6,961.53	NAPL Sheen
CMW-3R	08/15/13	22.69			6,984.85	6,962.16	NAPL Sheen
CMW-3R	09/17/13	20.70			6,984.85	6,964.15	NAPL Sheen
CMW-3R	09/26/13	19.80			6,984.85	6,965.05	NAPL Sheen
CMW-3R	10/10/13	18.60			6,984.85	6,966.25	NAPL Sheen
CMW-3R	10/24/13	18.50			6,984.85	6,966.35	NAPL Sheen
CMW-3R	11/07/13	19.30			6,984.85	6,965.55	NAPL Sheen
CMW-3R	11/14/13	19.05			6,984.85	6,965.80	NAPL Sheen
CMW-3R	11/26/13	20.10			6,984.85	6,964.75	NAPL Sheen
CMW-3R	12/16/13	20.82			6,984.45	6,964.03	
CMW-3R	01/20/14	21.83			6,984.45	6,963.02	
CMW-3R	02/10/14	22.33			6,984.45	6,962.52	
CMW-3R	04/07/14	23.91			6,984.45	6,960.94	
CMW-3R	07/14/14	22.91			6,984.45	6,961.94	
CMW-3R	10/27/15	17.00			6,984.45	6,967.85	
CMW-3R	04/07/16	21.70			6,984.45	6,963.15	
CMW-3R	12/14/16	20.26			6,984.45	6,964.59	
CMW-3R	08/14/17	23.31			6,984.45	6,961.54	
CMW-3R	02/20/18	23.93			6,984.45	6,960.92	
CMW-3R	08/09/18	22.39			6,984.45	6,962.46	
CMW-3R	02/21/19	23.28			6,984.45	6,961.57	
CMW-3R	09/24/19	19.99			6,984.45	6,964.86	
CMW-3R	08/01/22	25.27			6,984.45	6,959.58	
CMW-3R	11/16/22	21.62			6,984.45	6,963.23	
CMW-4	11/03/09	21.05			6,983.21	6,962.16	
CMW-4	11/08/09	21.00			6,983.21	6,962.21	
CMW-4	11/13/09	21.05			6,983.21	6,962.16	
CMW-4	03/23/10	22.26			6,982.95	6,960.69	
CMW-4	09/27/10	20.77			6,982.95	6,962.18	
CMW-4	12/06/10	20.91			6,982.95	6,962.04	
CMW-4	03/09/11	22.00			6,982.95	6,960.95	
CMW-4	06/14/11	22.46			6,982.95	6,960.49	
CMW-4	10/03/11	21.49			6,982.95	6,961.46	
CMW-4	01/03/12	21.58			6,982.95	6,961.37	
CMW-4	04/09/12	22.55			6,982.95	6,960.40	
CMW-4	07/16/12	22.78			6,982.95	6,960.17	
CMW-4	10/08/12	21.40			6,982.95	6,961.55	
CMW-4	01/07/13	21.73			6,982.95	6,961.22	
CMW-4	11/07/13	21.20			6,982.95	6,961.75	
CMW-4	11/08/13	21.18			6,982.95	6,961.77	
CMW-4	12/16/13	21.40			6,982.95	6,961.55	
CMW-4	01/20/14	21.90			6,982.95	6,961.05	
CMW-4	02/10/14	22.17			6,982.95	6,960.78	
CMW-4	04/09/14	23.27			6,982.95	6,959.68	
CMW-4	07/14/14	23.34			6,982.95	6,959.61	
CMW-4	09/25/14	20.55			6,982.95	6,962.40	
CMW-4	10/27/15	19.42			6,982.95	6,963.53	
CMW-4	04/04/16	21.75			6,982.95	6,961.20	
CMW-4	12/14/16	21.21			6,982.95	6,961.74	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
CMW-4	08/14/17	21.99			6,982.95	6,960.96	
CMW-4	02/20/18	22.58			6,982.95	6,960.37	
CMW-4	08/09/18	23.34			6,982.95	6,959.61	
CMW-4	02/21/19	21.91			6,982.95	6,961.04	
CMW-4	09/23/19	21.21			6,982.95	6,961.74	
CMW-4	08/01/22	22.22			6,982.95	6,960.73	
CMW-4	11/17/22	21.40			6,982.95	6,961.55	
CMW-5	11/08/09	30.52			6,983.92	6,953.40	
CMW-5	11/08/09	33.97			6,983.92	6,949.95	
CMW-5	11/13/09	30.77			6,983.92	6,953.15	
CMW-5	03/23/10	31.83			6,983.92	6,952.09	
CMW-5	09/27/10	38.69			6,983.92	6,945.23	
CMW-5	11/17/10	40.03			6,983.92	6,943.89	
CMW-5	12/06/10	40.18			6,983.92	6,943.74	
CMW-5	03/09/11	41.05			6,983.92	6,942.87	
CMW-5	06/14/11	41.90			6,983.92	6,942.02	
CMW-5	10/03/11	37.90			6,983.92	6,946.02	
CMW-5	01/03/12	36.72			6,983.92	6,947.20	
CMW-5	04/09/12	36.27			6,983.92	6,947.65	
CMW-5	07/16/12	36.10			6,983.92	6,947.82	
CMW-5	10/08/12	34.67			6,983.92	6,949.25	
CMW-5	01/07/13	33.65			6,983.92	6,950.27	
CMW-5	04/01/13	33.90			6,983.92	6,950.02	
CMW-5	06/24/13	33.50			6,983.92	6,950.42	
CMW-5	09/17/13	36.50			6,983.92	6,947.42	
CMW-5	12/16/13	36.00			6,983.92	6,947.92	
CMW-5	01/20/14	35.99			6,983.92	6,947.93	
CMW-5	02/10/14	33.78			6,983.92	6,950.14	
CMW-5	04/08/14	35.71			6,983.92	6,948.21	
CMW-5	07/14/14	34.80			6,983.92	6,949.12	
CMW-5	10/27/15	28.86			6,983.92	6,955.06	
CMW-5	04/06/16	33.58			6,983.92	6,950.34	
CMW-5	12/16/16	30.23			6,983.92	6,953.69	
CMW-5	08/14/17	30.70			6,983.92	6,953.22	
CMW-5	02/21/18	31.40			6,983.92	6,952.52	
CMW-5	08/08/18	31.34			6,983.92	6,952.58	
CMW-5	02/21/19	31.40			6,983.92	6,952.52	
CMW-6	11/08/09	17.77			6,985.36	6,967.59	
CMW-6	11/13/09	17.90			6,985.36	6,967.46	
CMW-6	03/23/10	21.65			6,985.36	6,963.71	
CMW-6	09/27/10	16.78			6,985.36	6,968.58	
CMW-6	12/06/10	18.31			6,985.36	6,967.05	
CMW-6	03/09/11	21.42			6,985.36	6,963.94	
CMW-6	06/14/11	22.80			6,985.36	6,962.56	
CMW-6	07/18/11	22.17			6,985.36	6,963.19	
CMW-6	07/22/11	21.75			6,985.36	6,963.61	
CMW-6	07/25/11	21.55			6,985.36	6,963.81	
CMW-6	08/01/11	21.01			6,985.36	6,964.35	
CMW-6	08/08/11	20.41			6,985.36	6,964.95	
CMW-6	08/22/11	19.42			6,985.36	6,965.94	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	**Date**	**Depth to Water**	**Depth to NAPL**	**NAPL Thickness**	**Top of Casing Elevation**	**Groundwater Elevation**	**Notes**
CMW-6	09/06/11	17.78			6,985.36	6,967.58	
CMW-6	09/19/11	17.24			6,985.36	6,968.12	
CMW-6	10/03/11	17.19			6,985.36	6,968.17	
CMW-6	10/17/11	16.96			6,985.36	6,968.40	
CMW-6	11/01/11	17.06			6,985.36	6,968.30	
CMW-6	11/15/11	17.66			6,985.36	6,967.70	
CMW-6	01/03/12	19.60			6,985.36	6,965.76	
CMW-6	04/09/12	22.16			6,985.36	6,963.20	
CMW-6	07/16/12	21.05			6,985.36	6,964.31	
CMW-6	10/08/12	18.28			6,985.36	6,967.08	
CMW-6	01/07/13	19.87			6,985.36	6,965.49	
CMW-6	04/01/13	22.40			6,985.36	6,962.96	
CMW-6	06/24/13	23.70			6,985.36	6,961.66	
CMW-6	09/17/13	19.00			6,985.36	6,966.36	
CMW-6	12/16/13	17.70			6,985.36	6,967.66	
CMW-6	01/20/14	20.82			6,985.36	6,964.54	
CMW-6	02/10/14	21.50			6,985.36	6,963.86	
CMW-6	04/07/14	21.72			6,985.36	6,963.64	
CMW-6	07/14/14	21.81			6,985.36	6,963.55	
CMW-6	10/27/15	15.04			6,985.36	6,970.32	
CMW-6	04/07/16	20.59			6,985.36	6,964.77	
CMW-6	12/14/16				6,985.36		Well destroyed
MW-1	09/23/03						NAPL Sheen
MW-1	03/31/04						Well plugged and abandoned
MW-1R	04/03/04	31.13			6,982.74	6,951.61	
MW-1R	08/06/04	30.05			6,982.74	6,952.69	
MW-1R	11/02/04	30.03			6,982.74	6,952.71	
MW-1R	02/13/06	30.69			6,982.74	6,952.05	
MW-1R	06/02/06	31.19			6,982.74	6,951.55	
MW-1R	02/16/07	30.21			6,982.74	6,952.53	
MW-1R	05/23/07	27.51			6,982.74	6,955.23	
MW-1R	08/29/07	26.91			6,982.74	6,955.83	
MW-1R	11/15/07	26.85			6,982.74	6,955.89	
MW-1R	09/15/08	28.36			6,982.74	6,954.38	
MW-1R	12/19/08	28.65			6,982.74	6,954.09	
MW-1R	03/09/09	29.72			6,982.74	6,953.02	
MW-1R	05/22/09	30.46			6,982.74	6,952.28	
MW-1R	06/26/09	30.45			6,982.74	6,952.29	
MW-1R	07/10/09	30.43			6,982.74	6,952.31	
MW-1R	07/17/09	30.53			6,982.74	6,952.21	
MW-1R	07/20/09	30.41			6,982.74	6,952.33	
MW-1R	08/06/09	30.38			6,982.74	6,952.36	
MW-1R	08/18/09	30.36			6,982.74	6,952.38	
MW-1R	11/08/09	29.94			6,982.74	6,952.80	
MW-1R	03/23/10	29.71			6,982.74	6,953.03	
MW-1R	09/27/10				6,982.74		Dry
MW-1R	01/03/12				6,982.74		Dry
MW-1R	04/09/12	35.18			6,982.74	6,947.56	
MW-1R	07/16/12	34.55			6,982.74	6,948.19	
MW-1R	10/08/12	34.00			6,982.74	6,948.74	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	**Date**	**Depth to Water**	**Depth to NAPL**	**NAPL Thickness**	**Top of Casing Elevation**	**Groundwater Elevation**	**Notes**
MW-1R	01/07/13	33.17			6,982.74	6,949.57	
MW-1R	04/01/13	34.22			6,982.74	6,948.52	
MW-1R	06/24/13	33.40			6,982.74	6,949.34	
MW-1R	09/17/13	34.20			6,982.74	6,948.54	
MW-1R	10/10/13	32.90			6,982.74	6,949.84	
MW-1R	12/16/13	32.20			6,982.74	6,950.54	
MW-1R	01/20/14	32.08			6,982.74	6,950.66	
MW-1R	02/10/14	31.97			6,982.74	6,950.77	
MW-1R	04/09/14	32.27			6,982.74	6,950.47	
MW-1R	07/14/14	31.90			6,982.74	6,950.84	
MW-1R	09/24/14	30.67			6,982.74	6,952.07	
MW-1R	10/27/15	24.90			6,982.74	6,957.84	
MW-1R	04/05/16	28.61			6,982.74	6,954.13	
MW-1R	12/14/16	28.53			6,982.74	6,954.21	
MW-1R	08/14/17	28.77			6,982.74	6,953.97	
MW-1R	02/21/18	30.75			6,982.74	6,951.99	
MW-1R	08/09/18	31.54			6,982.74	6,951.20	
MW-1R	02/21/19	30.90			6,982.74	6,951.84	
MW-1R	09/24/19	29.96			6,982.74	6,952.78	
MW-1R	07/29/22	30.89			6,982.74	6,951.85	
MW-1R	11/17/22	30.24			6,982.74	6,952.50	
MW-2	09/23/03	28.87			6,980.28	6,951.41	
MW-2	09/23/03	28.87			6,980.28	6,951.41	
MW-2	04/03/04	29.06			6,980.28	6,951.22	
MW-2	08/06/04	28.15			6,980.28	6,952.13	
MW-2	11/02/04	27.79			6,980.28	6,952.49	
MW-2	02/13/06	28.00			6,980.28	6,952.28	
MW-2	06/02/06	28.64			6,980.28	6,951.64	
MW-2	02/16/07	28.50			6,980.28	6,951.78	
MW-2	05/23/07	28.12			6,980.28	6,952.16	
MW-2	08/29/07	27.83			6,980.28	6,952.45	
MW-2	11/15/07	28.06			6,980.28	6,952.22	
MW-2	09/15/08	27.99			6,980.28	6,952.29	
MW-2	12/19/08	27.90			6,980.28	6,952.38	
MW-2	03/09/09	28.04			6,980.28	6,952.24	
MW-2	05/22/09	28.57			6,980.28	6,951.71	
MW-2	06/26/09	28.58			6,980.28	6,951.70	
MW-2	07/10/09	28.50			6,980.28	6,951.78	
MW-2	07/17/09	28.59			6,980.28	6,951.69	
MW-2	07/20/09	28.48			6,980.28	6,951.80	
MW-2	08/06/09	28.45			6,980.28	6,951.83	
MW-2	08/18/09	28.46			6,980.28	6,951.82	
MW-2	11/08/09	28.16			6,980.28	6,952.12	
MW-2	03/23/10	25.12			6,980.28	6,955.16	
MW-2	09/27/10				6,980.28		Dry
MW-2	06/14/11				6,980.28		Dry
MW-2	01/03/12				6,980.28		Water in the sump
MW-2	04/09/12	29.80			6,980.28	6,950.48	
MW-2	07/16/12				6,980.28		Dry
MW-2	10/08/12	31.20			6,980.28	6,949.08	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
MW-2	01/07/13	30.96			6,980.28	6,949.32	
MW-2	04/01/13	30.88			6,980.28	6,949.40	
MW-2	06/24/13	30.80			6,980.28	6,949.48	
MW-2	09/17/13	30.20			6,980.28	6,950.08	
MW-2	12/16/13	29.52			6,980.28	6,950.76	
MW-2	01/20/14	29.62			6,980.28	6,950.66	
MW-2	02/10/14	29.66			6,980.28	6,950.62	
MW-2	04/07/14	29.79			6,980.28	6,950.49	
MW-2	07/14/14	29.26			6,980.28	6,951.02	
MW-2	10/26/15	25.91			6,980.28	6,954.37	
MW-2	04/07/16	27.20			6,980.28	6,953.08	
MW-2	12/14/16	27.93			6,980.28	6,952.35	
MW-2	08/14/17	27.79			6,980.28	6,952.49	
MW-2	02/21/18	28.48			6,980.28	6,951.80	
MW-2	08/08/18	29.00			6,980.28	6,951.28	
MW-2	02/21/19	28.64			6,980.28	6,951.64	
MW-3	04/03/04	32.50	29.47	3.03	6,981.91	6,951.68	
MW-3	08/06/04	30.85	28.65	2.20	6,981.91	6,952.71	
MW-3	11/02/04	31.27	28.73	2.54	6,981.91	6,952.55	
MW-3	06/02/05	29.54	28.47	1.07	6,981.91	6,953.17	
MW-3	06/08/05	29.92	28.36	1.56	6,981.91	6,953.16	
MW-3	06/14/05	30.00	28.39	1.61	6,981.91	6,953.12	
MW-3	06/16/05	29.51	28.55	0.96	6,981.91	6,953.12	
MW-3	06/21/05	29.93	28.48	1.45	6,981.91	6,953.07	
MW-3	06/24/05	30.02	28.45	1.57	6,981.91	6,953.07	
MW-3	06/28/05	29.80	28.56	1.24	6,981.91	6,953.04	
MW-3	07/01/05	29.55	28.70	0.85	6,981.91	6,953.00	
MW-3	07/07/05	29.85	28.66	1.19	6,981.91	6,952.95	
MW-3	07/14/05	29.93	28.71	1.22	6,981.91	6,952.90	
MW-3	07/28/05	29.73	28.95	0.78	6,981.91	6,952.77	
MW-3	08/12/05	30.29	28.92	1.37	6,981.91	6,952.65	
MW-3	08/25/05	30.12	29.08	1.04	6,981.91	6,952.57	
MW-3	09/02/05	30.03	29.18	0.85	6,981.91	6,952.52	
MW-3	09/09/05	30.02	29.20	0.82	6,981.91	6,952.51	
MW-3	09/21/05	30.45	29.13	1.32	6,981.91	6,952.45	
MW-3	10/14/05	31.14	28.98	2.16	6,981.91	6,952.39	
MW-3	11/03/05	31.08	29.03	2.05	6,981.91	6,952.37	
MW-3	12/02/05	31.54	29.02	2.52	6,981.91	6,952.26	
MW-3	12/28/05	31.84	29.09	2.75	6,981.91	6,952.13	
MW-3	02/13/06	32.25	29.23	3.02	6,981.91	6,951.93	
MW-3	04/05/06	32.62	29.40	3.22	6,981.91	6,951.71	
MW-3	05/17/06	32.92	29.51	3.41	6,981.91	6,951.55	
MW-3	06/02/06	32.99	29.56	3.43	6,981.91	6,951.49	
MW-3	06/07/06	33.00	29.56	3.44	6,981.91	6,951.49	
MW-3	08/04/06	32.30	29.35	2.95	6,981.91	6,951.82	
MW-3	08/18/06	31.81	29.22	2.59	6,981.91	6,952.04	
MW-3	09/01/06	31.28	29.00	2.28	6,981.91	6,952.34	
MW-3	09/08/06	30.99	28.87	2.12	6,981.91	6,952.51	
MW-3	09/18/06	30.67	28.71	1.96	6,981.91	6,952.71	
MW-3	09/22/06	30.51	29.67	0.84	6,981.91	6,952.03	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
MW-3	09/29/06	30.48	28.67	1.81	6,981.91	6,952.79	
MW-3	10/06/06	30.50	28.70	1.80	6,981.91	6,952.76	
MW-3	10/13/06	30.53	28.75	1.78	6,981.91	6,952.72	
MW-3	10/18/06	30.50	28.81	1.69	6,981.91	6,952.68	
MW-3	10/26/06	30.50	28.70	1.80	6,981.91	6,952.76	
MW-3	11/10/06	30.73	28.92	1.81	6,981.91	6,952.54	
MW-3	11/29/06	30.93	29.04	1.89	6,981.91	6,952.40	
MW-3	12/27/06	31.43	29.19	2.24	6,981.91	6,952.16	
MW-3	01/23/07	31.30	29.11	2.19	6,981.91	6,952.25	
MW-3	02/13/07	31.20	29.10	2.10	6,981.91	6,952.29	
MW-3	02/16/07	30.60	29.29	1.31	6,981.91	6,952.29	
MW-3	03/01/07	31.02	29.10	1.92	6,981.91	6,952.33	
MW-3	03/07/07	30.69	29.18	1.51	6,981.91	6,952.35	
MW-3	03/16/07	30.65	29.14	1.51	6,981.91	6,952.39	
MW-3	03/23/07	30.44	29.16	1.28	6,981.91	6,952.43	
MW-3	05/23/07	27.81			6,981.91	6,954.10	
MW-3	08/07/07	26.83	26.70	0.13	6,981.91	6,955.18	
MW-3	08/29/07	27.21	27.05	0.16	6,981.91	6,954.82	
MW-3	11/15/07	26.63			6,981.91	6,955.28	
MW-3	02/06/08	27.57	27.50	0.07	6,981.91	6,954.39	
MW-3	03/19/08	26.95			6,981.91	6,954.96	
MW-3	05/06/08	27.13	27.11	0.02	6,981.91	6,954.80	
MW-3	06/25/08	28.27	28.06	0.21	6,981.91	6,953.80	
MW-3	09/15/08	27.83	27.78	0.05	6,981.91	6,954.12	
MW-3	12/19/08	28.35	27.92	0.43	6,981.91	6,953.88	
MW-3	03/09/09	29.37	29.00	0.37	6,981.91	6,952.82	
MW-3	05/22/09	30.52	29.36	1.16	6,981.91	6,952.26	
MW-3	06/26/09	30.38	29.37	1.01	6,981.91	6,952.29	
MW-3	07/10/09				6,981.91		Well replaced with SVE-1
MW-4	02/13/06	31.18			6,983.24	6,952.06	
MW-4	06/02/06	31.70			6,983.24	6,951.54	
MW-4	02/16/07	30.71			6,983.24	6,952.53	
MW-4	05/23/07	28.36			6,983.24	6,954.88	
MW-4	08/29/07	27.72			6,983.24	6,955.52	
MW-4	11/15/07	27.73			6,983.24	6,955.51	
MW-4	09/15/08	29.13			6,983.24	6,954.11	
MW-4	12/19/08	29.38			6,983.24	6,953.86	
MW-4	03/09/09	30.31			6,983.24	6,952.93	
MW-4	05/22/09	31.00			6,983.24	6,952.24	
MW-4	06/26/09	30.96			6,983.24	6,952.28	
MW-4	07/10/09	30.95			6,983.24	6,952.29	
MW-4	07/17/09	31.03			6,983.24	6,952.21	
MW-4	07/20/09	30.91			6,983.24	6,952.33	
MW-4	08/06/09	30.90			6,983.24	6,952.34	
MW-4	08/18/09	30.87			6,983.24	6,952.37	
MW-4	03/23/10	30.17			6,983.24	6,953.07	
MW-4	09/27/10				6,983.24		Dry
MW-4	11/15/11				6,983.24		Dry
MW-4	01/03/12				6,983.24		Water in the sump
MW-4	04/09/12	35.70			6,983.24	6,947.54	NAPL Sheen

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
MW-4	07/16/12	35.00			6,983.24	6,948.24	
MW-4	10/08/12	34.47	34.40	0.07	6,983.24	6,948.82	
MW-4	01/07/13	33.92	33.81	0.11	6,983.24	6,949.40	
MW-4	04/01/13	34.03			6,983.24	6,949.21	
MW-4	06/24/13	33.10			6,983.24	6,950.14	
MW-4	09/17/13	34.78			6,983.24	6,948.46	
MW-4	10/10/13	33.40			6,983.24	6,949.84	
MW-4	12/16/13	32.80			6,983.24	6,950.44	
MW-4	01/20/14	32.60			6,983.24	6,950.64	
MW-4	02/10/14	32.57			6,983.24	6,950.67	
MW-4R	07/14/14	32.61			6,983.38	6,950.77	
MW-4R	09/24/14	31.83			6,983.38	6,951.55	
MW-4R	10/28/15	26.70			6,983.38	6,956.68	
MW-4R	04/06/16	29.59			6,983.38	6,953.79	
MW-4R	12/14/16	29.68			6,983.38	6,953.70	
MW-4R	08/14/17	29.57			6,983.38	6,953.81	
MW-4R	02/21/18	31.21			6,983.38	6,952.17	
MW-4R	08/09/18	32.24			6,983.38	6,951.14	
MW-4R	02/21/19	31.52			6,983.38	6,951.86	
MW-4R	09/24/19	30.81			6,983.38	6,952.57	
MW-4R	07/29/22	31.46			6,983.38	6,951.92	
MW-4R	11/17/22	30.87			6,983.38	6,952.51	
MW-5	02/21/06	31.52			6,983.37	6,951.85	
MW-5	06/02/06	31.88			6,983.37	6,951.49	
MW-5	02/16/07	31.34			6,983.37	6,952.03	
MW-5	05/23/07	30.47			6,983.37	6,952.90	
MW-5	08/29/07	29.75			6,983.37	6,953.62	
MW-5	11/15/07	29.72			6,983.37	6,953.65	
MW-5	09/15/08	30.13			6,983.37	6,953.24	
MW-5	12/19/08	30.24			6,983.37	6,953.13	
MW-5	03/09/09	31.01			6,983.37	6,952.36	
MW-5	05/22/09	31.33			6,983.37	6,952.04	
MW-5	06/26/09	31.26			6,983.37	6,952.11	
MW-5	07/10/09	31.26			6,983.37	6,952.11	
MW-5	07/17/09	31.37			6,983.37	6,952.00	
MW-5	07/20/09	31.24			6,983.37	6,952.13	
MW-5	08/06/09	31.22			6,983.37	6,952.15	
MW-5	08/17/09	31.23			6,983.37	6,952.14	
MW-5	11/08/09	31.07			6,983.37	6,952.30	
MW-5	03/23/10	30.55			6,983.37	6,952.82	
MW-5	09/27/10				6,983.37		Dry
MW-5	06/14/11				6,983.37		Dry
MW-5	10/03/11	39.54			6,983.37	6,943.83	
MW-5	01/03/12	37.21			6,983.37	6,946.16	
MW-5	04/09/12	35.85			6,983.37	6,947.52	
MW-5	07/16/12	35.18			6,983.37	6,948.19	
MW-5	10/08/12	34.60			6,983.37	6,948.77	
MW-5	01/07/13	34.12			6,983.37	6,949.25	
MW-5	04/01/13	34.00			6,983.37	6,949.37	
MW-5	06/24/13	34.01			6,983.37	6,949.36	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
MW-5	09/17/13	33.50			6,983.37	6,949.87	
MW-5	12/16/13	32.85			6,983.37	6,950.52	
MW-5	01/20/14	32.75			6,983.37	6,950.62	
MW-5	02/10/14	32.71			6,983.37	6,950.66	
MW-5	04/09/14	32.90			6,983.37	6,950.47	
MW-5	07/14/14	32.50			6,983.37	6,950.87	
MW-5	10/28/15	27.40			6,983.37	6,955.97	
MW-5	04/05/16	30.16			6,983.37	6,953.21	
MW-5	12/16/16	31.02			6,983.37	6,952.35	
MW-5	08/14/17	30.56			6,983.37	6,952.81	
MW-5	02/21/18	31.76			6,983.37	6,951.61	
MW-5	08/09/18	32.26			6,983.37	6,951.11	
MW-5	02/21/19	31.90			6,983.37	6,951.47	
MW-6	07/17/09	30.61			6,982.64	6,952.03	NAPL Sheen
MW-6	07/20/09	30.51			6,982.64	6,952.13	
MW-6	08/06/09	30.58	**30.47**	**0.11**	6,982.64	6,952.14	
MW-6	08/17/09	30.59	**30.46**	**0.13**	6,982.64	6,952.15	
MW-6	09/14/09	30.65	**30.48**	**0.17**	6,982.64	6,952.12	
MW-6	11/08/09	30.36	**30.31**	**0.05**	6,982.64	6,952.32	
MW-6	11/13/09	30.30	**30.27**	**0.03**	6,982.64	6,952.36	
MW-6	03/23/10	29.80			6,982.64	6,952.84	
MW-6	09/27/10				6,982.64		Dry
MW-6	07/18/11				6,982.64		Dry
MW-6	10/03/11	38.90			6,982.64	6,943.74	
MW-6	01/03/12	36.40			6,982.64	6,946.24	
MW-6	04/09/12	35.06			6,982.64	6,947.58	
MW-6	07/16/12	34.40			6,982.64	6,948.24	
MW-6	10/08/12	33.81			6,982.64	6,948.83	
MW-6	01/07/13	33.36			6,982.64	6,949.28	
MW-6	04/01/13	33.33			6,982.64	6,949.31	
MW-6	06/24/13	33.30			6,982.64	6,949.34	
MW-6	07/25/13	33.20			6,982.64	6,949.44	
MW-6	08/08/13	33.10			6,982.64	6,949.54	
MW-6	08/22/13	33.10			6,982.64	6,949.54	
MW-6	09/17/13	33.10			6,982.64	6,949.54	
MW-6	09/26/13	32.80			6,982.64	6,949.84	
MW-6	10/10/13	32.70			6,982.64	6,949.94	
MW-6	10/24/13	32.60			6,982.64	6,950.04	
MW-6	11/14/13	32.35			6,982.64	6,950.29	
MW-6	11/26/13	32.51			6,982.64	6,950.13	
MW-6	12/16/13	32.20			6,982.64	6,950.44	
MW-6	01/20/14	32.10			6,982.64	6,950.54	
MW-6	02/10/14	32.08			6,982.64	6,950.56	
MW-6	04/09/14	33.29			6,982.64	6,949.35	
MW-6	07/14/14	31.79			6,982.64	6,950.85	
MW-6	09/25/14	31.21			6,982.64	6,951.43	
MW-6	10/28/15	26.73			6,982.64	6,955.91	
MW-6	04/05/16	29.56			6,982.64	6,953.08	
MW-6	12/14/16	30.30			6,982.64	6,952.34	
MW-6	08/14/17	29.98			6,982.64	6,952.66	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
MW-6	08/09/18	31.33			6,982.64	6,951.31	
MW-6	02/21/19	30.94			6,982.64	6,951.70	
MW-6	09/23/19	30.10			6,982.64	6,952.54	
MW-6	08/01/22	30.87			6,982.64	6,951.77	
MW-6	11/16/22	30.57			6,982.64	6,952.07	
MW-7	07/17/09	31.65			6,983.66	6,952.01	
MW-7	07/20/09	31.53			6,983.66	6,952.13	
MW-7	08/06/09	31.52			6,983.66	6,952.14	
MW-7	08/17/09	31.52			6,983.66	6,952.14	
MW-7	11/08/09	31.40			6,983.66	6,952.26	
MW-7	03/23/10	30.82			6,983.66	6,952.84	
MW-7	09/27/10				6,983.66		Dry
MW-7	06/14/11				6,983.66		Dry
MW-7	10/03/11				6,983.66		Water in the sump
MW-7	01/03/12	37.28			6,983.66	6,946.38	
MW-7	04/09/12	35.93			6,983.66	6,947.73	
MW-7	07/16/12	35.38			6,983.66	6,948.28	
MW-7	10/08/12	34.85			6,983.66	6,948.81	
MW-7	01/07/13	34.45			6,983.66	6,949.21	
MW-7	04/01/13	34.30			6,983.66	6,949.36	
MW-7	06/24/13	34.25			6,983.66	6,949.41	
MW-7	09/17/13	33.85			6,983.66	6,949.81	
MW-7	12/16/13	33.40			6,983.66	6,950.26	
MW-7	01/20/14	33.52			6,983.66	6,950.14	
MW-7	02/10/14	33.09			6,983.66	6,950.57	
MW-7	04/09/14	33.30			6,983.66	6,950.36	
MW-7	07/14/14	32.81			6,983.66	6,950.85	
MW-7	10/28/15	28.10			6,983.66	6,955.56	
MW-7	04/05/16	30.45			6,983.66	6,953.21	
MW-7	12/14/16	31.15			6,983.66	6,952.51	
MW-7	08/14/17	31.38			6,983.66	6,952.28	
MW-7	02/20/18	31.96			6,983.66	6,951.70	
MW-7	08/09/18	32.54			6,983.66	6,951.12	
MW-7	02/21/19	32.13			6,983.66	6,951.53	
MW-8	07/17/09	32.39			6,984.36	6,951.97	
MW-8	07/20/09	32.28			6,984.36	6,952.08	
MW-8	08/06/09	32.28			6,984.36	6,952.08	
MW-8	08/17/09	32.26			6,984.36	6,952.10	
MW-8	11/08/09	32.17			6,984.36	6,952.19	
MW-8	03/23/10	31.67			6,984.36	6,952.69	
MW-8	09/27/10	39.94			6,984.36	6,944.42	
MW-8	12/06/10				6,984.36		Dry
MW-8	06/14/11				6,984.36		Dry
MW-8	10/03/11				6,984.36		Water in the sump
MW-8	01/03/12	37.78			6,984.36	6,946.58	
MW-8	04/09/12	36.60			6,984.36	6,947.76	
MW-8	07/16/12	36.00			6,984.36	6,948.36	
MW-8	10/08/12	35.55			6,984.36	6,948.81	
MW-8	01/07/13	35.17			6,984.36	6,949.19	
MW-8	04/01/13	35.08			6,984.36	6,949.28	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	**Date**	**Depth to Water**	**Depth to NAPL**	**NAPL Thickness**	**Top of Casing Elevation**	**Groundwater Elevation**	**Notes**
MW-8	06/24/13	35.00			6,984.36	6,949.36	
MW-8	09/17/13	34.50			6,984.36	6,949.86	
MW-8	12/16/13	34.09			6,984.36	6,950.27	
MW-8	01/20/14	34.20			6,984.36	6,950.16	
MW-8	02/10/14	33.96			6,984.36	6,950.40	
MW-8	04/08/14	34.21			6,984.36	6,950.15	
MW-8	07/14/14	33.51			6,984.36	6,950.85	
MW-8	10/28/15				6,984.36		Blocked
MW-8	04/06/16	31.68			6,984.36	6,952.68	
MW-8	12/14/16	32.33			6,984.36	6,952.03	
MW-8	08/14/17	32.41			6,984.36	6,951.95	
MW-8	02/20/18	32.94			6,984.36	6,951.42	
MW-8	08/08/18	33.36			6,984.36	6,951.00	
MW-8	02/21/19	33.14			6,984.36	6,951.22	
MW-9	07/21/09	33.86			6,985.90	6,952.04	
MW-9	03/24/10	33.27			6,985.90	6,952.63	
MW-9	09/27/10	41.65			6,985.90	6,944.25	
MW-9	12/06/10				6,985.90		Dry
MW-9	06/14/11				6,985.90		Dry
MW-9	10/03/11	41.58			6,985.90	6,944.32	
MW-9	01/03/12	39.24			6,985.90	6,946.66	
MW-9	04/09/12	38.07			6,985.90	6,947.83	
MW-9	07/16/12	37.48			6,985.90	6,948.42	
MW-9	10/08/12	36.98			6,985.90	6,948.92	
MW-9	01/07/13	36.69			6,985.90	6,949.21	
MW-9	04/01/13	36.50			6,985.90	6,949.40	
MW-9	06/24/13	36.54			6,985.90	6,949.36	
MW-9	09/17/13	36.00			6,985.90	6,949.90	
MW-9	12/16/13	35.65			6,985.90	6,950.25	
MW-9	01/20/14	35.50			6,985.90	6,950.40	
MW-9	02/10/14	35.56			6,985.90	6,950.34	
MW-9	04/07/14	35.74			6,985.90	6,950.16	
MW-9	07/14/14	35.06			6,985.90	6,950.84	
MW-9	10/26/15	31.36			6,985.90	6,954.54	
MW-9	04/07/16	33.23			6,985.90	6,952.67	
MW-9	12/14/16	33.31			6,985.90	6,952.59	
MW-9	08/14/17	33.39			6,985.90	6,952.51	
MW-9	02/20/18	33.91			6,985.90	6,951.99	
MW-9	08/08/18	34.28			6,985.90	6,951.62	
MW-9	02/21/19	34.07			6,985.90	6,951.83	
MW-10	08/03/09	32.17			6,984.27	6,952.10	
MW-10	03/23/10	31.68			6,984.27	6,952.59	
MW-10	09/27/10	39.11			6,984.27	6,945.16	
MW-10	10/25/10	40.28			6,984.27	6,943.99	
MW-10	12/06/10	40.95			6,984.27	6,943.32	
MW-10	03/09/11	41.03			6,984.27	6,943.24	
MW-10	06/14/11	41.16			6,984.27	6,943.11	
MW-10	10/03/11	39.43			6,984.27	6,944.84	
MW-10	01/03/12	37.50			6,984.27	6,946.77	
MW-10	04/09/12	36.38			6,984.27	6,947.89	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
MW-10	07/16/12	35.75			6,984.27	6,948.52	
MW-10	10/08/12	34.82			6,984.27	6,949.45	
MW-10	01/07/13				6,984.27		Not Accessible
MW-10	04/01/13	34.84			6,984.27	6,949.43	
MW-10	06/24/13	34.85			6,984.27	6,949.42	
MW-10	09/17/13	34.35			6,984.27	6,949.92	
MW-10	12/16/13	33.50			6,984.27	6,950.77	
MW-10	01/20/14	33.75			6,984.27	6,950.52	
MW-10	02/10/14	33.52			6,984.27	6,950.75	
MW-10	04/07/14	34.07			6,984.27	6,950.20	
MW-10	07/14/14	33.42			6,984.27	6,950.85	
MW-10	10/26/15	29.52			6,984.27	6,954.75	
MW-10	04/07/16	31.59			6,984.27	6,952.68	
MW-10	12/14/16	32.23			6,984.27	6,952.04	
MW-10	08/14/17	32.38			6,984.27	6,951.89	
MW-10	02/20/18	32.83			6,984.27	6,951.44	
MW-10	08/08/18	33.19			6,984.27	6,951.08	
MW-10	02/22/19	32.98			6,984.27	6,951.29	
MW-11	10/31/09	26.24			6,978.14	6,951.90	
MW-11	11/07/09	26.12			6,978.14	6,952.02	
MW-11	03/23/10	25.61			6,978.14	6,952.53	
MW-11	09/27/10		33.04	1.66	6,978.14	6,944.69	
MW-11	10/25/10				6,978.14		Dry
MW-11	06/14/11				6,978.14		Dry
MW-11	10/03/11				6,978.14		Water in the sump
MW-11	01/03/12	31.57			6,978.14	6,946.57	
MW-11	04/09/12	30.60			6,978.14	6,947.54	
MW-11	07/16/12	29.90			6,978.14	6,948.24	
MW-11	11/08/12	29.22			6,978.14	6,948.92	
MW-11	01/07/13	29.02			6,978.14	6,949.12	
MW-11	04/01/13	28.90			6,978.14	6,949.24	
MW-11	06/24/13	28.63			6,978.14	6,949.51	
MW-11	09/17/13	28.30			6,978.14	6,949.84	
MW-11	10/10/13	28.20			6,978.14	6,949.94	
MW-11	12/16/13	27.90			6,978.14	6,950.24	
MW-11	01/20/14	27.80			6,978.14	6,950.34	
MW-11	02/10/14	27.80			6,978.14	6,950.34	
MW-11	04/07/14	28.03			6,978.14	6,950.11	
MW-11	07/14/14	27.31			6,978.14	6,950.83	
MW-11	09/24/14	27.19			6,978.14	6,950.95	
MW-11	10/26/15	23.86			6,978.14	6,954.28	
MW-11	04/04/16	25.62			6,978.14	6,952.52	
MW-11	12/14/16	26.16			6,978.14	6,951.98	
MW-11	08/14/17	26.34			6,978.14	6,951.80	
MW-11	02/19/18	26.65			6,978.14	6,951.49	
MW-11	08/08/18	27.11			6,978.14	6,951.03	
MW-11	02/20/19	27.00			6,978.14	6,951.14	
MW-11	09/23/19	26.02			6,978.14	6,952.12	
MW-11	07/29/22	26.80			6,978.14	6,951.34	
MW-11	11/14/22	25.41			6,978.14	6,952.73	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
MW-12	10/24/09	26.98			6,978.97	6,951.99	
MW-12	11/07/09	26.92			6,978.97	6,952.05	
MW-12	03/23/10	26.44			6,978.97	6,952.53	
MW-12	10/25/10				6,978.97		Dry
MW-12	10/03/11				6,978.97		Dry
MW-12	01/03/12	32.38			6,978.97	6,946.59	
MW-12	04/09/12	31.32			6,978.97	6,947.65	
MW-12	07/16/12	30.68			6,978.97	6,948.29	
MW-12	10/08/12	30.10			6,978.97	6,948.87	
MW-12	01/07/13	29.81			6,978.97	6,949.16	
MW-12	04/01/13	29.68			6,978.97	6,949.29	
MW-12	06/24/13	29.55			6,978.97	6,949.42	
MW-12	09/17/13	29.11			6,978.97	6,949.86	
MW-12	12/17/13	28.80			6,978.97	6,950.17	
MW-12	01/20/14	28.60			6,978.97	6,950.37	
MW-12	02/10/14	28.60			6,978.97	6,950.37	
MW-12	04/07/14	28.81			6,978.97	6,950.16	
MW-12	07/14/14	28.12			6,978.97	6,950.85	
MW-12	10/26/15	24.57			6,978.97	6,954.40	
MW-12	04/04/16	26.36			6,978.97	6,952.61	
MW-12	12/14/16	26.95			6,978.97	6,952.02	
MW-12	08/14/17	27.11			6,978.97	6,951.86	
MW-12	02/19/18	27.65			6,978.97	6,951.32	
MW-12	08/08/18	27.92			6,978.97	6,951.05	
MW-12	02/21/19	27.79			6,978.97	6,951.18	
MW-13	03/09/11	36.15			6,977.42	6,941.27	
MW-13	06/14/11	35.10			6,977.42	6,942.32	
MW-13	10/03/11	32.99			6,977.42	6,944.43	
MW-13	01/03/12	30.54			6,977.42	6,946.88	
MW-13	04/09/12	29.59			6,977.42	6,947.83	
MW-13	07/16/12	29.00			6,977.42	6,948.42	
MW-13	10/08/12	28.50			6,977.42	6,948.92	
MW-13	01/07/13	28.20			6,977.42	6,949.22	
MW-13	04/01/13	28.00			6,977.42	6,949.42	
MW-13	06/24/13	27.96			6,977.42	6,949.46	
MW-13	09/17/13	27.50			6,977.42	6,949.92	
MW-13	10/10/13	27.40			6,977.42	6,950.02	
MW-13	12/16/13	27.09			6,977.42	6,950.33	
MW-13	01/20/14	27.10			6,977.42	6,950.32	
MW-13	02/10/14	26.87			6,977.42	6,950.55	
MW-13	04/07/14	27.26			6,977.42	6,950.16	
MW-13	07/14/14	26.55			6,977.42	6,950.87	
MW-13	09/24/14	26.46			6,977.42	6,950.96	
MW-13	10/26/15	23.17			6,977.42	6,954.25	
MW-13	04/04/16	24.89			6,977.42	6,952.53	
MW-13	12/14/16	25.45			6,977.42	6,951.97	
MW-13	08/14/17	25.50			6,977.42	6,951.92	
MW-13	02/19/18	25.80			6,977.42	6,951.62	
MW-13	08/08/18	26.37			6,977.42	6,951.05	
MW-13	02/20/19	26.24			6,977.42	6,951.18	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
MW-14	03/09/11	35.85			6,978.05	6,942.20	
MW-14	06/14/11	36.08			6,978.05	6,941.97	
MW-14	10/03/11	33.63			6,978.05	6,944.42	
MW-14	01/03/12	31.10			6,978.05	6,946.95	
MW-14	04/09/12	29.91			6,978.05	6,948.14	
MW-14	07/16/12	29.38			6,978.05	6,948.67	
MW-14	10/08/12	29.14			6,978.05	6,948.91	
MW-14	01/07/13	28.81			6,978.05	6,949.24	
MW-14	04/01/13	28.71			6,978.05	6,949.34	
MW-14	06/24/13	28.62			6,978.05	6,949.43	
MW-14	09/17/13	28.10			6,978.05	6,949.95	
MW-14	12/16/13	27.80			6,978.05	6,950.25	
MW-14	01/20/14	27.69			6,978.05	6,950.36	
MW-14	02/10/14	27.66			6,978.05	6,950.39	
MW-14	04/07/14	27.86			6,978.05	6,950.19	
MW-14	07/14/14	27.17			6,978.05	6,950.88	
MW-14	09/24/14	27.08			6,978.05	6,950.97	
MW-14	10/26/15	23.81			6,978.05	6,954.24	
MW-14	04/04/16	25.50			6,978.05	6,952.55	
MW-14	12/14/16	26.04			6,978.05	6,952.01	
MW-14	08/14/17	26.15			6,978.05	6,951.90	
MW-14	02/19/18	26.46			6,978.05	6,951.59	
MW-14	08/08/18	26.96			6,978.05	6,951.09	
MW-14	02/20/19	26.86			6,978.05	6,951.19	
MW-15	03/09/11	36.25			6,977.43	6,941.18	
MW-15	05/09/11	37.26			6,977.43	6,940.17	
MW-15	06/14/11	36.81			6,977.43	6,940.62	
MW-15	10/03/11	33.00			6,977.43	6,944.43	
MW-15	01/03/12	30.92			6,977.43	6,946.51	
MW-15	04/09/12	29.60			6,977.43	6,947.83	
MW-15	07/16/12	29.00			6,977.43	6,948.43	
MW-15	10/08/12	28.52			6,977.43	6,948.91	
MW-15	01/07/13	28.18			6,977.43	6,949.25	
MW-15	04/01/13	28.10			6,977.43	6,949.33	
MW-15	06/24/13	27.98			6,977.43	6,949.45	
MW-15	09/17/13	27.50			6,977.43	6,949.93	
MW-15	12/16/13	27.13			6,977.43	6,950.30	
MW-15	01/20/14	27.05			6,977.43	6,950.38	
MW-15	02/10/14	27.00			6,977.43	6,950.43	
MW-15	04/07/14	27.22			6,977.43	6,950.21	
MW-15	07/14/14	26.55			6,977.43	6,950.88	
MW-15	10/26/15	23.22			6,977.43	6,954.21	
MW-15	04/04/16	24.87			6,977.43	6,952.56	
MW-15	12/14/16	25.42			6,977.43	6,952.01	
MW-15	08/14/17	25.52			6,977.43	6,951.91	
MW-15	02/19/18	25.92			6,977.43	6,951.51	
MW-15	08/08/18	26.35			6,977.43	6,951.08	
MW-15	02/20/19	26.26			6,977.43	6,951.17	
MW-15	09/24/19	25.29			6,977.43	6,952.14	
MW-15	07/29/22	26.03			6,977.43	6,951.40	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
MW-15	11/14/22	25.67			6,977.43	6,951.76	
MW-16	08/11/14	21.59			6,972.49	6,950.90	
MW-16	10/26/15	18.32			6,972.49	6,954.17	
MW-16	04/07/16	19.97			6,972.49	6,952.52	
MW-16	12/14/16				6,972.49		Paved Over
MW-17	08/11/14	26.48			6,977.37	6,950.89	
MW-17	10/26/15	23.04			6,977.37	6,954.33	
MW-17	04/04/16	24.68			6,977.37	6,952.69	
MW-17	12/14/16	25.34			6,977.37	6,952.03	
MW-17	08/14/17	25.47			6,977.37	6,951.90	
MW-17	02/19/18	25.82			6,977.37	6,951.55	
MW-17	08/08/18	26.25			6,977.37	6,951.12	
MW-17	02/20/19	26.16			6,977.37	6,951.21	
MW-18	08/11/14	28.12			6,979.04	6,950.92	
MW-18	09/24/14	27.90			6,979.04	6,951.14	
MW-18	10/26/15	24.30			6,979.04	6,954.74	
MW-18	04/06/16	26.14			6,979.04	6,952.90	
MW-18	12/14/16	26.45			6,979.04	6,952.59	
MW-18	08/15/17	26.83			6,979.04	6,952.21	
MW-18	02/21/18	27.57			6,979.04	6,951.47	
MW-18	08/09/18	27.70			6,979.04	6,951.34	
MW-18	02/22/19	27.60			6,979.04	6,951.44	
MW-19	08/11/14	29.21			6,979.96	6,950.75	
MW-19	10/26/15	25.76			6,979.96	6,954.20	
MW-19	04/07/16	27.15			6,979.96	6,952.81	
MW-19	12/14/16	27.81			6,979.96	6,952.15	
MW-19	08/14/17	27.69			6,979.96	6,952.27	
MW-19	02/21/18	28.41			6,979.96	6,951.55	
MW-19	08/08/18	28.90			6,979.96	6,951.06	
MW-19	02/22/19	28.59			6,979.96	6,951.37	
MW-20	08/11/14	30.31			6,981.70	6,951.39	
MW-20	09/24/14	30.28			6,981.70	6,951.42	
MW-20	10/26/15	26.59			6,981.70	6,955.11	
MW-20	04/05/16	27.44			6,981.70	6,954.26	
MW-20	12/14/16	28.40			6,981.70	6,953.30	
MW-20	08/14/17	27.16			6,981.70	6,954.54	
MW-20	02/21/18	29.03			6,981.70	6,952.67	
MW-20	08/09/18	30.05			6,981.70	6,951.65	
MW-20	02/21/19	29.78			6,981.70	6,951.92	
SFCMW-01	04/22/09	32.85	31.86	0.99	6,983.72	6,951.61	
SFCMW-01	04/28/09	32.81	31.59	1.22	6,983.72	6,951.83	
SFCMW-01	05/11/09	32.97	31.34	1.63	6,983.72	6,951.97	
SFCMW-01	06/26/09	33.23	31.13	2.10	6,983.72	6,952.07	
SFCMW-01	06/30/09	33.21	31.12	2.09	6,983.72	6,952.08	
SFCMW-01	07/02/09	33.21	31.16	2.05	6,983.72	6,952.05	
SFCMW-01	07/06/09	32.13	31.49	0.64	6,983.72	6,952.07	
SFCMW-01	07/10/09	31.63	31.59	0.04	6,983.72	6,952.12	
SFCMW-01	07/17/09	31.78	31.54	0.24	6,983.72	6,952.12	
SFCMW-01	07/24/09	31.61	31.60	0.01	6,983.72	6,952.12	
SFCMW-01	07/27/09	31.85	31.55	0.30	6,983.72	6,952.10	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
SFCMW-01	07/31/09	31.61	31.59	0.02	6,983.72	6,952.13	
SFCMW-01	08/04/09	31.62	31.60	0.02	6,983.72	6,952.12	
SFCMW-01	08/07/09	31.79	31.52	0.27	6,983.72	6,952.13	
SFCMW-01	08/11/09	31.62	31.60	0.02	6,983.72	6,952.12	
SFCMW-01	08/14/09	31.62	31.60	0.02	6,983.72	6,952.12	
SFCMW-01	08/18/09	31.62	31.59	0.03	6,983.72	6,952.12	
SFCMW-01	08/21/09	31.61	31.59	0.02	6,983.72	6,952.13	
SFCMW-01	03/23/10	31.06	30.73	0.33	6,983.72	6,952.91	
SFCMW-01	10/03/11	38.31			6,982.15	6,943.84	NAPL Sheen
SFCMW-01	01/03/12	35.93			6,982.15	6,946.22	
SFCMW-01	04/09/12	24.66			6,982.15	6,957.49	
SFCMW-01	07/16/12	34.07			6,982.15	6,948.08	
SFCMW-01	10/08/12	33.52			6,982.15	6,948.63	
SFCMW-01	01/07/13	33.05			6,982.26	6,949.21	
SFCMW-01	01/07/13	33.08			6,982.26	6,949.18	
SFCMW-01	06/24/13	33.06			6,982.26	6,949.20	
SFCMW-01	07/20/13	32.79			6,982.26	6,949.47	
SFCMW-01	07/25/13	32.85			6,982.26	6,949.41	
SFCMW-01	08/08/13	32.70			6,982.26	6,949.56	
SFCMW-01	08/22/13	32.66			6,982.26	6,949.60	
SFCMW-01	09/17/13	32.45			6,982.26	6,949.81	
SFCMW-01	09/26/13	32.39			6,982.26	6,949.87	
SFCMW-01	10/10/13	32.25			6,982.26	6,950.01	
SFCMW-01	10/24/13	32.20			6,982.26	6,950.06	
SFCMW-01	11/07/13	32.20			6,982.26	6,950.06	
SFCMW-01	11/14/13	31.99			6,982.26	6,950.27	
SFCMW-01	11/26/13	32.35			6,982.26	6,949.91	
SFCMW-01	12/16/13	31.95			6,982.26	6,950.31	
SFCMW-01	01/20/14	31.88			6,982.26	6,950.38	
SFCMW-01	02/10/14	31.82			6,982.26	6,950.44	
SFCMW-01	04/09/14	32.02			6,982.26	6,950.24	
SFCMW-01	07/17/14	31.48			6,982.26	6,950.78	
SFCMW-01	09/25/14	31.11			6,982.26	6,951.15	
SFCMW-01	10/28/15	26.65			6,982.26	6,955.61	
SFCMW-01	04/05/16	29.34			6,982.26	6,952.92	
SFCMW-01	12/14/16	30.10			6,982.26	6,952.16	
SFCMW-01	08/14/17	30.23			6,982.26	6,952.03	
SFCMW-01	02/20/18	30.77			6,982.26	6,951.49	
SFCMW-01	08/09/18	31.26			6,982.26	6,951.00	
SFCMW-01	02/21/19	30.97			6,982.26	6,951.29	
SFCMW-01	09/23/19	29.99			6,982.26	6,952.27	
SFCMW-01	08/01/22	30.87			6,982.26	6,951.39	
SFCMW-01	11/15/22	30.50			6,982.26	6,951.76	
SFCMW-02	04/22/09	33.12	32.87	0.25	6,984.45	6,951.52	
SFCMW-02	04/28/09	32.88	32.55	0.33	6,984.45	6,951.82	
SFCMW-02	05/11/09	32.79	32.40	0.39	6,984.45	6,951.95	
SFCMW-02	06/26/09	32.86	32.24	0.62	6,984.45	6,952.06	
SFCMW-02	06/30/09	32.89	32.21	0.68	6,984.45	6,952.07	
SFCMW-02	07/10/09	32.80	32.20	0.60	6,984.45	6,952.10	
SFCMW-02	07/17/09	32.71	32.23	0.48	6,984.45	6,952.10	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
SFCMW-02	07/21/09	32.71	32.23	0.48	6,984.45	6,952.10	
SFCMW-02	07/24/09	32.61	32.25	0.36	6,984.45	6,952.11	
SFCMW-02	07/27/09	32.59	32.26	0.33	6,984.45	6,952.11	
SFCMW-02	07/31/09	32.54	32.27	0.27	6,984.45	6,952.11	
SFCMW-02	08/07/09	32.42	32.28	0.14	6,984.45	6,952.14	
SFCMW-02	08/14/09	32.40	32.30	0.10	6,984.45	6,952.13	
SFCMW-02	08/21/09	32.36	32.31	0.05	6,984.45	6,952.13	
SFCMW-02	03/23/10	31.62	31.52	0.10	6,984.45	6,952.91	
SFCMW-02	10/03/11	38.60			6,984.45	6,945.85	
SFCMW-02	01/03/12	36.27			6,984.45	6,948.18	
SFCMW-02	04/09/12	35.00			6,984.45	6,949.45	
SFCMW-02	07/16/12	34.35			6,984.45	6,950.10	
SFCMW-02	10/08/12	33.77			6,984.45	6,950.68	
SFCMW-02	01/07/13	33.38			6,982.50	6,949.12	
SFCMW-02	04/01/13	33.30			6,982.50	6,949.20	
SFCMW-02	06/24/13	33.20			6,982.50	6,949.30	
SFCMW-02	09/17/13	32.65			6,982.50	6,949.85	
SFCMW-02	12/16/13	32.25			6,982.50	6,950.25	
SFCMW-02	01/20/14	32.10			6,982.50	6,950.40	
SFCMW-02	02/10/14	32.08			6,982.50	6,950.42	
SFCMW-02	04/09/14	32.29			6,982.50	6,950.21	
SFCMW-02	07/14/14	31.73			6,982.50	6,950.77	
SFCMW-02	09/26/14	31.43			6,982.50	6,951.07	
SFCMW-02	10/28/15	27.02			6,982.50	6,955.48	
SFCMW-02	04/05/16	29.58			6,982.50	6,952.92	
SFCMW-02	12/14/16	30.35			6,982.50	6,952.15	
SFCMW-02	08/14/17	30.51			6,982.50	6,951.99	
SFCMW-02	02/20/18	30.97			6,982.50	6,951.53	
SFCMW-02	08/09/18	31.46			6,982.50	6,951.04	
SFCMW-02	02/21/19	31.22			6,982.50	6,951.28	
SFCMW-02	10/25/19	30.02			6,982.50	6,952.48	
SFCMW-02	08/01/22	31.10			6,982.50	6,951.40	
SFCMW-02	11/15/22	30.70			6,982.50	6,951.80	
SFCMW-03	04/22/09	33.52	33.47	0.05	6,985.01	6,951.53	
SFCMW-03	04/28/09	33.31			6,985.01	6,951.70	
SFCMW-03	05/11/09	33.13	33.08	0.05	6,985.01	6,951.92	
SFCMW-03	06/26/09	32.96	32.95	0.01	6,985.01	6,952.06	
SFCMW-03	06/30/09	33.02	32.92	0.10	6,985.01	6,952.07	
SFCMW-03	07/10/09	33.02	32.91	0.11	6,985.01	6,952.07	
SFCMW-03	07/17/09	33.03	32.91	0.12	6,985.01	6,952.07	
SFCMW-03	07/24/09	33.03	32.91	0.12	6,985.01	6,952.07	
SFCMW-03	07/31/09	33.02	32.91	0.11	6,985.01	6,952.07	
SFCMW-03	08/07/09	33.02	32.89	0.13	6,985.01	6,952.09	
SFCMW-03	08/14/09	33.03	32.89	0.14	6,985.01	6,952.09	
SFCMW-03	08/21/09	33.05	32.90	0.15	6,985.01	6,952.07	
SFCMW-03	03/23/10	32.41	32.21	0.20	6,985.01	6,952.75	
SFCMW-03	10/03/11	39.74			6,985.01	6,945.27	
SFCMW-03	01/03/12	37.40			6,985.01	6,947.61	
SFCMW-03	04/09/12	36.09			6,983.67	6,947.58	
SFCMW-03	07/16/12	35.45			6,983.67	6,948.22	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
SFCMW-03	10/08/12	35.12			6,983.67	6,948.55	
SFCMW-03	01/07/13	34.18			6,983.74	6,949.56	
SFCMW-03	04/01/13	34.19			6,983.74	6,949.55	
SFCMW-03	06/24/13	34.40			6,983.74	6,949.34	
SFCMW-03	09/17/13	33.90			6,983.74	6,949.84	
SFCMW-03	12/16/13	33.35			6,983.74	6,950.39	
SFCMW-03	01/20/14	33.37			6,983.74	6,950.37	
SFCMW-03	02/10/14	33.32			6,983.74	6,950.42	
SFCMW-03	04/09/14	33.55			6,983.74	6,950.19	
SFCMW-03	07/14/14	32.96			6,983.74	6,950.78	
SFCMW-03	09/25/14	32.71			6,983.74	6,951.03	
SFCMW-03	10/27/15	28.84			6,983.74	6,954.90	
SFCMW-03	04/05/16	29.86			6,983.74	6,953.88	
SFCMW-03	12/14/16	31.62			6,983.74	6,952.12	
SFCMW-03	08/14/17	31.81			6,983.74	6,951.93	
SFCMW-03	02/20/18	32.24			6,983.74	6,951.50	
SFCMW-03	08/09/18	31.48			6,983.74	6,952.26	
SFCMW-03	02/21/19	32.45			6,983.74	6,951.29	
SFCMW-03	10/25/19	31.19			6,983.74	6,952.55	
SFCMW-03	08/02/22	32.25			6,983.74	6,951.49	
SFCMW-03	11/15/22	32.90			6,983.74	6,950.84	
SFCMW-04	04/22/09	33.27	33.02	0.25	6,984.65	6,951.57	
SFCMW-04	04/28/09	33.02	32.81	0.21	6,984.65	6,951.79	
SFCMW-04	05/11/09	32.87	32.67	0.20	6,984.65	6,951.93	
SFCMW-04	06/26/09	32.87	32.52	0.35	6,984.65	6,952.04	
SFCMW-04	06/30/09	33.00	32.48	0.52	6,984.65	6,952.04	
SFCMW-04	07/10/09	32.77	32.49	0.28	6,984.65	6,952.09	
SFCMW-04	07/17/09	32.63	32.53	0.10	6,984.65	6,952.10	
SFCMW-04	07/21/09	32.63	32.55	0.08	6,984.65	6,952.08	
SFCMW-04	07/24/09	32.60	32.55	0.05	6,984.65	6,952.09	
SFCMW-04	07/27/09	32.59	32.54	0.05	6,984.65	6,952.10	
SFCMW-04	07/31/09	32.59	32.54	0.05	6,984.65	6,952.10	
SFCMW-04	08/07/09	32.56	32.53	0.03	6,984.65	6,952.11	
SFCMW-04	08/14/09	32.61	32.54	0.07	6,984.65	6,952.09	
SFCMW-04	08/21/09	32.65	32.53	0.12	6,984.65	6,952.09	
SFCMW-04	03/23/10	32.08	31.97	0.11	6,984.65	6,952.65	
SFCMW-04	10/03/11				6,984.65		Dry - presumed destroyed
SFCMW-04	01/03/12				6,984.65		Plugged and abandoned
SFCMW-05	04/22/09	34.11	31.57	2.54	6,983.85	6,951.65	
SFCMW-05	04/28/09	33.93	31.46	2.47	6,983.85	6,951.77	
SFCMW-05	05/11/09	33.65	31.35	2.30	6,983.85	6,951.93	
SFCMW-05	06/26/09	33.38	31.27	2.11	6,983.85	6,952.05	
SFCMW-05	06/30/09	33.37	31.26	2.11	6,983.85	6,952.06	
SFCMW-05	07/02/09	33.33	31.29	2.04	6,983.85	6,952.05	
SFCMW-05	07/06/09	33.20	31.31	1.89	6,983.85	6,952.07	
SFCMW-05	07/10/09	31.63	31.59	0.04	6,983.85	6,952.25	
SFCMW-05	07/17/09	33.16	32.30	0.86	6,983.85	6,951.34	
SFCMW-05	07/24/09	33.22	31.29	1.93	6,983.85	6,952.08	
SFCMW-05	07/27/09	33.17	31.29	1.88	6,983.85	6,952.09	
SFCMW-05	07/31/09	32.56	31.49	1.07	6,983.85	6,952.09	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
SFCMW-05	08/04/09	32.46	31.52	0.94	6,983.85	6,952.10	
SFCMW-05	08/07/09	32.77	31.41	1.36	6,983.85	6,952.10	
SFCMW-05	08/14/09	33.14	31.32	1.82	6,983.85	6,952.08	
SFCMW-05	08/21/09	31.78	31.76	0.02	6,983.85	6,952.09	
SFCMW-05	03/23/10	31.78	30.95	0.83	6,983.85	6,952.69	
SFCMW-05	10/03/11				6,983.85		Dry
SFCMW-05	01/03/12				6,983.85		Plugged and abandoned
SFCMW-06	04/22/09	29.36	29.30	0.06	6,981.02	6,951.71	
SFCMW-06	04/28/09	29.26	29.20	0.06	6,981.02	6,951.81	
SFCMW-06	05/11/09	29.14	29.07	0.07	6,981.02	6,951.93	
SFCMW-06	06/26/09	29.18	28.93	0.25	6,981.02	6,952.03	
SFCMW-06	06/30/09	29.15	28.90	0.25	6,981.02	6,952.06	
SFCMW-06	07/10/09	29.12	28.88	0.24	6,981.02	6,952.08	
SFCMW-06	07/17/09	29.15	28.88	0.27	6,981.02	6,952.07	
SFCMW-06	07/24/09	29.15	28.86	0.29	6,981.02	6,952.09	
SFCMW-06	07/31/09	29.08	28.90	0.18	6,981.02	6,952.08	
SFCMW-06	08/07/09	28.96	28.92	0.04	6,981.02	6,952.09	
SFCMW-06	08/14/09	28.97	28.93	0.04	6,981.02	6,952.08	
SFCMW-06	08/21/09	28.98	28.95	0.03	6,981.02	6,952.06	
SFCMW-06	03/23/10	28.25	28.24	0.01	6,981.02	6,952.78	
SFCMW-06	07/18/11				6,981.02		Dry
SFCMW-06	08/08/11				6,981.02		Dry
SFCMW-06	08/22/11	38.21			6,981.02	6,942.81	
SFCMW-06	09/06/11	37.88			6,981.02	6,943.14	
SFCMW-06	10/03/11	36.71			6,981.02	6,944.31	
SFCMW-06	10/17/11	36.49			6,981.02	6,944.53	
SFCMW-06	11/01/11	35.85			6,981.02	6,945.17	
SFCMW-06	11/15/11	35.36			6,981.02	6,945.66	
SFCMW-06	01/03/12	34.44			6,981.02	6,946.58	
SFCMW-06	04/09/12	33.28			6,981.02	6,947.74	
SFCMW-06	07/16/12	32.10			6,980.77	6,948.67	
SFCMW-06	10/08/12	31.65			6,980.77	6,949.12	
SFCMW-06	01/07/13	31.30			6,980.41	6,949.11	
SFCMW-06	04/01/13	31.13			6,980.41	6,949.28	
SFCMW-06	06/24/13	31.07			6,980.41	6,949.34	
SFCMW-06	09/17/13	30.37			6,980.41	6,950.04	
SFCMW-06	12/16/13	30.15			6,980.41	6,950.26	
SFCMW-06	01/20/14	30.03			6,980.41	6,950.38	
SFCMW-06	02/10/14	30.00			6,980.41	6,950.41	
SFCMW-06	04/08/14	30.25			6,980.41	6,950.16	
SFCMW-06	07/14/14	29.35			6,980.41	6,951.06	
SFCMW-06	09/26/14	29.36			6,980.41	6,951.05	
SFCMW-06	10/27/15	25.85			6,980.41	6,954.56	
SFCMW-06	04/04/16	27.83			6,980.41	6,952.58	
SFCMW-06	12/14/16	28.49			6,980.41	6,951.92	
SFCMW-06	08/14/17	28.53			6,980.41	6,951.88	
SFCMW-06	02/20/18	29.00			6,980.41	6,951.41	
SFCMW-06	08/09/18	29.27			6,980.41	6,951.14	
SFCMW-06	02/21/19	29.17			6,980.41	6,951.24	
SFCMW-07	05/04/09	29.12			6,979.65	6,950.53	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
SFCMW-07	05/11/09	28.88	27.42	1.46	6,979.65	6,951.87	
SFCMW-07	06/26/09	29.06	27.18	1.88	6,979.65	6,952.00	
SFCMW-07	06/30/09	29.03	27.15	1.88	6,979.65	6,952.03	
SFCMW-07	07/10/09	28.65	27.27	1.38	6,979.65	6,952.04	
SFCMW-07	07/17/09	28.67	27.30	1.37	6,979.65	6,952.01	
SFCMW-07	07/21/09	28.74	27.29	1.45	6,979.65	6,952.00	
SFCMW-07	07/24/09	28.70	27.30	1.40	6,979.65	6,952.00	
SFCMW-07	07/31/09	28.66	27.31	1.35	6,979.65	6,952.00	
SFCMW-07	08/07/09	28.54	27.32	1.22	6,979.65	6,952.03	
SFCMW-07	08/14/09	28.56	27.30	1.26	6,979.65	6,952.04	
SFCMW-07	08/21/09	28.53	27.30	1.23	6,979.65	6,952.04	
SFCMW-07	11/07/09	27.23			6,979.65	6,952.42	
SFCMW-07	03/23/10	28.06	26.81	1.25	6,979.65	6,952.53	
SFCMW-07	12/07/10				6,979.65		Dry
SFCMW-07	10/03/11				6,979.65		Dry
SFCMW-07	01/03/12	31.62			6,979.65	6,948.03	
SFCMW-07	04/09/12	32.37			6,979.65	6,947.28	
SFCMW-07	07/16/12	31.58			6,979.65	6,948.07	
SFCMW-07	10/08/12	30.84			6,979.65	6,948.81	
SFCMW-07	01/09/13	30.67			6,980.42	6,949.75	
SFCMW-07	04/01/13	31.41			6,980.42	6,949.01	
SFCMW-07	06/24/13	31.38			6,980.42	6,949.04	
SFCMW-07	09/17/13	30.64			6,980.42	6,949.78	
SFCMW-07	12/16/13	30.21			6,980.42	6,950.21	
SFCMW-07	01/20/14	30.08			6,980.42	6,950.34	
SFCMW-07	02/10/14	30.00			6,980.42	6,950.42	
SFCMW-07	04/08/14	30.23			6,980.42	6,950.19	
SFCMW-07	07/14/14	29.61			6,980.42	6,950.81	
SFCMW-07	09/26/14	29.45			6,980.42	6,950.97	
SFCMW-07	10/27/15	26.01			6,980.42	6,954.41	
SFCMW-07	04/04/16	27.85			6,980.42	6,952.57	
SFCMW-07	12/14/16	28.49			6,980.42	6,951.93	
SFCMW-07	08/14/17	28.64			6,980.42	6,951.78	
SFCMW-07	02/19/18	28.90			6,980.42	6,951.52	
SFCMW-07	08/08/18	29.38			6,980.42	6,951.04	
SFCMW-07	02/20/19	29.27			6,980.42	6,951.15	
SFCMW-07	09/24/19	28.26			6,980.42	6,952.16	
SFCMW-07	07/29/22	29.08			6,980.42	6,951.34	
SFCMW-07	11/15/22	28.75			6,980.42	6,951.67	
SFCMW-08	05/04/09	29.85			6,978.89	6,949.04	
SFCMW-08	05/11/09	26.79			6,978.89	6,952.10	
SFCMW-08	05/28/09	26.81			6,978.89	6,952.08	
SFCMW-08	06/26/09	26.65			6,978.89	6,952.24	
SFCMW-08	07/20/09	26.63			6,978.89	6,952.26	
SFCMW-08	08/06/09	26.65			6,978.89	6,952.24	
SFCMW-08	08/17/09	26.56			6,978.89	6,952.33	
SFCMW-08	03/23/10	25.38			6,978.89	6,953.51	
SFCMW-08	09/27/10				6,978.89		Dry
SFCMW-08	10/03/11				6,978.89		Dry
SFCMW-08	01/03/12	31.99			6,978.89	6,946.90	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
SFCMW-08	04/09/12	30.85			6,978.89	6,948.04	
SFCMW-08	07/16/12	30.34			6,978.89	6,948.55	
SFCMW-08	10/08/12	30.91			6,978.89	6,947.98	
SFCMW-08	01/07/13	30.47			6,978.89	6,948.42	
SFCMW-08	04/01/13	30.50			6,978.89	6,948.39	
SFCMW-08	06/24/13	30.20			6,978.89	6,948.69	
SFCMW-08	09/17/13	28.48			6,978.89	6,950.41	
SFCMW-08	12/16/13	29.23			6,978.89	6,949.66	
SFCMW-08	01/20/14	29.34			6,978.89	6,949.55	
SFCMW-08	02/10/14	29.37			6,978.89	6,949.52	
SFCMW-08	04/07/14	29.63			6,978.89	6,949.26	
SFCMW-08	07/14/14	28.05			6,978.89	6,950.84	
SFCMW-08	10/27/15	24.70			6,978.89	6,954.19	
SFCMW-08	04/07/16	26.53			6,978.89	6,952.36	
SFCMW-08	12/14/16	27.74			6,978.89	6,951.15	
SFCMW-08	08/14/17	27.73			6,978.89	6,951.16	
SFCMW-08	02/20/18	28.44			6,978.89	6,950.45	
SFCMW-08	08/08/18	27.80			6,978.89	6,951.09	
SFCMW-08	02/20/19	28.41			6,978.89	6,950.48	
SFCMW-09	05/04/09	26.20			6,977.29	6,951.09	
SFCMW-09	05/11/09	26.19			6,977.29	6,951.10	
SFCMW-09	05/28/09	26.30			6,977.29	6,950.99	
SFCMW-09	06/26/09	26.31			6,977.29	6,950.98	
SFCMW-09	07/20/09	26.16			6,977.29	6,951.13	
SFCMW-09	08/07/09	26.12			6,977.29	6,951.17	
SFCMW-09	08/17/09	25.71			6,977.29	6,951.58	
SFCMW-09	03/23/10	24.66			6,977.29	6,952.63	
SFCMW-09	09/27/10	26.33			6,977.29	6,950.96	
SFCMW-09	10/25/10	26.71			6,977.29	6,950.58	
SFCMW-09	12/06/10	28.41			6,977.29	6,948.88	
SFCMW-09	03/09/11	29.22			6,977.29	6,948.07	
SFCMW-09	06/14/11				6,977.29		Vault obstructed
SFCMW-09	10/03/11				6,977.29		Dry
SFCMW-09	01/03/12				6,977.29		Plugged and abandoned
SFCMW-09D	03/23/10	25.22			6,977.81	6,952.59	
SFCMW-09D	09/27/10	32.52			6,977.81	6,945.29	
SFCMW-09D	10/25/10	34.82			6,977.81	6,942.99	
SFCMW-09D	12/06/10	35.59			6,977.81	6,942.22	
SFCMW-09D	03/09/11	36.76			6,977.81	6,941.05	
SFCMW-09D	06/14/11	37.11			6,977.81	6,940.70	
SFCMW-09D	10/03/11	33.31			6,977.81	6,944.50	
SFCMW-09D	01/03/12	30.56			6,977.81	6,947.25	
SFCMW-09D	04/09/12	29.38			6,977.81	6,948.43	
SFCMW-09D	07/16/12	28.85			6,975.05	6,948.96	
SFCMW-09D	10/08/12	26.25			6,975.05	6,951.56	
SFCMW-09D	01/07/13	25.75			6,975.05	6,952.06	
SFCMW-09D	01/20/13	24.75			6,975.05	6,953.06	
SFCMW-09D	02/10/13	24.61			6,975.05	6,953.20	
SFCMW-09D	04/01/13	25.81			6,975.05	6,952.00	
SFCMW-09D	04/07/13	24.93			6,975.05	6,952.88	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
SFCMW-09D	06/24/13	25.75			6,975.05	6,952.06	
SFCMW-09D	07/14/13	23.98			6,975.05	6,953.83	
SFCMW-09D	09/17/13	25.09			6,975.05	6,952.72	
SFCMW-09D	12/16/13	24.80			6,975.05	6,953.01	
SFCMW-09D	12/14/16	23.20			6,975.05	6,954.61	
SFCMW-09D	08/14/17	23.25			6,975.05	6,954.56	
SFCMW-10	08/17/09	28.93	28.70	0.23	6,980.85	6,952.09	
SFCMW-10	03/23/10	29.05	27.58	1.47	6,980.85	6,952.90	
SFCMW-10	12/06/10				6,980.85		Dry
SFCMW-10	08/08/11				6,980.85		Dry
SFCMW-10	08/22/11	38.30			6,980.85	6,942.55	
SFCMW-10	09/06/11	37.89			6,980.85	6,942.96	
SFCMW-10	09/19/11	37.30			6,980.85	6,943.55	
SFCMW-10	10/03/11	36.73			6,980.85	6,944.12	
SFCMW-10	10/17/11	36.36			6,980.85	6,944.49	
SFCMW-10	11/01/11	35.75			6,980.85	6,945.10	
SFCMW-10	11/15/11	35.35			6,980.85	6,945.50	
SFCMW-10	01/03/12	34.33			6,980.85	6,946.52	
SFCMW-10	04/09/12	33.11			6,980.85	6,947.74	
SFCMW-10	07/16/12	32.54			6,980.85	6,948.31	
SFCMW-10	10/08/12	32.16			6,980.85	6,948.69	
SFCMW-10	01/07/13	31.25			6,980.50	6,949.25	
SFCMW-10	04/01/13	31.25			6,980.50	6,949.25	
SFCMW-10	06/24/13	31.21			6,980.50	6,949.29	
SFCMW-10	07/20/13	31.02			6,980.50	6,949.48	
SFCMW-10	07/25/13	31.10			6,980.50	6,949.40	
SFCMW-10	08/08/13	31.05			6,980.50	6,949.45	
SFCMW-10	08/22/13	30.90			6,980.50	6,949.60	
SFCMW-10	09/17/13	30.65			6,980.50	6,949.85	
SFCMW-10	09/26/13	30.70			6,980.50	6,949.80	
SFCMW-10	10/10/13	30.50			6,980.50	6,950.00	
SFCMW-10	10/24/13	30.49			6,980.50	6,950.01	
SFCMW-10	11/07/13	30.40			6,980.50	6,950.10	
SFCMW-10	11/14/13	30.30			6,980.50	6,950.20	
SFCMW-10	11/26/13	30.60			6,980.50	6,949.90	
SFCMW-10	12/16/13	30.20			6,980.50	6,950.30	
SFCMW-10	01/20/14	30.10			6,980.50	6,950.40	
SFCMW-10	02/10/14	30.05			6,980.50	6,950.45	
SFCMW-10	04/09/14	30.30			6,980.50	6,950.20	
SFCMW-10	07/17/14	29.70			6,980.50	6,950.80	
SFCMW-10	09/25/14	29.42			6,980.50	6,951.08	
SFCMW-10	10/27/15	25.11			6,980.50	6,955.39	
SFCMW-10	04/05/16	27.62			6,980.50	6,952.88	
SFCMW-10	12/14/16	28.30			6,980.50	6,952.20	
SFCMW-10	08/14/17	28.42			6,980.50	6,952.08	
SFCMW-10	02/20/18	28.95			6,980.50	6,951.55	
SFCMW-10	08/08/18	29.48			6,980.50	6,951.02	
SFCMW-10	02/22/19	29.20			6,980.50	6,951.30	
SFCMW-10	09/23/19	28.25			6,980.50	6,952.25	
SFCMW-10	08/01/22	29.12			6,980.50	6,951.38	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
SFCMW-10	11/16/22	28.84			6,980.50	6,951.66	
SFCMW-11	08/17/09	25.71			6,977.91	6,952.20	
SFCMW-11	11/07/09	25.74			6,977.91	6,952.17	
SFCMW-11	03/23/10	25.24	25.23	0.01	6,977.91	6,952.68	
SFCMW-11	09/27/10	33.29	33.28	0.01	6,977.91	6,944.63	
SFCMW-11	10/25/10				6,977.91		Dry
SFCMW-11	12/06/10				6,977.91		Dry
SFCMW-11	03/09/11	34.52			6,977.91	6,943.39	
SFCMW-11	06/14/11	33.61			6,977.91	6,944.30	
SFCMW-11	10/03/11	33.54			6,977.91	6,944.37	
SFCMW-11	01/03/12	30.71			6,977.91	6,947.20	
SFCMW-11	04/09/12	30.16			6,977.91	6,947.75	
SFCMW-11	07/16/12	29.56			6,977.91	6,948.35	
SFCMW-11	10/08/12	29.09			6,977.91	6,948.82	
SFCMW-11	01/07/13	28.75			6,977.91	6,949.16	
SFCMW-11	04/01/13	28.65			6,977.91	6,949.26	
SFCMW-11	06/24/13	28.60			6,977.91	6,949.31	
SFCMW-11	09/17/13	28.14			6,977.91	6,949.77	
SFCMW-11	12/16/13	27.70			6,977.91	6,950.21	
SFCMW-11	01/20/14	27.60			6,977.91	6,950.31	
SFCMW-11	02/10/14	27.54			6,977.91	6,950.37	
SFCMW-11	04/08/14	27.74			6,977.91	6,950.17	
SFCMW-11	07/14/14	27.10			6,977.91	6,950.81	
SFCMW-11	10/27/15	23.60			6,977.91	6,954.31	
SFCMW-11	04/06/16	25.44			6,977.91	6,952.47	
SFCMW-11	12/14/16	26.02			6,977.91	6,951.89	
SFCMW-11	08/14/17	26.15			6,977.91	6,951.76	
SFCMW-11	02/19/18	26.38			6,977.91	6,951.53	
SFCMW-11	08/08/18	26.86			6,977.91	6,951.05	
SFCMW-11	02/20/19	26.78			6,977.91	6,951.13	
SFCMW-12	08/17/09	25.73			6,977.87	6,952.14	
SFCMW-12	11/07/09	25.76			6,977.87	6,952.11	
SFCMW-12	03/23/10	25.23			6,977.87	6,952.64	
SFCMW-12	09/27/10				6,977.87		Dry
SFCMW-12	10/03/11				6,977.87		Dry
SFCMW-12	01/03/12	30.81			6,977.87	6,947.06	
SFCMW-12	04/09/12	30.07			6,977.87	6,947.80	
SFCMW-12	07/16/12	29.35			6,977.87	6,948.52	
SFCMW-12	10/08/12	28.96			6,977.87	6,948.91	
SFCMW-12	01/07/13	28.56			6,977.79	6,949.23	
SFCMW-12	04/01/13	28.37			6,977.79	6,949.42	
SFCMW-12	06/24/13	28.35			6,977.79	6,949.44	
SFCMW-12	09/17/13	27.94			6,977.79	6,949.85	
SFCMW-12	12/17/13	27.57			6,977.79	6,950.22	
SFCMW-12	01/20/14	27.44			6,977.79	6,950.35	
SFCMW-12	02/10/14	27.38			6,977.79	6,950.41	
SFCMW-12	04/08/14	27.58			6,977.79	6,950.21	
SFCMW-12	07/14/14	26.96			6,977.79	6,950.83	
SFCMW-12	10/27/15	23.47			6,977.79	6,954.32	
SFCMW-12	04/04/16	25.30			6,977.79	6,952.49	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	**Date**	**Depth to Water**	**Depth to NAPL**	**NAPL Thickness**	**Top of Casing Elevation**	**Groundwater Elevation**	**Notes**
SFCMW-12	12/14/16	25.90			6,977.79	6,951.89	
SFCMW-12	08/14/17	26.00			6,977.79	6,951.79	
SFCMW-12	02/19/18	26.24			6,977.79	6,951.55	
SFCMW-12	08/08/18	26.74			6,977.79	6,951.05	
SFCMW-12	02/20/19	26.65			6,977.79	6,951.14	
SFRMW-01	03/23/10	19.30			6,971.80	6,952.50	
SFRMW-01	09/27/10	25.94			6,971.80	6,945.86	
SFRMW-01	10/25/10				6,971.80		Dry
SFRMW-01	09/19/11				6,971.80		Dry
SFRMW-01	10/03/11	27.11			6,971.80	6,944.69	
SFRMW-01	10/17/11	26.86			6,971.80	6,944.94	
SFRMW-01	11/01/11	26.36			6,971.80	6,945.44	
SFRMW-01	11/15/11	25.93			6,971.80	6,945.87	
SFRMW-01	01/03/12	25.05			6,971.80	6,946.75	
SFRMW-01	04/09/12	23.87			6,971.80	6,947.93	
SFRMW-01	07/16/12	23.15			6,971.80	6,948.65	
SFRMW-01	10/08/12	22.74			6,971.80	6,949.06	
SFRMW-01	01/07/13	22.51			6,971.80	6,949.29	
SFRMW-01	04/01/13	22.37			6,971.80	6,949.43	
SFRMW-01	06/24/13	22.32			6,971.80	6,949.48	
SFRMW-01	09/17/13	21.93			6,971.80	6,949.87	
SFRMW-01	12/16/13	21.50			6,971.80	6,950.30	
SFRMW-01	07/14/14	20.95			6,971.80	6,950.85	
SFRMW-01D	09/27/10	25.60			6,972.05	6,946.45	
SFRMW-01D	10/25/10	27.01			6,972.05	6,945.04	NAPL Sheen
SFRMW-01D	12/06/10	28.10			6,972.05	6,943.95	
SFRMW-01D	03/09/11	29.12			6,972.05	6,942.93	
SFRMW-01D	06/14/11	29.94			6,972.05	6,942.11	
SFRMW-01D	10/03/11	27.11			6,972.05	6,944.94	
SFRMW-01D	01/03/12	25.63			6,972.05	6,946.42	
SFRMW-01D	04/09/12	23.98			6,972.05	6,948.07	
SFRMW-01D	07/16/12	23.15			6,972.05	6,948.90	
SFRMW-01D	10/08/12	22.90			6,972.05	6,949.15	
SFRMW-01D	01/07/13	22.42			6,972.05	6,949.63	
SFRMW-01D	04/01/13	22.50			6,972.05	6,949.55	
SFRMW-01D	06/24/13	22.55			6,972.05	6,949.50	
SFRMW-01D	09/17/13	22.22			6,972.05	6,949.83	
SFRMW-01D	12/16/13	21.32			6,972.05	6,950.73	
SFRMW-01D	07/14/14	20.95			6,972.05	6,951.10	
SFRMW-02	09/27/10	26.71			6,976.74	6,950.03	
SFRMW-02	10/25/10	27.35			6,976.74	6,949.39	
SFRMW-02	12/06/10	28.36			6,976.74	6,948.38	
SFRMW-02	03/09/11	29.46			6,976.74	6,947.28	
SFRMW-02	06/14/11				6,976.74		Dry
SFRMW-02	10/03/11	28.00			6,976.74	6,948.74	
SFRMW-02	01/03/12	27.82			6,976.74	6,948.92	
SFRMW-02	04/09/12	27.38			6,976.74	6,949.36	
SFRMW-02	07/16/12	26.36			6,976.74	6,950.38	
SFRMW-02	10/08/12	25.64			6,976.74	6,951.10	
SFRMW-02	01/07/13	26.56			6,976.74	6,950.18	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
SFRMW-02	04/01/13	26.50			6,976.74	6,950.24	
SFRMW-02	06/24/13	26.00			6,976.74	6,950.74	
SFRMW-02	09/17/13	25.70			6,976.74	6,951.04	
SFRMW-02	12/16/13	25.90			6,976.74	6,950.84	
SFRMW-02	01/20/14	25.95			6,976.74	6,950.79	
SFRMW-02	02/10/14	25.93			6,976.74	6,950.81	
SFRMW-02	04/07/14	25.98			6,976.74	6,950.76	
SFRMW-02	07/14/14	23.79			6,976.74	6,952.95	
SVE-1	07/10/09	30.07	29.62	0.45	6,982.01	6,952.28	
SVE-1	07/17/09	29.95			6,982.01	6,952.06	
SVE-1	07/20/09	29.82			6,982.01	6,952.19	
SVE-1	08/06/09	29.84	29.80	0.04	6,982.01	6,952.20	
SVE-1	08/18/09	29.90	29.78	0.12	6,982.01	6,952.20	
SVE-1	09/14/09	30.24	29.68	0.56	6,982.01	6,952.19	
SVE-1	09/29/09	30.09	29.64	0.45	6,982.01	6,952.26	
SVE-1	11/08/09	30.01	29.44	0.57	6,982.01	6,952.43	
SVE-1	11/13/09	29.96	29.39	0.57	6,982.01	6,952.48	
SVE-1	03/23/10	29.15	29.09	0.06	6,982.01	6,952.91	
SVE-1	12/06/10				6,981.91		Dry
SVE-1	10/03/11	37.62			6,981.91	6,944.29	
SVE-1	01/03/12	32.13			6,981.91	6,949.78	
SVE-1	04/09/12	31.98			6,981.91	6,949.93	
SVE-1	07/16/12	31.38			6,981.91	6,950.53	
SVE-1	10/08/12	31.41			6,981.91	6,950.50	
SVE-1	01/07/13	31.82			6,981.91	6,950.09	
SVE-1	04/01/13	32.37			6,981.91	6,949.54	
SVE-1	06/24/13	32.20			6,981.91	6,949.71	
SVE-1	07/20/13	32.04			6,981.91	6,949.87	
SVE-1	09/17/13	31.75			6,981.91	6,950.16	
SVE-1	11/07/13	31.50			6,981.91	6,950.41	
SVE-1	12/16/13	31.75			6,981.91	6,950.16	
SVE-1	01/20/14	31.45			6,981.91	6,950.46	
SVE-1	02/10/14	31.43			6,981.91	6,950.48	
SVE-1	04/08/14	31.61			6,981.91	6,950.30	
SVE-1	07/14/14	31.08			6,981.91	6,950.83	
SVE-1	09/26/14	29.92			6,981.91	6,951.99	
SVE-1	10/26/15	24.59			6,981.91	6,957.32	
SVE-1	04/04/16	28.70			6,981.91	6,953.21	
SVE-1	12/14/16	29.29			6,981.91	6,952.62	
SVE-1	08/14/17	29.03			6,981.91	6,952.88	
SVE-1	02/21/18	30.09			6,981.91	6,951.82	
SVE-1	08/09/18	30.76			6,981.91	6,951.15	
SVE-1	02/21/19	30.39			6,981.91	6,951.52	
SVE-1	09/23/19	29.44			6,981.91	6,952.47	
SVE-1	08/01/22	30.36			6,981.91	6,951.55	
SVE-1	11/17/22	29.80			6,981.91	6,952.11	
SVE-2	10/05/09	28.76			6,980.80	6,952.04	
SVE-2	11/08/09	28.52			6,980.80	6,952.28	
SVE-2	03/23/10	27.96			6,980.80	6,952.84	
SVE-2	09/28/10				6,980.80		Dry

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
SVE-2	10/03/11				6,980.80		Dry
SVE-2	01/03/12	34.37			6,980.80	6,946.43	
SVE-2	04/09/12	33.17			6,980.80	6,947.63	
SVE-2	07/16/12	32.58			6,980.80	6,948.22	
SVE-2	10/08/12	32.00			6,980.80	6,948.80	
SVE-2	01/07/13	31.54			6,980.80	6,949.26	
SVE-2	04/01/13	31.56			6,980.80	6,949.24	
SVE-2	06/24/13	31.52			6,980.80	6,949.28	
SVE-2	07/25/13	31.40			6,980.80	6,949.40	
SVE-2	08/08/13	31.30			6,980.80	6,949.50	
SVE-2	08/22/13	31.30			6,980.80	6,949.50	
SVE-2	09/17/13	31.00			6,980.80	6,949.80	
SVE-2	09/26/13	30.90			6,980.80	6,949.90	
SVE-2	10/10/13	30.80			6,980.80	6,950.00	
SVE-2	10/24/13	30.80			6,980.80	6,950.00	
SVE-2	11/14/13	30.30			6,980.80	6,950.50	
SVE-2	11/26/13	30.90			6,980.80	6,949.90	
SVE-2	12/16/13	30.50			6,980.80	6,950.30	
SVE-2	01/20/14	30.40			6,980.80	6,950.40	
SVE-2	02/10/14	30.42			6,980.80	6,950.38	
SVE-2	04/08/14	30.75			6,980.80	6,950.05	
SVE-2	07/14/14	30.06			6,980.80	6,950.74	
SVE-2	09/25/14	29.63			6,980.80	6,951.17	
SVE-2	10/27/15	25.54			6,980.80	6,955.26	
SVE-2	04/04/16	27.99			6,980.80	6,952.81	
SVE-2	12/14/16	28.59			6,980.80	6,952.21	
SVE-2	08/14/17	28.62			6,980.80	6,952.18	
SVE-2	02/21/18	29.40			6,980.80	6,951.40	
SVE-2	08/09/18	29.84			6,980.80	6,950.96	
SVE-2	02/21/19	29.59			6,980.80	6,951.21	
SVE-3	10/04/09	29.05			6,981.10	6,952.05	
SVE-3	11/08/09	28.81			6,981.10	6,952.29	
SVE-3	03/23/10	29.35	**27.90**	**1.45**	6,981.10	6,952.84	
SVE-3	12/06/10				6,980.98		Dry
SVE-3	10/03/11	37.01	**36.40**	**0.61**	6,980.98	6,944.43	
SVE-3	10/17/11	33.98	**33.90**	**0.08**	6,980.98	6,947.06	
SVE-3	11/01/11	34.43			6,980.98	6,946.55	NAPL Sheen
SVE-3	11/15/11	34.06	**34.03**	**0.03**	6,980.98	6,946.94	
SVE-3	11/28/11	33.28	**33.25**	**0.03**	6,980.98	6,947.72	
SVE-3	01/03/12	32.39	**32.38**	**0.01**	6,980.98	6,948.60	
SVE-3	04/09/12	31.68	**31.66**	**0.02**	6,980.98	6,949.32	
SVE-3	07/16/12	30.38	**30.36**	**0.02**	6,980.98	6,950.62	
SVE-3	10/08/12	32.07	**32.00**	**0.07**	6,980.98	6,948.96	
SVE-3	01/07/13	31.58			6,980.98	6,949.40	NAPL Sheen
SVE-3	04/01/13	31.70			6,980.98	6,949.28	NAPL Sheen
SVE-3	06/24/13	31.83			6,980.98	6,949.15	NAPL Sheen
SVE-3	07/20/13	31.47			6,980.98	6,949.51	
SVE-3	09/17/13	31.20			6,980.98	6,949.78	
SVE-3	10/10/13	31.40			6,980.98	6,949.58	
SVE-3	11/07/13	31.40			6,980.98	6,949.58	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
SVE-3	12/16/13	29.80			6,980.98	6,951.18	
SVE-3	01/20/14	29.81			6,980.98	6,951.17	
SVE-3	02/10/14	30.67			6,980.98	6,950.31	
SVE-3	04/08/14	31.00			6,980.98	6,949.98	
SVE-3	07/14/14	30.27			6,980.98	6,950.71	
SVE-3	09/26/14	29.84			6,980.98	6,951.14	
SVE-3	10/27/15	26.63			6,980.98	6,954.35	
SVE-3	04/04/16	27.94			6,980.98	6,953.04	
SVE-3	12/15/16	28.54			6,980.98	6,952.44	
SVE-3	08/14/17	28.66			6,980.98	6,952.32	
SVE-3	02/21/18	29.44			6,980.98	6,951.54	
SVE-3	08/10/18	29.02			6,980.98	6,951.96	
SVE-3	02/22/19	29.69			6,980.98	6,951.29	
SVE-3	09/25/19	28.68			6,980.98	6,952.30	
SVE-3	08/01/22	29.55			6,980.98	6,951.43	
SVE-3	11/16/22	29.50			6,980.98	6,951.48	
SVE-4	11/08/09	21.07			6,984.66	6,963.59	
SVE-4	11/13/09	21.05			6,984.66	6,963.61	
SVE-4	03/23/10	22.19			6,984.66	6,962.47	
SVE-4	09/28/10	20.61			6,984.66	6,964.05	
SVE-4	12/06/10	20.94			6,984.66	6,963.72	
SVE-4	03/09/11	21.90			6,984.66	6,962.76	
SVE-4	06/14/11	23.06			6,984.66	6,961.60	
SVE-4	10/03/11	20.76			6,984.66	6,963.90	
SVE-4	01/03/12	21.01			6,984.66	6,963.65	
SVE-4	04/09/12	22.48			6,984.66	6,962.18	
SVE-4	07/16/12	21.79			6,984.66	6,962.87	
SVE-4	10/08/12	20.66			6,984.66	6,964.00	
SVE-4	01/07/13	21.10			6,984.66	6,963.56	
SVE-4	04/01/13	22.65			6,984.66	6,962.01	
SVE-4	06/24/13	22.86			6,984.66	6,961.80	
SVE-4	07/20/13	22.34			6,984.66	6,962.32	
SVE-4	09/17/13	21.50			6,984.66	6,963.16	
SVE-4	11/07/13	20.85			6,984.66	6,963.81	
SVE-4	12/16/13	21.30			6,984.66	6,963.36	
SVE-4	01/20/14	21.93			6,984.66	6,962.73	
SVE-4	02/10/14	22.30			6,984.66	6,962.36	
SVE-4	04/07/14	23.65			6,984.66	6,961.01	
SVE-4	07/14/14	22.80			6,984.66	6,961.86	
SVE-4	10/26/15	19.39			6,984.66	6,965.27	
SVE-4	04/07/16	21.21			6,984.66	6,963.45	
SVE-4	12/15/16				6,984.66		Ozone emitter stuck in well
SVE-4	08/14/17				6,984.66		Ozone emitter stuck in well
SVE-4	08/08/18				6,984.66		Ozone emitter stuck in well
SVE-4	02/21/19				6,984.66		Ozone emitter stuck in well
SVE-5	11/08/09	30.40	30.38	0.02	6,982.69	6,952.31	
SVE-5	03/23/10	31.29	29.45	1.84	6,982.69	6,952.78	
SVE-5	09/27/10				6,982.69		Not gauged or sampled
SVE-5	11/17/10	40.05			6,982.69	6,942.64	
SVE-5	12/06/10				6,982.69		Dry

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	**Date**	**Depth to Water**	**Depth to NAPL**	**NAPL Thickness**	**Top of Casing Elevation**	**Groundwater Elevation**	**Notes**
SVE-5	06/14/11				6,982.69		Dry
SVE-5	10/03/11	38.91			6,982.69	6,943.78	
SVE-5	01/03/12	36.46			6,982.69	6,946.23	
SVE-5	04/09/12	35.12			6,982.69	6,947.57	
SVE-5	07/16/12	34.48			6,982.69	6,948.21	
SVE-5	10/08/12	33.90			6,982.69	6,948.79	
SVE-5	01/07/13	33.41			6,982.69	6,949.28	
SVE-5	04/01/13	33.33			6,982.69	6,949.36	
SVE-5	06/24/13	33.38			6,982.69	6,949.31	
SVE-5	09/17/13	32.95			6,982.69	6,949.74	
SVE-5	12/16/13	32.20			6,982.69	6,950.49	
SVE-5	01/20/14	32.21			6,982.69	6,950.48	
SVE-5	02/10/14	32.02			6,982.69	6,950.67	
SVE-5	04/08/14	33.22			6,982.69	6,949.47	
SVE-5	07/14/14	31.81			6,982.69	6,950.88	
SVE-5	10/26/15	26.25			6,982.69	6,956.44	
SVE-5	04/05/16	29.65			6,982.69	6,953.04	
SVE-5	12/14/16	29.86			6,982.69	6,952.83	
SVE-5	08/14/17	29.93			6,982.69	6,952.76	
SVE-5	02/21/18				6,982.69		NM
SVE-5	08/08/18	31.21			6,982.69	6,951.48	
SVE-5	02/21/19	30.77			6,982.69	6,951.92	
SVE-6	09/27/10				6,982.50		Not gauged or sampled
SVE-6	12/07/10				6,982.50		Dry
SVE-6	10/03/11				6,982.50		
SVE-6	01/03/12	34.80			6,982.50	6,947.70	
SVE-6	04/09/12	33.92			6,982.50	6,948.58	
SVE-6	07/16/12	32.75			6,982.50	6,949.75	
SVE-6	10/08/12	33.71			6,982.50	6,948.79	
SVE-6	01/07/13	32.53			6,982.50	6,949.97	
SVE-6	04/01/13	33.15			6,982.50	6,949.35	
SVE-6	06/24/13	33.27			6,982.50	6,949.23	
SVE-6	07/20/13	33.09			6,982.50	6,949.41	
SVE-6	09/17/13	32.80			6,982.50	6,949.70	
SVE-6	11/07/13	32.40			6,982.50	6,950.10	
SVE-6	12/16/13	32.20			6,982.50	6,950.30	
SVE-6	01/20/14	32.42			6,982.50	6,950.08	
SVE-6	02/10/14	32.10			6,982.50	6,950.40	
SVE-6	04/07/14	32.48			6,982.50	6,950.02	
SVE-6	07/14/14	31.78			6,982.50	6,950.72	
SVE-6	10/28/15				6,982.50		Well blocked
SVE-6	04/07/16	29.61			6,982.50	6,952.89	
SVE-6	12/16/16	30.31			6,982.50	6,952.19	
SVE-6	02/21/18	30.94			6,982.50	6,951.56	
SVE-6	08/08/18	31.44			6,982.50	6,951.06	
SVE-6	02/21/19				6,982.50		Well blocked
SVE-7	09/27/10				6,983.01		Not gauged or sampled
SVE-7	12/06/10				6,983.01		Dry
SVE-7	10/03/11				6,983.01		Dry
SVE-7	01/03/12	34.74			6,983.01	6,948.27	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
SVE-7	04/09/12	33.85			6,983.01	6,949.16	
SVE-7	07/16/12	33.21			6,983.01	6,949.80	
SVE-7	10/08/12	34.20			6,983.01	6,948.81	
SVE-7	01/07/13	32.49			6,983.01	6,950.52	
SVE-7	04/01/13	32.18			6,983.01	6,950.83	
SVE-7	06/24/13	33.59			6,983.01	6,949.42	
SVE-7	09/17/13	33.20			6,983.01	6,949.81	
SVE-7	12/16/13	32.70			6,983.01	6,950.31	
SVE-7	01/20/14	32.68			6,983.01	6,950.33	
SVE-7	02/10/14	32.51			6,983.01	6,950.50	
SVE-7	04/07/14	32.71			6,983.01	6,950.30	
SVE-7	07/14/14	32.18			6,983.01	6,950.83	
SVE-7	10/28/15				6,983.01		Blocked
SVE-7	04/07/16	30.01			6,983.01	6,953.00	
SVE-7	12/16/16	30.71			6,983.01	6,952.30	
SVE-7	08/14/17				6,983.01		Blocked
SVE-7	02/21/18				6,983.01		Blocked
SVE-7	08/08/18	31.86			6,983.01	6,951.15	
SVE-7	02/21/19	31.62			6,983.01	6,951.39	
SVE-8	10/25/09	27.98			6,980.08	6,952.10	
SVE-8	03/23/10	27.55			6,980.08	6,952.53	
SVE-8	09/28/10				6,980.08		Dry
SVE-8	10/03/11				6,980.08		Dry
SVE-8	01/03/12	33.55			6,980.08	6,946.53	
SVE-8	04/09/12	32.32			6,980.08	6,947.76	
SVE-8	07/16/12	31.71			6,980.08	6,948.37	
SVE-8	10/08/12	31.23			6,980.08	6,948.85	
SVE-8	01/07/13	30.85			6,980.08	6,949.23	
SVE-8	04/01/13	30.37			6,980.08	6,949.71	
SVE-8	06/24/13	30.63			6,980.08	6,949.45	
SVE-8	09/17/13	30.21			6,980.08	6,949.87	
SVE-8	12/16/13	29.43			6,980.08	6,950.65	
SVE-8	01/20/14	29.62			6,980.08	6,950.46	
SVE-8	02/10/14	29.60			6,980.08	6,950.48	
SVE-8	04/07/14	29.90			6,980.08	6,950.18	
SVE-8	07/14/14	28.25			6,980.08	6,951.83	
SVE-8	10/26/15	25.59			6,980.08	6,954.49	
SVE-8	04/06/16	27.42			6,980.08	6,952.66	
SVE-8	12/15/16	28.06			6,980.08	6,952.02	
SVE-8	08/14/17	27.70			6,980.08	6,952.38	
SVE-8	02/20/18	28.52			6,980.08	6,951.56	
SVE-8	08/08/18	29.00			6,980.08	6,951.08	
SVE-8	02/20/19	28.86			6,980.08	6,951.22	
SVE-9	10/24/09	26.39	**26.24**	**0.15**	6,978.26	6,951.98	
SVE-9	10/31/09	27.66	**25.72**	**1.94**	6,978.26	6,952.06	
SVE-9	11/07/09	27.42	**25.82**	**1.60**	6,978.26	6,952.04	
SVE-9	03/23/10	26.65	**25.41**	**1.24**	6,978.26	6,952.54	
SVE-9	12/06/10				6,978.13		Dry
SVE-9	10/03/11				6,978.13		Water in the sump
SVE-9	01/03/12	29.82			6,978.13	6,948.31	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
SVE-9	04/09/12	30.70			6,978.13	6,947.43	
SVE-9	07/16/12	29.98			6,978.13	6,948.15	
SVE-9	10/08/12	29.21			6,978.13	6,948.92	
SVE-9	01/07/13	29.03			6,978.13	6,949.10	
SVE-9	04/01/13	29.01			6,978.13	6,949.12	
SVE-9	06/24/13	28.80			6,978.13	6,949.33	
SVE-9	09/17/13	28.20			6,978.13	6,949.93	
SVE-9	12/16/13	27.87			6,978.13	6,950.26	
SVE-9	01/20/14	27.75			6,978.13	6,950.38	
SVE-9	02/10/14	27.50			6,978.13	6,950.63	
SVE-9	04/10/14	27.98			6,978.13	6,950.15	
SVE-9	07/14/14	23.25			6,978.13	6,954.88	
SVE-9	10/26/15	23.87			6,978.13	6,954.26	
SVE-9	04/07/16	25.57			6,978.13	6,952.56	
SVE-9	12/15/16	26.12			6,978.13	6,952.01	
SVE-9	08/14/17	26.24			6,978.13	6,951.89	
SVE-9	08/08/18	27.04			6,978.13	6,951.09	
SVE-9	02/20/19	26.93			6,978.13	6,951.20	
SVE-10D	12/07/10	37.27			6,980.49	6,943.22	
SVE-10D	03/09/11	38.92			6,980.49	6,941.57	
SVE-10D	06/14/11	38.73			6,980.49	6,941.76	
SVE-10D	07/18/11	36.53			6,980.49	6,943.96	
SVE-10D	07/22/11	36.67			6,980.49	6,943.82	
SVE-10D	07/25/11	36.86			6,980.49	6,943.63	
SVE-10D	08/01/11	37.31			6,980.49	6,943.18	
SVE-10D	08/08/11	36.45			6,980.49	6,944.04	
SVE-10D	08/22/11	37.75			6,980.49	6,942.74	
SVE-10D	09/06/11	35.90			6,980.49	6,944.59	
SVE-10D	09/19/11	36.50			6,980.49	6,943.99	
SVE-10D	10/03/11	36.12			6,980.49	6,944.37	
SVE-10D	10/17/11	33.82			6,980.49	6,946.67	
SVE-10D	11/01/11	35.47			6,980.49	6,945.02	
SVE-10D	11/15/11	34.75			6,980.49	6,945.74	
SVE-10D	01/03/12	33.40			6,980.49	6,947.09	
SVE-10D	04/09/12	32.81			6,980.49	6,947.68	
SVE-10D	07/16/12	32.16			6,980.49	6,948.33	
SVE-10D	10/08/12	29.92			6,979.49	6,949.57	
SVE-10D	01/07/13	29.94			6,979.49	6,949.55	
SVE-10D	04/01/13	30.26			6,979.49	6,949.23	
SVE-10D	06/24/13	30.19			6,979.49	6,949.30	
SVE-10D	09/17/13	29.75			6,979.49	6,949.74	
SVE-10D	12/16/13	29.30			6,979.49	6,950.19	
SVE-10D	01/20/14	29.07			6,979.49	6,950.42	
SVE-10D	02/10/14	29.20			6,979.49	6,950.29	
SVE-10D	04/07/14	29.29			6,979.49	6,950.20	
SVE-10D	07/14/14	28.24			6,979.06	6,950.82	
SVE-10D	10/26/15	24.59			6,979.06	6,954.47	
SVE-10D	04/07/16	27.40			6,979.06	6,951.66	
SVE-10D	12/16/16	28.89			6,979.06	6,950.17	
SVE-10D	08/14/17	27.13			6,979.06	6,951.93	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
SVE-10D	02/19/18	27.42			6,979.06	6,951.64	
SVE-10D	08/08/18	27.94			6,979.06	6,951.12	
SVE-10D	02/20/19				6,979.06		Blocked
SVE-11D	12/06/10	41.16			6,981.57	6,940.41	
SVE-11D	03/09/11	40.95			6,981.57	6,940.62	
SVE-11D	06/14/11	40.32			6,981.57	6,941.25	
SVE-11D	07/18/11	39.60			6,981.57	6,941.97	
SVE-11D	07/22/11	40.08			6,981.57	6,941.49	
SVE-11D	07/25/11	40.05			6,981.57	6,941.52	
SVE-11D	08/01/11	40.44			6,981.57	6,941.13	
SVE-11D	08/08/11	38.90			6,981.57	6,942.67	
SVE-11D	08/22/11	39.40			6,981.57	6,942.17	
SVE-11D	09/06/11	37.80			6,981.57	6,943.77	
SVE-11D	09/19/11	38.44			6,981.57	6,943.13	
SVE-11D	10/03/11	37.72			6,981.57	6,943.85	
SVE-11D	10/17/11	36.81			6,981.57	6,944.76	
SVE-11D	11/01/11	34.47			6,981.57	6,947.10	
SVE-11D	11/15/11	36.10			6,981.57	6,945.47	
SVE-11D	01/03/12	34.23			6,981.57	6,947.34	
SVE-11D	04/09/12	33.97			6,981.57	6,947.60	
SVE-11D	07/16/12	32.90			6,981.57	6,948.67	
SVE-11D	10/08/12	32.75			6,981.57	6,948.82	
SVE-11D	01/07/13	31.45			6,981.57	6,950.12	
SVE-11D	04/01/13	32.11			6,981.57	6,949.46	
SVE-11D	06/24/13	32.28			6,981.57	6,949.29	
SVE-11D	07/25/13	32.18			6,981.57	6,949.39	
SVE-11D	08/08/13	32.10			6,981.57	6,949.47	
SVE-11D	08/22/13	32.02			6,981.57	6,949.55	
SVE-11D	09/17/13	31.80			6,981.57	6,949.77	
SVE-11D	09/26/13	31.80			6,981.57	6,949.77	
SVE-11D	10/10/13	31.70			6,981.57	6,949.87	
SVE-11D	10/24/13	31.55			6,981.57	6,950.02	
SVE-11D	11/14/13	31.30			6,981.57	6,950.27	
SVE-11D	11/26/13	31.50			6,981.57	6,950.07	
SVE-11D	12/16/13	31.25			6,981.57	6,950.32	
SVE-11D	01/20/14	31.10			6,981.57	6,950.47	
SVE-11D	02/10/14	31.10			6,981.57	6,950.47	
SVE-11D	04/07/14	31.34			6,981.57	6,950.23	
SVE-11D	07/14/14	30.77			6,981.57	6,950.80	
SVE-11D	10/26/15	25.87			6,981.57	6,955.70	
SVE-11D	04/05/16	28.59			6,981.57	6,952.98	
SVE-11D	12/15/16	29.23			6,981.57	6,952.34	
SVE-11D	08/15/17	29.35			6,981.57	6,952.22	
SVE-11D	02/21/18	30.10			6,981.57	6,951.47	
SVE-11D	08/08/18	30.58			6,981.57	6,950.99	
SVE-11D	02/22/19	30.23			6,981.57	6,951.34	
SVE-11D	09/23/19	29.32			6,981.57	6,952.25	
SVE-11D	08/01/22	30.19			6,981.57	6,951.38	
SVE-11D	11/16/22	29.79			6,981.57	6,951.78	
TBAMW-03	03/24/14	26.90			6,981.08	6,954.18	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	**Date**	**Depth to Water**	**Depth to NAPL**	**NAPL Thickness**	**Top of Casing Elevation**	**Groundwater Elevation**	**Notes**
TBAMW-03	04/07/14	26.10			6,981.08	6,954.98	
TBAMW-03	07/14/14	25.93			6,981.08	6,955.15	
TMW-06	04/01/13	13.75			6,962.99	6,949.24	
TMW-06	06/24/13	13.61			6,962.99	6,949.38	
TMW-06	09/17/13	13.18			6,962.99	6,949.81	
TMW-06	12/16/13	12.70			6,962.99	6,950.29	
TMW-06	01/20/14	12.66			6,962.99	6,950.33	
TMW-06	02/10/14	12.60			6,962.99	6,950.39	
TMW-06	04/07/14	12.76			6,962.99	6,950.23	
TMW-06	07/14/14	12.18			6,962.99	6,950.81	
TMW-06	10/28/15				6,962.99		Not gauged
TMW-06	12/14/15				6,962.99		Not gauged
TMW-06D	04/01/13	13.82			6,963.08	6,949.26	
TMW-06D	06/24/13	13.70			6,963.08	6,949.38	
TMW-06D	09/17/13	13.12			6,963.08	6,949.96	
TMW-06D	12/16/13	12.73			6,963.08	6,950.35	
TMW-06D	01/20/14	12.74			6,963.08	6,950.34	
TMW-06D	02/10/14	12.65			6,963.08	6,950.43	
TMW-06D	04/07/14	12.85			6,963.08	6,950.23	
TMW-06D	07/14/14	12.18			6,963.08	6,950.90	
TMW-06D	10/28/15				6,963.08		Not gauged
TMW-06D	12/14/15				6,963.08		Not gauged
TWN-1	03/24/14	26.41			6,977.55	6,951.14	
TWN-1	04/07/14	26.55			6,977.55	6,951.00	
TWN-1	07/14/14	25.86			6,977.55	6,951.69	
TWN-1	10/26/15	23.02			6,977.55	6,954.53	
TWN-1	04/04/16	23.75			6,977.55	6,953.80	
TWN-1	12/14/16	24.67			6,977.55	6,952.88	
TWN-1	08/14/17	24.91			6,977.55	6,952.64	
TWN-1	02/19/18	25.23			6,977.55	6,952.32	
TWN-1	08/08/18	25.62			6,977.55	6,951.93	
TWN-1	02/20/19	25.55			6,977.55	6,952.00	
TWN-2	03/24/14	27.22			6,977.55	6,950.33	
TWN-2	04/07/14	27.34			6,977.55	6,950.21	
TWN-2	07/14/14	26.66			6,977.55	6,950.89	
TWN-2	09/24/14	26.57			6,977.55	6,950.98	
TWN-2	10/26/15	23.31			6,977.55	6,954.24	
TWN-2	04/04/16	25.01			6,977.55	6,952.54	
TWN-2	12/14/16	25.52			6,977.55	6,952.03	
TWN-2	08/14/17	25.69			6,977.55	6,951.86	
TWN-2	02/20/18	26.45			6,977.55	6,951.10	
TWN-2	08/08/18	25.99			6,977.55	6,951.56	
TWN-2	02/20/19	26.37			6,977.55	6,951.18	
TWN-2	09/24/19	25.38			6,977.55	6,952.17	
TWN-2	07/29/22	26.15			6,977.55	6,951.40	
TWN-2	11/15/22	25.85			6,977.55	6,951.70	
TWN-3	03/24/14	26.86			6,977.16	6,950.30	
TWN-3	04/07/14	27.04			6,977.16	6,950.12	
TWN-3	07/14/14	26.29			6,977.16	6,950.87	
TWN-3	09/24/14	26.21			6,977.16	6,950.95	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	Date	Depth to Water	Depth to NAPL	NAPL Thickness	Top of Casing Elevation	Groundwater Elevation	Notes
TWN-3	10/26/15	27.85			6,977.16	6,949.31	
TWN-3	04/06/16	24.61			6,977.16	6,952.55	
TWN-3	12/14/16	25.14			6,977.16	6,952.02	
TWN-3	08/14/17	26.35			6,977.16	6,950.81	
TWN-3	02/20/18	25.56			6,977.16	6,951.60	
TWN-3	08/08/18	26.10			6,977.16	6,951.06	
TWN-3	02/20/19	26.01			6,977.16	6,951.15	
TWN-3	09/23/19	25.02			6,977.16	6,952.14	
TWN-3	07/29/22	25.79			6,977.16	6,951.37	
TWN-3	11/14/22	25.40			6,977.16	6,951.76	
TWS-1	03/24/14	29.65			6,979.93	6,950.28	
TWS-1	04/07/14	29.78			6,979.93	6,950.15	
TWS-1	07/14/14	29.11			6,979.93	6,950.82	
TWS-1	09/25/14	28.77			6,979.93	6,951.16	
TWS-1	10/27/15	24.67			6,979.93	6,955.26	
TWS-1	04/06/16	27.21			6,979.93	6,952.72	
TWS-1	12/14/16	27.77			6,979.93	6,952.16	
TWS-1	08/14/17	29.32			6,979.93	6,950.61	
TWS-1	02/21/18	28.49			6,979.93	6,951.44	
TWS-1	08/09/18	28.83			6,979.93	6,951.10	
TWS-1	02/22/19	28.61			6,979.93	6,951.32	
TWS-1	09/23/19	27.64			6,979.93	6,952.29	
TWS-1	08/01/22	28.52			6,979.93	6,951.41	
TWS-1	11/16/22	28.26			6,979.93	6,951.67	
TWS-2	03/24/14	33.90			6,984.35	6,950.45	
TWS-2	04/07/14	34.00			6,984.35	6,950.35	
TWS-2	07/14/14	33.73			6,984.35	6,950.62	
TWS-2	10/27/15	29.23			6,984.35	6,955.12	
TWS-2	04/07/16	31.02			6,984.35	6,953.33	
TWS-2	12/14/16	31.90			6,984.35	6,952.45	
TWS-2	08/14/17	31.24			6,984.35	6,953.11	
TWS-2	02/21/18	32.50			6,984.35	6,951.85	
TWS-2	08/08/18	33.36			6,984.35	6,950.99	
TWS-2	02/21/19	31.78			6,984.35	6,952.57	
TWS-3	03/24/14	32.23			6,982.51	6,950.28	
TWS-3	04/07/14	32.31			6,982.51	6,950.20	
TWS-3	07/14/14	32.02			6,982.51	6,950.49	
TWS-3	10/27/15	27.51			6,982.51	6,955.00	
TWS-3	04/07/16	29.30			6,982.51	6,953.21	
TWS-3	12/14/16	30.28			6,982.51	6,952.23	
TWS-3	08/14/17	29.98			6,982.51	6,952.53	
TWS-3	02/21/18	30.86			6,982.51	6,951.65	
TWS-3	08/08/18	31.65			6,982.51	6,950.86	
TWS-3	02/21/19	31.14			6,982.51	6,951.37	
TWS-4	03/24/14	32.40			6,982.74	6,950.34	
TWS-4	04/07/14	32.57			6,982.74	6,950.17	
TWS-4	07/14/14	32.05			6,982.74	6,950.69	
TWS-4	09/24/14	31.41			6,982.74	6,951.33	
TWS-4	10/27/15	26.64			6,982.74	6,956.10	
TWS-4	04/05/16	29.34			6,982.74	6,953.40	

Table G-1. Fluid Level Gauging, NAPL Thickness, and Groundwater Elevations
Santa Fe Country Judicial Complex, Santa Fe, New Mexico

		feet btoc	*feet btoc*	*feet*	*feet amsl*	*feet amsl*	
Well ID	**Date**	**Depth to Water**	**Depth to NAPL**	**NAPL Thickness**	**Top of Casing Elevation**	**Groundwater Elevation**	**Notes**
TWS-4	12/14/16	29.78			6,982.74	6,952.96	
TWS-4	08/14/17	29.32			6,982.74	6,953.42	
TWS-4	02/21/18	31.02			6,982.74	6,951.72	
TWS-4	08/09/18	31.80			6,982.74	6,950.94	
TWS-4	02/21/19	31.25			6,982.74	6,951.49	
TWS-4	09/24/19	30.30			6,982.74	6,952.44	
TWS-4	07/29/22	31.27			6,982.74	6,951.47	
TWS-4	11/17/22	30.75			6,982.74	6,951.99	

Table G-2. Volatile Organic Compounds in Groundwater - November 2022
Santa Fe County Judicial Complex, Santa Fe, NM

	NMWQCC Standard		***5***	***1000***	***700***	***620***	***100***	***0.05***	***5***	***30***		
Plume	**Well**	**Date**	**Benzene**	**Toluene**	**Ethyl benzene**	**Total Xylenes**	**MTBE**	**EDB**	**EDC**	**Total Naphthalenes**	**BTEXN**	**Note**
Capital 66	CMW-1	11/15/22	**83**	< 1.0	< 1.0	2.1	< 1.0	**0.10**	< 1.0	9.7	97	
Capital 66	CMW-3R	11/16/22	**88**	58	62	**1,000**	< 5.0	**0.079**	< 5.0	**840**	2,048	
Capital 66	CMW-4	11/17/22	< 5.0	32	140	310	< 5.0	< 0.0094	< 5.0	**39**	526	
De Vargas	MW-11	11/14/22	< 5.0	< 5.0	130	150	< 5.0	**0.085**	< 5.0	**301**	591	
De Vargas	MW-15	11/14/22	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 0.0093	**25**	< 4.0	8.5	
De Vargas	SFCMW-07	11/15/22	< 1.0	< 1.0	< 1.0	3.1	< 1.0	**0.080**	< 1.0	**52**	58	
De Vargas	TWN-2	11/15/22	**24**	5.7	31	100	< 1.0	**0.39**	**5.9**	**624**	785	
De Vargas	TWN-3	11/14/22	**13**	< 1.0	< 1.0	< 1.5	< 1.0	0.020	4.4	5.2	22	
Design Center	MW-4R	11/17/22	**870**	**10,000**	**1,100**	**6,800**	< 20	**0.90**	< **20**	**673**	19,443	
Design Center	TWS-1	11/16/22	< 1.0	< 1.0	2.3	5.9	< 1.0	< **1.0**	< 1.0	**48**	58	
Design Center	TWS-4	11/17/22	**110**	610	620	**1,500**	< 10	< 0.0094	< **10**	**281**	3,121	
SFCJC	MW-6	11/16/22	< **10**	12	410	440	< 10	< **10**	< **10**	**375**	1,247	
SFCJC	MW-1R	11/17/22	**240**	**1,200**	**1,300**	**8,800**	< 10	< 0.0095	< **10**	**960**	12,500	
SFCJC	SFCMW-01	11/15/22	< 5.0	< 5.0	35	19	< 5.0	< **5.0**	< 5.0	**376**	440	
SFCJC	SFCMW-02	11/15/22	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< **1.0**	< 1.0	< 4.0	8.5	
SFCJC	SFCMW-03	11/15/22	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< **1.0**	< 1.0	< 4.0	8.5	
SFCJC	SFCMW-10	11/16/22	**19**	< 10	< 10	25	< 10	< **10**	< **10**	**2,810**	2,874	
SFCJC	SVE-1	11/17/22	< 1.0	< 1.0	< 1.0	1.6	< 1.0	< **1.0**	< 1.0	11	15	
SFCJC	SVE-11D	11/16/22	< 1.0	< 1.0	1.1	2.2	< 1.0	< **1.0**	< 1.0	27	33	
SFCJC	SVE-3	11/16/22	**53**	180	580	**2,600**	< 10	< **10**	< **10**	**607**	4,020	

Notes:
All concentrations reported in micrograms per liter (µg/L).
Bold Red *values indicates concentration that exceeds the New Mexico Water Quality Control Commission (NMWQCC) standard for groundwater*
BTEX, MTBE, EDC analyzed in accordance with EPA method 8260B.
EDB = 1,2-Dibromoethane
EDB analyzed in accordance with EPA method 8260 or 504.1.
EDC = 1,2-Dichloroethane
MTBE = Methyl tertiary-butyl ether
NAPL = Nonaqueous-phase liquid
Total naphthalenes analyzed in accordance with EPA methos 8260B or 8310.

Table G-3. Geochemical Parameters in Groundwater
Santa Fe County Judicial Compltex, Santa Fe, NM

Units		µs/cm	degrees Celsius	pH	mg/L	mV	
Well	Date	Specific Conductance	Temperature	Potential of Hydrogen	Dissolved Oxygen	Oxidation-Reduction Potential	Note
MW-2	02/21/18	7,110	14.0	7.0			
MW-5	02/22/18	746	13.5	7.5			
MW-5	08/09/18	1,270	17.5	6.8			
MW-5	02/21/19	1,112	13.5	7.3			
MW-6	02/20/18		15.7	6.5			
MW-6	08/09/18	902	18.0	6.8			
MW-6	02/22/19	1,080	11.9	7.1			
MW-6	09/23/19	1,053	16.5	6.9	1.4	-73	
MW-6	08/01/22	1,123	16.8	6.2	1.2	-14	
MW-6	11/16/22	1,085	15.8	6.7	0.98	-59	
MW-7	02/20/18	515	13.6	7.2			
MW-7	08/09/18	412	18.1	6.7			
MW-7	02/21/19	578	9.8	7.8			
MW-8	02/20/18	1,162	13.7	7.2			
MW-9	02/20/18	1,053	12.6	7.5			
MW-10	02/20/18	579	12.5	7.7			
MW-11	02/22/18	1,178	14.5	11.3			
MW-11	08/08/18	1,373	19.4	11.6			
MW-11	02/20/19	952	10.3	9.9			
MW-11	09/23/19	1,093	17.4	7.7	0.03	-78	
MW-11	07/29/22	1,305	16.3	7.0	5.2	-21	
MW-11	11/14/22	1,431	14.9	7.6	1.1	-75	
MW-12	02/22/18	859	12.1	7.9			
MW-13	02/19/18	742	15.3	7.9			
MW-13	08/08/18	114	17.5	7.1			
MW-13	02/20/19	1,334	14.6	7.6			
MW-14	02/22/18	2,090	15.9	12.0			
MW-14	08/08/18	1,043	17.6	7.6			
MW-14	02/20/19	1,362	14.8	7.0			
MW-15	02/19/17	1,092	15.8	7.1			
MW-15	08/08/18	1,202	17.1	7.0			
MW-15	02/20/19	1,132	13.8	7.4			
MW-15	09/24/19	1,126	15.6	7.1	3.9	76	
MW-15	07/29/22	1,213	16.3	6.9	7.7	65	
MW-15	11/14/22	1,249	14.8	7.0	2.1	79	
CMW-1	02/20/18	965	11.8	7.4			
CMW-1	08/09/18	1,302	18.3	7.2			
CMW-1	02/21/19	1,247	12.1	7.7			
CMW-1	09/24/19	2,086	17.4	7.0	3.0	-56	
CMW-1	08/01/22	1,493	19.2	6.7	1.5	31	
CMW-1	11/15/22	1,707	15.6	7.1	1.9	35	
CMW-2	02/20/18	1,355	11.0	7.1			
CMW-3R	02/20/18	1,824	14.5	6.9			
CMW-3R	08/09/18	1,242	18.4	7.1			
CMW-3R	02/21/19	2,194	12.4	7.1			
CMW-3R	09/24/19	3,293	16.7	6.8	4.4	17	
CMW-3R	08/01/22	2,290	18.3	6.7	2.1	-252	
CMW-3R	11/16/22	3,089	16.0	6.9	1.3	-62	
CMW-4	02/20/18	1,643	12.6	7.5			
CMW-4	08/09/18	1,251	18.4	7.1			
CMW-4	02/21/19	2,197	14.9	7.4			ORC-A® in the well
CMW-4	09/23/19	2,451	17.6	6.9	2.5	-4	ORC-A® in the well
CMW-4	08/01/22	1,099	17.2	7.0	1.5	47	
CMW-4	11/17/22	2,944	16.1	7.1	2.3	61	
MW-17	02/22/18	1,550	15.6	7.1			
MW-18	02/21/18	2,058	13.9	7.3			
MW-18	08/09/18	1,851	21.0	7.2			
MW-18	02/22/19	2,036	14.2	7.4			
MW-19	02/21/18	3,692	15.4	7.2			
MW-1R	02/20/18	2,747	13.0	6.9			

Table G-3. Geochemical Parameters in Groundwater
Santa Fe County Judicial Compltex, Santa Fe, NM

Units		µs/cm	degrees Celsius	pH	mg/L	mV	
Well	Date	Specific Conductance	Temperature	Potential of Hydrogen	Dissolved Oxygen	Oxidation-Reduction Potential	Note
MW-1R	08/09/18	2,703	17.7	6.9			
MW-1R	02/21/19	3,233	8.3	6.9			ORC-A® in the well
MW-1R	09/24/19	3,798	17.3	6.6	0	-127	
MW-1R	07/29/22	1,972	18.1	6.6	0.59	-4	
MW-1R	11/17/22	2,614	16.8	6.8	0.74	-77	
MW-20	02/21/18	763	13.2	7.8			
MW-20	08/09/18	743	17.2	7.7			
MW-20	02/21/19	790	13.3	7.4			
MW-4R	02/21/18	2,379	13.7	7.3			
MW-4R	02/21/19	2,020	9.4	7.0			
MW-4R	09/24/19	1,754	16.5	6.7	0.05	-58	
MW-4R	07/29/22	1,428	17.9	6.7	3.1	41	
MW-4R	11/17/22	1,981	15.7	7.0	0.95	6	
SFCMW-01	02/20/18	1,384	15.9	13.8			
SFCMW-01	08/09/18	1,419	17.3	7.0			
SFCMW-01	02/21/19	1,308	16.5	7.0			
SFCMW-01	09/23/19	1,398	17.4	6.9	0	-169	
SFCMW-01	08/01/22	1,315	17.2	6.8	0.69	-25	
SFCMW-01	11/15/22	1,378	16.7	7.0	1.2	-78	
SFCMW-02	02/20/18	1,087	15.7	7.0			
SFCMW-02	08/09/18	1,163	18.6	7.1			
SFCMW-02	02/21/19	1,065	16.1	6.9			
SFCMW-02	10/25/19	838	14.7	7.0	2.7	88	
SFCMW-02	08/01/22	1,115	17.7	6.6	1.4	42	
SFCMW-02	11/15/22	1,084	16.9	7.0	1.1	32	
SFCMW-03	02/20/18	930	14.9	7.1			
SFCMW-03	08/09/18	1,074	19.4	7.0			
SFCMW-03	02/21/19	1,084	14.6	7.9			
SFCMW-03	10/25/19	989	15.9	7.3	2.8	102	
SFCMW-03	08/02/22	875	17.6	6.9	5.1	47	
SFCMW-03	11/15/22	784	17.3	7.1	1.5	60	
SFCMW-06	02/20/18	1,450	15.4	7.5			
SFCMW-06	08/08/18	1,459	22.3	7.6			
SFCMW-06	02/21/19	1,492	14.6	7.6			
SFCMW-07	02/19/18	801	16.2	7.5			
SFCMW-07	08/08/18	730	21.0	7.4			
SFCMW-07	02/20/19	934	10.8	6.6			
SFCMW-07	09/24/19	802	15.5	7.3	0.74	68	
SFCMW-07	07/29/22	886	15.5	7.0	3.2	-7	
SFCMW-07	11/15/22	888	14.8	7.2	1.1	-101	
SFCMW-08	02/20/18	3,800	15.3	7.7			
SFCMW-10	08/08/18	1,371	23.3	6.5			
SFCMW-10	02/22/19	1,346	13.8	7.5			
SFCMW-10	09/23/19	1,418	18.2	6.4	0.05	21	
SFCMW-10	08/01/22	1,278	18.2	6.2	1.9	49	
SFCMW-10	11/16/22	1,308	17.3	6.4	1.2	17	
SFCMW-11	02/19/18	6,950	15.9	7.0			
SFCMW-11	08/08/18	1,271	18.7	7.1			
SFCMW-11	02/20/19	950	14.1	6.4			
SFCMW-12	02/19/18	2,455	15.5	7.0			
SFCMW-12	08/08/18	2,556	16.3	6.9			
SFCMW-12	02/20/19	1,942	13.0	6.0			
SVE-1	02/21/18	6,930	13.7	12.7			
SVE-1	08/10/18	1,048	17.6	7.2			
SVE-1	02/22/19	2,067	14.2	6.8			
SVE-1	09/23/19	2,396	17.5	6.7	1.5	20	
SVE-1	08/01/22	1,370	16.8	6.6	1.4	-8	
SVE-1	11/17/22	2,449	15.8	6.8	1.1	56	
SVE-10D	02/19/18	865	15.3	7.6			
SVE-11D	02/21/18	1,874	14.9	7.8			

Table G-3. Geochemical Parameters in Groundwater
Santa Fe County Judicial Compltex, Santa Fe, NM

Units		µs/cm	degrees Celsius	pH	mg/L	mV	
Well	**Date**	**Specific Conductance**	**Temperature**	**Potential of Hydrogen**	**Dissolved Oxygen**	**Oxidation-Reduction Potential**	**Note**
SVE-11D	09/23/19	2,107	17.5	6.6	2.6	50	
SVE-11D	08/01/22	1,284	17.7	6.0	2.7	44	ORC-A® in the well
SVE-11D	11/16/22	1,422	16.2	6.4	1.3	39	
SVE-2	08/09/18	2,427	18.5	6.8			
SVE-2	02/21/19	4,000	12.6	6.9			
SVE-3	02/21/18	3,193	15.9	6.8			
SVE-3	08/10/18	2,686	18.9	7.0			
SVE-3	02/22/19	1,730	15.2	6.4			
SVE-3	09/25/19	1,608	16.7	6.5	0.07	-117	
SVE-3	08/01/22	2,335	16.5	6.4	2.2	-17	
SVE-3	11/16/22	2,384	15.6	7.0	1.2	-79	
SVE-6	02/21/18	1,021	14.5	7.0			
SVE-8	02/20/18	2,550	14.5	7.4			
TWN-1	02/19/18	2,111	15.8	6.9			
TWN-1	08/08/18	1,786	17.3	6.8			
TWN-1	02/20/19	2,064	12.3	6.1			
TWN-2	02/20/18	1,591	15.5	11.7			
TWN-2	08/08/18	650	16.6	9.6			
TWN-2	02/21/19	1,566	14.3	7.0			
TWN-2	09/24/19	1,503	16.5	7.1	0.09	39	
TWN-2	07/29/22	1,534	16.6	6.9	1.0	34	
TWN-2	11/15/22	1,582	15.8	7.1	1.4	-63	
TWN-3	02/19/18	1,599	15.9	7.9			
TWN-3	08/08/18	1,470	18.1	7.2			
TWN-3	02/20/19	1,637	12.1	7.6			
TWN-3	09/23/19	1,952	16.4	6.8	5.7	103	
TWN-3	07/29/22	2,323	17.5	6.8	5.7	49	
TWN-3	11/14/22	2,710	14.8	7.2	2.7	101	
TWS-1	02/21/18	2,989	13.6	7.0			
TWS-1	08/09/18	2,097	20.8	6.9			
TWS-1	02/22/19	2,087	14.4	7.3			
TWS-1	09/23/19	2,015	16.9	6.9	2.9	58	
TWS-1	08/01/22	2,052	16.8	6.6	3.9	29	
TWS-1	11/16/22	2,025	16.2	7.0	1.5	20	
TWS-2	02/21/18	1,043	12.8	7.5			
TWS-3	02/21/18	1,089	13.5	7.5			
TWS-4	02/21/18	926	13.5	10.7			ORC-A® in the well
TWS-4	08/09/18	673	17.6	9.9			
TWS-4	02/21/19	1,186	12.8	8.4			
TWS-4	09/24/19	1,652	17.9	6.6	0	-56	
TWS-4	07/29/22	1,300	18.2	6.7	1.0	9	
TWS-4	11/17/22	1,600	16.7	6.9	0.9	-69	
Average		**1,679**	**15.8**	**7.3**	**1.9**	**-2**	

Notes:
ORC-A® = Regenesis® Oxygen Release Compound - Advanced
µS/cm = microsiemens per centimeter
mg/L = milligrams per liter
mV = millivolts

Table C-1. Design Quantities - 20% Effective Porosity and 20% Target Pore Volume

		gallons	*pounds*	*gallons*	*gallons*	*gallons*	*gallons*
Plume	**Number of Wells**	**Total PetroFix® Volume**	**Total Mass of Electron Acceptor**	**Total Injectate Volume**	**Application Rate PetroFix® Per Well**	**Mass of Electron Acceptor Per Well**	**Volume of Injectate per Well**
West De Vargas	25	998	489	10,922	39.92	19.56	434.9

Table C-2. PetroFix Injection Details - February 2023
De Vargas Plume, Santa Fe County Judicial Complex, Santa Fe, NM

						psi	*gpm*	*gallons*	*pounds*	*gallons*	*gallons*	
Well ID	Start Date	Start Time	End Date	End Time	Batch	Sustained Pressure	Average Flow Rate	PetroFix® Volume	Electronic Acceptor Mass	Water Volume	Total Solution Volume	Day Lighting
DV-1	02/03/23	21:30	02/03/23	22:45	1	60	1.5	6.9	3.5	68.0	75	
DV-1	02/04/23	11:45	02/04/23	13:00	2	60	1.0	6.9	3.5	68.0	75	
DV-1	02/06/23	18:45	02/06/23	19:10			0.3	1.5	0.7	6.5	8	
DV-2	02/03/23	9:30	02/03/23	22:45	1	60	1.0	6.9	3.5	68.0	75	
DV-2	02/06/23	18:45	02/06/23	19:10			0	1.5	0.7	6.5	8	
DV-2	02/04/23	11:45	02/04/23	13:00	2	60	1.0	6.9	3.5	68.0	75	
DV-3	02/03/23	21:30	02/03/23	22:45	1	60	1.0	6.9	3.5	68.0	75	
DV-3	02/06/23	18:45	02/06/23	19:10			0.3	1.5	0.7	6.5	8	
DV-3	02/04/23	11:45	02/04/23	13:00	2	60	1.0	6.9	3.5	68.0	75	
DV-4	02/03/23	21:30	02/03/23	22:00	1	80	2.0	5.5	2.8	54.4	60	X
DV-4	02/06/23	18:45	02/06/23	19:10			0	1.5	0.7	6.5	8	
DV-5	02/06/23	18:45	02/06/23	19:01		60	0.3	3.5	1.0	16.5	20	
DV-6	02/03/23	22:00	02/03/23	22:45	1	20	1.0	1.8	0.9	18.1	20	
DV-6	02/04/23	10:40	02/04/23	11:25	2	20	1.7	6.9	3.5	68.0	75	
DV-6	02/06/23	19:30	02/06/23	20:19	3	20	1.2	11.0	5.5	49.0	60	
DV-6	02/06/23	20:33	02/06/23	21:36	4	20	1.0	6.5	3.3	53.6	60	
DV-6	02/06/23	21:41	02/06/23	22:48	5	20	1.0	6.5	3.3	53.6	60	
DV-6	02/06/23	22:32	02/06/23	23:20	6	20	1.0	6.5	3.3	53.6	60	
DV-6	02/06/23	23:25	02/06/23	0:08	7	20	1.0	6.5	3.3	53.6	60	
DV-6	02/07/23	0:15	02/07/23	1:10		20	1.0	6.5	3.3	53.6	60	
DV-6	02/07/23	1:13	02/07/23	1:50		20	1.0	6.5	3.3	53.6	60	
DV-7	02/06/23	19:30	02/06/23	20:19	1	15	1.0	11.0	5.5	49.0	60	
DV-7	02/06/23	20:33	02/06/23	21:36	2	15	1.0	6.5	3.3	53.6	60	
DV-7	02/06/23	21:41	02/06/23	22:48	3	15	1.0	6.5	3.3	53.6	60	
DV-7	02/06/23	22:32	02/06/23	23:20	4	15	1.0	6.5	3.3	53.6	60	
DV-7	02/06/23	23:25	02/06/23	0:08	5	15	1.0	6.5	3.3	53.6	60	
DV-7	02/07/23	0:15	02/07/23	1:10	6	15	1.0	6.5	3.3	53.6	60	
DV-7	02/07/23	1:13	02/07/23	1:50	7	15	1.0	6.5	3.3	53.6	60	
DV-8	02/04/23	10:40	02/04/23	11:25	1	20	1.5	6.9	3.5	68.0	75	
DV-8	02/06/23	19:30	02/06/23	20:19	2	20	1.2	11.0	5.5	49.0	60	
DV-8	02/06/23	20:33	02/06/23	21:36	3	20	1.0	6.5	3.3	53.6	60	
DV-8	02/06/23	21:41	02/06/23	22:48	4	20	1.0	6.5	3.3	53.6	60	
DV-8	02/06/23	22:32	02/06/23	23:20	5	20	1.0	6.5	3.3	53.6	60	
DV-8	02/06/23	23:25	02/06/23	0:08	6	20	1.0	6.5	3.3	53.6	60	
DV-8	02/07/23	0:15	02/07/23	1:10	7	20	1.1	6.5	3.3	53.6	60	
DV-8	02/07/23	1:13	02/07/23	1:50		20	1.6	6.5	3.3	53.6	60	
DV-9	02/04/23	10:40	02/04/23	11:25	1	20	1.7	6.9	3.5	68.0	75	
DV-9	02/06/23	19:30	02/06/23	20:19	2	20	1.2	11.0	5.5	49.0	60	

Table C-2. PetroFix Injection Details - February 2023
De Vargas Plume, Santa Fe County Judicial Complex, Santa Fe, NM

						psi	*gpm*	*gallons*	*pounds*	*gallons*	*gallons*	
Well ID	**Start Date**	**Start Time**	**End Date**	**End Time**	**Batch**	**Sustained Pressure**	**Average Flow Rate**	**PetroFix® Volume**	**Electronic Acceptor Mass**	**Water Volume**	**Total Solution Volume**	**Day Lighting**
DV-9	02/06/23	20:33	02/06/23	21:36	3	20	1.0	6.5	3.3	53.6	60	
DV-9	02/06/23	21:41	02/06/23	22:48	4	20	1.0	6.5	3.3	53.6	60	
DV-9	02/06/23	22:32	02/06/23	23:20	5	20	1.0	6.5	3.3	53.6	60	
DV-9	02/06/23	23:25		0:08	6	20	0	6.5	3.3	53.6	60	
DV-9	02/07/23	0:15	02/07/23	1:10	7	20	1.0	6.5	3.3	53.6	60	
DV-9	02/07/23	1:13	02/07/23	1:50		20	1.0	6.5	3.3	53.6	60	
DV-10	02/04/23	10:40	02/04/23	11:25	1	20	1.5	6.9	3.5	68.0	75	
DV-10	02/06/23	19:30	02/06/23	20:19	2	20	1.2	11.0	5.5	49.0	60	
DV-10	02/06/23	20:33	02/06/23	21:36	3	20	1.0	6.5	3.3	53.6	60	
DV-10	02/06/23	21:41	02/06/23	22:48	4	20	1.0	6.5	3.3	53.6	60	
DV-10	02/06/23	22:32	02/06/23	23:20	5	20	1.3	6.5	3.3	53.6	60	
DV-10	02/06/23	23:25	02/07/23	0:08	6	20		6.5	3.3	53.6	60	
DV-10	02/07/23	0:15	02/07/23	1:10	7	20	1.1	6.5	3.3	53.6	60	
DV-10	02/07/23	1:13	02/07/23	1:50		20	1.6	6.5	3.3	53.6	60	
DV-11	02/04/23	13:30	02/04/23	14:30	1	20	1.0	8.0	4.0	50.0	58	
DV-11	02/04/23	14:35	02/04/23	15:25	2	20	1.2	8.0	4.0	50.0	58	
DV-11	02/04/23	15:29	02/04/23	16:10	3	20	1.4	8.0	4.0	50.0	58	
DV-11	02/04/23	16:14	02/04/23	17:05	4	20	1.1	8.0	4.0	50.0	58	
DV-11	02/04/23	17:10	02/04/23	18:00	5	20	1.2	8.0	4.0	50.0	58	
DV-11	02/07/23	17:48	02/07/23	18:10				6.5	3.3	53.6	60	
DV-11	02/07/23	18:14	02/07/23	18:38			2.5	6.5	3.3	53.6	60	
DV-12	02/04/23	13:30	02/04/23	14:30	1	20	1.0	8.0	4.0	50.0	58	
DV-12	02/04/23	14:35	02/04/23	15:25	2	20	1.2	8.0	4.0	50.0	58	
DV-12	02/04/23	15:29	02/04/23	16:10	3	20	1.4	8.0	4.0	50.0	58	
DV-12	02/04/23	16:14	02/04/23	17:05	4	20	1.1	8.0	4.0	50.0	58	
DV-12	02/04/23	17:10	02/04/23	18:00	5	20	1.2	8.0	4.0	50.0	58	
DV-12	02/07/23	17:48	02/07/23	18:10				6.5	3.3	53.6	60	
DV-12	02/07/23	18:14	02/07/23	18:38			2.5	6.5	3.3	53.6	60	
DV-13	02/04/23	13:30	02/04/23	14:30	1	20	1.0	8.0	4.0	50.0	58	
DV-13	02/04/23	14:35	02/04/23	15:25	2	20	1.2	8.0	4.0	50.0	58	
DV-13	02/04/23	15:29	02/04/23	16:10	3	20	1.4	8.0	4.0	50.0	58	
DV-13	02/04/23	16:14	02/04/23	17:05	4	20	1.1	8.0	4.0	50.0	58	
DV-13	02/04/23	17:10	02/04/23	18:00	5	20	1.2	8.0	4.0	50.0	58	
DV-13	02/07/23	17:48	02/07/23	18:10				6.5	3.3	53.6	60	
DV-13	02/07/23	18:14	02/07/23	18:38			2.5	6.5	3.3	53.6	60	
DV-14	02/05/23	9:00	02/05/23	9:32	1	10	1.8	8.0	4.0	50.0	58	
DV-14	02/05/23	9:35	02/05/23	10:13	2	10	1.5	8.0	4.0	50.0	58	
DV-14	02/05/23	10:17	02/05/23	10:51	3	10	1.8	5.6	2.8	54.4	60	

Table C-2. PetroFix Injection Details - February 2023
De Vargas Plume, Santa Fe County Judicial Complex, Santa Fe, NM

						psi	*gpm*	*gallons*	*pounds*	*gallons*	*gallons*	
Well ID	Start Date	Start Time	End Date	End Time	Batch	Sustained Pressure	Average Flow Rate	PetroFix® Volume	Electronic Acceptor Mass	Water Volume	Total Solution Volume	Day Lighting
DV-14	02/05/23	10:56	02/05/23	11:35	4	10	1.5	4.2	2.1	55.6	60	
DV-14	02/05/23	11:40	02/05/23	12:15	5	10	1.5	4.2	2.1	55.6	60	
DV-14	02/05/23	12:20	02/05/23	12:55	6	10	1.6	4.2	2.1	55.6	60	
DV-14	02/05/23	13:00	02/05/23	13:32	7	10	1.9	4.2	2.1	55.6	60	
DV-14	02/05/23	13:38	02/05/23	13:53	8	10	1.7	1.4	0.8	18.2	19	
DV-14	02/07/23	17:48	02/07/23	18:10				6.5	3.3	53.6	60	
DV-14	02/07/23	18:14	02/07/23	18:38				6.5	3.3	53.6	60	
DV-15	02/04/23	11:45	02/04/23	13:00	1	20	1.0	6.9	3.5	68.0	75	
DV-15	02/04/23	13:30	02/04/23	14:30	2	20	1.0	8.0	4.0	50.0	58	
DV-15	02/04/23	14:35	02/04/23	15:25	3	20	1.2	8.0	4.0	50.0	58	
DV-15	02/04/23	15:29	02/04/23	16:10	4	20	1.4	8.0	4.0	50.0	58	
DV-15	02/04/23	16:14	02/04/23	17:05	5	20	0.8	9.1	4.6	50.0	41	
DV-15	02/07/23	17:48	02/07/23	18:10				6.5	3.3	53.6	60	
DV-15	02/07/23	18:14	02/07/23	18:38			2.5	6.5	3.3	53.6	60	
DV-16	02/04/23	13:30	02/04/23	14:30	1	20	1.0	8.0	4.0	50.0	58	
DV-16	02/04/23	14:35	02/04/23	15:25	2	20	1.2	8.0	4.0	50.0	58	
DV-16	02/04/23	15:29	02/04/23	16:10	3	20	1.4	8.0	4.0	50.0	58	
DV-16	02/04/23	16:14	02/04/23	17:05	4	20	1.1	8.0	4.0	50.0	58	
DV-16	02/04/23	17:10	02/04/23	18:00	5	20	1.2	8.0	4.0	50.0	58	
DV-17	02/05/23	14:05	02/05/23	14:40	1	5	1.7	5.5	2.8	54.4	60	
DV-17	02/05/23	14:45	02/05/23	15:22	2	5	1.6	5.5	2.8	54.4	60	
DV-17	02/05/23	15:25	02/05/23	16:00	3	5	1.7	5.5	2.8	54.4	60	
DV-17	02/05/23	16:03	02/05/23	16:40	4	5	1.7	5.5	2.8	54.4	60	
DV-17	02/05/23	16:43	02/05/23	17:20	5	5	1.6	5.5	2.8	54.4	60	
DV-17	02/05/23	17:23	02/05/23	18:00	6	5	1.6	5.5	2.8	54.4	60	
DV-17	02/05/23	18:03	02/05/23	18:40	7	5	1.6	5.5	2.8	54.4	60	
DV-17	02/05/23	18:42	02/05/23	18:54	8	5	1.3	1.5	0.4	13.7	15	
DV-18	02/05/23	9:00	02/05/23	9:32	1	15	1.8	8.0	4.0	50.0	58	
DV-18	02/05/23	9:35	02/05/23	10:13	2	15	1.5	8.0	4.0	50.0	58	
DV-18	02/05/23	10:17	02/05/23	10:51	3	15	1.8	5.6	2.8	54.4	60	
DV-18	02/05/23	10:56	02/05/23	11:35	4	15	1.7	4.2	2.1	55.6	60	
DV-18	02/05/23	11:40	02/05/23	12:15	5	15	1.8	4.2	2.1	55.6	60	
DV-18	02/05/23	12:20	02/05/23	12:55	6	15	1.7	4.2	2.1	55.6	60	
DV-18	02/05/23	13:00	02/05/23	13:32	7	15	1.9	4.2	2.1	55.6	60	
DV-18	02/05/23	13:38	02/05/23	13:53	8	15	1.4	1.4	0.8	18.2	19	
DV-19	02/05/23	9:00	02/05/23	9:32	1	5	1.8	8.0	4.0	50.0	58	
DV-19	02/05/23	9:35	02/05/23	10:13	2	5	1.5	8.0	4.0	50.0	58	
DV-19	02/05/23	10:17	02/05/23	10:51	3	5	1.8	5.6	2.8	54.4	60	

Table C-2. PetroFix Injection Details - February 2023
De Vargas Plume, Santa Fe County Judicial Complex, Santa Fe, NM

						psi	*gpm*	*gallons*	*pounds*	*gallons*	*gallons*	
Well ID	**Start Date**	**Start Time**	**End Date**	**End Time**	**Batch**	**Sustained Pressure**	**Average Flow Rate**	**PetroFix® Volume**	**Electronic Acceptor Mass**	**Water Volume**	**Total Solution Volume**	**Day Lighting**
DV-19	02/05/23	10:56	02/05/23	1:35	4	5	1.7	4.2	2.1	55.6	60	
DV-19	02/05/23	11:40	02/05/23	12:15	5	5	1.8	4.2	2.1	55.6	60	
DV-19	02/05/23	12:20	02/05/23	12:55	6	5	1.7	4.2	2.1	55.6	60	
DV-19	02/05/23	13:00	02/05/23	13:32	7	5	1.9	4.2	2.1	55.6	60	
DV-19	02/05/23	13:38	02/05/23	13:53	8	5	1.4	1.4	0.8	18.2	19	
DV-20	02/05/23	9:00	02/05/23	9:32	1	10	1.8	8.0	4.0	50.0	58	
DV-20	02/05/23	9:35	02/05/23	10:13	2	10	1.5	8.0	4.0	50.0	58	
DV-20	02/05/23	10:17	02/05/23	10:51	3	10	1.6	5.6	2.8	54.4	60	
DV-20	02/05/23	10:56	02/05/23	11:35	4	10	1.7	4.2	2.1	55.6	60	
DV-20	02/05/23	11:40	02/05/23	12:15	5	10	1.7	4.2	2.1	55.6	60	
DV-20	02/05/23	12:20	02/05/23	12:55	6	10	1.7	4.2	2.1	55.6	60	
DV-20	02/05/23	13:00	02/05/23	13:32	7	10	1.9	4.2	2.1	55.6	60	
DV-20	02/05/23	13:38	02/05/23	13:53	8	10	1.4	1.4	0.8	18.2	19	
DV-21	02/05/23	14:05	02/05/23	14:40	1	10	1.7	5.5	2.8	54.4	60	
DV-21	02/05/23	14:45	02/05/23	15:22	2	10	1.6	5.5	2.8	54.4	60	
DV-21	02/05/23	15:25	02/05/23	16:00	3	10	1.7	5.5	2.8	54.4	60	
DV-21	02/05/23	16:03	02/05/23	16:40	4	10	1.7	5.5	2.8	54.4	60	
DV-21	02/05/23	16:43	02/05/23	17:20	5	10	1.6	5.5	2.8	54.4	60	
DV-21	02/05/23	17:23	02/05/23	18:00	6	10	1.6	5.5	2.8	54.4	60	
DV-21	02/05/23	18:03	02/05/23	18:40	7	10	1.6	5.5	2.8	54.4	60	
DV-21	02/05/23	18:42	02/05/23	18:54	8	10	1.3	1.5	0.4	13.7	15	
DV-22	02/05/23	9:00	02/05/23	9:32	1	10	1.8	8.0	4.0	50.0	58	
DV-22	02/05/23	9:35	02/05/23	10:13	2	10	1.5	8.0	4.0	50.0	58	
DV-22	02/05/23	10:17	02/05/23	10:51	3	10	1.8	5.6	2.8	54.4	60	
DV-22	02/05/23	10:56	02/05/23	11:35	4	10	1.7	4.2	2.1	55.6	60	
DV-22	02/05/23	11:40	02/05/23	12:15	5	10	1.6	4.2	2.1	55.6	60	
DV-22	02/05/23	12:20	02/05/23	12:55	6	10	1.7	4.2	2.1	55.6	60	
DV-22	02/05/23	13:00	02/05/23	13:32	7	10	1.9	4.2	2.1	55.6	60	
DV-22	02/05/23	13:38	02/05/23	13:53	8	10	1.3	1.0	0.8	18.0	19	
DV-23	02/05/23	14:05	02/05/23	14:40	1	10	1.7	5.5	2.8	54.4	60	
DV-23	02/05/23	14:45	02/05/23	15:22	2	10	1.6	5.5	2.8	54.4	60	
DV-23	02/05/23	15:25	02/05/23	16:00	3	10	1.7	5.5	2.8	54.4	60	
DV-23	02/05/23	16:03	02/05/23	16:40	4	10	1.7	5.5	2.8	54.4	60	
DV-23	02/05/23	16:43	02/05/23	17:20	5	10	1.6	5.5	2.8	54.4	60	
DV-23	02/05/23	17:23	02/05/23	18:00	6	10	1.6	5.5	2.8	54.4	60	
DV-23	02/05/23	18:03	02/05/23	18:40	7	10	1.6	5.5	2.8	54.4	60	
DV-23	02/05/23	18:42	02/05/23	18:54	8	10	1.3	1.5	0.4	13.7	15	
DV-24	02/05/23	14:05	02/05/23	14:40	1	15	1.7	5.5	2.8	54.4	60	

Table C-2. PetroFix Injection Details - February 2023
De Vargas Plume, Santa Fe County Judicial Complex, Santa Fe, NM

						psi	*gpm*	*gallons*	*pounds*	*gallons*	*gallons*	
Well ID	**Start Date**	**Start Time**	**End Date**	**End Time**	**Batch**	**Sustained Pressure**	**Average Flow Rate**	**PetroFix® Volume**	**Electronic Acceptor Mass**	**Water Volume**	**Total Solution Volume**	**Day Lighting**
DV-24	02/05/23	14:45	02/05/23	15:22	2	15	1.6	5.5	2.8	54.4	60	
DV-24	02/05/23	15:25	02/05/23	16:00	3	15	1.7	5.5	2.8	54.4	60	
DV-24	02/05/23	16:03	02/05/23	16:40	4	15	1.7	5.5	2.8	54.4	60	
DV-24	02/05/23	16:43	02/05/23	17:20	5	15	1.6	5.5	2.8	54.4	60	
DV-24	02/05/23	17:23	02/05/23	18:00	6	15	1.6	5.5	2.8	54.4	60	
DV-24	02/05/23	18:03	02/05/23	18:40	7	15	1.6	5.5	2.8	54.4	60	
DV-24	02/05/23	18:42	02/05/23	18:54	8	15	1.3	1.5	0.4	13.7	15	
DV-25	02/05/23	14:05	02/05/23	14:40	1	10	1.7	5.5	2.8	54.4	60	
DV-25	02/05/23	14:45	02/05/23	15:22	2	10	1.6	5.5	2.8	54.4	60	
DV-25	02/05/23	15:25	02/05/23	16:00	3	10	1.7	5.5	2.8	54.4	60	
DV-25	02/05/23	16:03	02/05/23	16:40	4	10	1.7	5.5	2.8	54.4	60	
DV-25	02/05/23	16:43	02/05/23	17:20	5	10	1.6	5.5	2.8	54.4	60	
DV-25	02/05/23	17:23	02/05/23	18:00	6	10	1.6	5.5	2.8	54.4	60	
DV-25	02/05/23	18:03	02/05/23	18:40	7	10	1.6	5.5	2.8	54.4	60	
DV-25	02/05/23	18:42	02/05/23	18:54	8	10	1.3	1.5	0.4	13.7	15	
						16.8	**1.39**	**999**	**502**	**8,399**	**9,382**	

Table C-3. PetroFix Injection Summary by Point and Day - February 2023
De Vargas Plume, Santa Fe Country Judicial Complex, Santa Fe, NM

	02/03/23			02/04/23			02/05/23			02/06/23			02/07/23			Total PetroFix®	Total EA	Total Injectate
Well ID	**PetroFix®**	**EA**	**Injectate**	**PetroFix®**	**EA**	**Injectate**	**PetroFix®**	**EA**	**Injectate**	**PetroFix®**	**EA**	**Injectate**	**PetroFix®**	**EA**	**Injectate**			
DV-1	7	3.5	75	7	3.5	75				2	0.7	8				***15***	***8***	***158***
DV-2	7	3.5	75	7	3.5	75				2	0.7	8				***15***	***8***	***158***
DV-3	7	3.5	75	7	3.5	75				2	0.7	8				***15***	***8***	***158***
DV-4	6	2.8	60							2	0.7	8				***7***	***4***	***68***
DV-5										4	1.0	20				***4***	***1***	***20***
DV-6	2	0.9	20	7	3.5	75				37	18.7	300	13	6.6	120	***59***	***30***	***515***
DV-7										37	18.7	300	13	6.6	120	***50***	***25***	***420***
DV-8				7	3.5	75				37	18.7	300	13	6.6	120	***57***	***29***	***495***
DV-9				7	3.5	75				37	18.7	300	13	6.6	120	***57***	***29***	***495***
DV-10				7	3.5	75				37	18.7	300	13	6.6	120	***57***	***29***	***495***
DV-11				40	20	290							13	6.6	120	***53***	***27***	***410***
DV-12				40	20	290							13	6.6	120	***53***	***27***	***410***
DV-13				40	20	290							13	6.6	120	***53***	***27***	***410***
DV-14							40	20	435				13	6.6	120	***53***	***27***	***555***
DV-15				40	20	290							13	6.6	120	***53***	***27***	***410***
DV-16				40	20	290										***40***	***20***	***290***
DV-17							40	20	435							***40***	***20***	***435***
DV-18							40	20	435							***40***	***20***	***435***
DV-19							40	20	435							***40***	***20***	***435***
DV-20							40	20	435							***40***	***20***	***435***
DV-21							40	20	435							***40***	***20***	***435***
DV-22							39	20	435							***39***	***20***	***435***
DV-23							40	20	435							***40***	***20***	***435***
DV-24							40	20	435							***40***	***20***	***435***
DV-25							40	20	435							***40***	***20***	***435***
Grand Total	***28***	***14***	***305***	***248***	***125***	***1,975***	***399***	***200***	***4,350***	***195***	***97***	***1,552***	***130***	***66***	***1,200***	***999***	***502***	***9,382***

PetroFix® = PetroFix® volume in gallons
EA = electron acceptor in pounds
Total = total volume in gallons

Appendix A – PetroFix® Data Sheets

PetroFix™ Specification Sheet

PetroFix Technical Description

PetroFix is a remedial technology designed to treat petroleum fuel spills in soil and groundwater. A simple-to-use fluid that can be applied under low pressure into the subsurface or simply poured into open excavations, PetroFix offers a cost-effective solution for environmental practitioners and responsible parties to address petroleum hydrocarbon contaminants quickly and effectively.

PetroFix has a dual function; quickly removing hydrocarbons from the dissolved phase, by adsorbing them onto the activated carbon particles, while added electron acceptors stimulate hydrocarbon biodegradation in situ. The product can be applied with ease using readily available equipment associated with direct push technology.

The remedial fluid is a highly concentrated water-based suspension consisting of micron-scale activated carbon and biostimulating electron acceptors. PetroFix has a viscosity higher than water and is black in appearance. Its environmentally-compatible formulation of micron-scale activated carbon (1-2 microns) is combined with both slow and quick-release inorganic electron acceptors. A blend of additional electron acceptors is included along with the PetroFix fluid. Practitioners can select between a sulfate and nitrate combination blend (recommended), or sulfate only for the additional electron acceptors required.

Chemical Composition

Activated Carbon - CAS 7440-44-0 >30%

Calcium sulfate dihydrate - CAS 10101-41-4 < 10%

Properties

Appearance: Black Fluid

Viscosity: 1500-3500 cP (syrup-like)

pH: 8-10

Storage and Handling Guidelines

Storage:

- Store away from incompatible materials
- Store in original closed container
- Store at temperatures below 95° F
- Dispose of waste and residues in accordance with local authority requirements

Handling:

- Never add additives to solution prior to mixing with water
- Wear appropriate personal protective equipment
- Do not taste or ingest
- Observe good industrial hygiene practices
- Wash hands after handling

PetroFIX™ Remediation Fluid

Applications

PetroFix is mixed with water on-site and easily applied into the sub-surface using low pressure injections, or mixed in excavations. PetroFix is compatible with, and can be used with ORC Advanced® to expedite rates of biodegradation. For more information about co-application with ORC Advanced, contact REGENESIS.

REGENESIS®

www.regenesis.com

Corporate Headquarters
1011 Calle Sombra, San Clemente CA 92673 USA
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REGENESIS

Technology-Based Solutions for the Environment

Nitrate/Sulfate Addition and Syntrophic Biodegradation:

Kickstarting Petroleum Biodegradation

PetroFIX™ Remediation Fluid

Nitrate/Sulfate Addition and Syntrophic Biodegradation: Kickstarting Petroleum Biodegradation

The remediation of petroleum- impacted sites in both active and monitored natural attenuation situations commonly relies on biodegradation. A large and diverse population of microbes is known to use petroleum hydrocarbons as a food source, forming the basis of bioremediation for these contaminants[1]. Petroleum biodegradation is fastest when microbes have an ample supply of oxygen, which is the most favorable electron acceptor from a redox standpoint. For this reason, oxygen is quickly depleted in most petroleum-impacted sites (Figure 1). One of the next-best electron acceptors is nitrate (NO_3^-) which is also rapidly utilized in groundwater when petroleum or other carbon sources are present. After oxygen and nitrate, several other electron acceptors, including iron and sulfate (SO_4^{2-}) may be used by microbes. As the more favorable electron acceptors are consumed, an aquifer will become methanogenic. Under these conditions the acetate, other small organic compounds, CO_2, and H_2 that are produced by syntrophic degradation of the petroleum hydrocarbons are ultimately converted to CH_4.

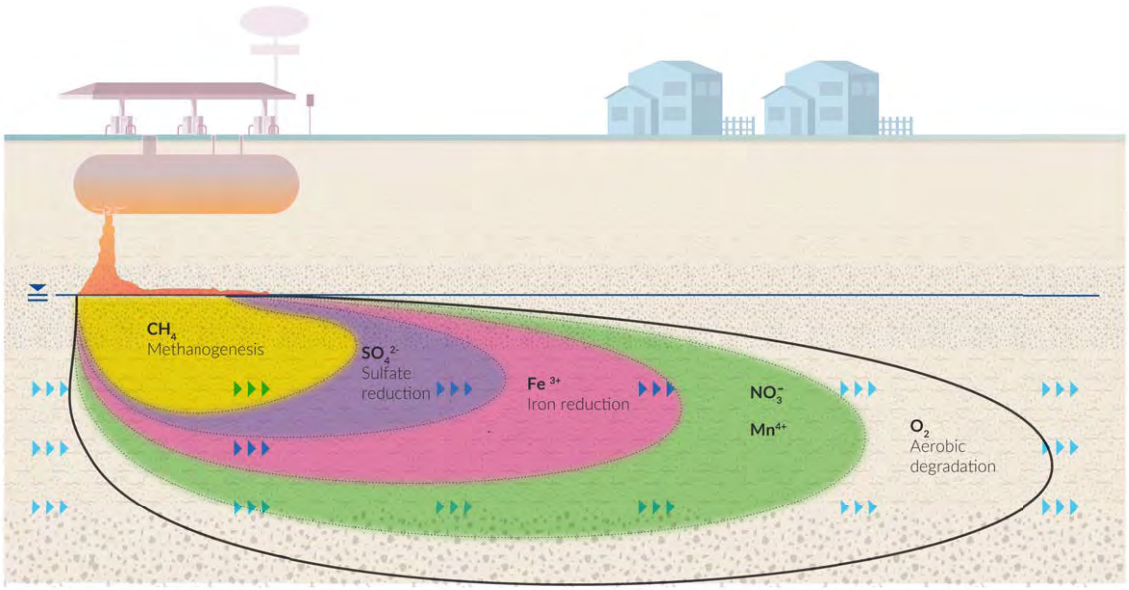


Figure 1. *Redox zones created by the depletion of electron acceptors in a common hydrocarbon plume. The order that petroleum degrading microbes utilize electron acceptors follows with their redox potential. Oxygen has the most positive redox potential and is therefore depleted first. Image adapted from https://toxics.usgs.gov/photo_gallery/photos/bimidji/bimidji4_lg.jpg*

The mineralization of petroleum contaminants using electron acceptors like oxygen requires a stoichiometric amount of the electron acceptor, which often is an impractical amount or necessitates follow-up injections. This limitation is true for PetroFix™ or almost any other remedial amendment on the market. However, the addition of non-stoichiometric amounts of nitrate or sulfate as electron acceptors can aid biodegradation, even after their consumption, by promoting syntrophy.

Furthermore, reports have demonstrated improved outcomes when both electron acceptors are used together as a result of the following benefits of co-application[2]:

1. Denitrifying bacteria remove benzene more rapidly compared to sulfate reducers alone. Because benzene is usually the petroleum contaminant with the lowest cleanup standard, this can be a significant advantage[3]

2. Sulfate reducers and denitrifying bacteria metabolize BTEX components in slightly different ways. Providing nitrate and sulfate stimulates both populations and promotes faster, more complete petroleum degradation.

3. Many of the syntrophic bacteria capable of reducing nitrate and sulfate will continue to thrive after the added electron acceptors are exhausted. Petroleum components will be fermented to acetate and hydrogen which are then removed by methanogens (see figure 2).

Syntrophic Metabolism

Syntrophy describes the process in which a community of microbes 'feed together', simultaneously using carbon sources and their byproducts in an ecological partnership[4].

A simplified illustration of syntrophy is shown in Figure 2. On petroleum-contaminated sites, BTEX and other hydrocarbons will be metabolized to acetate and hydrogen by syntrophs. This process can continue to occur so long as the produced hydrogen and acetate are removed by a community of methanogens. Under these conditions, contaminant degradation can proceed without the need for an additional electron acceptor. Researchers have shown that syntrophic arrangements are common and critical to the success of natural attenuation on many petroleum-impacted sites[5].

PetroFIX™ Remediation Fluid

Syntrophic Metabolism - Continued

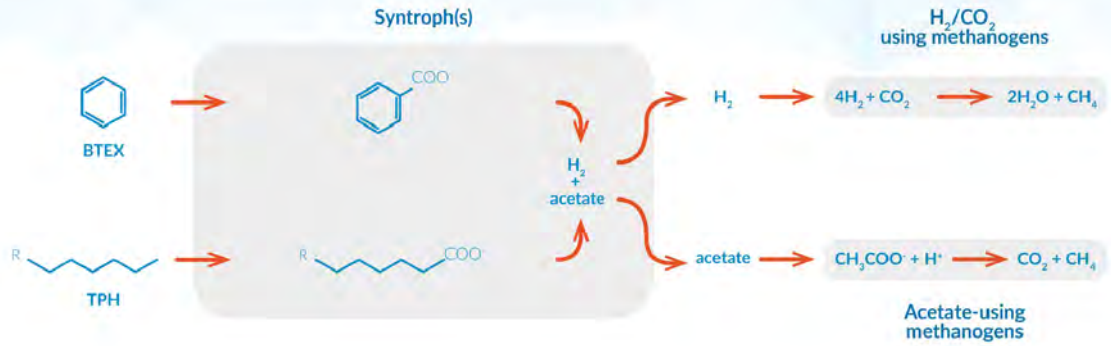


Figure 2 *Syntrophic metabolism on petroleum-impacted sites proceeds in two general steps. The first group of microbes metabolize BTEX and other hydrocarbons into simpler substrates like acetate and hydrogen (H_2). These metabolites are mineralized by subsequent microbes, which may be methanogens (shown) or reducers of other electron acceptors, when available. By working together, these microbes maintain an ecological balance that facilitates efficient petroleum degradation. Figure adapted from Ref 3.*

Conclusion

The remediation strategy employed when applying PetroFix is two-part: contaminants are adsorbed to the activated carbon and biodegradation is kickstarted through the addition of a sulfate/nitrate blend to stimulate the growth of syntrophic and BTEX-degrading microbes. After the added nitrate and sulfate are exhausted, petroleum degradation will continue via syntrophic processes, meaning the continuous addition of electron acceptors is not required. The combination of an injectable form of activated carbon that can adsorb contaminants and contain them in a finite zone with electron acceptors that will initially degrade the contaminants via anaerobic pathways and promote syntrophic conditions that sustain degradation will expedite the remediation of petroleum-impacted sites.

References:

1. Weelink, S. A. B., van Eekert, M. H. A. & Stams, A. J. M. Degradation of BTEX by anaerobic bacteria: physiology and application. *Rev. Environ. Sci. Biotechnol.* **9**, 359–385 (2010).

2. Cunningham, J. A., Rahme, H., Hopkins, G. D., Lebron, C. & Reinhard, M. Enhanced In Situ Bioremediation of BTEX-Contaminated Groundwater by Combined Injection of Nitrate and Sulfate. *Environ. Sci. Technol.* **35**, 1663–1670 (2001).

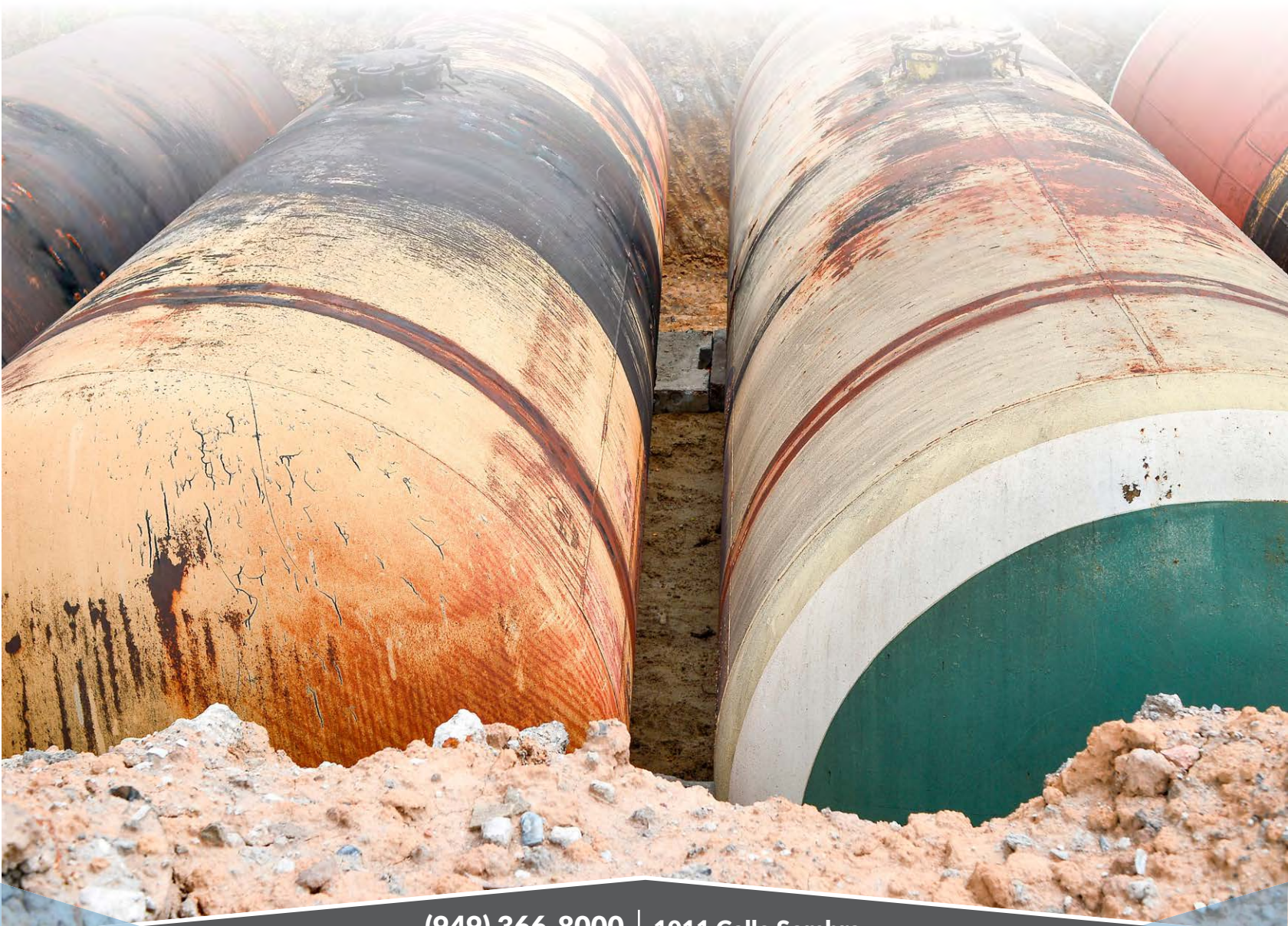
3. Vogt, C., Kleinsteuber, S. & Richnow, H.-H. Anaerobic benzene degradation by bacteria. *Microb. Biotechnol.* **4**, 710–724 (2011).

4. Gieg, L. M., Fowler, S. J. & Berdugo-Clavijo, C. Syntrophic biodegradation of hydrocarbon contaminants. *Curr. Opin. Biotechnol.* **27**, 21–29 (2014).

5. Garg, S. et al. Overview of Natural Source Zone Depletion: Processes, Controlling Factors, and Composition Change. *Groundw. Monit. Remediat.* **37**, 62–81 (2017).

REGENESIS

Technology-Based Solutions for the Environment



(949) 366-8000
www.regenesis.com

1011 Calle Sombra
San Clemente, CA 92673

SAFETY DATA SHEET

1. Identification

Product identifier **PetroFix Electron Acceptor Blend**

Other means of identification None.

Recommended use Remediation of soils and groundwater.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company Name Regenesis

Address 1011 Calle Sombra
San Clemente, CA 92673 USA

General information 949-366-8000

E-mail CustomerService@regenesis.com

Emergency phone number For Hazardous Materials Incidents ONLY (spill, leak, fire, exposure or accident), call CHEMTREC 24/7 at:

USA, Canada, Mexico 1-800-424-9300

International 1-703-527-3887

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Serious eye damage/eye irritation Category 2B

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word Warning

Hazard statement Causes eye irritation.

Precautionary statement

Prevention Wash thoroughly after handling.

Response If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Ammonium sulfate	7783-20-2	40 - 60
Sodium nitrate	7631-99-4	40 - 60

Composition comments All concentrations are in percent by weight unless otherwise indicated.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact	Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Dusts may irritate the respiratory tract, skin and eyes.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Use extinguishing agent suitable for type of surrounding fire.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed. Combustion products may include: nitrogen oxides, sulfur oxides, ammonia.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Use water spray to cool unopened containers.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Material will not burn.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Avoid the generation of dusts during clean-up. Collect dust using a vacuum cleaner equipped with HEPA filter. Stop the flow of material, if this is without risk. Large Spills: Wet down with water and dike for later disposal. Absorb in vermiculite, dry sand or earth and place into containers. Shovel the material into waste container. Following product recovery, flush area with water. Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection	Unvented, tight fitting goggles should be worn in dusty areas.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
Skin protection	
Other	Wear suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Wear NIOSH approved respirator appropriate for airborne exposure at the point of use. Appropriate respirator selection should be made by a qualified professional. Recommended use: Wear respirator with dust filter.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical state	Solid.
Form	Powder.
Color	White.
Odor	Not available.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	This material will not burn.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Heat.
Incompatible materials	Strong reducing agents. Strong acids.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Dust may irritate respiratory system.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Causes eye irritation.
Ingestion	May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Dusts may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

Acute toxicity	Not expected to be acutely toxic.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Causes eye irritation.

Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.

Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Further information	Nitrate poisoning resulting in methemoglobinemia manifested as cyanosis is rare, but possible for people with specific susceptibility traits.

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	The product solely consists of inorganic compounds which are not biodegradable.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	None known.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical	Yes
Classified hazard categories	Serious eye damage or eye irritation

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Ammonium sulfate	7783-20-2	40 - 60
Sodium nitrate	7631-99-4	40 - 60

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)	Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Ammonium sulfate (CAS 7783-20-2)
Sodium nitrate (CAS 7631-99-4)

US. New Jersey Worker and Community Right-to-Know Act

Sodium nitrate (CAS 7631-99-4)

US. Pennsylvania Worker and Community Right-to-Know Law

Ammonium sulfate (CAS 7783-20-2)
Sodium nitrate (CAS 7631-99-4)

US. Rhode Island RTK

Ammonium sulfate (CAS 7783-20-2)
Sodium nitrate (CAS 7631-99-4)

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 15-August-2018

Revision date -

Version # 01

HMIS® ratings

Health: 1
Flammability: 0
Physical hazard: 0

NFPA ratings

Disclaimer

Regenesis cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

SAFETY DATA SHEET

Creation Date 27-Oct-2009 **Revision Date** 23-Jan-2018 **Revision Number** 4

1. Identification

Product Name **Potassium sulfate**

Cat No. : **AC424220000; AC424220010; AC424220050; AC424220250; AC424222500**

CAS-No 7778-80-5
Synonyms Dipotassium sulfate; Sulfuric acid, dipotassium salt.; Potassium sulfate (2:1)

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

Emergency Telephone Number
For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
CHEMTREC Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

2. Hazard(s) identification

Classification
Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements
None required

Hazards not otherwise classified (HNOC)
None identified

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Sulfuric acid dipotassium salt	7778-80-5	>95

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

Inhalation Remove to fresh air. Get medical attention if symptoms occur. If not breathing, give artificial respiration.

Ingestion Do NOT induce vomiting. Get medical attention.

Most important symptoms and effects No information available.

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

Unsuitable Extinguishing Media No information available

Flash Point No information available
Method - No information available

Autoignition Temperature No information available

Explosion Limits
Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical
Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

Hazardous Combustion Products
Sulfur oxides.
Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
1	0	0	N/A

6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

Environmental Precautions Should not be released into the environment. See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

7. Handling and storage

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies.

Engineering Measures None under normal use conditions.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection No protective equipment is needed under normal use conditions.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Solid
Appearance	White
Odor	Odorless
Odor Threshold	No information available
pH	~ 6-8 5% aq.sol.(20 C)
Melting Point/Range	1067 °C / 1952.6 °F
Boiling Point/Range	1689 °C / 3072.2 °F @ 760 mmHg
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	Partially soluble
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	Not applicable
Molecular Formula	K2 O4 S
Molecular Weight	174.25

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat. Avoid dust formation.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Sulfur oxides

Hazardous Polymerization No information available.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sulfuric acid dipotassium salt	LD50 = 6600 mg/kg (Rat)	Not listed	Not listed

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Sulfuric acid dipotassium salt	7778-80-5	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and delayed No information available

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Do not empty into drains. .

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Sulfuric acid dipotassium salt	EC50: 2900 mg/L 72h	LC50: 510 - 880 mg/L, 96h static (Pimephales promelas)	Not listed	EC50: 890 mg/L 48h

		LC50: = 653 mg/L, 96h (Lepomis macrochirus) LC50: = 3550 mg/L, 96h static (Lepomis macrochirus)		

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its water solubility.

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT Not regulated
TDG Not regulated
IATA Not regulated
IMDG/IMO Not regulated

15. Regulatory information

United States of America Inventory

Component	CAS-No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags
Sulfuric acid dipotassium salt	7778-80-5	X	ACTIVE	-

Legend:
TSCA - Toxic Substances Control Act, (40 CFR Part 710)
X - Listed
'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories
Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
Sulfuric acid dipotassium salt	7778-80-5	X	-	231-915-5	X	X	X	X	KE-29200

U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and Health Administration Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations	Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ):	N
DOT Marine Pollutant	N
DOT Severe Marine Pollutant	N

U.S. Department of Homeland Security	This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade	No information available

16. Other information

Prepared By	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com
Creation Date	27-Oct-2009
Revision Date	23-Jan-2018
Print Date	23-Jan-2018
Revision Summary	This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS

Appendix B – Photographs

Injection Setup

JCB 506 Forklift

Trailer-Mounted MultiQuip 150 KVA Generator

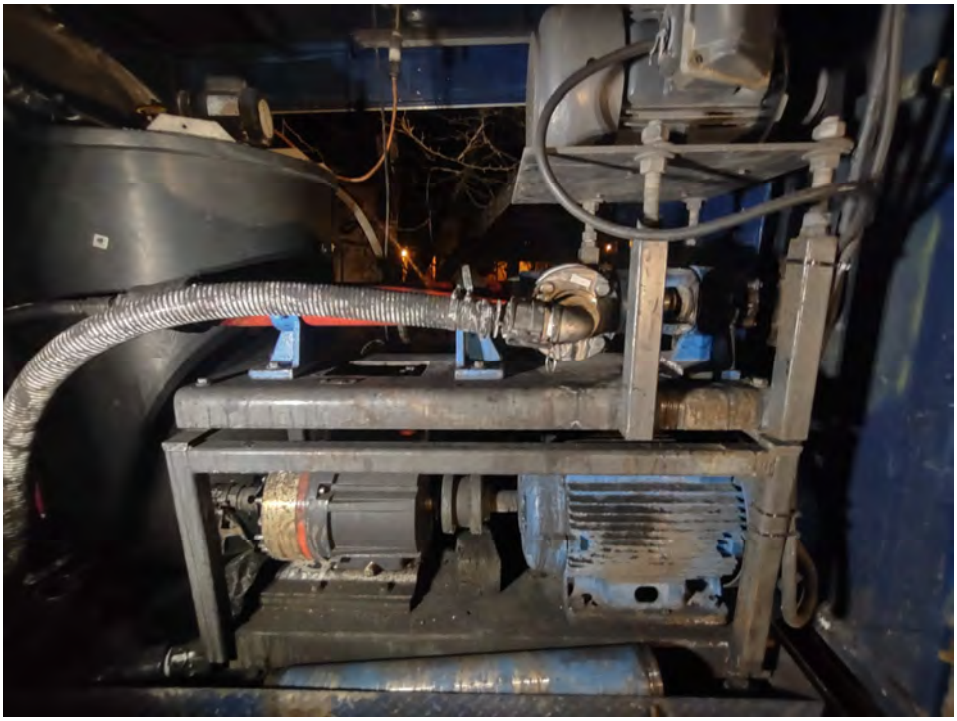
Custom Injection Trailer

PetroFix® Tote on a Forklift

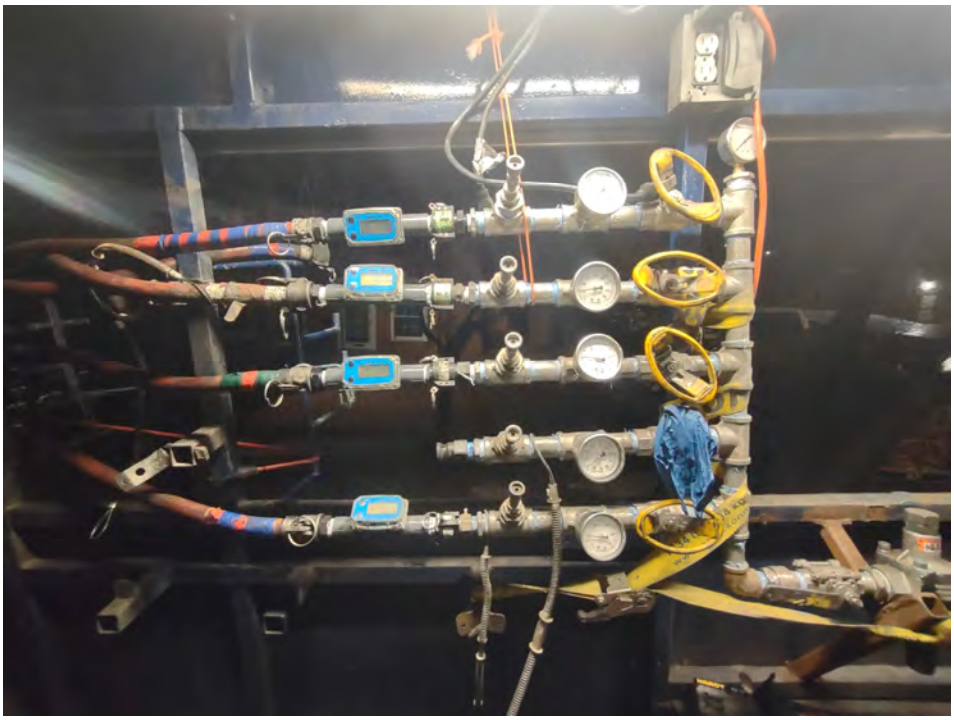
Diesel Heater to Keep PetroFix® Warm

Wellhead Assembly – View from Above

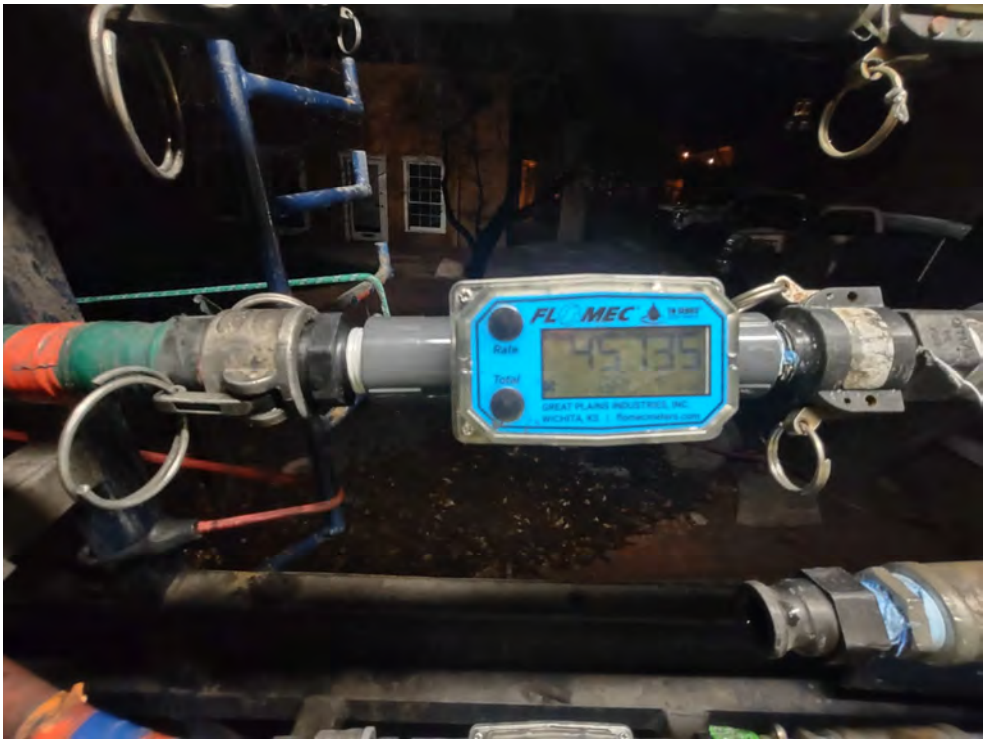
Wellhead Assembly – Profile View



Injection Pumps and Mixing Tank



Injection Manifold



Flomec Totalizing Flowmeter

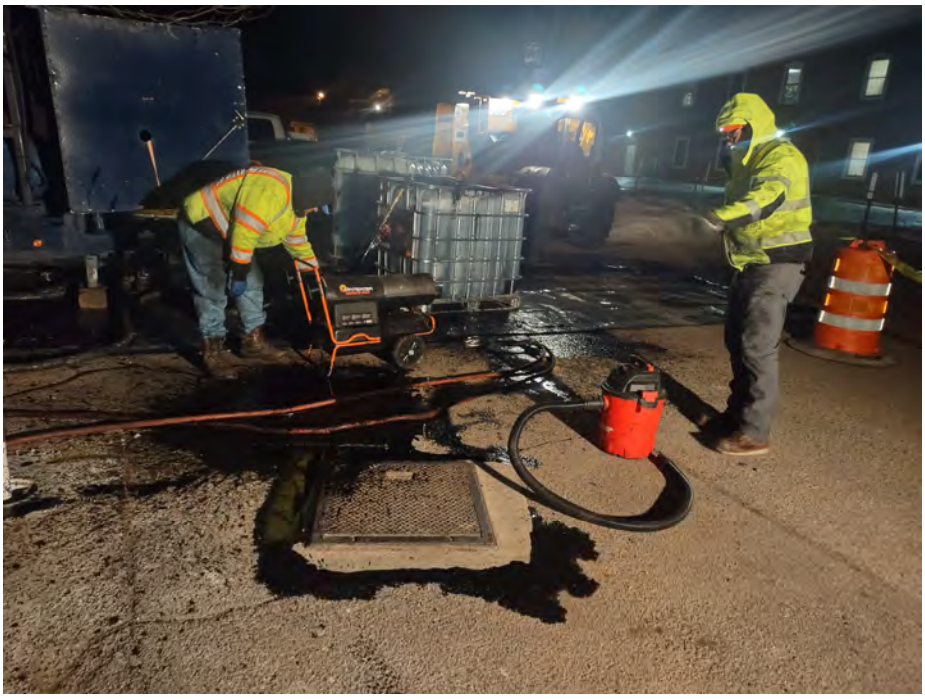
Scale to Weigh Electron Acceptors

300-gallon Mixing Vessel

Electron Acceptor

Injection Trailer

DV-4 Fitting Blow Off the Wellhead



Cleanup of PetroFix® Using a Vacuum Device

Cleaned up Surfaces before De-Mobilization

Equipment Loaded for De-Mobilization

Surfaces Prior to De-Mobilization

Pressure-Washed Surface Prior to De-Mobilization

Appendix C – Field Forms

Site Name: Santa Fe County Judicial Complex

JOB NUMBER: ____________

AREA: ____________

CLIENT: NMED PSTB

DATE: 2-3-23

EA STAFF: D. OBrien

PAGE: 1 of

Batch Mix	Volume PetroFlx (gal)	Volume Water (gal)	Volume Nutirents (Nitrate/Sulfat ~~(gal)~~ 183	Volume Nutirents (Nitrate) (gal)	Number of batches #	Total Volume (gal)	COMMENTS (note variance in inj. rate or pressures; downtime and cause; break-through pressure.
	27.6	272	13.8				

Injection

Injection Point	Injection Interval	Time	Flow Meter Reading - Start	Flow Meter Reading - End	Wellhead Volume (gal)	Wellhead Flow Rate (gpm)	Wellhead Pressure (psi)	
DV1	—	2118	5	0.1	67		0-80	
DV2		↓	↓	↓	67		↓	
DV3		↓	↓	↓	67		↓	
DV4		↓	↓	↓	67		↓	wellhead blown off with pressure
DV6	—	2309	~~[illegible]~~ 1	1	30		15	

2/3/2023

1730 - onsite, mike martin present and setting up

1804 - health and safety meeting conducted

1819 - setup continues

2022 - Succesful pump of water in DV1, DV2 DV3, DV4

2118 - Began injecting into DV1 DV2, DV3, DV4

2152 - DV4 exploded from high pressure injection continues on DV1, DV2, DV3 at slow rpm (0.1-0.2)

2304 DV6 connected for injection

2328 tank of first batch Emptied & Drillers Decided to begin cleanup and try tomorrow moving well to well, small amounts at a time to allow Dissipation

00:42 off site

Site Name: Santa Fe County Judicial Complex

JOB NUMBER:

AREA:

CLIENT: NMED PSTB

DATE: 2-4-2023

EA STAFF: D. OBrien

PAGE: 2 of

Batch Mix	Volume PetroFlx (gal)	Volume Water (gal)	Volume Nutirents (Nitrate/Sulfat (gal)	Volume Nutirents (Nitrate) (gal)	Number of batches #	Total Volume (gal)	COMMENTS (note variance in inj. rate or pressures; downtime and cause; break-through pressure.
	27.6 - 41.4	272 - 259	13.8 - 20.7				

Injection

Injection Point	Injection Interval	Time	Flow Meter Reading - Start	Flow Meter Reading - End	Wellhead Volume (gal)	Wellhead Flow Rate (gpm)	Wellhead Pressure (psi)	
DV 6		1008			75			
DV 8		↓			75			
DV 9					75			
DV 10		↓			75			
DV 1		1250			75			
DV 2					75			
DV 3					75			
DV 15		↓			75			
DV 11		1341			290			Batch increase in petrofix concentration wells taking Dosing better - 145 g water will be chased to achieve full 435
DV 12								
DV 13								
DV 15								
DV 16		↓			↓			

2/4/2023

0947 on site, beginning setup

1008 connecting to DV6, ~~DV7~~, DV8, DV9, DV10 for injection

1038 injecting into DV6, DV8, DV9, DV10

1124 injection stopped in DV6, DV8, DV9, DV10 Due to resistance/low flow/high pressure. Total injected volume 300g - 67.5/hole

1138 hooked up to DV1, DV2, DV3 to see if injection from 2/3/2023 has dissapated, DV15 ~~after~~ also connected for injection

1250 Batch completely injected into DV1, DV2, DV3, DV15 moving to new wells for next injection

1341 -injecting into DV11, DV12, DV13, DV15, DV16
- batch increased 50% concentration of petrofix and Electron acceptor

1431 injecting second batch into DV11, DV12 DV13, DV15, DV16 These wells are taking the Dose better

1636 batch 4 successfully injected into DV11, DV12, DV13, DV15, DV16

1806 final batch (3rd) injected into DV11, DV12, DV13, DV15, DV16
- full Dose of petrofix Delivered at higher concentration

1814 off site

Site Name: Santa Fe County Judicial Complex

JOB NUMBER:

AREA:

CLIENT: NMED PSTB

DATE: 2-5-2023

EA STAFF: D. O'Brien

PAGE: 3 of

Batch Mix	Volume PetroFlx (gal)	Volume Water (gal)	Volume Nutirents (Nitrate/Sulfat (gal)	Volume Nutirents (Nitrate) (gal)	Number of batches #	Total Volume (gal)	COMMENTS (note variance in inj. rate or pressures; downtime and cause; break-through pressure.

Injection

Injection Point	Injection Interval	Time	Flow Meter Reading - Start	Flow Meter Reading - End	Wellhead Volume (gal)	Wellhead Flow Rate (gpm)	Wellhead Pressure (psi)	
DV 14		0849	1.5	1.5	435		0	
DV 18		↓	↓	↓	↓		↓	
DV 19								
DV 20								
DV 22								
DV 17		1406	1.7	1.7	435		5	
DV 21			↓	↓	↓		10	
DV 23							0	
DV 24							0	
DV 25							0	

2/5/2023
0811 on site, Drillers begin setting up after health and safety meeting

0837 connecting to wells DV 14, ~~DV 17~~, DV 18, DV 19 DV 20, DV 22

0849 injecting into wells DV 14, DV 18, DV 19, DV 20

1344 injections complete in DV 22 wells DV 14, DV 18 DV 19, DV 20, DV 22

1353 connecting to wells DV 17, DV 21, DV 23, DV 24, DV 25

1406 injecting into DV 17, DV 21, DV 23, DV 24, DV 25

1845 injections complete in DV ~~22~~ 17, 21, DV 23, DV 24, DV 25 begin cleanup

1909 off site

Site Name: Santa Fe County Judicial Complex

JOB NUMBER: _____ DATE: 2/4/2023

AREA: _____ EA STAFF: _____

CLIENT: NMED PSTB PAGE: _____ of _____

Batch Mix	Volume PetroFlx (gal)	Volume Water (gal)	Volume Nutirents (Nitrate/Sulfat (gal)	Volume Nutirents (Nitrate) (gal)	Number of batches #	Total Volume (gal)	COMMENTS (note variance in inj. rate or pressures; downtime and cause; break-through pressure.
	55	245	27.5			300~~290~~	

Injection

Injection Point	Injection Interval	Time	Flow Meter Reading - Start	Flow Meter Reading - End	Wellhead Volume (gal)	Wellhead Flow Rate (gpm)	Wellhead Pressure (psi)	
DV 1		1842	0.2	0.1	4		40	• concentration increased
DV 2		↓			↓		↓	• 141g needed for DV 1, 2, 3
DV 3								
DV 4								• 188g needed for DV 4
DV 5								• 218g needed for DV 5 • injection aborted due to high pressure and low flow
DV 6		1933	1.0					• DV 6, 7, 8, 9, 10 Batch adjusted after first batch to: 31.25g petro-flx 20 lbs Electron acceptor 268g H_2O
DV 7		↓	↓					
DV 8								
DV 9								
DV 10		↓	↓					• DV 6, 7, 8, 9, 10 will be dosed 6 batches with new recipe and 2 remaining batches will be dosed to DV 11, 12 13, 14, 15 - to make up for lower water concentration in DV 11, 12, 13, 14, 15

2/6/2023

1724 on site contacted owner

1739 conducted Health and ~~Safety~~ meeting & Discussed scope of work

1842 injecting into DV1, DV2, DV3, DV4, DV5

1914 injection stopped - 6Pm started at 0.2 resistance after 8g Borwell was too high to continue injection

1939 injecting into DV6, DV7, DV8, DV9, DV10

2026 injection of ~~first~~ batch in DV6, DV7, DV8 DV9, DV10 complete and successful - contacting owner

2049 Batch changed to 31.25g Petroflx 20lbs Electronacceptor 268g water for 8 even batches - 6 in DV6, DV7 DV8, DV9, DV10 and 2 in DV11, DV12, DV13, DV14, DV15

2091 injecting secon batch (new recipe) into DV6, DV7, DV8, DV9, DV10 - new recipe is 31.25g PF, 20lbs EA, 268 H_2O

0211 final batch (6) complete in DV6, DV7, DV8, DV9, DV10 Begining Cleanup

0218 off site

Site Name: Santa Fe County Judicial Complex

JOB NUMBER: _____ DATE: 2/7/2023

AREA: _____ EA STAFF: D. Bowen

CLIENT: NMED PSTB PAGE: _____ of _____

Batch Mix	Volume PetroFlx (gal)	Volume Water (gal)	Volume Nutirents (Nitrate/Sulfat (gal)	Volume Nutirents (Nitrate) (gal)	Number of batches #	Total Volume (gal)	COMMENTS (note variance in inj. rate or pressures; downtime and cause; break-through pressure.
	31.25	264	20				

Injection

Injection Point	Injection Interval	Time	Flow Meter Reading - Start	Flow Meter Reading - End	Wellhead Volume (gal)	Wellhead Flow Rate (gpm)	Wellhead Pressure (psi)	
DV 11		1746	1.0				0720	
DV 12		↓	↓				↓	
DV 13								
DV 14								
DV 15								

2/7/2023 SFJC Injections

1724 on site health and safty meeting followed by setup

1737 connecting to wells DV11, DV12, DV13, DV14, DV15

1746 pumping in wells DV11, DV12, DV13, DV14, DV15

1921 pomping in wells DV11, DV12, DV13, DV14, DV15 complete - clean up started

2106 off site