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June 28, 2021

VIA E-PERMITTING PORTAL

Mr. Cory Smith
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

RE: 2021 Well Installation and Testing Activities Work Plan – Blanco Plant – Former North Flare Pit Site
El Paso CGP Company
NMOCD Incident Number: NAUTOFCS000155
NMOCD Order Number: GW-49

Dear Mr. Smith:

Stantec, on behalf of El Paso CGP Company, LLC (EPCGP), is submitting the enclosed 2021 Well Installation and Testing Work Plan (Work Plan) for the Blanco Plant – Former North Flare Pit Site (Site). The enclosed document contains the proposed methodology for the installation of three (3) air sparge (AS) test wells, and three (3) monitoring points, the abandonment and replacement of one (1) monitoring well, and soil vapor extraction (SVE) feasibility testing at the Site. Unless otherwise noted, the procedures outlined in this Work Plan are meant to comply 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 July 12, 2021.

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
steve.varsa@stantec.com

/rsm;leh
cc: Joseph Wiley, EPCGP (via electronic mail)
United States Bureau of Land Management (via electronic mail)

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

Blanco Plant – Former North Flare Pit Site
NMOCD Incident Number: NAUTOFCS000155
NMOCD Order Number: GW-49
2021 WELL INSTALLATION AND TESTING ACTIVITIES WORK PLAN
BLOOMFIELD, NEW MEXICO

June 2021

Prepared by:

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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 Well Installation and Testing Activities Work Plan (Work Plan) presents the scope of work for the installation of three air sparge (AS) test wells, three monitoring points, the plugging and replacement of one monitoring well, and soil vapor extraction feasibility testing at the Site. Installation of air sparge test wells and accompanying monitoring points are to facilitate future testing of the feasibility of air sparge remedies at three locations on-site impacted by dissolved hydrocarbons. Based on the long groundwater level stabilization periods previously noted in the site monitoring wells following their installation, AS feasibility testing will be completed at a later date under a separate work plan. The proposed well 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 well installation, well plugging, and SVE feasibility testing 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 activities at the Site have generally delineated the extent of hydrocarbons present. The three AS test wells (TW-2 through TW-4) are proposed to allow for future feasibility testing of air sparging methods to effectively remediate hydrocarbon impacts in groundwater at the Site. Three monitoring points (MP-1 through MP-3) are proposed to allow for monitoring during the AS and SVE feasibility testing. Replacement of monitoring well MW-33 with MW-57 is to be completed to confirm a viable monitoring well is present at this location. SVE feasibility testing is to be completed on existing monitoring wells located in areas where elevated benzene concentrations are present. The scope of work includes well installation, feasibility testing, data processing and reporting, waste management and disposal, and reporting.

SECTION 3 - FIELD METHODS

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

3.1 SOIL BORING

The location of each proposed well or monitoring point will be staked by Stantec prior to completing 811 locations. A ground penetrating radar (GPR) survey will be completed prior to ground disturbance activities to evaluate for the presence of utilities or other anomalies around each monitoring well location. Once GPR and public underground utility locating activities have been completed, hydrovac equipment will be used to clear the well locations to a depth of 10-feet below ground surface (bgs). Each cleared location will be covered with wooden or steel plates and marked "hole" until well advancement begins. A truck-mounted, rotosonic drill rig will be mobilized and used to advance each soil boring following completion of the utility clearance activities. The locations of each proposed well and proposed construction is depicted on Figure 1.

During advancement of MW-57, the monitoring points, and the AS test wells, soil sampling will be conducted continuously to the termination depth of the soil boring to assess potential hydrocarbon impacts at each location. Data collected during advancement will be used to select soil samples for laboratory analysis, and to help optimize placement of the well screens.

A Stantec field geologist will oversee the drilling activities and provide soil sampling and logging services. Borehole logging will include United 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-foot intervals, where possible, from the 2-foot or 5-foot continuous sample barrel or equivalent sampler. 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.

During advancement, 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). If suspected of having hydrocarbon impact, soil samples will be placed in a laboratory-provided 4-ounce glass jar, sealed, labeled, and stored on ice. After the boring and soil screening are completed, one retained soil sample from each air sparge test well and MW-57 associated with the highest PID reading above the field-interpreted and/or gauged water table, will be shipped in an ice-filled cooler under standard chain-of-custody protocol to Eurofins TestAmerica, Inc. (Eurofins), in Pensacola, Florida. If vertical hydrocarbon distribution in the monitoring points appear to be significantly different than the corresponding AS test well, based on field screening readings and visual and olfactory observations, soil samples from applicable monitoring points may also be retained and submitted for laboratory analysis. 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.

3.2 WELL INSTALLATION ACTIVITIES

The air sparge test wells and monitoring points will be constructed of 2-inch diameter, Schedule 40, 0.010-slot Schedule 40 polyvinyl chloride (PVC) screen and 2-inch diameter, Schedule 40 PVC riser casing. The air sparge wells are to be installed with 2 feet of well screen, with the top of screen targeted to be submerged at least 3 to 6 feet below the water table, and approximately 1 foot below the top of the sandstone bedrock surface.

For the monitoring points, each will be constructed of 2-inch diameter Schedule 40 0.010-slot PVC screen and 2-inch diameter Schedule 40 PVC casing. Each monitoring point will be completed with a 20-foot screen, to be installed to a depth anticipated to intersect the groundwater surface, with approximately 5 feet of screen in the saturated zone, and 15 feet of screen above the field-apparent water table.

Monitoring well MW-57 will be constructed of 30 feet of 4-inch diameter, Schedule 40, 0.010-slot PVC screen and 4-inch diameter, schedule 40 PVC riser casing. Monitoring well MW-57 will be installed to a depth of 80 feet bgs, with the well screen installed where 15 feet of screen will be below the water tables and 15 feet of screen will be above the water table.

For each well, 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 1 foot below the bottom of the well vault.

For each well, a locking, protective steel stick-up well casing will be installed within a concrete pad on the ground surface from 3 feet above ground surface to 2 feet bgs. Water-tight gripper plugs will also be placed on the top of the monitoring point and MW-57 well casings. For MW-57, a second water-tight gripper plug will be installed on the protective casing and a lockable cap placed over the seal to provide additional protection from surface water intrusion. Threaded PVC caps will be installed on the air sparge test wells. Following completion, the well completions and 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. Hydro-vacuum spoils and soil cuttings will be placed in a lined roll-off staged on-site. Decontamination and development water will be placed in EPCGP-owned poly-tanks.

Following development, a Hydrasleeve™ sampler will be placed in MW-57, with the Hydrasleeve™ set approximately 5 feet below the field-apparent water table. Hydrasleeves™ will not be installed in the monitoring wells MP-1 to MP-3 or air sparge wells TW-2 to TW-4.

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 verify the accuracy of the locations and elevations of previously-surveyed monitoring wells at the site, and update the survey as needed.

3.3 SOIL VAPOR EXTRACTION FEASIBILITY TESTING

A remediation contractor will be used to conduct the SVE feasibility testing activities. The remediation contractor will utilize an internal combustion engine which reduces emissions over 99%, and therefore the New Mexico Environmental Department has confirmed short term soil vapor extraction activities do not trigger air emission concerns.

The SVE feasibility testing will be completed on monitoring wells MW-23, MW-32, MW-44, MW-45, MW-47, MW-48, MW-51 and MW-52, where elevated concentrations of hydrocarbons are present. Each test will be operated for approximately 1.5 hours, with vacuum rates incrementally increased during the test. Extraction well flow and vacuums are collected in addition to off-gas concentration data to evaluate potential emission rates. Vacuum influence data will also be collected from nearby monitoring wells to evaluate SVE influence away from each extraction well.

To aid in evaluating potential off-gas emissions for a full-scale system, one off-gas sample will be collected from the MW-32 and MW-45 SVE manifolds via Summa canister prior to completion of the feasibility test at that location. The Summa sample will be submitted to Eurofins for analysis of BTEX constituents using Method TO-3, and Total Petroleum Hydrocarbons using Method TO-15. Additional Summa samples will also be collected from the ICE stack, in conjunction with the MW-32 and MW-45 manifold samples, to document the effectiveness of the ICE.

3.4 WASTE DISPOSAL

Soil waste, including hydro-vac wastes, will be containerized in a lined roll-off and staged at the Site. A front-end loader or equivalent equipment will be utilized to load cuttings as they are generated. Once loaded, Stantec will arrange for removal and transport of the roll-off from the Site to Envirotech's local landfarm facility.

Poly tote tanks will be used to store well development and decontamination water as it is generated. Following completion of the project, or as needed for additional volume, the wastewater will be transported to Basin Disposal, Inc. (Basin) for disposal. Any water generated during the SVE feasibility tests will also be containerized and transported to Basin 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.

3.5 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 activities.

3.5.1 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. Typically, subcontractors will operate under their own HASP, which will be reviewed and referenced by Stantec prior to the start of the project.

3.5.2 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. Individual field sheets will be used to document data collected during the SVE feasibility testing activities.

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 onsite
- 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 boring locations are 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 fourteen days of the clearance. Hydrovac clearing of boreholes will be conducted in accordance with Section 3.1 of the Work Plan.

3.5.4 Field Equipment Calibration Procedures

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. All calibration information will be recorded in the field logbook.

SECTION 4 - SCHEDULE

It is anticipated that remedial well installation activities will commence on July 12, 2021. Utility locates must be verified prior to the work. SVE feasibility testing is anticipated to be conducted in August 2021.

A separate work plan will be prepared for the AS feasibility testing. The AS feasibility testing is expected to occur in 2022.

Completion of the planned activities will be summarized and reported in the 2021 Annual Report, anticipated for submittal by early 2022.

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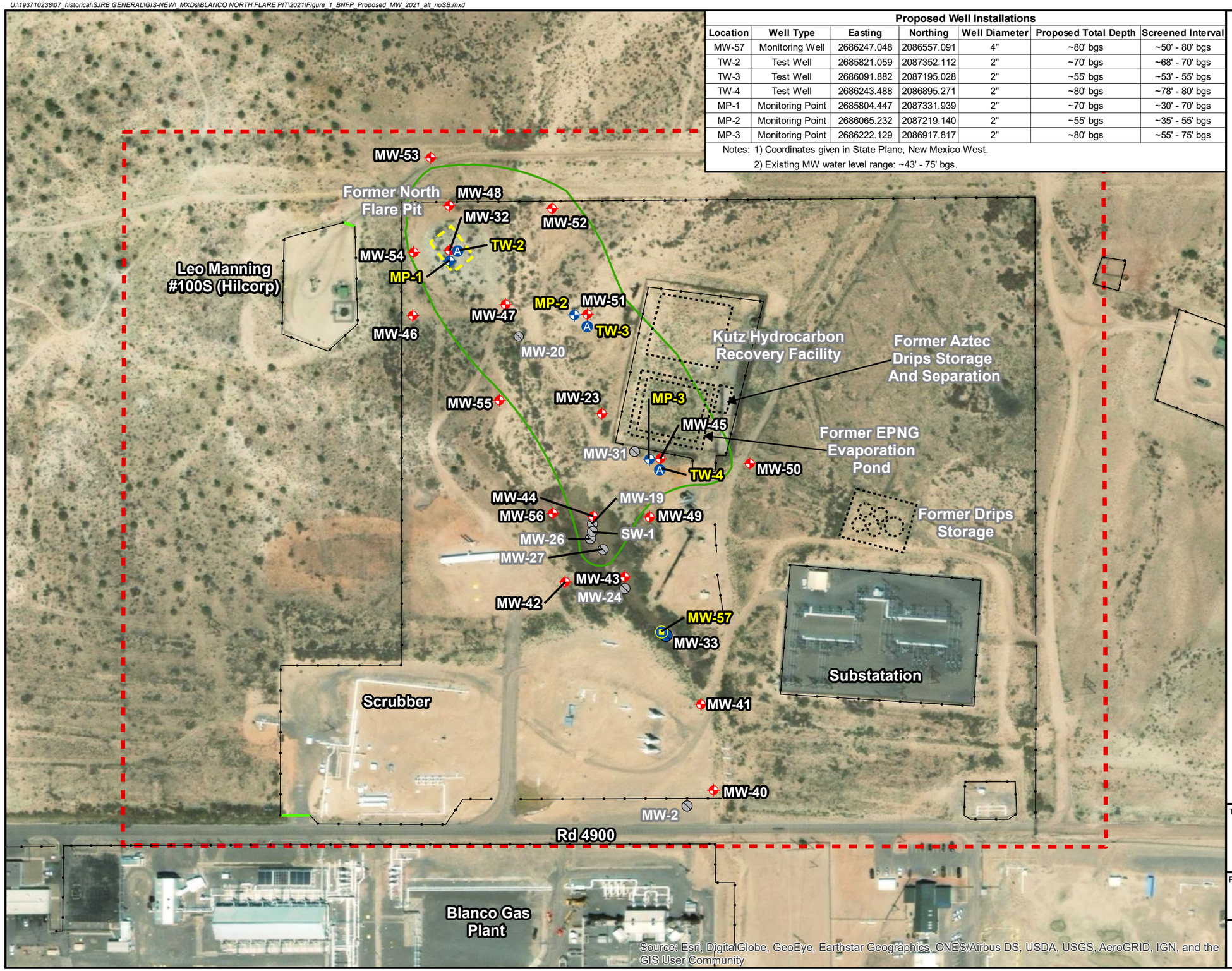
Proposed Well Installations

Location	Well Type	Easting	Northing	Well Diameter	Proposed Total Depth	Screened Interval
MW-57	Monitoring Well	2686247.048	2086557.091	4"	~80' bgs	~50' - 80' bgs
TW-2	Test Well	2685821.059	2087352.112	2"	~70' bgs	~68' - 70' bgs
TW-3	Test Well	2686091.882	2087195.028	2"	~55' bgs	~53' - 55' bgs
TW-4	Test Well	2686243.488	2086895.271	2"	~80' bgs	~78' - 80' bgs
MP-1	Monitoring Point	2685804.447	2087331.939	2"	~70' bgs	~30' - 70' bgs
MP-2	Monitoring Point	2686065.232	2087219.140	2"	~55' bgs	~35' - 55' bgs
MP-3	Monitoring Point	2686222.129	2086917.817	2"	~80' bgs	~55' - 75' bgs

Notes: 1) Coordinates given in State Plane, New Mexico West.
2) Existing MW water level range: ~43' - 75' bgs.



LEGEND

PROPOSED FEATURES

- MONITORING WELL
- TEST WELL
- MONITORING POINT
- MONITORING WELL TO BE ABANDONED

EXISTING FEATURES

- MONITORING WELL
- ABANDONED/DESTROYED MONITORING WELL
- FENCE
- GATE
- FORMER SITE FEATURES
- BENZENE PLUME 10 ug/L
- FORMER FLARE PIT
- BLM ACCESS GRANT RIGHT OF WAY

N

SCALE IN FEET
0 100 200

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	6/18/2021	SLG	SLG	SRV

TITLE:
PROPOSED WELLS

PROJECT:
BLANCO PLANT - NORTH FLARE PIT
BLOOMFIELD, 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
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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 34170

CONDITIONS

Operator:	OGRID:
El Paso Natural Gas Company, L.L.C 1001 Louisiana Street Houston, TX 77002	7046
	Action Number: 34170
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Accepted for the record. See app ID 94607 for most updated status.	10/26/2022