NEW MEXICO ENVIRONMENT DEPARTMENT GROUND WATER QUALITY BUREAU

UNDERGROUND INJECTION CONTROL

GENERAL DISCHARGE PERMIT

Certified Mail- Return Receipt Requested

Facility Name:	NMDOT Artesia Patrol Yard Site Remediation
Facility Location:	3101 West Main Street, Artesia, New Mexico, 88210 17S 25E 13 Eddy County
Legally Responsible Party:	New Mexico Department of Transportation General Office, P.O. Box 1149, Santa Fe, NM 87504 505-670-4644
Remediation Oversight Agency Contact:	NMDOT and NMED PSTB Lawrence N. Kemp, PG, Geoscientist, NMDOT Hazardous Materials Investigation Bureau 505-670-4644 NMAC 20.5.119. Corrective Action for Storage Tank Systems Containing Petroleum Products
Remediation or Injection Plan Identification:	Work Plan for Pilot Testing to Inject BOS-200 (Injection Plan)
Permitting Action:	New DP-1948
PPS Contact	Avery Young, Environmental Scientist (505) 699-8564/avery.young@state.nm.us
EFFECTIVE DATE: XX/XX/XXXX	**TERM ENDS: XX/XX/XXXX**

Justin D. Ball
Chief, Ground Water Quality Bureau
[Subsection H of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.I]
Version updated December 5, 2018

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I. UIC GENERAL DISCHARGE PERMIT

The New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) issues this Underground Injection Control General Discharge Permit (UIC Permit) for the subsurface emplacement of additive fluids through a Class V UIC injection well for the purpose of facilitating vadose zone or groundwater remediation. The GWQB issues this UIC Permit to New Mexico Department of Transportation (Permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Ground and Surface Water Protection Regulations, 20.6.2 NMAC.

In issuing this UIC Permit, the GWQB has determined that the requirements of Subsection C of 20.6.2.3109 NMAC have been met. The activities authorized by this UIC Permit are principally governed by Work Plan for Pilot Testing to Inject BOS-200 (Injection Plan), under the authority of New Mexico Department of Transportation, with oversight by the New Mexico Environment Department Petroleum Storage Tank Bureau. Compliance with this UIC Permit requires compliance with the terms, requirements, and conditions of the Injection Plan. The term of this UIC Permit shall be no longer than five years from the effective date of this UIC Permit.

The injection activities, the location of the injection site, the type of injection and quantities of additives being used are briefly described as follows:

Injection Activities (summary: including injection well type, number of wells, and injection frequency)

Copy of the Injection Plan Attached (required): ☒
Summary of Injection Plan: To mitigate soil and groundwater impacted by the release of gasoline from underground storage tank, a pilot test to evaluate efficacy of injecting BOS-200 activated carbon with remediation amendments will be performed. Ten boreholes will be pre-drilled to a depth of approximately 73 feet bgs using a soild stem augers by a New Mexico lincensed driller. The boreholes will then be filled with hydrated bentonite. After bentonite is set, remediation fluids will be injected into subsurface between approximately 55 and 70 feet bgs using direct push rig and steel rods. Details are provided in the attached Work Plan for Injection of BOS-200 approved by the NMDOT and NMED PSTB.

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Injection Site Information

Depth to most shallow groundwater (required): 50-55 ft

Existing concentration of total dissolved solids (TDS) in groundwater (required): 896 - 4,160 mg/L Location (required): Description of site location

County (required): Eddy

Latitude: 32.84237

Longitude: -104.43560

Map Showing Area of Injection Sites Attached (required): ☐

Additives Being Used (including volumes, manufacturer, and mixing ratios)

BOS-200 activated carbon by Remediation Product ~3,200 pound, gypsum ~2,000 pounds, magnesium sulfate ~2,000 pounds, starch ~1,000 pounds, yest ~53 pounds, hydrocarbon degrading bacteria ~38 liters, water ~2,000 - 3,000 gallons.

Anticipated Precipitation, Dissolution, Adsorption, and Desorption Products

The BOS-200® will be mixed onsite with gypsum, magnesium sulfate, starch, bacteria, and water to form a slurry. The bacteria is a proprietary mix uniquely designed for petroleum hydrocarbons degradation and is effective in both aerobic and anaerobic conditions. Yeast is added to facilitate the degradation of EDC. Gypsum and magnesium sulfate are added to provide electron acceptors for biodegradation.

Public Notice Posting Locations

2 inch by 3 inch Newspaper Ad required for Renewal applications. **Newspaper:** Artesia Daily Press

3 inch by 4 inch Newspaper Ad required for New, Modification, and Renewal/Modification applications.
Newspaper: Artesia Daily Press

2 feet by 3 feet sign posted for 30 days in a location conspicuous to the public at or near the facility required for New, Modification, and Renewal/Modification applications.
Sign Location: Onsite at 3101 West Main, Artesia, NM

8.5 inch by 11 inch or larger posted off-site location conspicuous to the public (e.g. public library). Required for New, Modification, and Renewal/Modification applications.
Flyer Location: Artesia Public Library, 205 West Quaya Avenue, Artesia, NM 88210

This UIC Permit consists of the complete and accurate completion of this UIC Permit form as determined by the GWQB.

Issuance of this UIC Permit does not relieve the Permittee of the responsibility to comply with the WQA, WQCC Regulations, and any other applicable federal, state and/or local laws and regulations, such as zoning requirements and nuisance ordinances.

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Signatures

Signature must be that of the person listed as the legally responsible party on this application.

I, the applicant, attest under penalty of law to the truth of the information and supporting documentation contained in this application for an Underground Injection Control General Discharge Permit.

Applicant's Signature

Signature: Lawrence N Kemp Date: 05 / 23/ 2022

Printed Name: Lawrence N. Kemp Title: Geoscientist

Applicant Note that Submissions Must Include:

1- One electronic copy of the application delivered to the GWQB via email or other format

2- Two hardcopies of the application delivered to: Ground Water Quality Bureau
Harold Runnels Building
1190 Saint Francis Drive
P.O. Box 5469
Santa Fe, NM 87502-5469

3- Payment by check or electronic transfer of one application fee of $100.00

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II. FINDINGS

In issuing this UIC Permit, GWQB finds:

1. The Permittee is injecting fluids so that such injections will move directly or indirectly into groundwater within the meaning of Section 20.6.2.3104 NMAC.

2. The Permittee is injecting fluids so that such fluids will move into groundwater of the State of New Mexico which has an existing concentration of 10,000 mg/L or less of TDS within the meaning of Subsection A of 20.6.2.3101 NMAC.

3. The Permittee is using a Class V UIC well as described in 20.6.2.5002(B)(5)(d)(ii) NMAC for in situ groundwater remediation by injecting a fluid that facilitates vadose zone or groundwater remediation.

4. The Permittee is injecting fluids into groundwater in order to achieve the remediation goals identified in the Injection Plan.

III. AUTHORIZATION TO DISCHARGE

The Permittee is authorized to inject chemical additives into groundwater in accordance with this UIC Permit and the Injection Plan under the oversight of NMDOT and NMED PSTB.

[20.6.2.3104 NMAC, Subsection C of 20.6.2.3106 NMAC, Subsection C of 20.6.2.3109 NMAC]

IV. CONDITIONS

The conditions of this UIC Permit shall be complied with by the Permittee and are enforceable by GWQB.

1. The Permittee shall perform remediation activities in accordance with the Injection Plan and shall notify GWQB of any changes prior to making them.

   [20.6.2.3107 NMAC]

2. The Permittee shall monitor the injection activities and their effects on groundwater quality as required by the Injection Plan and shall provide GWQB with electronic copies of the required reporting and any pertinent documentation of activities at the site.

   [20.6.2.3107.A NMAC, 20.6.2.3109.A NMAC]

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3. If the GWQB or the Permittee identifies any failure of the Injection Plan or this UIC Permit to comply with 20.6.2 NMAC not specifically noted herein, GWQB may require the Permittee to submit a corrective action plan and a schedule for completion of corrective actions to address the failure.
   Additionally, the GWQB may require the Permittee to submit a proposed modification to the Injection Plan, this UIC Permit, or both.
   [20.6.2.3107.A NMAC, 20.6.2.3109.E NMAC]

4. ADDITIONAL MONITORING REQUIREMENTS – (RESERVED) - Placeholder for any added monitoring and reporting requirements.

5. TERMINATION – Within 30 days of completion of activities authorized by this UIC Permit the Permittee shall submit a closure report and a request to terminate the UIC Permit to the GWQB for its approval. The closure report shall identify how the injection well(s) was (were) closed in accordance with the Injection Plan. The Permittee shall provide NMDOT with a copy of this closure report.
   [20.6.2.5005 NMAC, 19.27.4 NMAC]

6. INSPECTION and ENTRY – The Permittee shall allow a representative of the NMED to inspect the facility and its operations subject to this UIC Permit and the WQCC regulations. The GWQB representative may, upon presentation of proper credentials, enter at reasonable times upon or through any premises in which a water contaminant source is located or in which are located any records required to be maintained by regulations of the federal government or the WQCC. The Permittee shall allow the GWQB representative to have access to, and reproduce for their use, any copy of the records, and to perform assessments, sampling or monitoring during an inspection for the purpose of evaluating compliance with this UIC Permit and the WQCC regulations.
   Nothing in this UIC Permit shall be construed as limiting in any way the inspection and entry authority of GWQB under the WQA, the WQCC Regulations, or any other local, state, or federal regulations.
   [20.6.2.3107.D NMAC, NMSA 1978, §§ 74-6-9.B and 74-6-9.E]

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7. MODIFICATIONS and/or AMENDMENTS – In the event the Permittee proposes a change to the injection plan that would result in a change in the volume injected; the location of the injections; or the concentration of the additives being injected by the facility, the Permittee shall notify GWQB prior to implementing such changes. The Permittee shall obtain approval (which may require modification of this UIC Permit) by GWQB prior to implementing such changes.

   [20.6.2.3107.C NMAC, 20.6.2.3109.E and G NMAC]

8. COMPLIANCE with OTHER LAWS – Nothing in this UIC Permit shall be construed in any way as relieving the Permittee of the obligation to comply with all applicable federal, state, and local laws, regulations, permits, or orders.

   [NMSA 1978, § 74-6-5.L]

9. PERMIT FEES – Payment of permit fees is due at the time of UIC Permit approval. Permit fees shall be paid in a single payment remitted to GWQB no later than 30 days after the UIC Permit effective date.

   Permit fees are associated with issuance of this UIC Permit. Nothing in this UIC Permit shall be construed as relieving the Permittee of the obligation to pay all permit fees assessed by GWQB. A Permittee that ceases injecting or does not commence injecting during the term of the UIC Permit shall pay all permit fees assessed by GWQB. An approved UIC Permit shall be suspended or terminated if the facility fails to remit a payment by its due date.

   [20.6.2.3114.F NMAC, NMSA 1978, § 74-6-5.K]

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INJECTION PLAN

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EA Engineering, Science, and Technology, Inc., PBC
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102
www.eaest.com

February 21, 2022

Mr. Larry Kemp
UST Remediation Program Manager
New Mexico Department of Transportation
Hazardous Material Investigation Bureau
P.O. Box 1149, Room 201
Santa Fe, New Mexico 87504-1149

RE: Work Plan for Pilot Testing to Inject BOS-200® - Revision 1
NMDOT Artesia Patrol Yard 42 61
3101 W. Main Street, Artesia, Eddy County, New Mexico 88210
Facility ID: 29642 Release ID: 1921 Release Name: NMSHTD Artesia

Dear Mr. Kemp:

EA Engineering, Science, and Technology, Inc., PBC (EA) is pleased to submit this work plan for pilot testing to inject BOS-200 with amendments at the Artesia Patrol Yard (the site), located in Artesia, New Mexico (Figure 1). The work will be performed under EA's contract for Monitoring and Maintenance of New Mexico Department of Transportation (NMDOT) Petroleum Storage Tanks (PSTs) No. C06164.

Objective

The objective of this pilot test is to evaluate the effectiveness of BOS-200® with amendments for in-situ remediation of residual hydrocarbon contamination at the site.

Background

This section presents a summary of site conditions. Summaries of groundwater levels, field geochemical parameters, and contaminant concentrations are presented in Tables 1 through 4. November 2020 potentiometric surface elevations, benzene concentrations, and recent analytical results are shown in Figures 2 through 4.

Organic Compounds in Groundwater. Concentrations of benzene, methyl tertiary-butyl ether (MTBE), total naphthalenes, and ethylene dichloride (EDC) in groundwater remain above the New Mexico Water Quality Control Commission (NMWQCC) standards. During November 2020, the following concentrations were observed:

Well ID	Benzene (µg/L)	MTBE (µg/L)	Naphthalenes (µg/L)	EDC (µg/L)
1-5	**1,000**	**320**	**450**	**<10**
MW-3	**130**	14	**86**	1.2
1-3	**150**	**1,300**	**1,830**	**14**
Cleanup Standard	5.0	100	30	5.0

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Inorganic Compounds in Groundwater. Concentrations of dissolved manganese, iron, sulfate, and methane observed during the November 2020 monitoring event are provided below. Nitrate concentrations were low and below the standard. Sulfide concentrations were below the detection limits. Utilization of sulfate in Wells 1-3 and 1-5 indicated anaerobic sulfate reduction supported by the presence of sulfate-reducing bacteria in Well 1-5. Detection of methane indicated anaerobic methanogenesis.

Well ID	Manganese (mg/L)	Iron (mg/L)	Sulfate (mg/L)	Methane (mg/L)
1-5	**1.2**	0.27	<2.5	1.51
MW-3	0.097	0.049	**770**	0.0358
1-3	**0.71**	**2.0**	<2.5	0.478
Cleanup Standard	0.2	1.0	600	5.0

Geochemical Indicators. In November 2020, field pH was near neutral averaging 7.10 units, dissolved oxygen (DO) concentrations averaged 1.3 milligrams per liter (mg/L), oxidation-reduction potential (ORP) values averaged -58 millivolts (mV), specific conductance (SC) averaged 1,725 micro Siemens per centimeter (µS/cm), and temperature averaged 21degrees Celsius. Geochemical indicators of redox processes (low concentrations of DO coupled with elevated concentrations of reduced metals and methane and decreased concentrations of sulfate relative to background) indicate that anaerobic conditions are present at Well 1-5; therefore, aerobic processes are not expected to be significant.

Bio-Trap® Results. In the Well 1-5, November 2020 MNA Bio-Trap® analyses indicated low numbers of bacteria associated with aerobic degradation of benzene, toluene, ethylbenzene, total xylenes (BTEX), and MTBE and moderate numbers of bacteria associated with anaerobic degradation of BTEX, Polycyclic Aromatic Hydrocarbons (PAHs), and alkanes. High numbers of sulfate-reducing bacteria were present suggesting that in situ conditions favor anaerobic processes.

Geology and Hydrogeology. Geology at the site consists of clays with layers of caliche. Groundwater was encountered between 50 and 65 feet below ground surface (ft bgs) and averaged 56 ft bgs in November 2020. The groundwater level in the Well 1-5 for the last several years has been approximately 55 ft bgs. Boring logs indicate that site monitoring wells were installed to 70 ft bgs. The primary groundwater flow direction in November 2020 was to the south with an average hydraulic gradient of 0.044 foot per foot.

Additional details can be found in the Groundwater Monitoring and In-Situ Microcosm Study Report (EA, February 2021).

Technical Approach

The technical approach for the pilot test includes injection of BOS-200® activated carbon around Well1-5 in the source area. BOS-200® is an activated carbon-based product used for the remediation of petroleum hydrocarbons. Injection boreholes will be pre-drilled using solid stem auger drilling methodology followed by injection through hollow direct push steel rods utilizing high-pressure pumps. The BOS-200® will be mixed onsite with gypsum, magnesium sulfate, starch, bacteria, and water to form a slurry. The bacteria is a proprietary mix uniquely designed for petroleum hydrocarbons degradation and is effective in both aerobic and anaerobic conditions. Yeast is added to facilitate the degradation of EDC. Gypsum and magnesium sulfate are added to provide electron acceptors for biodegradation.

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Scope Elements

Provided below is a summary of the scope:

1. Preparation of this work plan that includes scope, pricing and schedule, planning, and preparation of a Health and Safety Plan (HASP)
2. Preparation of a Discharge Permit to inject remediation fluids
3. Pre-drilling of 10 boreholes to facilitate injection
4. Injection of remediation fluids
5. Post-Injection evaluation
6. Contingency

Task 1 - Work Plan Preparation, Planning, and HASP

This task includes development of the scope, pricing, and schedule for this work plan.

Upon receipt of the Notice to Proceed from the NMDOT Hazardous Material Investigation Bureau (HMIB) and the New Mexico Environment Department Petroleum Storage Tank Bureau (NMED PSTB), EA will prepare a site-specific Health and Safety Plan (HASP) in accordance with the requirements of 40 CFR 1910.120 to cover all proposed activities.

The NMDOT HMIB and NMED PTSB Project Managers, property owner(s), and any other affected property owners will be notified at least four days before implementing field activities. All field activities will be coordinated, as necessary, with the affected property owners.

Task 2 – Preparation of a Discharge Permit

Before injection, EA will obtain an Underground Injection Control General Discharge Permit (UIC DP) from the NMED Ground Water Quality Bureau (GWQB). As part of the UCI DP, the following will be completed:

- EA will prepare and submit a UIC DP application to the NMED GWQB on behalf of the NMDOT HMIB.
- Public notice will be published in the local newspaper.
- A 2’ x 3’ sign will be posted for 30 days in a location conspicuous to the public at or near the site.
- An 8.5” x 11” notice will be posted in a public library or another public place.
- A public notice flyer will be mailed by 1st Class mail to the property owners within 1/3 mile of the site.
- A public notice flyer will be mailed by certified mail to the owner of the site.

An affidavit of posting of a public notice, a list of names and addresses to whom the public notice was mailed, a list and names and addresses of owners of discharge sites, certified mail receipts, and a copy of the newspaper ad will be submitted to the NMED GWQB.

Task 3 - Pre-Drilling of Boreholes

Site soil contains caliche horizons that would preclude the advancement of the direct push rods to the injection target interval. Therefore, to facilitate injection, 10 boreholes will be pre-drilled using solid steam augers and backfilled with bentonite. Soil cuttings will be described for soil type and screened with a photoionization detector. A direct push rig will then be utilized to advance the injection tool to the target depth for injection of the BOS-200®. Proposed borehole locations are shown in Figure 5. Provided below are the salient points of the work execution:

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- Drilling will be conducted by a New Mexico licensed driller. A bid by Enviro-Drill, Inc. (EDI) was included in the provided costs.
- Before drilling, EDI will obtain drilling and plugging permits from the New Mexico Office of the State Engineer (NMOSE). Upon completion, EDI will file a plugging report with the NMOSE.
- Borehole locations will be marked with stakes and white survey whiskers and EDI will request a utility locate through NM 811 before drilling.
- Boreholes will be drilled using solid stem augers, approximately 4-inches in diameter.
- Boreholes will be extended to a depth of approximately 73 ft bgs, three feet below the target bottom injection interval to allow space for the injection tool. This depth is based on the approximate vertical extent of soil contamination determined by photoionization detector (PID) field screening reported in the 1994 Monitor Well Installation and SVE Pilot Test Report prepared by Intera Inc. and Billings and Associates, Inc.
- Upon completion, boreholes will be backfilled with hydrated bentonite to 5 ft bgs. The remaining cavity will be filled with clean cuttings or fill. Five (5) gallons of water will be added for each 50-pound bag of bentonite. The bentonite will be allowed to set for a minimum of 24 hours. A steel plate will be placed over the boring until the injections are completed.
- Soil cuttings will be placed into a roll-off bin or drums, profiled for waste disposal for VOCs, ignitibility, and corrosivity, and disposed of as an exempt waste at a Rhino permitted facility. The Rhino Environmental Services, Inc. proposal was included in the provided waste disposal costs.
- After completion, EA will prepare a letter report documenting the work.
- It is assumed that equipment and materials can be stored onsite and work can be performed during normal business hours for 10 hours per day.

Task 4 - Injection of Remediation Fluids

After the pre-drilled boreholes are completed, backfilled with bentonite, and allowed to set for at least 24 hours, BOS-200® will be injected into the injection target zone utilizing the pre-drilled boreholes. Additional mobilization/demobilization will be required as a different drilling rig and contractor will be used to perform the injection. Provided below are the salient points of work execution:

- Injection will be completed using a Direct Push (DP) drilling rig with 2.25-inch-diameter hollow drive rods and a high-pressure, high-flow diaphragm pump and high-pressure hoses. Alpine Remediation (Alpine), a New Mexico licensed driller, will perform the work. Alpine is a woman-owned small business located in Golden, Colorado, and is an authorized consultant for BOS-200® injection.
- Injection will be performed every 2 feet into one-foot intervals using a top-down method starting at 55 ft bgs to a total depth of 70 ft bgs. The target interval was chosen to span the impacted saturated soil, as noted in the boring logs during well installation. The top-down methodology was selected to minimize the probability of short-circuiting. Alpine will be requested to have additional tools to allow for a bottom-up application if needed.
- Injection pressures are expected to be in 100-150 pounds per square foot range and may dissipate as injection proceeds.
- Injection in the adjacent boreholes will be staggered, alternating between odd and even injection intervals. For example, injection into Borehole A will be performed at 55, 57, 59 … etc. ft bgs; whereas injection into an adjacent Borehole B will be performed at 56, 58, 60 … etc. ft bgs.
- Provided below is the mixture recipe. The amount of water and recipe may be adjusted based on the injectability observed in the field.

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Materials	BOS-200® (pounds)	Gypsum (pounds)	Magnesium Sulfate, (pounds)	Starch (pounds)	Yeast (pounds)	Bacteria (liters)	Water (gallons)
Per 2-foot Interval	40	25	25	12.5	~0.66	~0.46	23-35
Per Borehole	320	200	200	100	~5.3	3.8	200-280
Total	3,200	2,000	2,000	1,000	~53	38	2,000-2,800

- Materials will be mixed in batches using mechanical mixers.
- It is assumed that a source of potable water is available onsite, equipment and materials can be stored onsite, and work can be performed during normal business hours for 10 hours per day.

Task 5 - Post-Injection Evaluation

Groundwater concentrations will be monitored post-injection to evaluate the effectiveness of the pilot test. The sampling regimen is discussed below:

- Well 1-5 will be sampled 2 weeks, 1 month, and each quarter after the injection.
- A Bio-Trap® sampler will be deployed in Well 1-5 one month after injection and retrieved during the 1st quarterly event.
- Plume wells (defined below) will be sampled quarterly after the injection.
- All site wells will be sampled one year after the injection.

Samples will be submitted to the following analytical laboratories for analysis, as follows:

- Remediation Products Inc. (RPI) in Golden, Colorado, manufacturer of BOS-200®, will analyze samples for additional anions in Well 1-5 2 weeks and 1 month after injection.
- Microbial Insights in Knoxville, Tennessee, will analyze the Bio-Trap® sample for QuantArray Petro analysis in Well 1-5 during the 1st quarterly event.
- Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico, will perform all of the remaining analyses.

The sampling regimen is shown in Table 5. A summary of analyses, methods, container requirements, preservation, and holding times is provided in Table 6.

Groundwater levels will be gauged in all accessible wells to determine groundwater flow direction and gradient.

Well 1-5 will serve as the main pilot test well. Samples from this well will be analyzed for target contaminants, markers of biodegradation of contaminants, and microbial activity.

Bio-Trap® Sample. A Bio-Trap® sample will be deployed in Well 1-5 one month after injection. The trap will be retrieved during the 1st quarterly sampling event and submitted to the Microbial Insights for QuantArray Petro® microbial analysis to quantify specific functional genes responsible for aerobic and anaerobic biodegradation of BTEX, PAHs, and alkanes.

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Plume Wells. Plume wells are those located within the footprint of the plume and are listed below. These wells will be sampled quarterly to evaluate changes in concentrations within the plume. All plume wells will be sampled for VOCs and select wells will be sampled for additional analytes listed in Table 5.

- MW-3, upgradient within the plume
- 1-3, upgradient within the plume
- 1-5, source area and pilot test well
- 1-6, cross-gradient, impacted by naphthalenes
- 2-1, cross-gradient, impacted by naphthalenes
- 2-4, medial within the plume
- 2-5, downgradient within the plume
- 2-7, downgradient within the plume

Periphery Wells. Eleven peripheral wells are defined as that outside of the plume extent and include 1-1, 1-4, 1-7, 2-2, 2-6, 3-1, 3-2, MW-5, MW-7, MW-10, and MW-13. These wells will be sampled quarterly for VOCs.

Purging and Sampling. Sampling will be performed by hand bailing using clean disposable bailers and twine. Before sampling, groundwater levels will be measured to the nearest 0.01 foot using a water level meter. After fluid level gauging is completed, wells will be purged and sampled. Purging will be completed when three casing volumes have been purged or when the well starts to bail dry. If the well starts to bail dry, the well will be sampled while sufficient volume for a sample aliquot remains or after sufficient volume for a sample is recharged. Purge water will be discharged onto an impervious surface providing it does not contain non-aqueous-phase liquid (NAPL). Purge start time, volume purged, and field parameters will be logged on standardized well sampling field forms during purging. DO, ORP, pH, SC, and temperature will be measured during the purging of wells using a multi-meter. VOC samples will be collected such that no headspace exists in the sample vials. DO will be only measured from the first bailer, as bailing action agitates and oxygenates groundwater.

Reporting. After completion of each quarterly post-injection monitoring event and receipt of laboratory data, EA will prepare a report summarizing scope and execution, presenting results, and providing conclusions. The results from the 2-weeks and 1-month post-injection sampling events will be included in the first quarter report. Each report will contain the following:

- Description of scope and execution of work
- Results and findings
- Recommendations
- Tabulated groundwater level data
- Tabulated groundwater analytical data
- Site layout map
- Groundwater contour map
- Contaminant concentration map and plume extent
- Field records
- Laboratory analytical report

Task 6 - Contingency

To cover unforeseen circumstances or changes in conditions, EA proposes to allocate funds in contingency. If the use of contingency is required, EA will submit a request to the NMDOT via email describing the reason for the request, the scope, pricing, and schedule. Contingency funds will not be accessed without prior written approval by NMDOT.

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EA will accept direct payment for reimbursable costs for the proposed scope of work according to the fixed price proposal presented in Table 7.

Assumptions

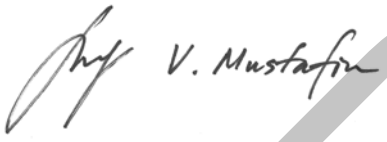
The following assumptions were built into the provided costs:

1. Access to EA and EA subcontractors will be granted by NMDOT.
2. Work will be performed during normal working hours for the duration of up to 10 hours per day.
3. A private utility locate is not required to install borings and inject remediation fluids.
4. Potable water for mixing is available onsite.
5. Equipment, roll-off bin, drums, and materials can be stored onsite.
6. Roll-off bin can be picked up during the same mobilization.
7. Borehole installation will take no longer than five days.
8. Injection will take no longer than five days.
9. Restoration includes a surface patch, clearing of materials and equipment, and removal of debris generated during field activities.

If you have questions or comments, please feel free to contact me at 505-715-4477 or email me at vmustafin@eaest.com

Sincerely,

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



Vener Mustafin, P.E.
Project Manager/Senior Engineer

Attachments: Figure 1 – Site Layout
Figure 2 – Groundwater Contours – November 2020
Figure 3 – Benzene Concentrations – November 2020
Figure 4 – Recent Analytical Results
Figure 5 – Proposed Injection Point Locations
Table 1 – Summary of Fluid Gauging Results
Table 2 – Summary of Groundwater Field Parameters
Table 3 – Summary of Groundwater Analytical Results
Table 4 – Summary of Analytical Results – Dissolved Gasses
Table 5 – Groundwater Monitoring Regimen
Table 6 – Analyses, Methods, Preservation, Holding Time, and Handling

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FIGURES

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LEGEND:

- EXISTING MONITORING WELL
- EXISTING CONVERTED MONITORING WELL
- PLUGGED WELL
- PROPERTY BOUNDARY

30 15 0 30

SCALE IN FEET

SOURCES:
NV5 MAY 2019 ANNUAL GROUNDWATER MONITORING REPORT
GOOGLE EARTH, DECEMBER 2019 IMAGE

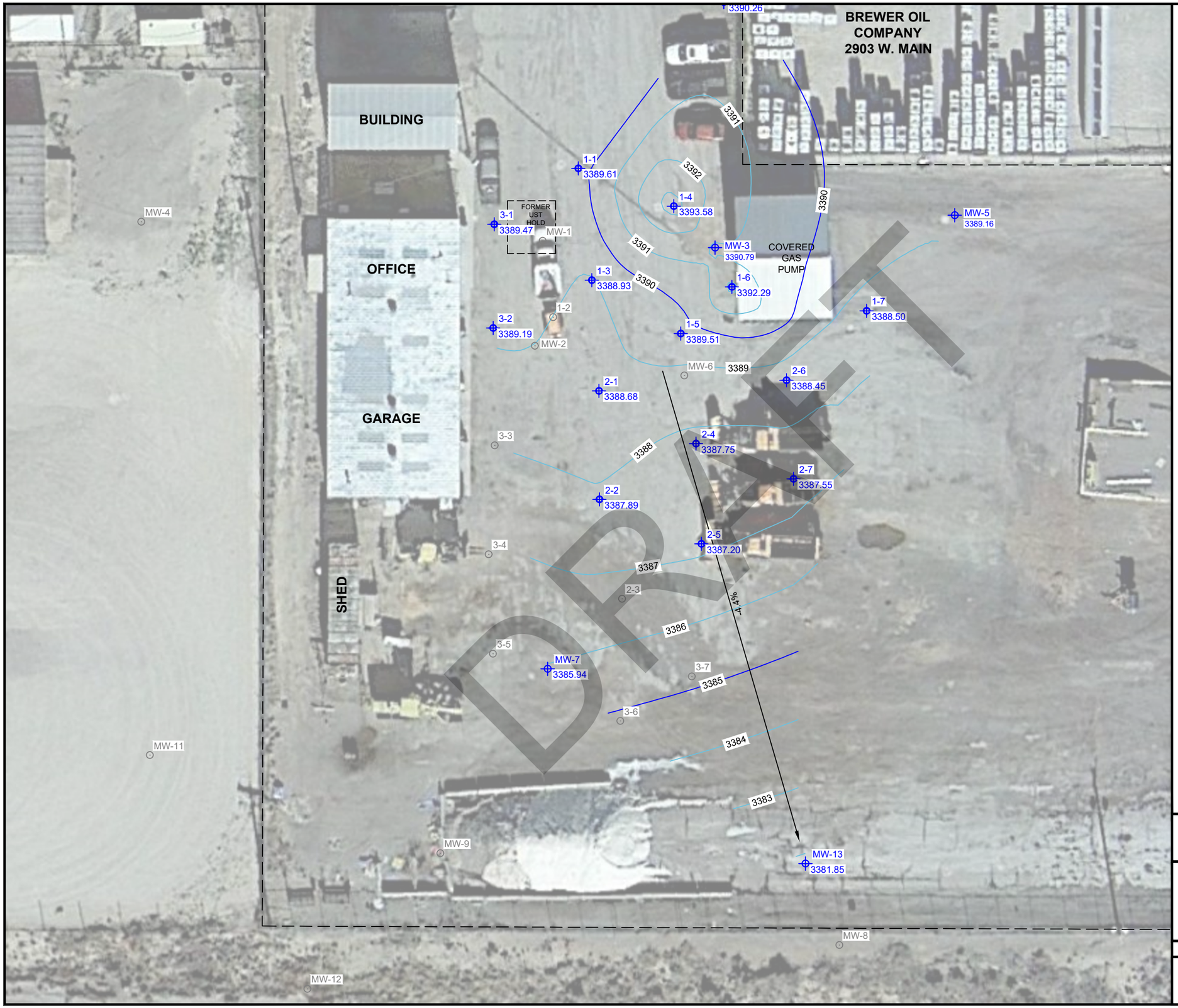
ARTESIA NMDOT YARD
3103 WEST MAIN STREET, ARTESIA, NM

FIGURE 1
SITE LAYOUT

PROJECT #:	PROJECT PHASE: 01	PROJECT MANAGER: VM

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

FILE PATH:



LEGEND:

- EXISTING MONITORING WELL
- EXISTING CONVERTED MONITORING WELL
- PLUGGED WELL
- PROPERTY BOUNDARY
- 3390 — GROUNDWATER CONTOUR FEET ABOVE MEAN SEA LEVEL

30 15 0 30

SCALE IN FEET

SOURCES:
NV5 MAY 2019 ANNUAL GROUNDWATER MONITORING REPORT
GOOGLE EARTH, DECEMBER 2019 IMAGE

ARTESIA NMDOT YARD
3103 WEST MAIN STREET, ARTESIA, NM

FIGURE 2
GROUNDWATER CONTOURS
NOVEMBER 2020

PROJECT #:	___	PROJECT PHASE:	01	PROJECT MANAGER:	VM

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

FILE PATH:

LEGEND:

- EXISTING MONITORING WELL
- EXISTING CONVERTED MONITORING WELL
- PLUGGED WELL
- PROPERTY BOUNDARY
- 100 BENZENE CONTOURS, MICROGRAMS PER LITER

BENZENE CONTOUR RANGES (MICROGRAMS PER LITER)

- 5 - 100
- 100 - 250
- 250 - 500
- 500 - 1,000

30 15 0 30

SCALE IN FEET

SOURCES:
NV5 MAY 2019 ANNUAL GROUNDWATER MONITORING REPORT
GOOGLE EARTH, DECEMBER 2019 IMAGE

ARTESIA NMDOT YARD
3103 WEST MAIN STREET, ARTESIA, NM

FIGURE 3
BENZENE CONCENTRATIONS
NOVEMBER 2020

PROJECT #:	___	PROJECT PHASE:	01	PROJECT MANAGER:	VM

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

FILE PATH:

MW-10	B	T	E	X	MTBE	EDC	TN	Mn
10/29/2018	2.4	<1.0	11	4.0	<1.0	<1.0	2.0	NA
5/15/2019	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<10	**0.58**
11/18/2020	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<4.0	NA

1-4	B	T	E	X	MTBE	EDC	TN	Mn
5/16/2019	**160**	<25	420	330	**1,300**	<25	**1,820**	**0.70**
10/30/2018	NS	NS	NS	NS	NS	NS	NS	NA
5/16/2019	**23**	41	330	310	7.8	<5.0	**34**	0.035
11/18/2020	1.2	<1.0	2.0	1.7	1.1	<1.0	<4.0	NA

1-1	B	T	E	X	MTBE	EDC	TN	Mn
5/16/2019	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<10	<0.0020
10/29/2018	Dry							
5/16/2019	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<10	**1.8**
11/18/2020	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<4.0	NA

MW-3	B	T	E	X	MTBE	EDC	TN	Mn
10/30/2018	**11**	<1.0	14	6.6	25	2.2	3.8	NA
5/16/2019	**590**	11	930	440	89	<10	**389**	**0.48**
11/17/2020	**130**	2.1	130	42	14	1.2	**86**	0.097

3-1	B	T	E	X	MTBE	EDC	TN	Mn
10/30/2018	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<10	NA
5/16/2019	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<10	**1.4**
11/18/2020	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<4.0	NA

MW-5	B	T	E	X	MTBE	EDC	TN	Mn
10/30/2018	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<10	NA
5/16/2019	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<10	<0.0020
11/17/2020	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<4.0	NA

1-3	B	T	E	X	MTBE	EDC	TN	Mn
5/16/2019	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<10	**1.8**
10/30/2018	**160**	<20	400	290	**1,400**	<20	**2,310**	NA
5/16/2019	**160**	<25	420	330	**1,300**	<25	**1,820**	**0.70**
11/17/2020	**150**	17	480	490	**1,300**	**14**	**1,830**	**0.71**

1-7	B	T	E	X	MTBE	EDC	TN	Mn
10/29/2018	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<10	NA
5/16/2019	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<10	**0.82**
11/17/2020	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<4.0	NA

3-2	B	T	E	X	MTBE	EDC	TN	Mn
10/30/2018	Purged Dry							
5/16/2019	Insufficent Water							
11/18/2020	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<4.0	NA

1-5	B	T	E	X	MTBE	EDC	TN	Mn
5/16/2019	**23**	41	330	310	7.8	<5.0	**34**	**35**
10/30/2018	**540**	16	150	310	**240**	<10	**570**	NA
5/16/2019	**1,500**	60	480	**980**	**470**	<20	**1,180**	**1,200**
11/17/2020	**1,000**	34	330	460	**320**	<10	**450**	**1.2**

1-6	B	T	E	X	MTBE	EDC	TN	Mn
10/30/2018	1.7	<2.0	16	3.7	2.8	<2.0	**96**	NA
5/16/2019	<5.0	<5.0	20	8.1	<5.0	<5.0	**82**	**0.56**
11/18/2020	<1.0	<1.0	<1.0	<1.5	1.0	<1.0	<4.0	NA

2-6	B	T	E	X	MTBE	EDC	TN	Mn
10/30/2018	NS	NS	NS	NS	NS	NS	NS	NA
5/16/2019	<1.0	<1.0	<1.0	<1.5	7.1	2.4	<10	**0.42**
11/17/2020	<1.0	<1.0	<1.0	<1.5	3.9	1.3	<4.0	NA

2-1	B	T	E	X	MTBE	EDC	TN	Mn
10/29/2018	<10	<10	110	46	85	<10	**1,300**	NA
5/15/2019	<5.0	<10	36	<15	67	<10	**263**	**0.40**
11/18/2020	<2.5	<2.5	8.6	<3.8	58	3.4	**36**	NA

2-2	B	T	E	X	MTBE	EDC	TN	Mn
10/29/2018	<2.0	<2.0	10	15	<2.0	<2.0	**83.4**	NA
5/15/2019	<5.0	<5.0	9.8	15	<5.0	<5.0	**47**	0.120
11/18/2020	<2.5	<2.5	<2.5	<3.8	<2.5	<2.5	<10	NA

2-4	B	T	E	X	MTBE	EDC	TN	Mn
10/30/2018	Purged Dry							
5/16/2019	**100**	35	360	190	<10	<10	**169**	0.110
11/18/2020	**89**	73	320	290	2.3	<1.0	**146**	NA

2-7	B	T	E	X	MTBE	EDC	TN	Mn
10/30/2018	**480**	**1,800**	**2,100**	**4,700**	<5.0	<5.0	**1,140**	NA
5/16/2019	**250**	55	400	230	<10	<10	**140**	**0.84**
11/18/2020	**81**	3.3	43	<1.5	<1.0	<1.0	<4.0	NA

MW-7	B	T	E	X	MTBE	EDC	TN	Mn
10/29/2018	<1.0	<1.0	<1.0	<1.5	51	1.8	<10	NA
5/15/2019	<1.0	<1.0	<1.0	<1.5	44	1.5	<10	**0.82**
11/18/2020	<1.0	<1.0	<1.0	<1.5	11	<1.0	<4.0	NA

2-5	B	T	E	X	MTBE	EDC	TN	Mn
10/30/2018	**67**	<1.0	60	2.5	<1.0	<1.0	12	NA
5/16/2019	**46**	<1.0	23	<1.5	<1.0	<1.0	<10	**2.1**
11/18/2020	**10**	<2.5	7.3	<3.8	<2.5	<2.5	<10	NA

MW-13	B	T	E	X	MTBE	EDC	TN	Mn
10/30/2018	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<10	NA
5/16/2019	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<10	<0.0020
11/18/2020	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<4.0	<0.0020

MW-12	B	T	E	X	MTBE	EDC	TN	Mn
5/15/2019	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<10	NA

LEGEND:

- EXISTING MONITORING WELL
- EXISTING CONVERTED MONITORING WELL
- PLUGGED WELL
- PROPERTY BOUNDARY

NOTE: FOR COMPLETE ANALYTICAL RESULTS, PLEASE REFER TO TABLES AND LABORATORY REPORTS.

30 15 0 30

SCALE IN FEET

SOURCES:
NV5 MAY 2019 ANNUAL GROUNDWATER MONITORING REPORT
GOOGLE EARTH, DECEMBER 2019 IMAGE

ARTESIA NMDOT YARD
3103 WEST MAIN STREET, ARTESIA, NM

FIGURE 4
RECENT ANALYTICAL RESULTS

PROJECT #:	PROJECT PHASE: 01	PROJECT MANAGER: VM

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.
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Fax: (505) 224-9016

FILE PATH:

LEGEND:

- EXISTING MONITORING WELL
- EXISTING CONVERTED MONITORING WELL
- PLUGGED WELL
- PROPERTY BOUNDARY
- 100 BENZENE CONTOURS, MICROGRAMS PER LITER

BENZENE CONTOUR RANGES (MICROGRAMS PER LITER)	
	5 - 100
	100 - 250
	250 - 500
	500 - 1,000

NOTE: ZERO WAS USED FOR CONCENTRATIONS BELOW LABORATORY LIMITS.

PROPOSED INJECTION POINTS WITH APPROXIMATE RADIUS OF INFLUENCE APPROXIMATELY 7.5 FEET ON CENTER

N

30 15 0 30

SCALE IN FEET

SOURCES:
NV5 MAY 2019 ANNUAL GROUNDWATER MONITORING REPORT
GOOGLE EARTH, DECEMBER 2019 IMAGE

ARTESIA NMDOT YARD
3103 WEST MAIN STREET, ARTESIA, NM

FIGURE 5
BENZENE CONCENTRATIONS
NOVEMBER 2020 AND
PROPOSED INJECTION POINTS

PROJECT #:	___	PROJECT PHASE:	01	PROJECT MANAGER:	VM

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.
320 Gold Avenue, SW Suite 1300
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FILE PATH:

TABLES

DRAFT

TABLE 1. SUMMARY OF FLUID GAUGING RESULTS
NMDOT PATROL YARD, ARTESIA, NEW MEXICO

Monitor Well	Date Measured	Top of Casing Elevation (AMSL)	Depth to Water (ft)	Depth to Hydrocarbon (ft)	Hydrocarbon Thickness (ft)	Total Depth (ft)	Corrected GW Elevation (ft AMSL)	Comments
MW-1	12/11/2000	99.91	56.96	ND	-	ND	42.95	Screen 56'-79'
MW-1	5/31/2001	99.91	57.09	ND	-	ND	42.82	
MW-1	8/9/2001	99.91	56.8	ND	-	ND	43.11	
MW-1	11/5/2001	99.91	56.79	ND	-	ND	43.12	
MW-1	2/5/2002	99.91	56.43	ND	-	ND	43.48	
MW-1	7/24/2002	99.91	52.24	ND	-	ND	47.67	
MW-1	1/13/2003	99.91	54.98	ND	-	ND	44.93	
MW-1	6/26/2003	99.91	55.77	ND	-	ND	44.14	
MW-1	12/16/2003	99.91	54.36	ND	-	ND	45.55	
MW-1	2/17/2005	99.91	48.68	ND	-	ND	51.23	
MW-1	8/23/2005	99.91	52.28	ND	-	ND	47.63	
MW-1	1/17/2006	99.91	55.35	ND	-	ND	44.56	
MW-1	9/6/2006	3,444.81	49.57	ND	-	ND	3,395.24	
MW-1	9/6/2006	3,444.81	49.57	ND	-	ND	3,395.24	
MW-1	10/6/2006	3,444.81	51.69	ND	-	ND	3,393.12	
MW-1	2/4/2009	3,444.81	52.80	ND	-	ND	3,392.01	
MW-1	9/30/2010	3,445.17	53.44	ND	-	72.83	3,391.73	
MW-1	5/18/2015	3,445.17	56.45	ND	-	73.97	3,388.72	
MW-1	3/10/2016	3,445.17	54.98	ND	-	73.95	3,390.19	
MW-1	1/08/2016	Abandoned August 2016						
MW-2	12/11/2000	99.82	57.08	ND	-	ND	42.74	Screen 60'-80'
MW-2	5/31/2001	99.82	58.33	58.32	-	0.01	41.50	
MW-2	8/9/2001	99.82	58.16	58.15	-	0.01	41.67	
MW-2	11/5/2001	99.82	58.21	ND	-	ND	41.61	
MW-2	2/5/2002	99.82	58.46	ND	-	ND	41.36	
MW-2	7/24/2002	99.82	55.18	ND	-	ND	44.64	
MW-2	1/13/2003	99.82	56.42	ND	-	ND	43.40	
MW-2	6/26/2003	99.82	57.59	ND	-	ND	42.23	
MW-2	12/16/2003	99.82	56.88	ND	-	ND	42.94	
MW-2	2/17/2005	99.82	49.92	ND	-	ND	49.90	
MW-2	8/23/2005	99.82	53.14	ND	-	ND	46.68	
MW-2	1/17/2006	99.82	56.05	ND	-	ND	43.77	
MW-2	9/6/2006	3,444.57	50.86	ND	-	ND	3,393.71	
MW-2	10/6/2006	3,444.57	52.96	ND	-	ND	3,391.61	
MW-2	2/4/2009	3,444.57	54.14	ND	-	ND	3,390.43	
MW-2	9/30/2010	3,445.06	54.44	ND	-	74.15	3,390.62	
MW-2	5/18/2015	3,445.06	56.91	ND	-	75.55	3,388.15	
MW-2	3/10/2016	3,445.06	54.89	ND	-	75.89	3,390.17	
MW-2	8/1/2016	Abandoned August 2016						
MW-3	12/11/2000	98.87	57.51	ND	-	ND	41.36	Screen 60' - 80'
MW-3	5/31/2001	98.87	57.71	ND	-	ND	41.16	
MW-3	8/9/2001	98.87	57.58	ND	-	ND	41.29	
MW-3	11/5/2001	98.87	57.03	ND	-	ND	41.84	
MW-3	2/5/2002	98.87	57.27	ND	-	ND	41.60	
MW-3	7/24/2002	98.87	56.14	ND	-	ND	42.73	
MW-3	1/13/2003	98.87	55.2	ND	-	ND	43.67	

DRAFT

TABLE 1. SUMMARY OF FLUID GAUGING RESULTS
NMDOT PATROL YARD, ARTESIA, NEW MEXICO

Monitor Well	Date Measured	Top of Casing Elevation (AMSL)	Depth to Water (ft)	Depth to Hydrocarbon (ft)	Hydrocarbon Thickness (ft)	Total Depth (ft)	Corrected GW Elevation (ft AMSL)	Comments
MW-3	6/26/2003	98.87	56.41	ND	-	ND	42.46	
MW-3	12/16/2003	98.87	56.2	ND	-	ND	42.67	
MW-3	2/17/2005	98.87	49.65	ND	-	ND	49.22	
MW-3	8/23/2005	98.87	52.79	ND	-	ND	46.08	
MW-3	1/17/2006	98.87	55.37	ND	-	ND	43.50	
MW-3	9/6/2006	3,443.86	54.22	ND	-	ND	3,389.64	
MW-3	10/6/2006	3,443.86	53.00	ND	-	ND	3,390.86	
MW-3	2/4/2009	3,443.86	55.25	ND	-	ND	3,388.61	
MW-3	9/30/2010	3,444.12	54.16	ND	-	72.05	3,389.96	
MW-3	5/18/2015	3,444.12	56.07	ND	-	73.63	3,388.05	
MW-3	3/10/2016	3,444.12	53.76	ND	-	73.53	3,390.36	
MW-3	8/29/2016	3,444.19	55.43	ND	-	74.40	3,388.76	New TOC Elevation
MW-3	2/28/2017	3,444.19	52.45	ND	-	74.13	3,391.74	
MW-3	8/15/2017	3,444.19	55.49	ND	-	74.10	3,388.70	
MW-3	10/30/2018	3,444.19	54.38	ND	-	74.74	3,389.81	
MW-3	5/16/2019	3,444.19	55.10	ND	-	74.25	3,389.09	
MW-3	11/17/2020	3,444.19	53.40	ND	-	74.25	3,390.79	
MW-4	12/11/2000	100.77	56.26	ND	-	ND	44.51	Screen 53' - 73'
MW-4	5/31/2001	100.77	58.01	ND	-	ND	42.76	
MW-4	8/9/2001	100.77	57.77	ND	-	ND	43.00	
MW-4	11/5/2001	100.77	58.19	ND	-	ND	42.58	
MW-4	2/5/2002	100.77	58.3	ND	-	ND	42.47	
MW-4	7/24/2002	100.77	53.19	ND	-	ND	47.58	
MW-4	1/13/2003	100.77	55.55	ND	-	ND	45.22	
MW-4	6/26/2003	100.77	57.8	ND	-	ND	42.97	
MW-4	12/16/2003	100.77	56.89	ND	-	ND	43.88	
MW-4	2/17/2005	100.77	48.35	ND	-	ND	52.42	
MW-4	8/23/2005	100.77	52.51	ND	-	ND	48.26	
MW-4	9/6/2006	3,445.72	39.83	ND	-	ND	3,405.89	
MW-4	10/6/2006	3,445.72	51.07	ND	-	ND	3,394.65	
MW-4	2/2/2009	3,445.72	53.71	ND	-	ND	3,392.01	Abandoned February 2009
MW-5	12/11/2000	98.18	56.81	ND	-	ND	41.37	Screen 53.5' - 73.5'
MW-5	5/31/2001	98.18	57.11	ND	-	ND	41.07	
MW-5	8/9/2001	98.18	56.82	ND	-	ND	41.36	
MW-5	11/5/2001	98.18	56.29	ND	-	ND	41.89	
MW-5	2/5/2002	98.18	56.93	ND	-	ND	41.25	
MW-5	7/24/2002	98.18	55.88	ND	-	ND	42.3	
MW-5	1/13/2003	98.18	55.08	ND	-	ND	43.1	
MW-5	6/26/2003	98.18	55.67	ND	-	ND	42.51	
MW-5	12/16/2003	98.18	55.42	ND	-	ND	42.76	
MW-5	2/17/2005	98.18	49.65	ND	-	ND	48.53	
MW-5	8/23/2005	98.18	52.57	ND	-	ND	45.61	
MW-5	9/6/2006	3,443.15	55.54	ND	-	ND	3,387.61	
MW-5	10/6/2006	3,443.15	53.33	ND	-	ND	3,389.82	
MW-5	2/4/2009	3,443.15	53.95	ND	-	ND	3,389.20	
MW-5	9/30/2010	3,442.97	53.98	ND	-	72.86	3,388.99	

DRAFT

TABLE 1. SUMMARY OF FLUID GAUGING RESULTS
NMDOT PATROL YARD, ARTESIA, NEW MEXICO

Monitor Well	Date Measured	Top of Casing Elevation (AMSL)	Depth to Water (ft)	Depth to Hydrocarbon (ft)	Hydrocarbon Thickness (ft)	Total Depth (ft)	Corrected GW Elevation (ft AMSL)	Comments
MW-5	5/18/2015	3,442.97	55.05	ND	-	73.60	3,387.92	
MW-5	3/10/2016	3,442.97	52.76	ND	-	73.47	3,390.21	
MW-5	8/29/2016	3,443.94	53.05	ND	-	73.40	3,390.89	New TOC Elevation
MW-5	2/28/2017	3,443.94	51.98	ND	-	73.38	3,391.96	
MW-5	8/15/2017	3,443.94	54.95	ND	-	73.33	3,388.99	
MW-5	10/30/2018	3,443.94	54.19	ND	-	73.40	3,389.75	
MW-5	5/16/2019	3,443.94	55.20	ND	-	73.32	3,388.74	
MW-5	11/17/2020	3,443.94	54.78	ND	-	73.32	3,389.16	
MW-7	12/11/2000	100.27	60.35	ND	-	ND	39.92	Screen 54' - 74'
MW-7	5/31/2001	100.27	61.75	ND	-	ND	38.52	
MW-7	8/9/2001	100.27	61.67	ND	-	ND	38.6	
MW-7	11/5/2001	100.27	61.64	ND	-	ND	38.63	
MW-7	2/5/2002	100.27	62.12	ND	-	ND	38.15	
MW-7	7/24/2002	100.27	60.97	ND	-	ND	39.3	
MW-7	1/13/2003	100.27	59.99	ND	-	ND	40.28	
MW-7	6/26/2003	100.27	61.24	ND	-	ND	39.03	
MW-7	12/16/2003	100.27	60.83	ND	-	ND	39.44	
MW-7	2/17/2005	100.27	54.09	ND	-	ND	46.18	
MW-7	8/23/2005	100.27	56.38	ND	-	ND	43.89	
MW-7	1/17/2006	100.27	58.87	ND	-	ND	41.4	
MW-7	9/6/2006	3,445.25	56.82	ND	-	ND	3,388.43	
MW-7	10/6/2006	3,445.25	56.72	ND	-	ND	3,388.53	
MW-7	2/4/2009	3,445.25	57.54	ND	-	ND	3,387.71	
MW-7	9/30/2010	3,445.04	57.63	ND	-	72.13	3,387.41	
MW-7	5/18/2015	3,445.04	59.06	ND	-	73.61	3,385.98	
MW-7	3/10/2016	3,445.04	57.39	ND	-	73.54	3,387.65	
MW-7	7/30/2016	3,445.04	58.50	ND	-	73.55	3,386.54	
MW-7	8/29/2016	3,445.11	58.35	ND	-	73.79	3,386.76	New TOC Elevation
MW-7	2/28/2017	3,445.11	56.68	ND	-	73.57	3,388.43	
MW-7	8/15/2017	3,445.11	58.77	ND	-	73.57	3,386.34	
MW-7	10/29/2018	3,445.11	57.69	ND	-	73.62	3,387.42	
MW-7	5/15/2019	3,445.11	58.55	ND		73.47	3,386.56	
MW-7	11/18/2020	3,445.11	59.17	ND		73.47	3,385.94	
MW-8	12/11/2000	99.35	64.23	ND	-	ND	35.12	Screen 53.5' - 73.5'
MW-8	5/31/2001	99.35	64.82	ND	-	ND	34.53	
MW-8	8/9/2001	99.35	64.83	ND	-	ND	34.52	
MW-8	11/5/2001	99.35	64.88	ND	-	ND	34.47	
MW-8	2/5/2002	99.35	65.11	ND	-	ND	34.24	
MW-8	7/24/2002	99.35	65.39	ND	-	ND	33.96	
MW-8	1/13/2003	99.35	64.39	ND	-	ND	34.96	
MW-8	6/26/2003	99.35	64.66	ND	-	ND	34.69	
MW-8	12/16/2003	99.35	64.39	ND	-	ND	34.96	
MW-8	2/17/2005	99.35	58.71	ND	-	ND	40.64	
MW-8	8/23/2005	99.35	60.39	ND	-	ND	38.96	
MW-8	9/6/2006	3,444.23	64.27	ND	-	ND	3,379.96	
MW-8	10/6/2006	3,444.23	62.87	ND	-	ND	3,381.36	

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TABLE 1. SUMMARY OF FLUID GAUGING RESULTS
NMDOT PATROL YARD, ARTESIA, NEW MEXICO

Monitor Well	Date Measured	Top of Casing Elevation (AMSL)	Depth to Water (ft)	Depth to Hydrocarbon (ft)	Hydrocarbon Thickness (ft)	Total Depth (ft)	Corrected GW Elevation (ft AMSL)	Comments
MW-8	2/2/2009	3,444.23	62.01	ND	-	ND	3,382.22	Abandoned February 2009
MW-9	12/11/2000	101.48	63.70	ND	-	ND	37.78	Screen 50' - 70'
MW-9	5/31/2001	101.48	64.94	ND	-	ND	36.54	
MW-9	8/9/2001	101.48	64.89	ND	-	ND	36.59	
MW-9	11/5/2001	101.48	64.93	ND	-	ND	36.55	
MW-9	2/5/2002	101.48	65.41	ND	-	ND	36.07	
MW-9	7/24/2002	101.48	64.53	ND	-	ND	36.95	
MW-9	1/13/2003	101.48	63.20	ND	-	ND	38.28	
MW-9	6/26/2003	101.48	64.29	ND	-	ND	37.19	
MW-9	12/16/2003	101.48	63.91	ND	-	ND	37.57	
MW-9	2/17/2005	101.48	57.91	ND	-	ND	43.57	
MW-9	8/23/2005	101.48	59.53	ND	-	ND	41.95	
MW-9	9/6/2006	3,443.58	60.83	ND	-	ND	3,382.75	
MW-9	10/6/2006	3,443.58	60.00	ND	-	ND	3,383.58	Abandoned September 2010
MW-10	12/11/2000	98.61	56.18	ND	-	ND	42.43	Screen 54' - 69'
MW-10	5/31/2001	98.61	56.38	ND	-	ND	42.23	
MW-10	8/9/2001	98.61	55.99	ND	-	ND	42.62	
MW-10	11/5/2001	98.61	55.39	ND	-	ND	43.22	
MW-10	2/5/2002	98.61	55.91	ND	-	ND	42.7	
MW-10	7/24/2002	98.61	53.31	ND	-	ND	45.3	
MW-10	1/13/2003	98.61	53.68	ND	-	ND	44.93	
MW-10	6/26/2003	98.61	54.67	ND	-	ND	43.94	
MW-10	12/16/2003	98.61	54.20	ND	-	ND	44.41	
MW-10	2/17/2005	98.61	47.52	ND	-	ND	51.09	
MW-10	8/23/2005	98.61	51.45	ND	-	ND	47.16	
MW-10	1/17/2006	98.61	54.43	ND	-	ND	44.18	
MW-10	9/6/2006	3,446.25	51.98	ND	-	ND	3,394.27	
MW-10	10/6/2006	3,446.25	51.42	ND	-	ND	3,394.83	
MW-10	2/4/2009	3,446.25	52.81	ND	-	ND	3,393.44	
MW-10	9/30/2010	3,444.02	52.99	ND	-	69.19	3,391.03	
MW-10	5/18/2015	3,444.02	55.1	ND	-	70.05	3,388.92	
MW-10	3/10/2016	3,444.02	52.65	ND	-	69.98	3,391.37	
MW-10	8/29/2016	3,445.13	52.50	ND	-	70.15	3,392.63	New TOC Elevation
MW-10	2/28/2017	3,445.13	52.45	ND	-	70.00	3,392.68	
MW-10	8/15/2017	3,445.13	52.27	ND	-	70.00	3,392.86	
MW-10	10/29/2018	3,445.13	53.41	ND	-	70.08	3,391.72	
MW-10	5/15/2019	3,445.13	54.69	ND	-	69.99	3,390.44	
MW-10	11/18/2020	3,445.13	54.87	ND	-	69.99	3,390.26	
MW-11	2/2/2009	NSVD	59.08	ND	-	ND	NSVD	Abandoned February 2009
MW-12	12/11/2000	102.09	67.09	ND	-	ND	35	Screen 50' - 70'
MW-12	5/31/2001	102.09	68.34	ND	-	ND	33.75	
MW-12	8/9/2001	102.09	68.38	ND	-	ND	33.71	
MW-12	11/5/2001	102.09	68.45	ND	-	ND	33.64	
MW-12	2/5/2002	102.09	68.84	ND	-	ND	33.25	
MW-12	7/24/2002	102.09	68.37	ND	-	ND	33.72	
MW-12	1/13/2003	102.09	66.83	ND	-	ND	35.26	

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TABLE 1. SUMMARY OF FLUID GAUGING RESULTS
NMDOT PATROL YARD, ARTESIA, NEW MEXICO

Monitor Well	Date Measured	Top of Casing Elevation (AMSL)	Depth to Water (ft)	Depth to Hydrocarbon (ft)	Hydrocarbon Thickness (ft)	Total Depth (ft)	Corrected GW Elevation (ft AMSL)	Comments
MW-12	6/26/2003	102.09	67.84	ND	-	ND	34.25	
MW-12	12/16/2003	102.09	67.33	ND	-	ND	34.76	
MW-12	2/17/2005	102.09	61.49	ND	-	ND	40.6	
MW-12	8/23/2005	102.09	62.95	ND	-	ND	39.14	
MW-12	9/6/2006	3,448.57	65.66	ND	-	ND	3,382.91	
MW-12	10/6/2006	3,448.57	63.93	ND	-	ND	3,384.64	
MW-12	2/2/2009	3,448.57	64.20	ND	-	ND	3,384.37	Abandoned February 2009
MW-13	8/29/2016	3,444.78	61.90	61.91	0.01	70.05	3,382.88	New TOC Elevation
MW-13	2/28/2017	3,444.78	59.71	ND	-	69.88	3,385.07	
MW-13	8/15/2017	3,444.78	61.62	ND	-	69.89	3,383.16	
MW-13	10/30/2018	3,444.78	61.70	ND	-	69.97	3,383.08	
MW-13	5/16/2019	3,444.78	62.80	ND	-	69.87	3,381.98	
MW-13	11/18/2020	3,444.78	62.93	ND	-	69.87	3,381.85	
1-1	11/5/2005	3,444.38	52.38	ND	-	ND	3,392.00	Screen 16' - 61'
1-1	1/17/2006	3,444.38	53.91	ND	-	ND	3,390.47	
1-1	4/2/2009	3,444.38	52.38	ND	-	ND	3,392.00	
1-1	9/30/2010	3,444.72	52.87	ND	-	59.46	3,391.85	
1-1	5/18/2015	3,444.72	55.66	ND	-	61.07	3,389.06	
1-1	8/29/2016	3,444.57	54.10	ND	-	60.90	3,390.47	New TOC Elevation
1-1	10/3/2016	3,444.72	53.27	ND	-	60.85	3,391.45	
1-1	2/28/2017	3,444.57	52.80	ND	-	60.70	3,391.77	
1-1	8/15/2017	3,444.57	55.39	ND	-	60.70	3,389.18	
1-1	10/30/2018	Not Measured - Well Was Dry						
1-1	5/16/2019	3,444.57	55.50	ND	-	60.68	3,389.07	
1-1	11/18/2020	3,444.57	54.96	ND	-	60.68	3,389.61	
1-3	5/11/2005	NSVD	52.50	ND	-	ND	NSVD	Screen 14' - 59'
1-3	1/17/2006	NSVD	53.63	ND	-	ND	NSVD	
1-3	9/6/2006	3,444.33	54.82	ND	-	ND	3,389.51	
1-3	10/6/2006	3,444.33	51.34	ND	-	ND	3,392.99	
1-3	2/4/2009	3,444.33	52.65	ND	-	ND	3,391.68	
1-3	9/30/2010	3,444.77	54.33	ND	-	56.51	3,390.44	
1-3	5/18/2015	3,444.77	55.30	ND	-	57.35	3,389.47	
1-3	3/10/2016	3,444.77	53.69	ND	-	57.25	3,391.08	
1-3	8/1/2016	3,444.77	55.05	ND	-	57.28	3,389.72	
1-3	8/29/2016	3,444.83	55.85	ND	-	57.54	3,388.98	New TOC Elevation
1-3	2/28/2017	3,444.83	53.10	ND	-	57.35	3,391.73	
1-3	8/15/2017	3,444.83	55.38	ND	-	57.35	3,389.45	
1-3	10/30/2018	3,444.83	54.72	ND	-	57.48	3,390.11	
1-3	5/16/2019	3,444.83	55.60	ND	-	57.34	3,389.23	
1-3	11/17/2020	3,444.83	55.90	ND	-	57.34	3,388.93	
1-4	5/11/2005	3,444.08	48.98	ND	-	ND	3,395.10	Screen 41' - 61'
1-4	1/17/2006	3,444.08	54.35	ND	-	ND	3,389.73	
1-4	2/4/2009	3,444.08	52.48	ND	-	ND	3,391.60	
1-4	9/30/2010	3,444.33	53.72	ND	-	57.64	3,390.61	
1-4	5/18/2015	3,444.33	55.62	ND	-	59.10	3,388.71	
1-4	3/10/2016	3,444.33	53.15	ND	-	59.04	3,391.18	

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TABLE 1. SUMMARY OF FLUID GAUGING RESULTS
NMDOT PATROL YARD, ARTESIA, NEW MEXICO

Monitor Well	Date Measured	Top of Casing Elevation (AMSL)	Depth to Water (ft)	Depth to Hydrocarbon (ft)	Hydrocarbon Thickness (ft)	Total Depth (ft)	Corrected GW Elevation (ft AMSL)	Comments
1-4	8/2/2016	3,444.17	54.83	ND	-	58.80	3,389.34	New TOC Elevation
1-4	8/29/2016	3,444.17	54.45	ND	-	59.00	3,389.72	New TOC Elevation
1-4	2/28/2017	3,444.17	52.28	ND	-	58.85	3,391.89	
1-4	8/15/2017	3,444.17	55.22	ND	-	58.89	3,388.95	
1-4	10/30/2018	3,444.17	54.60	ND	-	59.00	3,389.57	
1-4	5/16/2019	3,444.17	55.62	ND	-	58.90	3,388.55	
1-4	11/18/2020	3,444.17	50.59	ND	-	58.90	3,393.58	
1-5	5/11/2005	NSVD	50.45	ND	-	ND	NSVD	Screen 41' - 61'
1-5	1/17/2006	NSVD	55.03	ND	-	ND	NSVD	
1-5	9/6/2006	3,444.10	56.28	ND	-	ND	3,387.82	
1-5	10/6/2006	3,444.10	53.09	ND	-	ND	3,391.01	
1-5	2/4/2009	3,444.10	53.81	ND	--	ND	3,390.29	
1-5	9/30/2010	3,444.21	54.55	ND	-	59.98	3,389.66	
1-5	5/18/2015	3,444.21	56.02	ND	-	61.51	3,388.19	
1-5	8/2/2016	3,444.30	55.36	ND	-	61.41	3,388.94	New TOC Elevation
1-5	8/29/2016	3,444.30	55.81	ND	-	61.53	3,388.49	
1-5	3/10/2016	3,444.21	54.92	ND	-	61.42	3,389.29	
1-5	2/28/2017	3,444.30	53.21	ND	-	61.49	3,391.09	
1-5	8/15/2017	3,444.30	55.83	ND	-	61.46	3,388.47	
1-5	10/30/2018	3,444.30	54.30	ND	-	61.52	3,390.00	
1-5	5/16/2019	3,444.30	55.08	ND		61.43	3,389.22	
1-5	11/17/2020	3,444.30	54.79	ND		61.43	3,389.51	
1-6	9/30/2010	3,443.88	54.39	ND	-	69.79	3,389.49	ND
1-6	5/18/2015	3,443.88	55.58	ND	-	61.35	3,388.30	
1-6	3/10/2016	3,443.88	53.41	ND	-	61.25	3,390.47	
1-6	8/29/2016	3,443.98	54.43	ND	-	61.45	3,389.55	New TOC Elevation
1-6	2/28/2017	3,443.98	53.90	ND	-	61.27	3,390.08	
1-6	8/15/2017	3,443.98	55.38	ND	-	61.27	3,388.60	
1-6	10/30/2018	3,443.98	56.08	ND	-	61.39	3,387.90	
1-6	5/16/2019	3,443.98	57.13	ND	-	61.20	3,386.85	
1-6	11/18/2020	3,443.98	51.69	ND	-	61.20	3,392.29	
1-7	9/30/2010	3,443.63	54.53	ND	-	59.67	3,389.10	ND
1-7	5/18/2015	3,443.63	55.66	ND	-	60.87	3,387.97	
1-7	3/10/2016	3,443.63	53.45	ND	-	61.00	3,390.18	
1-7	7/31/2016	3,443.63	55.10	ND	-	61.00	3,388.53	
1-7	8/29/2016	3,443.72	54.66	ND	-	61.21	3,389.06	New TOC Elevation
1-7	2/28/2017	3,443.72	52.85	ND	-	61.02	3,390.87	
1-7	8/15/2017	3,443.72	55.65	ND	-	61.05	3,388.07	
1-7	10/29/2018	3,443.72	55.41	ND	-	60.85	3,388.31	
1-7	5/16/2019	3,443.72	55.80	ND	-	61.20	3,387.92	
1-7	11/17/2020	3,443.72	55.22	ND	-	61.20	3,388.50	
2-1	5/11/2005	3,444.39	50.95	ND	-	ND	3,393.44	Screen 36' - 61'
2-1	1/17/2006	3,444.39	55.68	ND	-	ND	3,388.71	
2-1	9/30/2010	3,444.78	54.92	ND	-	58.16	3,389.86	
2-1	5/18/2015	3,444.78	56.83	ND	-	59.63	3,387.95	
2-1	3/10/2016	3,444.78	55.69	ND	-	59.80	3,389.09	

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TABLE 1. SUMMARY OF FLUID GAUGING RESULTS
NMDOT PATROL YARD, ARTESIA, NEW MEXICO

Monitor Well	Date Measured	Top of Casing Elevation (AMSL)	Depth to Water (ft)	Depth to Hydrocarbon (ft)	Hydrocarbon Thickness (ft)	Total Depth (ft)	Corrected GW Elevation (ft AMSL)	Comments
2-1	8/1/2016	3,444.78	56.33	ND	-	59.88	3,388.45	
2-1	8/29/2016	3,444.85	55.71	ND	-	60.08	3,389.14	New TOC Elevation
2-1	2/28/2017	3,444.85	54.27	ND	-	59.91	3,390.58	
2-1	8/15/2017	3,444.85	56.47	ND	-	59.91	3,388.38	
2-1	10/29/2018	3,444.85	55.39	ND	-	61.55	3,389.46	
2-1	5/15/2019	3,444.85	56.30	ND	-	61.50	3,388.55	
2-1	11/18/2020	3,444.85	56.17	ND	-	61.50	3,388.68	
2-2	5/11/2005	3,443.87	51.92	ND	-	ND	3,391.95	Screen 41' - 61'
2-2	1/17/2006	3,443.87	56.08	ND	-	ND	3,387.79	
2-2	9/30/2010	3,444.88	55.89	ND	-	57.80	3,388.99	
2-2	5/18/2015	3,444.88	56.95	ND	-	57.45	3,387.93	
2-2	3/10/2016	3,444.88	55.35	ND	-	57.34	3,389.53	
2-2	8/1/2016	3,444.84	56.34	ND	-	57.38	3,388.50	New TOC Elevation
2-2	8/29/2016	3,444.84	56.51	ND	-	58.24	3,388.33	
2-2	2/28/2017	3,444.84	54.64	ND	-	58.11	3,390.20	
2-2	8/15/2017	3,444.84	55.95	ND	-	58.20	3,388.89	
2-2	10/29/2018	3,444.84	54.78	ND	-	58.34	3,390.06	
2-2	5/15/2019	3,444.84	56.35	ND	-	58.29	3,388.49	
2-2	11/18/2020	3,444.84	56.95	ND	-	58.29	3,387.89	
2-4	5/11/2005	NSVD	51.15	ND	-	ND	NSVD	Screen 41' - 61'
2-4	1/17/2006	NSVD	55.59	ND	-	ND	NSVD	
2-4	9/6/2006	3,444.40	56.09	ND	-	ND	3,388.31	
2-4	10/6/2006	3,444.40	53.78	ND	-	ND	3,390.62	
2-4	2/4/2009	3,444.40	54.02	ND	-	ND	3,390.38	
2-4	9/30/2010	3,444.44	55.53	ND	-	57.06	3,388.91	
2-4	5/18/2015	3,444.44	57.02	ND	-	58.50	3,387.42	
2-4	3/10/2016	3,444.44	54.85	ND	-	58.44	3,389.59	
2-4	8/29/2016	3,444.44	56.06	ND	-	58.52	3,388.38	New TOC Elevation
2-4	2/28/2017	3,444.44	53.94	ND	-	58.35	3,390.50	
2-4	8/15/2017	3,444.44	56.65	ND	-	58.36	3,387.79	
2-4	10/30/2018	3,444.44	56.21	ND	-	58.50	3,388.23	
2-4	5/16/2019	3,444.44	57.20	ND	-	58.37	3,387.24	
2-4	11/18/2020	3,444.44	56.69	ND	-	58.37	3,387.75	
2-5	10/6/2006	3,444.01	54.74	ND	-	ND	3,389.27	
2-5	2/4/2009	3,444.01	55.30	ND	-	ND	3,388.71	
2-5	9/30/2010	3,444.68	56.33	ND	-	60.45	3,388.35	
2-5	5/18/2015	3,444.68	57.86	ND	-	61.60	3,386.82	
2-5	8/1/2016	3,444.65	57.16	ND	-	61.69	3,387.49	New TOC Elevation
2-5	8/29/2016	3,444.65	56.88	ND	-	61.91	3,387.77	
2-5	3/10/2016	3,444.68	55.85	ND	-	61.80	3,388.83	
2-5	2/28/2017	3,444.65	55.11	ND	-	61.70	3,389.54	
2-5	8/15/2017	3,444.65	57.40	ND	-	61.70	3,387.25	
2-5	10/30/2018	3,444.65	56.89	ND	-	61.80	3,387.76	
2-5	5/16/2019	3,444.65	57.80	ND	-	61.69	3,386.85	
2-5	11/18/2020	3,444.65	57.45	ND	-	61.69	3,387.20	
2-6	5/11/2005	NSVD	50.86	ND	-	ND	NSVD	Screen 41' - 61'

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TABLE 1. SUMMARY OF FLUID GAUGING RESULTS
NMDOT PATROL YARD, ARTESIA, NEW MEXICO

Monitor Well	Date Measured	Top of Casing Elevation (AMSL)	Depth to Water (ft)	Depth to Hydrocarbon (ft)	Hydrocarbon Thickness (ft)	Total Depth (ft)	Corrected GW Elevation (ft AMSL)	Comments
2-6	1/17/2006	NSVD	55.73	ND	-	ND	NSVD	
2-6	9/6/2006	3,443.64	56.68	ND	-	ND	3,386.96	
2-6	10/6/2006	3,443.64	53.87	ND	-	ND	3,389.77	
2-6	2/4/2009	3,443.64	54.31	ND	-	ND	3,389.33	
2-6	9/30/2010	3,443.75	54.74	ND	-	59.70	3,389.01	
2-6	5/18/2015	3,443.75	56.23	ND	-	60.95	3,387.52	
2-6	3/10/2016	3,443.75	54.05	ND	-	61.12	3,389.70	
2-6	7/31/2016	3,443.75	55.61	ND	-	61.17	3,388.14	
2-6	8/29/2016	3,443.86	55.95	55.96	0.01	61.00	3,387.91	New TOC Elevation
2-6	2/28/2017	3,443.86	53.41	ND	-	61.18	3,390.45	
2-6	8/15/2017	3,443.86	55.99	ND	-	61.16	3,387.87	
2-6	10/30/2018	3,443.86	55.22	ND	-	60.97	3,388.64	
2-6	5/16/2019	3,443.86	56.35	ND	-	61.07	3,387.51	
2-6	11/17/2020	3,443.86	55.41	ND	-	61.07	3,388.45	
2-7	2/4/2009	3,443.58	54.56	ND	-	ND	3,389.02	
2-7	9/30/2010	3,443.86	55.28	ND	-	58.93	3,388.58	
2-7	5/18/2015	3,443.86	56.47	ND	-	60.41	3,387.39	
2-7	3/10/2016	3,443.86	54.49	ND	-	60.28	3,389.37	
2-7	7/31/2016	3,443.86	55.91	ND	-	60.32	3,387.95	
2-7	8/29/2016	3,443.95	55.95	ND	-	60.70	3,388.00	New TOC Elevation
2-7	2/28/2017	3,443.95	53.82	ND	-	60.60	3,390.13	
2-7	8/15/2017	3,443.95	56.20	ND	-	59.64	3,387.75	
2-7	10/30/2018	3,443.95	55.90	ND	-	60.80	3,388.05	
2-7	5/16/2019	3,443.95	57.01	ND	-	60.70	3,386.94	
2-7	11/18/2020	3,443.95	56.40	ND	-	60.70	3,387.55	
3-1	5/11/2005	3,445.54	49.10	ND	-	ND	3,396.44	Screen 29' - 59'
3-1	1/17/2006	3,445.54	52.92	ND	-	ND	3,392.62	
3-1	9/30/2010	3,445.25	52.34	ND	-	57.37	3,392.91	
3-1	5/18/2015	3,445.25	55.11	ND	-	58.55	3,390.14	
3-1	3/10/2016	3,445.25	53.31	ND	-	58.72	3,391.94	
3-1	7/31/2016	3,445.25	54.85	ND	-	58.75	3,390.40	
3-1	8/29/2016	3,445.30	55.07	ND	-	58.90	3,390.23	New TOC Elevation
3-1	2/28/2017	3,445.30	53.17	ND	-	58.78	3,392.13	
3-1	8/15/2017	3,445.30	55.39	ND	-	58.75	3,389.91	
3-1	10/30/2018	3,445.30	54.58	ND	-	58.53	3,390.72	
3-1	5/16/2019	3,445.30	55.61	ND	-	58.74	3,389.69	
3-1	11/18/2020	3,445.30	55.83	ND	-	58.74	3,389.47	
3-2	5/11/2005	3,445.28	50.32	ND	-	ND	3,394.96	Screen 29' - 59'
3-2	1/17/2006	3,445.28	54.87	ND	-	ND	3,390.41	
3-2	9/30/2010	3,445.33	52.69	ND	-	54.19	3,392.64	
3-2	5/18/2015	3,445.33	Dry	ND	-	55.15	Dry	
3-2	3/10/2016	3,445.33	54.38	ND	-	55.12	3,390.95	
3-2	7/31/2016	3,445.33	56.00	ND	-	56.45	3,389.33	
3-2	8/29/2016	3,445.27	53.60	ND	-	56.70	3,391.67	New TOC Elevation
3-2	2/28/2017	3,445.27	54.02	ND	-	56.49	3,391.25	
3-2	8/15/2017	3,445.27	56.48	ND	-	56.70	3,388.79	

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TABLE 1. SUMMARY OF FLUID GAUGING RESULTS
NMDOT PATROL YARD, ARTESIA, NEW MEXICO

Monitor Well	Date Measured	Top of Casing Elevation (AMSL)	Depth to Water (ft)	Depth to Hydrocarbon (ft)	Hydrocarbon Thickness (ft)	Total Depth (ft)	Corrected GW Elevation (ft AMSL)	Comments
3-2	10/30/2018	3,445.27	54.78	ND	-	57.00	3,390.49	
3-2	5/16/2019	3,445.27	55.07	ND		56.92	3,390.20	
3-2	11/18/2020	3,445.27	56.08	ND		56.92	3,389.19	
3-3	5/11/2005	3,445.30	52.25	ND	-	ND	3,393.05	Screen 31' - 61'
3-3	1/17/2006	3,445.30	56.76	ND	-	ND	3,388.54	
3-3	2/2/2009	3,445.30	55.50	ND	-	ND	3,389.80	Abandoned February 2009
3-4	5/11/2005	3,445.41	53.16	ND	-	ND	3,392.25	Screen 41' - 61'
3-4	1/17/2006	3,445.41	56.89	ND	-	ND	3,388.52	
3-4	2/2/2009	3,445.41	56.34	ND	-	ND	3,389.07	Abandoned February 2009
3-5	5/11/2005	3,445.47	54.02	ND	-	ND	3,391.45	Screen 45' - 60'
3-5	1/17/2006	3,445.47	54.35	ND	-	ND	3,391.12	
3-5	2/2/2009	3,445.47	Dry	ND	-	ND	3,391.12	Abandoned February 2009
3-6	2/2/2009	NSVD	38.42	ND	-	ND	NSVD	Abandoned February 2009
3-7	1/17/2006	3,444.56	58.10	ND	-	ND	3,386.46	Screen 46' - 61' Abandoned September 2015

NOTES:
GW = Groundwater
TOC = Top of Casing
ND = Not Detected
NSVD = Not Surveyed to Vertical Datum
AMSL = Above Mean Sea Level
Wells surveyed to North American Vertical Datum 1988 (NAVD 88)

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TABLE 2. SUMMARY OF GROUNDWATER FIELD PARAMETERS
NMDOT PATROL YARD, ARTESIA, NEW MEXICO

Well Number	Date Sampled	pH	SpC (uS/cm)	Temp (°C)	DO (mg/L)	ORP (mV)
MW-3	17-Nov-20	7.12	1,206	21.2	0.80	-196.4
MW-5	17-Nov-20	7.06	767	20.9	2.81	74.1
MW-7	18-Nov-20	7.08	692	20.8	0.55	-76.7
MW-10	18-Nov-20	6.91	1,863	20.5	0.62	4.5
MW-13	18-Nov-20	7.27	766	20.7	4.42	37.5
1-1	18-Nov-20	6.92	2,450	20.7	0.51	-93.3
1-3	17-Nov-20	6.78	1,471	21.6	0.88	-110.5
1-4	18-Nov-20	7.33	1,528	21.1	0.69	-47.8
1-5	17-Nov-20	7.03	944	22.3	0.63	-194.2
1-6	18-Nov-20	7.10	1,591	21.0	0.55	-12.4
1-7	17-Nov-20	7.23	1,984	21.2	0.63	25.1
2-1	18-Nov-20	7.22	1,181	21.0	0.89	-216.8
2-2	18-Nov-20	7.22	4,194	19.8	0.82	-176.3
2-4	18-Nov-20	7.39	32.3	21.5	4.01	228.7
2-5	18-Nov-20	6.89	5,173	21.1	0.63	-128.0
2-6	17-Nov-20	7.18	948	21.3	1.57	73.3
2-7	18-Nov-20	7.30	1,072	21.1	1.44	-192.1
3-1	18-Nov-20	6.72	3,187	21.0	1.01	-51.1
3-2	18-Nov-20	Insufficient Water				
Minimum	Nov-20	6.72	32	19.8	0.51	-217
Average	Nov-20	7.10	1,725	21.0	1.30	-58
Maximum	Nov-20	7.39	5,173	22.3	4.42	229

NOTES:
SpC = Specific conductivity in microsiemens per centimeter (µS/cm)
Temp = Temperature in degrees Celsius (°C)
DO = Dissolved oxygen in milligrams per liter (mg/L)
ORP = Oxidation-reduction potential in millivolts (mV)
NA = Not analyzed

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TABLE 3. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS
NMDOT PATROL YARD, ARTESIA , NEW MEXICO

Monitor Well	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	1,2,4-TMB (µg/L)	1,3,5-TMB (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Naphthalenes (µg/L)	Manganese (mg/L)	Iron (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	Nitrate (As N) (mg/L)
NMWQCC Standard		**5**	**1,000**	**700**	**620**	**NA**	**100**	**NA**	**NA**	**0.05**	**5**	**30**	**0.2**	**1.0**	**600**		**NA**
MW-1	5/31/2001	**500**	720	**2,000**	**2,300**	5,520	**150**	NA	NA	<50	<50	**1,270**	NA	NA	NA	NA	NA
MW-1	8/9/2001	**320**	210	**1,400**	**630**	2,560	<100	NA	NA	<100	<100	<200	NA	NA	NA	NA	NA
MW-1	11/5/2001	**630**	**910**	**2,300**	**3,400**	7,240	<100	NA	NA	<100	<100	**610**	NA	NA	NA	NA	NA
MW-1	2/5/2002	**670**	**770**	**2,800**	**3,400**	7,640	**150**	NA	NA	<50	<50	**1,360**	NA	NA	NA	NA	NA
MW-1	7/24/2002	**880**	84	610	400	1,974	**200**	NA	NA	<50	<50	**590**	NA	NA	NA	NA	NA
MW-1	1/13/2003	**560**	60	430	470	1,520	**660**	NA	NA	<50	<50	**610**	NA	NA	NA	NA	NA
MW-1	6/26/2003	**920**	54	**1,600**	530	3,104	**1,100**	NA	NA	<20	<20	**920**	NA	NA	NA	NA	NA
MW-1	12/16/2003	**500**	320	**1,500**	**1,800**	4,120	**590**	NA	NA	<0.01	<20	**840**	NA	NA	NA	NA	NA
MW-1	2/16/2005	**328**	39.4	174	102.3	644	**354**	NA	NA	<0.01	<10	**484**	NA	NA	NA	NA	NA
MW-1	8/24/2005	**460**	130	**810**	430	1,830	**130**	NA	NA	<0.01	<10	**210**	NA	NA	NA	NA	NA
MW-1	9/6/2006	**130**	<10	370	67	567	**640**	520	310	<10	<10	**550**	NA	NA	NA	NA	NA
MW-1	2/4/2009	**29**	16	230	100	375	**350**	110	140	<5.0	<5.0	**131**	NA	NA	NA	NA	NA
MW-1	9/30/2010	**19**	<1.0	20	3.9	42.9	**900**	18	33	<1.0	3.6	**76**	NA	NA	NA	NA	NA
MW-1	5/20/2015	**12**	13	150	84	259	**150**	83	23	<2.0	5.2	**40**	NA	NA	NA	NA	NA
MW-1	3/12/2016	4.2	2.5	32	14	52.7	**220**	14	<1.0	<1.0	6.7	**56**	NA	NA	NA	NA	NA
MW-1	8/1/2016	Abandoned August 2016															
MW-2	5/31/2001	**28**	<10	26	<10	54	**140**	NA	NA	<10	**10**	**1,340**	NA	NA	NA	NA	NA
MW-2	8/9/2001	**22**	<2	42	2.2	66	**110**	NA	NA	<2	8.1	**1,209**	NA	NA	NA	NA	NA
MW-2	11/5/2001	**26**	<20	<20	<20	26	**130**	NA	NA	<20	<20	**710**	NA	NA	NA	NA	NA
MW-2	2/5/2002	**14**	<10	30	<10	44	96	NA	NA	<10	<10	**513**	NA	NA	NA	NA	NA
MW-2	7/24/2002	**18**	<10	25	<10	43	92	NA	NA	<10	<10	**230**	NA	NA	NA	NA	NA
MW-2	1/13/2003	**23**	<5	45	5.3	73	**100**	NA	NA	<5	6.7	**412**	NA	NA	NA	NA	NA
MW-2	6/26/2003	**29**	<10	50	<10	79	95	NA	NA	<10	<10	**411**	NA	NA	NA	NA	NA
MW-2	12/16/2003	**27**	<5	52	<5	79	96	NA	NA	<0.01	5.1	**302**	NA	NA	NA	NA	NA
MW-2	2/16/2005	**9.9**	1.21	37.4	<1	48.5	70.5	NA	NA	<0.01	4.5	**246**	NA	NA	NA	NA	NA
MW-2	9/6/2006	<10	<10	<10	<30	<60	**130**	<10	<10	<10	<10	**<100**	NA	NA	NA	NA	NA
MW-2	2/4/2009	2.2	1.7	3.1	<1.5	7	51	<1.0	<1.0	<1.0	4.1	<10	NA	NA	NA	NA	NA
MW-2	3/11/2016	<1.0	<1.0	<1.0	<1.5	<4.5	16	<1.0	<1.0	<1.0	1.3	<10	NA	NA	NA	NA	NA
MW-2	8/1/2016	Abandoned August 2016															
MW-3	2/16/2005	**479**	148	679	5	1,311	13	NA	NA	NA	<10	**595**	NA	NA	NA	NA	NA
MW-3	9/7/2006	**240**	180	**1,700**	**2,500**	4,620	<150	2,100	580	<100	<100	**530**	NA	NA	NA	NA	NA
MW-3	2/4/2009	**83**	20	140	150	393	9.5	220	61	<1.0	2.2	**95**	NA	NA	NA	NA	NA
MW-3	3/11/2016	**410**	26	**1,500**	**1,300**	3,236	32	2,300	610	<10	<10	**1,130**	NA	NA	NA	NA	NA
MW-3	3/1/2017	**860**	53	**1,900**	**2,000**	4,813	65	2,300	670	<10	<10	**1,040**	NA	NA	NA	NA	NA
MW-3	8/17/2017	**360**	14	**730**	610	1,714	45	990	300	<10	<10	**470**	NA	NA	NA	NA	NA
MW-3	10/30/2018	**11**	<1.0	14	6.6	31.6	25	11	3.4	<1.0	2.2	3.8	NA	NA	NA	NA	NA
MW-3	5/16/2019	**590**	11	**930**	440	1,971	89	650	230	<0.0094	<10	**389**	**0.48**	NA	NA	NA	NA

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TABLE 3. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS
NMDOT PATROL YARD, ARTESIA , NEW MEXICO

Monitor Well	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	1,2,4-TMB (µg/L)	1,3,5-TMB (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Naphthalenes (µg/L)	Manganese (mg/L)	Iron (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	Nitrate (As N) (mg/L)
MW-3	11/17/2020	**130**	2.1	130	42	304	14	210	110	<0.0094	1.2	**86**	0.097	0.049	**770**	<0.050	3.6
MW-4	2/15/2005	<1	<1	<1	<1	<4	<1	NA	NA	<0.01	<1	<10	NA	NA	NA	NA	NA
MW-4	9/7/2006	<1.0	<1.0	<1.0	<3.0	<6.0	<1.5	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-4	2/2/2009	Abandoned August 2016															
MW-5	7/24/2002	<1	<1	<1	<1	<4	<1	NA	NA	<1	<1	<10	NA	NA	NA	NA	NA
MW-5	6/27/2003	<1	<1	<1	<1	<4	<1	NA	NA	<1	<1	<10	NA	NA	NA	NA	NA
MW-5	12/16/2003	<1	<1	<1	<1	<4	<1	NA	NA	<0.01	<1	<10	NA	NA	NA	NA	NA
MW-5	2/15/2005	<1	<1	<1	<1	<4	<1	NA	NA	<0.01	<1	<10	NA	NA	NA	NA	NA
MW-5	8/23/2005	<1	<1	<1	<1	<4	<1	NA	NA	<0.01	<1	<10	NA	NA	NA	NA	NA
MW-5	9/7/2006	<1.0	<1.0	<1.0	<3.0	<6.0	<1.5	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-5	2/4/2009	<1.0	<1.0	7.4	7.3	14.7	<1.0	18	5.8	<1.0	<1.0	10.6	NA	NA	NA	NA	NA
MW-5	9/30/2010	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-5	5/19/2015	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-5	3/12/2016	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-5	3/1/2017	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-5	8/16/2017	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-5	10/30/2018	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-5	5/16/2019	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<0.0020	NA	NA	NA	NA
MW-5	11/17/2020	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<0.0095	<1.0	<10	NA	NA	NA	NA	NA
MW-7	5/31/2001	<1.0	<1.0	<1.0	<1.0	<4	<1.0	NA	NA	<1.0	<1.0	5.4	NA	NA	NA	NA	NA
MW-7	8/9/2001	<1.0	<1.0	<1.0	<1.0	<4	<1.0	NA	NA	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-7	11/5/2001	<1.0	<1.0	<1.0	<1.0	<4	<1.0	NA	NA	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-7	2/5/2002	<1.0	<1.0	<1.0	<1.0	<4	<1.0	NA	NA	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-7	7/25/2002	<1.0	<1.0	<1.0	<1.0	<4	<1.0	NA	NA	<1.0	<1.0	8.4	NA	NA	NA	NA	NA
MW-7	6/27/2003	<1.0	<1.0	<1.0	<1.0	<4	1.3	NA	NA	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-7	12/16/2003	<1.0	<1.0	<1.0	<1.0	<4	<1	NA	NA	<1.0	<1.0	13	NA	NA	NA	NA	NA
MW-7	2/16/2005	1.27	<1.0	1.31	<1.0	2.58	20.4	NA	NA	<0.01	1.18	9.87	NA	NA	NA	NA	NA
MW-7	8/24/2005	<1.0	<1.0	1.1	<1.0	1.1	26	NA	NA	<.01	1.8	<10	NA	NA	NA	NA	NA
MW-7	9/7/2006	<1.0	<1.0	<1.0	<3.0	<6.0	34	<1.0	<1.0	<1.0	1.6	<10	NA	NA	NA	NA	NA
MW-7	2/4/2009	<1.0	<1.0	3.6	2.8	6.4	38	9.8	3.6	<1.0	1.4	2.5	NA	NA	NA	NA	NA
MW-7	9/30/1010	<1.0	<1.0	<1.0	<1.5	<4.5	57	<1.0	<1.0	<1.0	2.3	<10	NA	NA	NA	NA	NA
MW-7	5/19/2015	<1.0	<1.0	<1.0	<1.5	<4.5	67	<1.0	<1.0	<1.0	2.6	<10	NA	NA	NA	NA	NA
MW-7	3/11/2016	<1.0	<1.0	<1.0	<1.5	<4.5	62	<1.0	<1.0	<2.0	2.3	<10	NA	NA	NA	NA	NA
MW-7	2/28/2017	<1.0	<1.0	<1.0	<1.5	<4.5	69	<1.0	<1.0	<2.0	2.5	<10	NA	NA	NA	NA	NA
MW-7	8/16/2017	<1.0	<1.0	<1.0	<1.5	<4.5	50	<1.0	<1.0	<2.0	2.1	<10	NA	NA	NA	NA	NA
MW-7	10/29/2018	<1.0	<1.0	<1.0	<1.5	<4.5	51	<1.0	<1.0	<2.0	1.8	<10	NA	NA	NA	NA	NA
MW-7	5/15/2019	<1.0	<1.0	<1.0	<1.5	<4.5	44	<1.0	<1.0	<0.0095	1.5	<10	**0.820**	NA	NA	NA	NA
MW-7	11/18/2020	<1.0	<1.0	<1.0	<1.5	<1.5	11	<1.0	<1.0	<0.0094	<1.0	<10	NA	NA	NA	NA	NA

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TABLE 3. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS
NMDOT PATROL YARD, ARTESIA , NEW MEXICO

Monitor Well	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	1,2,4-TMB (µg/L)	1,3,5-TMB (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Naphthalenes (µg/L)	Manganese (mg/L)	Iron (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	Nitrate (As N) (mg/L)
MW-8	9/7/2006	<1.0	<1.0	<1.0	<3.0	<6.0	<1.5	<1			1.0	<10	NA	NA	NA	NA	NA
MW-8	2/2/2009	Abandoned August 2016															
MW-9	5/31/2001	**53**	11	**930**	280	1,274	<10	NA	NA	<10	<10	**460**	NA	NA	NA	NA	NA
MW-9	8/9/2001	**46**	<20	**850**	210	1,106	<20	NA	NA	<20	<20	**820**	NA	NA	NA	NA	NA
MW-9	11/5/2001	<50	<50	410	160	570	<50	NA	NA	<50	<50	<100	NA	NA	NA	NA	NA
MW-9	2/5/2002	<20	<20	500	280	780	<20	NA	NA	<20	<20	**150**	NA	NA	NA	NA	NA
MW-9	7/25/2002	<20	<20	570	140	710	<20	NA	NA	<20	<20	**110**	NA	NA	NA	NA	NA
MW-9	6/27/2003	<20	<20	490	80	570	<20	NA	NA	<20	<20	**150**	NA	NA	NA	NA	NA
MW-9	12/16/2003	<10	<10	310	<10	310	11	NA	NA	<0.01	<10	**150**	NA	NA	NA	NA	NA
MW-9	2/15/2005	**23.4**	2.01	25.5	1.9	52.8	7.79	NA	NA	<0.01	<1	**40.8**	NA	NA	NA	NA	NA
MW-9	8/24/2005	**7.5**	<5	59	6.1	73	<5	NA	NA	<0.01	<5	**72**	NA	NA	NA	NA	NA
MW-9	9/7/2006	<1.0	<1.0	12	<3.0	12	3.1	9	1.3	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-9	2/4/2009	Abandoned September 2010															
MW-10	5/31/2001	<1.0	<1.0	<1.0	<1.0	<4	<1.0	NA	NA	<1.0	1.1	<10	NA	NA	NA	NA	NA
MW-10	8/9/2001	1.8	<1.0	<1.0	<1.0	1.8	<1.0	NA	NA	<1.0	1.1	<10	NA	NA	NA	NA	NA
MW-10	11/5/2001	**18**	1.3	5.9	4.5	30	<1.0	NA	NA	<1.0	1	<10	NA	NA	NA	NA	NA
MW-10	2/5/2002	2.3	<1.0	1	<1.0	3	<1.0	NA	NA	<1.0	<1	<10	NA	NA	NA	NA	NA
MW-10	7/24/2002	**30**	<1.0	5	4	39	<1.0	NA	NA	<1.0	1.3	<10	NA	NA	NA	NA	NA
MW-10	6/27/2003	5.0	<1.0	1.4	1.2	8	<1.0	NA	NA	<1.0	1.2	<10	NA	NA	NA	NA	NA
MW-10	12/16/2003	**16**	1.1	6	4.2	27	<1.0	NA	NA	<0.01	1.5	<10	NA	NA	NA	NA	NA
MW-10	2/16/2005	**27.1**	<1.0	13.3	11.32	51.7	<1.0	NA	NA	<0.01	1.3	4.1	NA	NA	NA	NA	NA
MW-10	8/24/2005	<1.0	<1.0	<1.0	<1.0	<4	<1.0	NA	NA	<0.01	1.4	<10	NA	NA	NA	NA	NA
MW-10	9/7/2006	<1.0	<1.0	<1.0	<3.0	<6.0	<1.5	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-10	2/4/2009	<1.0	<1.0	4.9	1.7	6.6	<1.0	3.3	4	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-10	9/30/2010	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-10	5/19/2015	**5.1**	<1.0	15	8.9	29	<1.0	8.9	2.0	<1.0	<1.0	2.5	NA	NA	NA	NA	NA
MW-10	3/12/2016	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-10	2/28/2017	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-10	8/16/2017	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-10	10/29/2018	2.4	<1.0	11	4.0	17.4	<1.0	5.4	1.4	<1.0	<1.0	2.0	NA	NA	NA	NA	NA
MW-10	5/15/2019	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<0.0093	<1.0	<10	**0.580**	NA	NA	NA	NA
MW-10	11/18/2020	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<1.0	<1.0	<0.0094	<1.0	<10	NA	NA	NA	NA	NA
MW-12	5/31/2001	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	NA	NA	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-12	8/9/2001	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	NA	NA	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-12	11/5/2001	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	NA	NA	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-12	2/5/2002	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	NA	NA	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-12	7/24/2002	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	NA	NA	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-12	6/27/2003	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	NA	NA	<1.0	<1.0	<10	NA	NA	NA	NA	NA

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TABLE 3. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS
NMDOT PATROL YARD, ARTESIA , NEW MEXICO

Monitor Well	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	1,2,4-TMB (µg/L)	1,3,5-TMB (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Naphthalenes (µg/L)	Manganese (mg/L)	Iron (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	Nitrate (As N) (mg/L)
MW-12	12/16/2003	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	NA	NA	<0.01	<1.0	<10	NA	NA	NA	NA	NA
MW-12	8/23/2005	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	NA	NA	<0.01	<1.0	<10	NA	NA	NA	NA	NA
MW-12	12/17/2005	<1.0	<1.0	<1.0	<5.0	<8.0	<1.0	NA	NA	<0.01	<1.0	<10	NA	NA	NA	NA	NA
MW-12	9/7/2006	<1.0	<1.0	<1.0	<3.0	<6.0	<1.5	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-12	2/2/2009	Abandoned February 2009															
MW-13	3/1/2017	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-13	8/16/2017	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-13	10/30/2018	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
MW-13	5/16/2019	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<0.0020	NA	NA	NA	NA
MW-13	11/18/2020	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<1.0	<1.0	<0.0095	<1.0	<10	<0.0020	NA	NA	NA	NA
1-1	2/4/2009	**17**	<1.0	<1.0	<1.5	17	1.6	<1.0	<1.0	<1.0	2.2	2.9	NA	NA	NA	NA	NA
1-1	3/11/2016	<1.0	<1.0	<1.0	<1.5	<4.5	1	<1.0	<1.0	<1.0	1.2	<10	NA	NA	NA	NA	NA
1-1	3/1/2017	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
1-1	8/17/2017	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
1-1	10/29/2018	Well dry, no sample taken															
1-1	5/16/2019	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<0.0094	<1.0	<10	**1.8**	NA	NA	NA	NA
1-1	11/18/2020	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<1.0	<1.0	<0.0094	<1.0	<10	NA	NA	NA	NA	NA
1-3	5/10/2005	**1,000**	<50	140	**1,700**	2,840	**900**	NA	NA	<50	<50	**2,090**	NA	NA	NA	NA	NA
1-3	5/10/2005	**920**	<100	<100	**1,100**	2,020	**1,100**	NA	NA	<100	<100	**2,110**	NA	NA	NA	NA	NA
1-3	9/6/2006	**1,700**	<100	320	**2,300**	4,320	**1,600**	5,200	1,900	<100	**100**	**4,310**	NA	NA	NA	NA	NA
1-3	2/4/2009	**900**	<50	180	320	1,400	**1,200**	3,000	1,300	<50	<50	**2,280**	NA	NA	NA	NA	NA
1-3	3/12/2016	**220**	<20	320	310	850	**1,200**	2,600	800	<20	<20	**2,140**	NA	NA	NA	NA	NA
1-3	3/1/2017	**190**	<20	360	160	710	**1,400**	3,000	1,500	<20	<20	**2,780**	NA	NA	NA	NA	NA
1-3	8/17/2017	**210**	<25	330	220	760	**1,200**	2,300	770	<25	<25	**1,740**	NA	NA	NA	NA	NA
1-3	10/30/2018	**160**	<20	400	290	850	**1,400**	2,000	810	<20	<20	**2,310**	NA	NA	NA	NA	NA
1-3	5/16/2019	**160**	<25	420	330	910	**1,300**	1,900	790	<0.0095	<25	**1,820**	**0.70**	NA	NA	NA	NA
1-3	11/17/2020	**150**	17	480	490	1,137	**1,300**	2,100	790	0.018	**14**	**1,830**	**0.71**	**2.0**	<2.5	<0.0500	<0.50
1-4	2/4/2009	**360**	**4,600**	**2,700**	**9,500**	17,160	<50	3,700	1,100	<50	<50	**1,460**	NA	NA	NA	NA	NA
1-4	9/30/2010	**120**	210	**1000**	**920**	2,250	<20	1,600	440	<20	<20	**490**	NA	NA	NA	NA	NA
1-4	5/20/2015	**130**	660	**1500**	**2,100**	4,390	19	1,800	350	<10	<10	**580**	NA	NA	NA	NA	NA
1-4	3/12/2016	**88**	580	**1,200**	**2,200**	4,068	16	1,300	340	<10	<10	**630**	NA	NA	NA	NA	NA
1-4	3/1/2017	**23**	54	340	200	617	<10	260	50	<10	<10	**57**	NA	NA	NA	NA	NA
1-4	8/17/2017	**32**	95	310	230	667	12	180	42	<5	<5	**79**	NA	NA	NA	NA	NA
1-4	10/30/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA
1-4	5/16/2019	**23**	41	330	310	704	7.8	97	51	<0.0095	<5.0	**34**	0.035	NA	NA	NA	NA
1-4	11/18/2020	1.2	<1.0	2.0	1.7	4.9	1.1	3.6	1.7	<0.0095	<1.0	<10	NA	NA	NA	NA	NA
1-5	5/11/2005	**3,000**	<100	<100	<100	3,000	**630**	NA	NA	<100	<100	<100	NA	NA	NA	NA	NA
1-5	24/8/2005	**1,800**	<50	65	130	1,995	**250**	NA	NA	<0.01	<50	<100	NA	NA	NA	NA	NA

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TABLE 3. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS
NMDOT PATROL YARD, ARTESIA , NEW MEXICO

Monitor Well	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	1,2,4-TMB (µg/L)	1,3,5-TMB (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Naphthalenes (µg/L)	Manganese (mg/L)	Iron (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	Nitrate (As N) (mg/L)
1-5	9/6/2006	**4,900**	320	470	**1,300**	6,990	**630**	1,000	420	<100	<100	**1,460**	NA	NA	NA	NA	NA
1-5	2/4/2009	**2,100**	17	87	140	2,344	**500**	360	180	<10	**33**	**233**	NA	NA	NA	NA	NA
1-5	3/11/2016	**800**	10	91	180	1,081	**380**	390	220	<10	**11**	**610**	NA	NA	NA	NA	NA
1-5	3/1/2017	**640**	7	72	160	879	**410**	740	330	<5	**11**	**920**	NA	NA	NA	NA	NA
1-5	8/17/2017	**1,400**	42	330	**630**	2,402	**490**	710	330	<10	**17**	**900**	NA	NA	NA	NA	NA
1-5	10/30/2018	**540**	16	150	310	1,016	**240**	370	210	<10	<10	**570**	NA	NA	NA	NA	NA
1-5	5/16/2019	**1,500**	60	480	**980**	3,020	**470**	730	420	<0.0094	<20	**1,180**	**1,200**	NA	NA	NA	NA
1-5	11/17/2020	**1,000**	34	330	460	1,824	**320**	390	180	<0.0095	<10	**450**	**1.2**	0.27	11	<0.0500	<0.50
1-6	3/11/2016	**5.6**	3.6	16.0	8.2	33.4	4.2	26	58	<1.0	<1.0	**100**	NA	NA	NA	NA	NA
1-6	3/1/2017	3.4	<5.0	<5.0	<7.5	3.4	<5.0	<5.0	9.1	<5.0	<5.0	**<30**	NA	NA	NA	NA	NA
1-6	8/17/2017	1.9	29	130	64	224.9	2	220	200	<1.0	<1.0	**179**	NA	NA	NA	NA	NA
1-6	10/30/2018	1.7	<2.0	16	3.7	21.4	2.8	46	110	<2.0	<2.0	**96**	NA	NA	NA	NA	NA
1-6	5/16/2019	<5.0	<5.0	20	8.1	28.1	<5.0	39	71	<0.0093	<5.0	**82**	**0.560**	NA	NA	NA	NA
1-6	11/18/2020	<1.0	<1.0	<1.0	<1.5	<1.5	1.0	<1.0	<1.0	<0.0095	<1.0	<10	NA	NA	NA	NA	NA
1-7	3/11/2016	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
1-7	3/1/2017	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
1-7	8/17/2017	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
1-7	10/29/2018	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
1-7	5/16/2019	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<0.0095	<1.0	<10	**0.820**	NA	NA	NA	NA
1-7	11/17/2020	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<1.0	<1.0	<0.0093	<1.0	<10	NA	NA	NA	NA	NA
2-1	9/30/2010	**5.1**	3.4	27	19	55	86	51	45	<1.0	6.7	**150**	NA	NA	NA	NA	NA
2-1	5/20/2010	<10	<10	130	140	270	60	950	490	<10	<10	**1800**	NA	NA	NA	NA	NA
2-1	3/11/2016	<10	<10	29	36	65	49	400	170	<10	<10	**1190**	NA	NA	NA	NA	NA
2-1	2/28/2017	<5.0	<5.0	13	14	27	62	150	68	<5.0	<5.0	**375**	NA	NA	NA	NA	NA
2-1	8/17/2017	<5.0	15	210	230	455	56	2,200	870	<5.0	<5.0	**4,000**	NA	NA	NA	NA	NA
2-1	10/29/2018	<10	<10	110	46	156	85	820	510	<10	<10	**1,300**	NA	NA	NA	NA	NA
2-1	5/15/2019	<5.0	<10	36	<15	36	67	130	110	<0.0094	<10	**263**	**0.400**	NA	NA	NA	NA
2-1	11/18/2020	<2.5	<2.5	8.6	<3.8	8.6	58	11	8.5	<0.0095	3.4	**36**	NA	NA	NA	NA	NA
2-2	3/11/2016	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
2-2	2/28/2017	<1.0	<1.0	140	490	630	<1.0	840	270	<1.0	<1.0	**289**	NA	NA	NA	NA	NA
2-2	8/17/2017	<5.0	<5.0	59	170	229	<5.0	400	130	<5.0	<5.0	**162**	NA	NA	NA	NA	NA
2-2	10/29/2018	<2.0	<2.0	10	15	25	<2.0	170	60	<2.0	<2.0	**83.4**	NA	NA	NA	NA	NA
2-2	5/15/2019	<5.0	<5.0	9.8	15	24.8	<5.0	110	43	<0.0093	<5.0	**47**	0.120	NA	NA	NA	NA
2-2	11/18/2020	<2.5	<2.5	<2.5	<3.8	<3.8	<2.5	26	8.7	<0.0094	<2.5	<25	NA	NA	NA	NA	NA
2-4	9/6/2006	Well purged dry, no sample taken															
2-4	2/4/2009	**300**	43	360	410	1,113	**430**	1,500	520	<10	**15**	**930**	NA	NA	NA	NA	NA
2-4	3/12/2016	**330**	120	350	450	1,250	<10	930	340	<10	<10	**476**	NA	NA	NA	NA	NA
2-4	3/1/2017	**45**	8.9	260	250	563.9	6.4	810	230	<5.0	<5.0	**224**	NA	NA	NA	NA	NA

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TABLE 3. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS
NMDOT PATROL YARD, ARTESIA , NEW MEXICO

Monitor Well	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	1,2,4-TMB (µg/L)	1,3,5-TMB (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Naphthalenes (µg/L)	Manganese (mg/L)	Iron (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	Nitrate (As N) (mg/L)
2-4	8/17/2017	**140**	23	280	190	633	<10	660	170	<10	<10	**198**	NA	NA	NA	NA	NA
2-4	10/30/2018	Well purged dry, no sample taken															
2-4	5/16/2019	**100**	35	360	190	685	<10	440	160	<0.0094	<10	**169**	0.110	NA	NA	NA	NA
2-4	11/18/2020	**89**	73	320	290	772	2.3	240	120	<0.0094	<1.0	**146**	NA	NA	NA	NA	NA
2-5	2/4/2009	**750**	**6,100**	**3,500**	**13,000**	23,350	<200	4,500	1,400	<200	<200	**1,970**	NA	NA	NA	NA	NA
2-5	9/30/2010	**41**	<10	49	<15	90	<10	<10	17	<10	**12**	<40	NA	NA	NA	NA	NA
2-5	5/30/2015	**680**	33	420	110	1,243	<10	240	190	<10	<10	**260**	NA	NA	NA	NA	NA
2-5	3/11/2016	**500**	<10	270	24	794	<10	200	150	<10	<10	**210**	NA	NA	NA	NA	NA
2-5	3/1/2017	**130**	<5.0	190	<7.5	320	<5.0	5	110	<5.0	<5.0	**122**	NA	NA	NA	NA	NA
2-5	8/16/2017	**100**	<2.0	170	5.7	276	<2.0	6	100	<2.0	<2.0	**108.7**	NA	NA	NA	NA	NA
2-5	10/30/2018	**67**	<1.0	60	2.5	130	<1.0	1.2	<1.0	<1.0	<1.0	12	NA	NA	NA	NA	NA
2-5	5/16/2019	**46**	<1.0	23	<1.5	69	<1.0	1.4	<1.0	<0.0093	<1.0	<10	**2.100**	NA	NA	NA	NA
2-5	11/18/2020	**10**	<2.5	7.3	<3.8	17.3	<2.5	3.4	<2.5	<2.5	<2.5	<25	NA	NA	NA	NA	NA
2-6	9/7/2006	**70**	60	290	78	498	17	140	41	<5.0	**12**	**34**	NA	NA	NA	NA	NA
2-6	2/4/2009	**1,500**	**14,000**	**14,000**	**43,000**	72,500	<200	20,000	6,300	<200	<200	**8,000**	NA	NA	NA	NA	NA
2-6	9/30/2010	<1.0	<1.0	10	<1.5	10	17	19	9	<1.0	8.8	<10	NA	NA	NA	NA	NA
2-6	5/19/2015	<2.0	<2.0	<2.0	<3.0	<3.0	11	<2.0	<2.0	<2.0	6.0	<10	NA	NA	NA	NA	NA
2-6	3/11/2016	**16**	<1.0	2.2	<1.5	18	20	<1.0	<1.0	<1.0	7.2	<10	NA	NA	NA	NA	NA
2-6	3/1/2017	**8.6**	<1.0	1.6	<1.5	10.6	16	<1.0	<1.0	<1.0	4.9	<10	NA	NA	NA	NA	NA
2-6	8/17/2017	1.7	<1.0	<1.0	<1.5	2.0	19	<1.0	<1.0	<1.0	6.8	<10	NA	NA	NA	NA	NA
2-6	10/30/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA
2-6	5/16/2019	<1.0	<1.0	<1.0	<1.5	<4.5	7.1	<1.0	<1.0	<0.0096	2.4	<10	**0.420**	NA	NA	NA	NA
2-6	11/17/2020	<1.0	<1.0	<1.0	<1.5	<1.5	3.9	<1.0	<1.0	<1.0	1.3	<10	NA	NA	NA	NA	NA
2-7	2/4/2009	**1,200**	190	**720**	380	2490	<10	370	140	<10	<10	**156**	NA	NA	NA	NA	NA
2-7	3/11/2016	**590**	300	650	**810**	2570	<10	470	120	<10	<10	**297**	NA	NA	NA	NA	NA
2-7	3/1/2017	**970**	7.1	430	<7.5	1407.1	<5.0	9	19	<5.0	<5.0	**75**	NA	NA	NA	NA	NA
2-7	8/17/2017	**470**	26	530	67	1,093	<5.0	72	27	<5.0	<5.0	**49**	NA	NA	NA	NA	NA
2-7	10/30/2018	**480**	**1,800**	**2,100**	**4,700**	9,080	<5.0	1,900	570	<5.0	<5.0	**1,140**	NA	NA	NA	NA	NA
2-7	5/16/2019	**250**	55	400	230	935	<10	240	97	<0.0094	<10	**140**	**0.840**	NA	NA	NA	NA
2-7	11/18/2020	**81**	3.3	43	<1.5	127	<1.0	<1.0	<1.0	<0.0092	<1.0	<10	NA	NA	NA	NA	NA
3-1	3/12/2016	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA
3-1	3/1/2017	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
3-1	8/16/2017	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
3-1	10/30/2018	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
3-1	5/16/2019	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<0.0096	<1.0	<10	**1.400**	NA	NA	NA	NA
3-1	11/18/2020	<1.0	<1.0	<1.0	<1.5	<1.5	<1.5	<1.0	<1.0	<0.0095	<1.0	<10	NA	NA	NA	NA	NA
3-2	5/11/2005	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	NA	NA	<1.0	<1.0	<10	NA	NA	NA	NA	NA
3-2	3/11/2016	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA

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TABLE 3. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS
NMDOT PATROL YARD, ARTESIA , NEW MEXICO

Monitor Well	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	1,2,4-TMB (µg/L)	1,3,5-TMB (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Naphthalenes (µg/L)	Manganese (mg/L)	Iron (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	Nitrate (As N) (mg/L)
3-2	3/1/2017	<1.0	<1.0	<1.0	<1.5	<4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NA	NA	NA	NA	NA
3-2	8/16/2017	Not sampled, insufficient water															
3-2	10/30/2018	Well purged dry, no sample taken															
3-2	5/16/2019	Not sampled, insufficient water															
3-2	11/18/2020	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<1.0	<1.0	<0.0097	<1.0	<10	NA	NA	NA	NA	NA
3-4	5/11/2005	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	NA	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA
3-4	2/2/2009	Abandoned February 2009															
3-7	8/24/2005	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	NA	NA	<0.01	<1.0	<2.0	NA	NA	NA	NA	NA
	Abandoned September 2015																

NOTES:

Bold indicates concentration equal to or above the applicable NMWQCC standard.

Volatile Organic Compound were analyzed by EPA Method 8260B

EDB was analyzed by EPA Method 8011/504.1

Dissolved Iron and Manganese were analyzed by EPA Method 200.7

Sulfides were analyzed by Method 4500S2 D-2011

Sulfate and Nitrate were analyzed by EPA Method 300.0

µg/L = micrograms per liter (parts-per-billion)

1,2,4-TMB = 1,2,4-Trimethylbenzene

1,3,5-TMB = 1,3,5-Trimethylbenzene

BTEX = Sum of benzene, toluene, ethylbenzene, and total xylenes

EDB = Ethylene dibromide

EDC = Ethylene dichloride

MTBE = Methyl tertiary-butyl ether

NA = Not analyzed

NMWQCC = New Mexico Water Quality Control Commission

Total Naphthalenes = Naphthalene + 1-Methylnapthalene + 2-Methylnaphthalene

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TABLE 4. SUMMARY OF ANALYTICAL RESULTS - DISSOLVED GASES
NMDOT PATROL YARD, ARTESIA, NEW MEXICO

Well ID	Sample Date	Methane	Ethane	Ethene	Acetylene	Propane
1-3	11/17/20	0.478	<0.0130	<0.0130	<0.0200	<0.0186
1-5	11/17/20	1.51	<0.0130	<0.0130	<0.0200	<0.0186
MW-3	11/17/20	0.0358	<0.0130	<0.0130	<0.0200	<0.0186

Notes:
Dissolved gasses were analyzed by Method RSK175
Presented results are in milligrams per liter

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TABLE 5. GROUNDWATER MONITORING REGIMEN
NMDOT ARTESIA PATROL YARD, ARTESIA, NEW MEXICO

WELLS TO BE SAMPLED BY EVENT

Well ID	2 weeks	4 weeks	1st Quarter	2nd Quarter	3rd Quarter	Annual
	Well 1-5	Well 1-5	Plume Wells	Plume Wells	Plume Wells	
1-1						x
1-3			x	x	x	x
1-4						x
1-5	x	x	x	x	x	x
1-6			x	x	x	x
1-7						x
2-1			x	x	x	x
2-2						x
2-4			x	x	x	x
2-5			x	x	x	x
2-6						x
2-7			x	x	x	x
3-1						x
3-2						x
MW-3			x	x	x	x
MW-5						x
MW-7						x
MW-10						x
MW-13						x

ANALYSES FOR EACH WELL TYPE AND EVENT

Analyses	Well 1-5 2 weeks	Well 1-5 4 weeks	Well 1-5 Annual	Plume Wells 1st QTR	Plume Wells 2nd QTR	Plume Wells 3rd QTR	Plume Wells Annual	Periphery Wells Annual
VOCs	x	x	x	x	x	x	x	x
Nitrate	x	x	x	1-5, 1-3, 2-4, MW-3			1-5, 1-3, 2-4, MW-3	
Sulfate	x	x	x	1-5, 1-3, 2-4, MW-3			1-5, 1-3, 2-4, MW-3	
Dissolved Iron	x	x	x	1-5, 1-3, 2-4, MW-3			1-5, 1-3, 2-4, MW-3	
Dissolved Manganese	x	x	x	1-5, 1-3, 2-4, MW-3			1-5, 1-3, 2-4, MW-3	
Methane	x	x	x	1-5, 1-3, 2-4, MW-3			1-5, 1-3, 2-4, MW-3	
Total Dissolved Solids				1-3, 2-4, MW-3				
Bio-Trap Quant-Array Petro		x	x					
Additional Anions	x	x						

WELL CATEGORIES

Pilot Test Well	Plume Wells	Periphery Wells
1-5	1-3	1-1
	1-5	1-4
	1-6	1-7
	2-1	2-2
	2-4	2-6
	2-5	3-1
	MW-3	3-2
		MW-5
		MW-7
		MW-10
		MW-13

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TABLE 6. ANALYSES, METHODS, PRESERVATION, HOLDING TIME, AND HANDLING
NMDOT ARTESIA PATROL YARD, ARTESIA, NEW MEXICO

Analyses	Method	Container	Preservative	Holding Time	Handling
Volatile Organic Compounds	EPA 8260B	3 x 40-mL glass no headspace	$HgCl_2$	14 days	<6°Celsius
Nitrate	EPA 300	1 x 250 mL plastic	H_2SO_4	28 days	<6°Celsius
Sulfate	EPA 300	1 x 125 mL plastic	None	28 days	<6°Celsius
Dissolved Iron	EPA 200	1 x 125 mL plastic	HCl	48 hours	<6°Celsius
Dissolved Manganese	EPA 200	1 x 125 mL plastic	HCl	49 hours	<6°Celsius
Methane	RSK-175	3 x 40-mL glass no headspace	HCl	14 days	<6°Celsius
Total Dissolved Solids	SM 2540 C	1 x 250 mL plastic	None	28 days	<6°Celsius
Additional Anions	EPA 300	1 x 250 mL plastic	None	14 days	<6°Celsius
Quant-Array Petro - MNA Biotrap		MNA Biotrap	None	14 days	<6°Celsius

Notes:

°	Degrees
<	Less than
EPA	United States Environmental Protection Agency
H_2SO_4	Sulfuric Acid
HCl	Hydrochloric Acid
$HgCl_2$	Mercuric chloride
HNO_3	Nitric Acid
mL	Milliliter
NaOH	Sodium Hydroxide

Additional Anions by RPI:

Acetate	Succinate
Butyrate	Sulfide
Chloride	
Formate/Isobutyrate	
Lactate	
Nitrite	
Phosphate	
Proionate	
Pyruvate	

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