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**REVIEWED**

By Nelson Velez at 7:33 am, May 22, 2023

Review of 2023 Monitoring Well and Soil Boring Installation Activities Work Plan: **Content satisfactory**

1. OCD approves the monitor well and Soil Boring installation as written.
2. Continue with scheduling per Section 4.0 in this work plan.
3. Submit next annual groundwater monitoring report no later than April 1, 2024.

April 7, 2023

**VIA E-PERMITTING PORTAL**

Mr. Nelson Velez  
New Mexico Oil Conservation Division  
1000 Rio Brazos Road  
Aztec, NM 87410

RE: 2023 Monitoring Well and Soil Boring Installation Activities Work Plan  
Blanco Plant – Former North Flare Pit Site  
El Paso CGP Company  
NMOCD Incident Number nAUTOfCS000155

Dear Mr. Velez,

On behalf of El Paso CGP Company, LLC (EPCGP), Stantec Consulting Services, Inc. (Stantec) is submitting the enclosed 2023 Monitoring Well and Soil Boring Installation Activities Work Plan (Work Plan) for the Blanco Plant – North Flare Pit Site (Site). The enclosed document contains the proposed methodology for the installation of three (3) new monitoring wells (MWs) and five (5) soil borings (SBs) to assess a former evaporation pond at the Site. Unless otherwise noted, the procedures outlined in this Work Plan are to be completed in accordance with 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 May 1, 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.**

Stephen Varsa  
Project Manager  
Phone: (515) 251-1020  
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srv/csh/lmd

cc: Joseph Wiley, EPCGP  
United States Bureau of Land Management (ROW# NMNM135011)



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

**Blanco Plant – Former North Flare Pit Site  
NMOCD Incident Number: nAUTOfCS000155  
2023 MONITORING WELL AND SOIL BORING INSTALLATION ACTIVITIES WORK PLAN  
BLOOMFIELD, NEW MEXICO**

**APRIL 2023**

**Prepared by:**

**Stantec Consulting Services Inc.  
11311 Aurora Avenue  
Des Moines, Iowa 50322  
(515) 253-0830**

2023 MONITORING WELL AND SOIL BORING INSTALLATION ACTIVITIES WORK PLAN  
BLANCO PLANT - FORMER NORTH FLARE PIT SITE, BLOOMFIELD, NEW MEXICO

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2023 MONITORING WELL AND SOIL BORING INSTALLATION ACTIVITIES WORK PLAN  
BLANCO PLANT – FORMER NORTH FLARE PIT SITE - BLOOMFIELD, NEW MEXICO

## SECTION 1 - INTRODUCTION

The Blanco Plant Former North Flare Pit Site (Site) is located approximately 1.5 miles northeast of central Bloomfield, New Mexico, on land controlled by the U.S. Bureau of Land Management (BLM). The Site is located north of San Juan County Road 4900, on a portion of the Blanco Gas Plant operated by Enterprise Products and used for gas gathering activities with no active gas processing. On the south side of San Juan County Road 4900 is the main Blanco Gas Plant facility. The main Blanco Gas Plant facility is primarily owned and operated by Enterprise Products. El Paso Natural Gas Company (EPNG) operates natural gas compression facilities in one area of the main Blanco Gas Plant.

This Monitoring Well and Soil Boring Installation Activities Work Plan (Work Plan) presents the scope of work for the installation of three (3) new monitoring wells (MWs) and five (5) soil borings (SBs) to assess a former evaporation pond at the Site. The proposed monitoring well and soil boring locations, existing monitoring wells, and other features are depicted on Figure 1.

The purpose of this Work Plan is to provide the necessary field methods and implementation schedule for the monitoring well and soil boring well installation activities. Section 2 describes the Site and the purpose behind the proposed 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 site investigation activities indicate a potential source of hydrocarbons may be associated with a former evaporation pond, which from historical site drawings was located on the southern portion of the former Kutz Hydrocarbon Recovery facility (Kutz facility) at the Site. It is not evident the northern portion of the Kutz facility has a historical evaporation pond present, and it was reported concrete rubble was buried in this area when the facility was closed, and the liners were removed.

The proposed scope of work is intended to complete an assessment of the former evaporation pond area. The advancement and sampling of eight soil borings, three of which will be converted to monitoring wells, is proposed to assess this area. The locations of the proposed soil borings and monitoring wells are depicted on Figure 1. The scope of work includes well installation, data processing and reporting, and waste management and disposal.

## SECTION 3 - FIELD METHODS

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

### 3.1 MONITORING WELL AND SOIL BORING ADVANCEMENT

The location of each proposed monitoring well and soil boring will be staked by Stantec prior to completing 811 locations. Prior to ground disturbance activities, an electromagnetic (EM) survey will be performed at the Kutz facility to help confirm the location of the former evaporation pond and identify anomalies. A ground penetrating radar (GPR) survey and a private utility survey of the Kutz facility will also be conducted to help identify and avoid conflicts with suspected buried utilities at the Kutz facility. A Stantec geologist will oversee the utility clearance activities. The final locations of the soil borings and monitoring wells may be adjusted based on the results of the EM, public utility, GPR, or private utility survey activities. Once underground utility locating activities have been completed, hydro-excavation equipment will be used to clear the well and boring locations to a depth of at least 10 feet below ground surface (bgs) prior to advancing drill tooling.

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Each cleared location will be covered with wooden or steel plates and marked “hole” until well or boring advancement begins.

Following the completion of utility clearance activities, a truck-mounted, rotosonic drill rig will be mobilized and used to advance each well and boring to the target depths noted on Figure 1. A Stantec geologist will oversee the drilling activities, complete soil sample logging, retain samples for laboratory analysis, and document well construction. Soil sampling will be performed to the termination depth of each boring (up to 70 feet below ground surface [bgs]) to log and document lithology and determine proper well screen intervals. Borehole logging will include Unified Soil Classification System (USCS) soil descriptions along with a detailed description of each discrete lithologic unit. Soil samples will be collected for field screening at one (1)-foot intervals from cores recovered at approximately 10-foot intervals. After the sample core is collected, field personnel will field screen using a pre-calibrated photoionization detector (PID) and record the readings. The field screen 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 the PID response.

The field screening data, in addition to visual and olfactory observations (e.g., observing apparent hydrocarbon staining), will aid in identifying sample interval(s) to be retained for potential laboratory analysis (i.e., suspected of having a hydrocarbon impact). At a minimum, one soil sample will be retained from each soil boring from the interval exhibiting the highest field screening reading and/or the interval immediately above the field-interpreted water table. Retained soil samples will be placed in a laboratory-provided four (4)-ounce glass jar, sealed, labeled, and stored on ice.

After the boring and soil screening are completed, the retained soil samples will be shipped in an ice-filled cooler under standard chain-of-custody protocol to Eurofins Environment Testing Southeast, LLC (Eurofins), in Pensacola, Florida. Samples not retained and submitted for laboratory analysis will be disposed of with the soil cuttings. The submitted soil samples will be analyzed for the presence of benzene, toluene, ethylbenzene, and total xylenes (BTEX) by United States Environmental Protection Agency (EPA) Method SW846 8260B, gasoline-range organics, diesel-range organics, and oil-range organics by EPA Method 8015 M, and chlorides by EPA Method 300.

Following advancement, soil borings not being completed as monitoring wells will be plugged and abandoned in accordance with the existing Plan of Abandonment for the Site (Plan) issued in 2017 by the Office of the State Engineer (OSE), and the New Mexico Environment Department Ground Water Quality Bureau Monitoring Well Construction and Abandonment Guidelines dated March 2011. The ground surface at each location will be restored to be compatible with the surrounding ground surface. Following completion of the project, Form WD-11, Plugging Record, will be submitted for the soil borings to the OSE, with copies provided to the BLM along with an updated site plan.

### 3.2 MONITORING WELL INSTALLATION

The planned total depth of proposed monitoring wells is 70 feet bgs. The monitoring wells will be constructed with 20 feet of four (4)-inch diameter, Schedule 40, 0.010-slot PVC screen and four (4)-inch diameter, schedule 40 PVC riser casing. The proposed screened depths are intended to intersect the water table with 13 feet of screen submerged and seven (7) feet of screen above the water table. The annular space adjacent to the well screen will be filled with 10-20 silica sand from the bottom of the borehole to two (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 one (1)-foot bgs.

For each well, a locking, protective steel stick-up well casing will be installed within a concrete pad on the ground surface from approximately 3 feet above ground surface to 2 feet bgs. Water-

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tight gripper plugs will be placed on the top of the monitoring well risers. Following installation, the well completions and any protective bollards will be painted safety-yellow, and the well identifiers stenciled on the stick-up completions. The newly installed wells will be secured with zip-ties.

Well development will be performed using well swab surging and pumping until sediment has been removed and visibly clear water is observed or the well runs dry. Decontamination and development water will be placed in a poly-tank.

Assuming free-phase petroleum hydrocarbons are not encountered; following development, a HydraSleeve™ no-purge groundwater sampler and tether will be placed in each of the new monitoring wells. The sampler will be at least five (5) feet below the field-apparent water table.

The top-of-casing and ground surface elevations and locations of the newly installed monitoring wells will be surveyed-in by a New Mexico-licensed surveyor. The surveyor will also update the site plan with the locations of identified utilities not included in previous surveys.

### **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.

#### **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 boring and well construction logs. The boring logs will include USCS descriptions, detailed lithologic descriptions, PID readings, length/percent recovery, sample collection intervals, and drilling method employed. The well construction logs will include 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
- Sample collection intervals and times

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- 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 monitoring well and/or soil boring location is staked or flagged and that the entire area surrounding the boring 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 14 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 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.

### 3.3.5 Investigation-Derived Waste

The hydro-excavated spoils generated will be transported to the Envirotech Land Farm located near Bloomfield, New Mexico (land farm) for disposal. Investigation-derived soil waste will be containerized in a roll-off staged at the Site. The driller will have a front-end loader or equivalent equipment on site to load cuttings as they are generated. Stantec will coordinate the removal and transport of the roll-off from the Site to the land farm for disposal.

A 330-gallon tote will be used to store well development and decontamination water. An additional tote will be used to store clean water for decontamination activities. The totes will be staged on the ground in the work area. Following completion of the project, the wastewater will be transported to the land farm for disposal.

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

### 3.3.6 Field Equipment Calibration Procedures

Regarding 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.

**2023 MONITORING WELL AND SOIL BORING INSTALLATION ACTIVITIES WORK PLAN  
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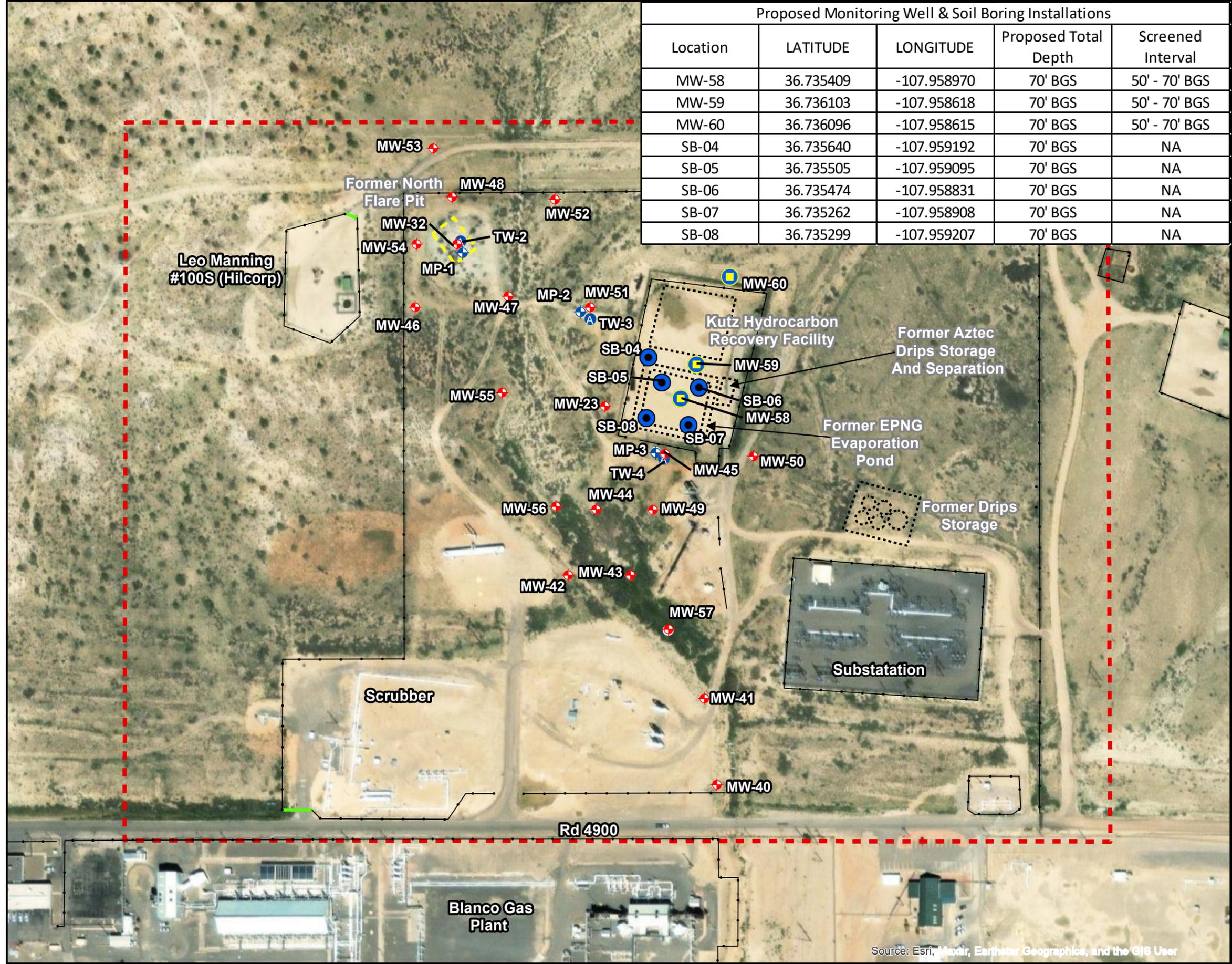
**SECTION 4 - SCHEDULE**

It is anticipated that the activities herein will commence the week of May 1, 2023. 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 2023 Annual Report, anticipated to be submitted by April 1, 2024.

**Figure**

\\cd1001-c200\CTX-CIFSS\VDI\Redirect\shansen\Desktop\GIS-NEW\_MXD\BLANCO NORTH FLARE PIT\2022\Figure\_1\_BNFP\_Proposed\_MW\_SB\_2022\_V1.mxd

Proposed Monitoring Well & Soil Boring Installations				
Location	LATITUDE	LONGITUDE	Proposed Total Depth	Screened Interval
MW-58	36.735409	-107.958970	70' BGS	50' - 70' BGS
MW-59	36.736103	-107.958618	70' BGS	50' - 70' BGS
MW-60	36.736096	-107.958615	70' BGS	50' - 70' BGS
SB-04	36.735640	-107.959192	70' BGS	NA
SB-05	36.735505	-107.959095	70' BGS	NA
SB-06	36.735474	-107.958831	70' BGS	NA
SB-07	36.735262	-107.958908	70' BGS	NA
SB-08	36.735299	-107.959207	70' BGS	NA



### LEGEND

**PROPOSED FEATURES**

- PROPOSED MONITORING WELL (Yellow circle with blue center)
- PROPOSED SOIL BORING (Blue circle with blue center)

**EXISTING FEATURES**

- MONITORING WELL (Red diamond)
- SPARGE TEST WELL (Blue circle with 'A')
- MONITORING POINT (Blue circle with crosshair)
- FENCE (Black line with cross-ticks)
- GATE (Green line)
- FORMER SITE FEATURES (Dotted line)
- FORMER FLARE PIT (Yellow dashed line)
- BLM ACCESS GRANT RIGHT OF WAY (Red dashed line)

SCALE IN FEET

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2022-04-05	SAH	SAH	SRV

TITLE:  
**PROPOSED MONITORING WELL AND BORING LOCATIONS**

PROJECT:  
**BLANCO PLANT - NORTH FLARE PIT  
BLOOMFIELD, NEW MEXICO**

Figure No.:  
**1**

Stantec

Source: Esri, Maxar, Earthstar Geographics, and the GIS User

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
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**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS

Action 205168

**CONDITIONS**

Operator: El Paso Natural Gas Company, L.L.C 1001 Louisiana Street Houston, TX 77002	OGRID: 7046
	Action Number: 205168
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

**CONDITIONS**

Created By	Condition	Condition Date
nvelez	Review of 2023 Monitoring Well and Soil Boring Installation Activities Work Plan: Content satisfactory 1. OCD approves the monitor well and Soil Boring installation as written. 2. Continue with scheduling per Section 4.0 in this work plan. 3. Submit next annual groundwater monitoring report no later than April 1, 2024.	5/22/2023