



Stantec Consulting Services Inc.  
11311 Aurora Avenue  
Des Moines, Iowa 50322  
Phone: (515) 253-0830  
Fax: (515) 253-9592

NV

January 26, 2023

**SUBMITTED 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: 2023 Monitoring Well Replacement Work Plan – Gallegos Canyon Unit #124E Site  
El Paso CGP Company – Pit Groundwater Remediation Sites  
NMOCD Incident Number: nAUTOfAB000205

Dear Mr. Velez:

Stantec Consulting Services Inc. (Stantec), on behalf of El Paso CGP Company, LLC (EPCGP), is submitting the enclosed 2023 Monitoring Well Replacement Work Plan (Work Plan) for the Gallegos Canyon Unit #124E Site (Site). The enclosed document contains the proposed methodology for over-drilling and replacing monitoring well MW-1 at the Site. Unless otherwise noted, the procedures outlined in this Work Plan meet or exceed the requirements established in EPCGP'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 10, 2023.

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

Sincerely,

**Stantec Consulting Services Inc.**

A handwritten signature in blue ink, appearing to read "Stephen Varsa".

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

/srv:imd

cc: Joseph Wiley, EPCGP (via electronic mail)  
Steve Austin, Navajo Environmental Protection Agency



**2023 MONITORING WELL  
REPLACEMENT WORK PLAN**

GALLEGOS CANYON UNIT #124E  
SITE  
NMOCD Incident #  
nAUTOofAB000205  
SAN JUAN COUNTY, NEW MEXICO

**Prepared for:**

El Paso CGP Company, LLC  
1001 Louisiana  
Houston, Texas 77002

**Prepared by:**

Stantec Consulting Services Inc.  
11311 Aurora Avenue  
Des Moines, Iowa 50322

January 26, 2023

2023 MONITORING WELL REPLACEMENT WORK PLAN  
GALLEGOS CANYON UNIT #124E SITE, SAN JUAN COUNTY, NEW MEXICO

**TABLE OF CONTENTS**

**SECTION 1 - INTRODUCTION..... 1**

**SECTION 2 - SCOPE OF WORK..... 2**

**SECTION 3 - FIELD METHODS..... 3**

**3.1 WELL OVER-DRILLING AND REPLACEMENT ..... 3**

**3.2 REPLACEMENT MONITORING WELL INSTALLATION ..... 3**

**3.3 GENERAL PROTOCOLS..... 3**

**3.3.1 Health and Safety ..... 4**

**3.3.2 Documentation Procedures ..... 4**

**3.3.3 Boring Locations and Utility Identification ..... 4**

**3.3.4 Equipment Decontamination..... 4**

**3.3.5 Investigation-Derived Waste ..... 5**

**3.3.6 Field Equipment Calibration Procedures ..... 5**

**SECTION 4 - SCHEDULE..... 6**

**LIST OF FIGURES**

**Figure 1 – Gallegos Canyon Unit #124E - Proposed Monitoring Well Location**

**2023 MONITORING WELL REPLACEMENT WORK PLAN  
GALLEGOS CANYON UNIT #124E SITE, SAN JUAN COUNTY, NEW MEXICO**

**SECTION 1 - INTRODUCTION**

This Monitoring Well Replacement Work Plan (Work Plan) presents the scope of work to be completed to over-drill and replace one existing monitoring well at the former El Paso CGP Company, LLC (EPCGP) Gallegos Canyon Unit #124E remediation site (Site) located in the San Juan River Basin near Farmington, New Mexico. There are currently seven EPCGP monitoring wells (MW-1, and MW-3 through MW-8) at the Site. Light non-aqueous phase liquid (LNAPL) has historically been present in monitoring well MW-1 and has been removed via completion of several mobile dual-phase extraction (MDPE) events in 2017, and by manual LNAPL recovery activities. Due to the age of the monitoring well, replacement of it is planned in order to facilitate future monitoring efforts.

The purpose of this Work Plan is to provide the field methods and an implementation schedule for over-drilling and replacing existing monitoring well MW-1. Section 2 describes the Site and the purpose behind the proposed monitoring well replacement. Section 3 provides details on the field methods to be used. Section 4 presents the anticipated implementation schedule.

**2023 MONITORING WELL REPLACEMENT WORK PLAN  
GALLEGOS CANYON UNIT #124E SITE, SAN JUAN COUNTY, NEW MEXICO**

**SECTION 2 - SCOPE OF WORK**

The replacement monitoring well (designated MW-1R) is intended to facilitate future monitoring efforts and provide more representative groundwater samples from this location, and to move the Site toward regulatory closure. Details of the proposed replacement of monitoring well MW-1 are provided below.

There are currently seven monitoring wells (MW-1, and MW-3 through MW-8) at the Site. Monitoring well MW-1 will be over-drilled and replaced with monitoring well MW-1R.

The existing monitoring wells and proposed replacement monitoring well location are depicted on Figure 1.

**2023 MONITORING WELL REPLACEMENT WORK PLAN  
GALLEGOS CANYON UNIT #124E SITE, SAN JUAN COUNTY, NEW MEXICO**

**SECTION 3 - FIELD METHODS**

The following subsections describe field procedures to be followed during the Site activities. Prior to conducting monitoring well installation activities, a permit for the monitoring well will be obtained from the Navajo Nation Department of Water Resources (DWR).

**3.1 WELL OVER-DRILLING AND REPLACEMENT**

Existing monitoring well MW-1 will be over-drilled and replaced. Activities will consist of first initiating NM811 notifications and completing underground utility and line locates, followed by clearing around the existing well pad with hand tools (i.e., shovel, post-hole digger, and hand-auger) to confirm no unmarked subsurface utilities or other obstructions are present prior to drilling activities. A truck-mounted, hollow-stem auger drill rig will be mobilized to the Site to remove the at-grade completion around MW-1 and over-drill and remove the existing well screen and casing. Once the existing well screen and casing are removed, augers will be advanced to a depth of 40 feet below ground surface (bgs) to facilitate installation of the replacement well, MW-1R. A Stantec field geologist will oversee the drilling activities. No soil sampling is proposed.

**3.2 REPLACEMENT MONITORING WELL INSTALLATION**

Replacement monitoring well MW-1R will be constructed of 4-inch-diameter, Schedule 40, 0.010-slot polyvinyl chloride (PVC) screen and 4-inch-diameter, Schedule 40 PVC riser casing. A 20-foot screen will be installed to the depth described in Figure 1, which is anticipated to intersect the groundwater surface (approximately 13 feet of well screen below the water table and approximately 7 feet of well screen above the water table) to provide sufficient water column for sample collection. The riser casing will extend from the top of the screen to approximately 0.5 foot below the ground surface. The annular space adjacent to the well screen will be filled with 10-20 silica sand from the bottom of the borehole to 2 feet above the top of the screen. Three (3) feet of hydrated bentonite chips will be placed above the silica sand to prevent downward migration of surface water. Bentonite grout will be placed above the bentonite chips to approximately 0.5 foot below the bottom of the well vault.

A bolt-down, traffic rated steel manhole, centered in an approximately 3-foot diameter concrete pad, will be installed at grade to protect MW-1R. Well development will be performed using a surge block and down-hole pump until sediment has been removed and visibly clear water is observed or until the well runs dry. Stantec will survey the location and elevation of the monitoring well upon completion of development. Assuming LNAPL is not encountered, the well will be fitted with a HydraSleeve™ no-purge groundwater sampling device. A zip tie will be used to secure the well.

**3.3 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.

**2023 MONITORING WELL REPLACEMENT WORK PLAN  
GALLEGOS CANYON UNIT #124E SITE, SAN JUAN COUNTY, NEW MEXICO**

**3.3.1 Health and Safety**

A Site-Specific Health and Safety Plan (HASP) will be prepared for groundwater monitoring, operations, maintenance, and 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 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.

**3.3.2 Documentation Procedures**

Data generated during the field investigation will be recorded on a well construction log. The well construction log will include the drilling method employed, and well screen, sand pack, wellbore seal, and surface completion details.

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
- Problems and corrective actions

**3.3.3 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 drilling location is staked or flagged and that the entire Site and areas surrounding the drilling location 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.

**3.3.4 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

**2023 MONITORING WELL REPLACEMENT WORK PLAN  
GALLEGOS CANYON UNIT #124E SITE, SAN JUAN COUNTY, NEW MEXICO**

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.

**3.3.5 Investigation-Derived Waste**

Soil cuttings generated from over-drilling activities will be containerized in labeled 55-gallon drums and staged on site for removal by a contracted transport and disposal company.

Decontamination and purge water generated through the development of the replacement monitoring well will be containerized in labeled 55-gallon drums and staged on site for removal with the soil cuttings.

Other investigation-derived wastes (i.e., excess well materials, bags, buckets, gloves), and debris, will be removed from the Site by the waste hauler for disposal as general construction/demolition debris.

Disposable equipment and PPE waste generated during field activities, including scrap PVC, concrete, steel, rope, disposable bailers, nitrile gloves, and Tyvek® suits, will be disposed of in standard industrial dumpsters. In the event the waste is grossly contaminated, it will be containerized for proper disposal along with the other investigation-derived waste.

**3.3.6 Field Equipment Calibration Procedures**

With regard to organic vapor meters, field personnel will use a 10.6 electron volt (eV) PID for measuring ambient air in worker breathing zones during over-drilling and advancement of the replacement well. 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.

**2023 MONITORING WELL REPLACEMENT WORK PLAN  
GALLEGOS CANYON UNIT #124E SITE, SAN JUAN COUNTY, NEW MEXICO**

**SECTION 4 - SCHEDULE**

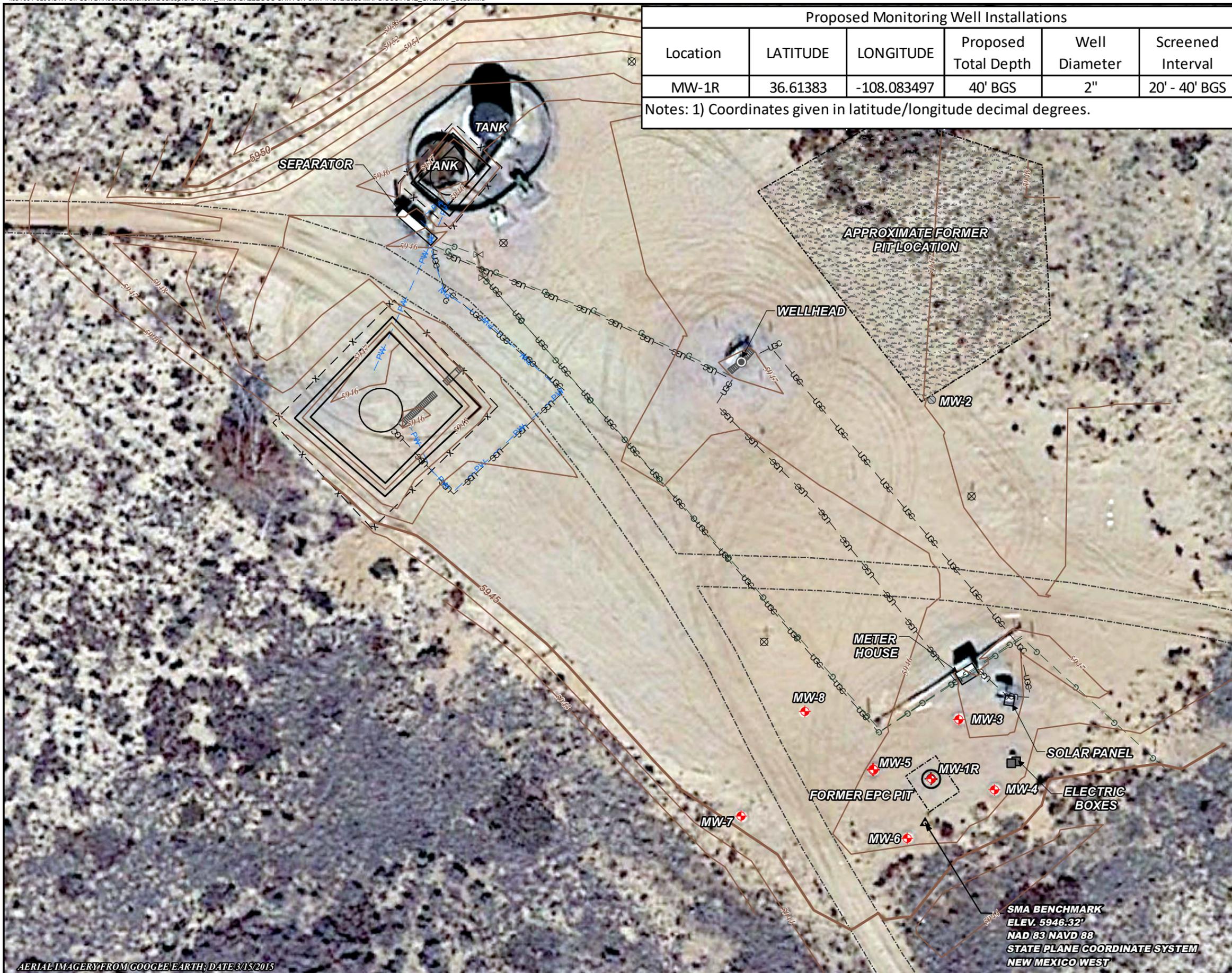
It is anticipated that well replacement activities will commence the week of April 10, 2023. Utility locates must be verified prior to the work. Assuming LNAPL is not encountered; following development, a HydraSleeve™ no-purge groundwater sampler and tether will be placed in the new well to prepare the well for groundwater sample collection. The replacement well will be sampled on at least a semi-annual basis, with the first sampling event expected to occur in May 2023.

The well replacement activities, well construction log, and groundwater analytical results will be documented in the 2023 Annual Report, anticipated to be submitted by April 1, 2024.

**FIGURE**



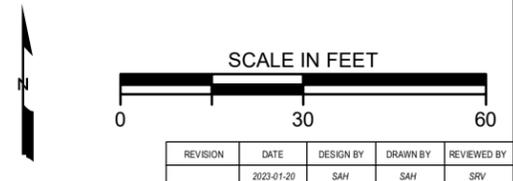
\\cd1001-c200\CTX-CIFSS\VDI\Redirecl\shansen\Desktop\GIS-NEW\_MXD\GALLEGOS CANYON UNIT #124E\2023 MAPS\GCU#124E\_SITEMAP\_2023.mxd



Proposed Monitoring Well Installations					
Location	LATITUDE	LONGITUDE	Proposed Total Depth	Well Diameter	Screened Interval
MW-1R	36.61383	-108.083497	40' BGS	2"	20' - 40' BGS

Notes: 1) Coordinates given in latitude/longitude decimal degrees.

- LEGEND:**
- 5795— APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
  - - - - - ACCESS ROAD
  - x-x- FENCE
  - - - - - FORMER PIT
  - PW— PRODUCED WATER LINE
  - UGC— UNDERGROUND CABLE
  - G— UNDERGROUND GAS LINE
  - ⊙ ABANDONED MONITORING WELL
  - ▲ SMA BENCHMARK
  - ⊗ GAS VALVE
  - ⊕ MONITORING WELL
  - ⊕ MONITORING WELL TO BE REMOVED AND REPLACED
  - ⊗ RIG ANCHOR
  - ⊙ WELLHEAD



REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2023-01-20	SAH	SAH	SRV

TITLE: **PROPOSED MONITORING WELL LOCATION**

PROJECT: **GALLEGOS CANYON UNIT #124E  
SAN JUAN RIVER BASIN  
SAN JUAN COUNTY, NEW MEXICO**

	Figure No.:
	<b>1</b>

AERIAL IMAGERY FROM GOOGLE EARTH; DATE 3/15/2015

SMA BENCHMARK  
ELEV. 5946.32'  
NAD 83 NAVD 88  
STATE PLANE COORDINATE SYSTEM  
NEW MEXICO WEST

**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 180013

**CONDITIONS**

Operator: El Paso Natural Gas Company, L.L.C 1001 Louisiana Street Houston, TX 77002	OGRID: 7046
	Action Number: 180013
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

**CONDITIONS**

Created By	Condition	Condition Date
nvez	Accepted for the record. Incident on tribal land.	5/19/2023