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March 21, 2022

VIA E-PERMITTING PORTAL

Mr. Nelson Velez, Environmental Specialist - Advanced
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: 2022 Direct Push Site Investigation Activities Work Plan
San Juan River Gas Plant
Kirtland, New Mexico
NMOCD Incident Number NAUTOFRM000157

Dear Mr. Smith:

Stantec, on behalf of El Paso Natural Gas Company, LLC (EPNG), is submitting the enclosed 2022 Direct Push Investigation Activities Work Plan (Work Plan) for the San Juan River Gas Plant Site (Site). The enclosed document contains the proposed methodology for the advancement and sampling of up to twenty soil borings at the Site. Unless otherwise noted, the procedures outlined in this Work Plan are to be completed in accordance with the requirements established in the EPNG's "Remediation Plan for Groundwater Encountered During Pit Closure Activities" document approved by the New Mexico Oil Conservation Division (NMOCD) on November 30, 1995. The scope of work contained herein is scheduled to begin the week of April 4, 2022.

Please contact Mr. Joseph Wiley of EPNG at (713) 420-3475, or me, if you have any questions or comments concerning the enclosed Work Plan.

Sincerely,

Stantec Consulting Services Inc.

Stephen Varsa
Project Manager
Phone: (515) 251-1020
steve.varsa@stantec.com

/csh:srv:lmd
cc: Joseph Wiley, EPNG (via electronic mail)

El Paso Natural Gas Company, L.L.C.
a Kinder Morgan company

El Paso Natural Gas Company, LLC
1001 Louisiana
Houston, Texas 77002

SAN JUAN RIVER GAS PLANT SITE

NMOCD Incident Number NAUTOFRM000157
2022 DIRECT PUSH INVESTIGATION ACTIVITIES WORK PLAN
KIRTLAND, NEW MEXICO

March 2022

Prepared by:

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SECTION 1 - INTRODUCTION

This Direct Push Investigation Work Plan (Work Plan) presents the scope of work for the advancement and sampling of up to twenty soil borings to assess the source of measurable light non-aqueous phase liquid (LNAPL) present in monitoring well MW-20 at the San Juan River Gas Plant Site (Site), located in Kirtland, New Mexico. Measurable LNAPL was detected in monitoring well MW-20 following its completion in 2019 as part of ongoing site characterization activities. The results of a mobile dual-phase extraction (MDPE) event completed on MW-20 in August 2020 indicated the source of LNAPL was likely coming from unconsolidated sediments logged as being present above bedrock during advancement of MW-20. Shallow hydrocarbons were not encountered during advancement of three monitoring wells (MW-24 through MW-26) in 2021, completed near potential sources of the LNAPL east and south of MW-20. Prior to conducting further groundwater assessment activities, additional sampling using direct-push methods is proposed to help identify other shallow source areas in the vicinity of MW-20. The locations of the proposed direct-push sampling locations are depicted on Figure 1.

The purpose of this Work Plan is to provide the necessary field methods and implementation schedule for the direct push investigation activities. Section 2 describes the Site and the purpose behind the proposed direct push investigation activities. Section 3 provides details on the field methods to be used. Section 4 presents the anticipated implementation schedule.

SECTION 2 - SCOPE OF WORK

Previous activities at the Site have helped delineate the extent of hydrocarbons present. Based on the data collected, the proposed soil borings are intended to provide additional assessment of the source of measurable LNAPL present in site monitoring well MW-20. The scope of work includes utility clearance activities, soil boring advancement, selected temporary well installation, inspection, and removal, borehole abandonment, waste management and disposal, and reporting.

Following completion of the direct push investigation, the soil boring locations and surface elevations will be surveyed and tied into the existing Site survey by a New Mexico-licensed surveyor.

SECTION 3 - FIELD METHODS

The following subsections describe field procedures to be followed during the Site activities.

3.1 UTILITY CLEARANCE ACTIVITIES

The location of each direct push boring location, as depicted on Figure 1, will be staked by Stantec prior to completing public utility locates through New Mexico 811 (NM811). Stantec will also supervise a ground penetrating radar (GPR) and private utility survey prior to ground disturbance activities to evaluate the presence of utilities or other anomalies around each soil boring location. Once the NM811, GPR and private underground utility locating activities have been completed, soft-digging methods (hand auger) will be used to clear the boring locations to a depth of 10-feet below ground surface (bgs).

3.2 SOIL BORINGS

A direct-push drill rig will be mobilized and used to advance the soil borings at each location following completion of the utility clearance activities. Soil sampling and screening will be conducted from the soft-digging termination depth to the base of the borehole using the direct-push rig and continuous-core sampling methods. Borehole logging will include Unified Soil Classification System (USCS) soil descriptions for the entire depth of the boring. In addition to the USCS descriptions, the field geologist will provide a detailed description of each discrete lithologic unit.

Soil samples will be collected at 1-foot intervals, where recovery is possible, for field screening and potential laboratory analysis. After the sample core is collected, the field personnel will field screen using a pre-calibrated photoionization detector (PID) and record the readings. The field screening will be conducted by notching the soil in the core with a hand trowel or other pre-cleaned hand tool, and briefly placing the PID in the notch to measure impacts. The screening, in addition to visual and olfactory observations (e.g., observing apparent hydrocarbon staining), will aid in identifying the portion of the sample interval to retain for potential laboratory analysis (i.e., the portion with the greatest suspected hydrocarbon impact).

Based on the field screening, one soil sample per boring will be collected from the core representing the greatest suspected hydrocarbon impact. No soil samples will be collected below the field-apparent water table. If the current core section being screened does not appear to be impacted to a level equal to or greater than a preceding core section, one soil sample will be collected immediately above the field-interpreted and/or gauged water table for laboratory analysis. The sample(s) retained for potential laboratory analysis will be placed in laboratory-provided 4-ounce glass jar(s), sealed, labeled, and stored on ice. After the boring and soil screening are completed, the collected samples will be shipped in an ice-filled cooler under standard chain-of-custody to Eurofins Environment Testing Southeast, LLC (Eurofins) in Pensacola, Florida. Samples not retained for analysis will be disposed of with the soil cuttings.

The submitted soil samples will be analyzed per the guidance established by Attachment A to Order No. R-13506-D, NMAC Section 19.15.17.13, Table 1, for the presence of benzene, toluene, ethylbenzene, and total xylenes (BTEX) by United States Environmental Protection Agency (EPA) Method SW846 8060; gasoline-range organics, diesel-range organics, and oil-range organics by EPA Method 8015 M; and chlorides by EPA Method 300. Due to the scope of this investigation and expected limited recovered sample volume, analysis of metals and other inorganic compounds is not proposed.

Upon completion, the locations and elevations of the direct push soil borings will be surveyed-in by a New Mexico-licensed surveyor.

3.3 TEMPORARY WELL INSTALLATION

If the presence of LNAPL is suspected based on the results of the soil sampling activities, a temporary monitoring well will be placed in the soil boring to attempt to verify the presence of measurable LNAPL. Each temporary well will be constructed of 1-inch-diameter, Schedule 40, 0.010-slot polyvinyl chloride (PVC) screen and 1-inch-diameter, Schedule 40 PVC riser casing. For each well, the well screen will be installed and placed to screen across the interval suspected of containing LNAPL or groundwater to provide sufficient water column for gauging and inspecting for the presence of LNAPL. The temporary wells will be allowed to equilibrate for at least 12 hours prior to gauging and inspection. Inspection for LNAPL will be conducted using a disposable bailer. No pumping of water will be conducted from temporary wells. Any observed LNAPL will be removed for disposal with wastewater accumulated during the direct push activities.

3.4 SOIL BORING ABANDONMENT

Following gauging and inspection, each temporary monitoring well will be removed. The direct push soil borings will be plugged in accordance with the NMOSE-approved plan of plugging for the site.

3.5 GENERAL PROTOCOLS

This subsection presents a discussion of health and safety, documentation procedures, buried piping or utility identification, waste handling, and other procedures to be performed as part of the investigation.

3.5.1 Health and Safety

A Site-Specific Health and Safety Plan (HASP) will be prepared covering the direct-push investigation drilling activities. The HASP includes guidance on the personal protective equipment (PPE) necessary for field activities, identified hazards associated with the field activities, and directions to the nearest medical facility. Flame-resistant clothing, puncture-resistant sole inserts, and Level D protective equipment will be worn, as required. A copy of the HASP will be on site at all times while work is being performed. The HASP will apply to Stantec employees, Stantec's subcontractors, and visitors at the Site.

3.5.2 Documentation Procedures

Data generated during the field investigation will be recorded on soil boring logs. The soil boring logs will include USCS descriptions, detailed lithologic descriptions, PID readings, length/percent recovery, sample collection intervals, and drilling method employed. The temporary well construction, if installed, will include screen, sand pack, wellbore seal, and surface completion details. Borehole abandonment activities will also be documented.

The field geologist will maintain a field logbook. At the end of each day of field activities, the notes will be dated and signed by the field geologist.

The daily field logbook will contain information such as:

- Date
- Name, location, and objective of the work activities
- Weather conditions

- Equipment calibration information
- Personnel and visitors on site
- Photograph numbers and descriptions (if applicable)
- Description of decontamination activities (if applicable)
- Any deviations from the Work Plan
- Other relevant observations as the fieldwork progresses
- Sample collection intervals and times
- Problems and corrective actions

3.5.3 Boring Locations and Utility Identification

Prior to any drilling or excavation, a call will be made to the New Mexico 811 "One Call" to verify utility clearance and to notify the operator. "One Call" will be notified that the soil boring location is staked or flagged and that the entire well pad and areas surrounding the borings should be marked. The clearance call must be made at least two working days prior to drilling, and site work must be completed within fifteen days of the clearance. In addition, access will be coordinated with the current operator of the Site prior to any drilling activities to allow location of any underground infrastructure and to comply with operator safety guidance.

3.5.4 Equipment Decontamination

Prior to drilling, down-hole equipment will be steam cleaned or scrubbed with a non-phosphate detergent (e.g., Liquinox®). Where feasible, equipment to be decontaminated will be disassembled to permit adequate cleaning of the internal portions of the equipment. Equipment to be steam cleaned will be placed into a self-contained decontamination trailer with metal cleaning racks that support the equipment for cleaning, rinsing, and air drying. Heavy waterproof gloves will be worn during steam cleaning to protect against skin contact with steam and potential contaminants and to reduce the potential for cross-contamination between samples.

3.5.5 Investigation-Derived Waste

Soil cuttings generated from drilling activities and utility clearance will be containerized in 55-gallon steel drums for removal by a contracted transport and disposal company.

Decontamination water will be containerized in 5-gallon buckets for removal by Stantec to a local disposal company. Any recovered groundwater or LNAPL generated from temporary well inspection activities will be containerized in Department of Transportation-approved metal gas cans for removal and disposal to a local disposal company.

Other investigation-derived wastes (i.e., excess well materials, bags, buckets, gloves) and disposable equipment and PPE waste generated during field activities, including scrap PVC, concrete, steel, rope, disposable bailers, nitrile gloves, and Tyvek® suits, will be placed in standard dumpsters for disposal as industrial waste.

3.5.6 Field Equipment Calibration Procedures

With regard to organic vapor meters, field personnel will use a 10.6 electron volt (eV) PID for screening soil samples during advancement of soil borings. This instrument will be calibrated prior to use according to the manufacturer's specifications. The instrument calibration will be checked at the beginning of each day of use and any time meter drift is suspected. Calibration information will be recorded in the field logbook.

SECTION 4 - SCHEDULE

It is anticipated that soil boring installation activities will commence the week of April 3, 2022. Utility locates must be verified prior to the work. Soil and groundwater analytical results and recommendations from the field activities will be provided in the 2022 Annual Report, anticipated to be submitted by April 1, 2023.

Figure

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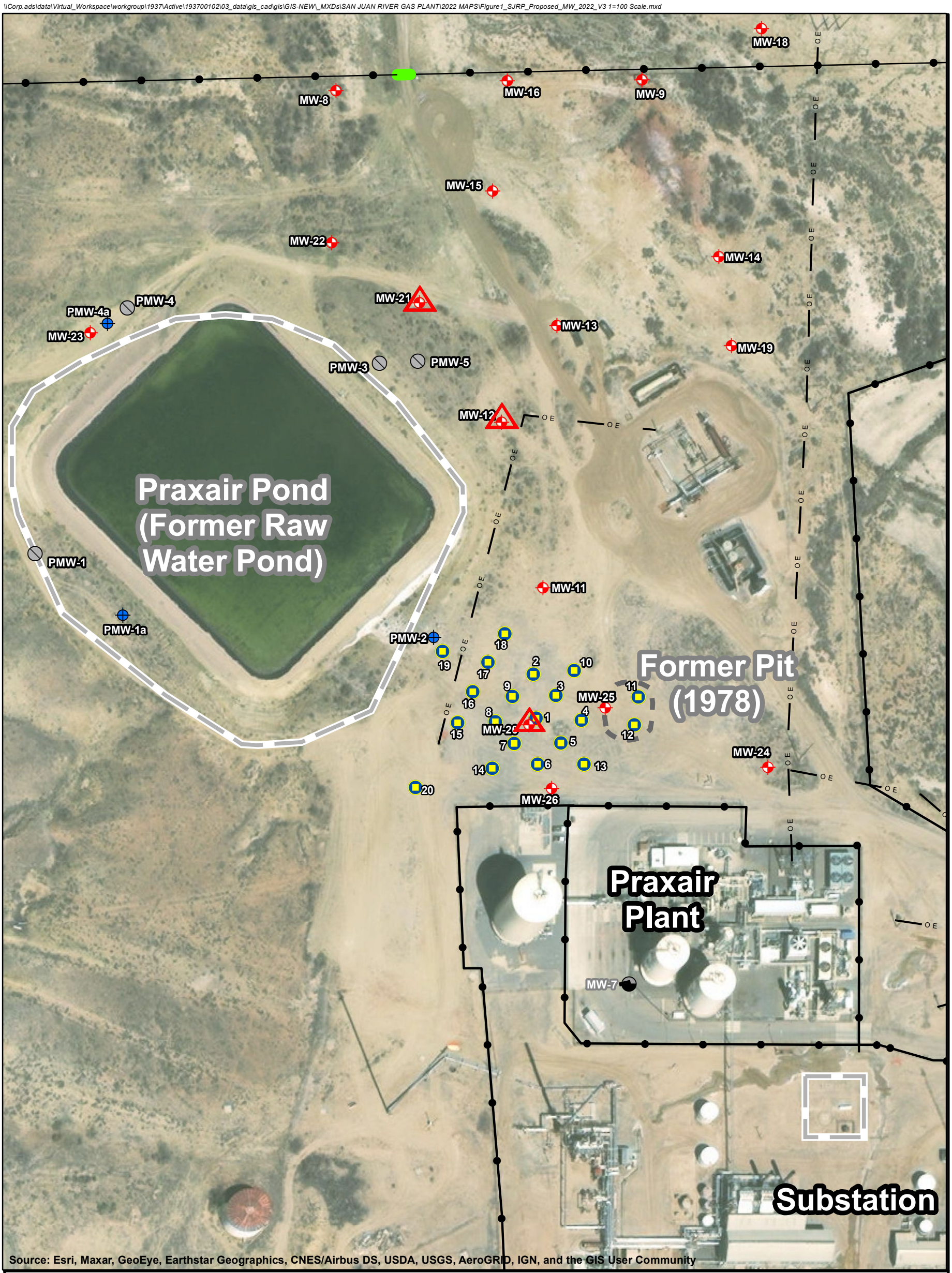

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

LEGEND

- MONITORING WELL
- MONITORING WELL WITH MEASUREABLE LNAPL DETECTED NOVEMBER 2021
- PROPOSED BORING LOCATION
- PRAXAIR MONITORING WELL
- DESTROYED/ABANDONED PRAXAIR MONITORING WELL
- DESTROYED/ABANDONED EPNG MONITORING WELL
- HISTORICAL FEATURE
- OVERHEAD ELECTRIC
- FENCE
- GATE
- FLARE PIT

N

SCALE IN FEET

0 100 200

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2022-02-09	SLG	SLG	SRV

TITLE:

PROPOSED BORING LOCATIONS

PROJECT:

SAN JUAN RIVER GAS PLANT
KIRTLAND, NEW MEXICO

Stantec

Figure No.: 1

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 92026

CONDITIONS

Operator:	OGRID:
El Paso Natural Gas Company, L.L.C 1001 Louisiana Street Houston, TX 77002	7046
	Action Number: 92026
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Accepted for the record. See app ID 123175 for most updated status.	10/19/2022