State of New Mexico
Energy, Minerals and Natural Resources Department

BY ELECTRONIC MAIL ONLY

September 6, 2023

Dan Guillotte
MorningStar Operating LLC
400 W. 7th Street
Fort Worth, TX 76102
dguillotte@txoenergy.com

RE: MorningStar Operating LLC - Notice of an Administratively Complete Discharge Permit Application for Buckeye CO_2 Plant

Dear Mr. Guillotte:

The New Mexico Energy, Minerals and Natural Resource Department's Oil Conservation Division (OCD) has reviewed your amended discharge permit application, dated August 31, 2023, for MorningStar Operating LLC (MorningStar), Buckeye CO_2 Plant. OCD has determined that the amended discharge permit application is administratively complete.

Given OCD's determination, MorningStar must provide public notice within 30 days of receipt of this letter (i.e., October 6, 2023) in accordance with the requirements of 20.6.2.3108(B) NMAC to the general public in the locale of the Plant by each of the methods listed below:

1. Prominently posting a synopsis of the public notice at least 2 feet by 3 feet in size, in English and in Spanish, at the Plant's main entrance and at the intersection of Texas Camp Road and Highway 238 for 30 days;

2. Providing written notice of the discharge by mail or electronic mail, to owners of record of all properties within a 1/3 mile distance from the boundary of the property where the discharge site is located; if there are no properties other than properties owned by the discharger within a 1/3 mile distance from the boundary of property where the discharge site is located, MorningStar shall provide notice to owners of record of the next nearest adjacent properties not owned by the discharger;

3. Providing notice by certified mail, return receipt requested, to the owner of the discharge site if MorningStar is not the owner; and

4. Publishing a synopsis of the notice in English and in Spanish, in a display ad at least three inches by four inches ***not*** in the classified or legal advertisements section, in the Lovington Leader. Note, the public notice in the application, first paragraph, contains an error. The OCD telephone number is 505-476-3441 and not 505-476-3440. MorningStar needs to correct this error.

Within 15-days of completion of the public notice requirements in 20.6.2.3108(B) NMAC, MorningStar must submit to the OCD proof of the notice, including affidavit of mailing(s) and the list of property owner(s), proof of publication, and an affidavit of posting, as appropriate.

Also, as part of the discharge permit application, MorningStar was required to submit a Closure/Post Closure Plan for OCD approval. OCD has reviewed this plan and hereby approves the Closure/Post Closure Plan. The financial assurance (FA) associated with this plan is $2,956,000. The FA must be on OCD-prescribed forms, or forms otherwise acceptable to the OCD, payable to the OCD. Bond forms can be found at the bottom of OCD's Forms Page located at https://www.emnrd.nm.gov/ocd/ocd-forms/. The FA is due to the OCD within 30-days of email receipt of this letter (i.e., October 6, 2023).

If you have any questions, please do not hesitate to contact me by email, LeighP.Barr@emnrd.nm.gov, or by phone, (505) 795-1722. On behalf of the OCD, I wish to thank you and your staff for your cooperation during this process.

Regards,

Leigh Barr

Leigh Barr
Administrative Permitting Supervisor

GROUNDWATER DISCHARGE PERMIT APPLICATION

Buckeye CO_2 Plant
Section 36
Township 17 South, Range 34 East
Lea County, New Mexico

Prepared For:

MorningStar Operating LLC
400 West 7th Street
Fort Worth, TX 76102

August 2023

Prepared by:

Portnoy Environmental, Inc.
1414 W. Sam Houston Pkwy N., Suite 160
Houston, Texas 77043
(713) 805-2994

Alan Hopkins, P.G.
Sr. Vice President

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Attachments:

1.0 FACILITY DESCRIPTION

The Buckeye CO_2 Plant (Plant) is located north of Texas Camp Road, approximately one mile southwest of Buckeye, Lea County, New Mexico. The facility location is in the SW ¼ of SE ¼ of Section 36, Township 17 South, Range 34 East at latitude/longitude 32.784532, -103.508311. A facility location map is shown on ***Figure 1*** in ***Attachment A***.

Ownership and contact information are shown below:

Owner/Operator:	MorningStar Operating LLC
Mailing Address:	400 W. 7th St., Fort Worth, TX 76102
Phone/Fax:	(817) 334-8098
Contact:	Dan Guillotte – EHS Manager
E-mail:	dguillotte@mspartners.com

The Plant originally began operation in November 1998 and is currently designed to handle 60 MMscfd of CO_2-rich gas along with entrained hydrocarbons and water. The plant utilizes the Ryan-Holmes process to recover hydrocarbons from the carbon dioxide rich gas stream that is produced with oil production from nearby fields. After the hydrocarbons are removed, the CO_2 gas stream (plus methane, ethane, and H_2S) is piped offsite for reinjection, i.e., enhanced oil recovery.

The gas enters the plant and flows to the inlet separator where the gas and liquids are separated. The liquids are pumped off site via pipeline to production facilities. A side stream of the inlet gas flows to the inlet feed exchanger, which uses hot compressor discharge gas to warm the inlet gas during cooler weather. Feed gas from the inlet feed exchanger flows to two inlet gas filter separators. Clean filtered gas is then sent to the triethylene glycol (TEG) contactor where high purity TEG absorbs water vapor from the wet inlet gas. The rich glycol, containing water absorbed from the inlet gas, enters the Drizo regeneration system, which is patented and licensed, to Chevron by Prosernat. Drizo differs from conventional TEG regeneration systems in that: (1) it uses hydrocarbon solvent stripping to achieve an extremely high TEG concentration, and (2) it is a sealed system with no vents to atmosphere. Water and solvent from the TEG reboiler are condensed and flow to a separator for degassing. Benzene, toluene, ethyl benzene, and xylene (BTEX) in the inlet gas are also absorbed into the rich TEG, recovered as a low-vapor pressure liquid, and become part of the circulating solvent. The heat for the TEG reboiler is supplied by the hot oil system.

The dehydrated inlet gas then flows to the compressor building consisting of five electric motor-driven reciprocating compressors which provide compression of CO_2, which is then reinjected into the producing fields (CVU and VGSAU). There are three electric motor driven propane compressors used in the propane refrigeration process. The CO_2 is injected in the CVU and VGSAU units via VGSAU 18. The approved C-103 for Well API No. 30-025-24317is included in ***Attachment A***.

Hot compressed inlet gas is routed to the first stage discharge cooler, and then sent to the propane recovery column (PRC). The PRC is where the NGL product is separated from the CO_2 using the Ryan-Holmes process. The overhead vapor from the PRC is partially condensed in two PRC reflux condensers. The gas

and liquid are separated in the PRC reflux accumulator and the liquid is pumped to the top of the PRC by three PRC reflux pumps. A detailed Plant drawing is included as ***Figure 2*** in ***Attachment A***.

Secondary recovery by water flooding was initiated in the Central Vacuum Unit (CVU) in 1977, the Vacuum Grayburg San Andres Unit (VGSAU) in 1973 on 40 acre spots and then 10 acre infills in the 1980's and 90's, and the West Vacuum Unit (WVU) in 1992. Fluids are separated at satellites and plants. The produced water is reinjected and supplemented with water from nearby CVX fields. Wet gas from the waterflood portions of the field are sold directly to Targa. Wet gas from the CO_2 flood is processed at Buckeye Plant.

2.0 SITE CHARACTERISTICS

Geographically, the Plant is situated near the western boundary of the southern extension of the High Plains in southeastern New Mexico. Topographically, the Southern High Plains, a plateau, rises approximately 100 to 300 feet above the surrounding region and slopes to the southwest at 10 to 20 feet per mile.

The formations of interest in this area are the DacCum group, or "Redbed" and the Ogallala. The relatively impermeable shale facies of the upper portion of the Triassic Redbed represent the lower limit of the overlying Ogallala aquifer. The Triassic Redbeds are composed of red to reddish brown mudstone with minor interbedded sandstone. This clay formation which underlies the fresh water aquifer is very irregular, varying in depth as much as fifty feet. Where the redbeds are exposed to the surface, it appears the changes and irregularities are due to stream erosion. These ridges and channels along with the southeastward dip of the redbed surface control the direction and movement of ground water in the lower portion of the Ogallala formation. The Ogallala formation overlying the redbeds is found to consist of an upper unit of very dense light gray, beige to light pink caliche that contains occasional thin layers of light to medium brown very fine-grained silty sand. This upper caliche unit ranges in thickness from 28 to 80 feet. Underlying the upper caliche unit, the Ogallala formation consists of unconsolidated, loose to very loose very fine-grained clean to silty sand with some medium to coarse-grained, clean to silty sand containing occasional small diameter gravel with occasional thin layers of very fine to medium grained sandstone and sandy clay. Immediately below the middle unit and just above the base of the Ogallala formation is a 2 to 12 foot section of clean 1/8 to 1/2 inch diameter gravel.

The Ogallala aquifer commonly yields 250 to 800 gallons per minute (gpm) and locally yields as much as 1,000 gpm in some wells. The quality of the ground water in the Ogallala formation is reported to be generally suitable for domestic, municipal and irrigation use. Water in this area is also used for makeup waterflood projects. The depth to the first usable aquifer is 115-120 feet. The Total Dissolved Solids (TDS) concentration is 324 mg/L as measured in MW-22 at the Targa gas plant to the south through analytical testing. The well was sampled in June 2021 and the results were reported in *"2021 Annual Groundwater Monitoring Report, Buckeye Compressor Station, Abatement Plan AP-104, Lea County, NM"* dated February 2022, prepared by Arcadis.

There are no known bodies of water, streams or other watercourses within one mile of the Plant. During the 25 year operating history of the Plant there have been no known flooding events.

There are multiple freshwater wells within a one mile radius of the plant as shown in the EDR Radius Map included in ***Attachment A***. These wells are associated with oilfield production. There are no known public drinking water wells within one mile.

In addition, there are multiple groundwater monitoring wells associated with the Targa gas plant to the south and the former Buckeye Compressor Station. One monitoring well is located on Plant property (MW-21). Based on a 2022 annual groundwater monitoring report, groundwater is not impacted in this well. The groundwater flow direction is to the east-southeast as shown on ***Figure 3*** in ***Attachment A***. MorningStar

is the owner/operator who submitted the 2022 annual groundwater monitoring report and the responsible entity for monitoring well MW-21.

3.0 POTENTIAL AND INTENTIONAL DISCHARGES

There are no intentional discharges located at the plant.

3.1 Storage and Collection Systems

Materials used or stored at the Plant are shown below:

Gasoline Storage Tank	500 gallon metal overhead tank with steel secondary containment
Diesel Storage Tank	500 gallon metal overhead tank with steel secondary containment
Triethylene Glycol Tank	750 gallon Suncoast Chemical metal overhead tank with steel secondary containment
Lube Oil Tank	4,200 gallon Chevron Rando HD 150 metal tank with concrete containment
Lube Oil Tank	1,034 gallon Chevron Cetus Hipersyn metal tank with concrete containment
Coolant Tank	3,000 gallon Chevron HDAX prediluted 50/50 fiberglass tank with concrete containment
Methanol Tank	500 gallon Suncoast Chemical metal overhead tank with steel secondary containment
Open Drain System	1,000 gallon general process fluids fiberglass tank with fiberglass secondary containment

3.2 Source of Effluent and Waste Streams

There is no on-site disposal and all fluids collected at the Plant are re-injected into the production field. Ten cubic yards of contaminated soil were sent to Sundance Disposal in Eunice, NM via truck due to the flare separator pump skid being overfilled, which caused the release of one bbl of water on the ground.

4.0 COLLECTION AND STORAGE SYSTEMS

Three drawings are included in ***Attachment B*** that show the open and closed drains at the Plant that are used to manage all the waste liquids at the Plant. All the process skids within the plant are free draining hard piped to the closed drain sump. All contact rain/stormwater is handled in this manner as well. Non-contact rainwater generally would flow to the south, however average rainfall is approximately 10-12 inches per year and is unlikely to flow off site. In a major weather event, a high-high alarm is triggered on the drain sump. The drain sump also has auto start-stop features that are monitored from the operation station.

- Drawing 041 is the Open Drain system, taking all the rainwater and such from all the skids and anything else piped into it to a 48-inch outer diameter by 12-foot long tank sump. This tank is emptied approximately twice per day via a 45 gpm @ 160 psig 20 HP pump. This liquid is pumped to the production battery as shown on the right hand side of the drawing.

- Drawing 029 is the Closed Drain system, where everything hard piped into the system goes (like scrubber manual dumps, separator manual dumps, etc.). This liquid is pumped into the same line as the Open Drain to the production battery.

- Drawing 051C is the open and closed drains from the Dresser-Rand compressor C-217 that was added after initial Plant construction.

All of the Plant's wastewaters are disposed of in the Vacuum Glorieta production field via the Vacuum Glorieta Satellite 3 well. The wastewater is pumped from the Plant through a 2" carbon steel line to the VGWU production battery, then via pump to VG Injection Satellite 3, then to the production field. Copies of C-101 for VGWU #4 and VGWU #79 are included in ***Attachment C***. The injection well and the waterflood project are operated by MorningStar.

5.0 INSPECTION, MAINTENANCE, AND REPORTING

Multiple inspections are completed throughout the day at the Plant by Plant personnel. The Plant is manned 24 hours per day, 7 days per week by two operators. Three inspections per shift are completed by the operators for the entire Plant between detailed rounds of operational checks. The operators always inspect for leaks. If a leak is observed, that piece of equipment/piping is shut down or isolated and if it is not able to be repaired by the operators immediately, a workorder is generated to have it repaired. The inspections are recorded electronically and a printout of the inspections is included in ***Attachment D***.

MorningStar recognizes the potential for leaks to occur in its fluids line which is run underground from the Plant to the production battery for injection. In order to address this concern, MorningStar, will implement a mechanical integrity testing program on the line to be performed annually. Should a leak be detected, the transfer pump will be shut down and the line will be shut in to allow for any repairs and to prevent any additional leakage. Once the situation is assessed, any reporting to the OCD will be done as required in the time frame specified by the OCD and any remediation will be performed as required. The first test has not been completed at the time of this application and once completed, the results of the test will be reported to the OCD.

6.0 PROPOSED MODIFICATIONS

There are no modifications proposed at this time associated with this groundwater discharge permit application.

7.0 SPILL/LEAK PREVENTION AND REPORTING PROCEDURES

If a spill and/or release should occur at the Plant, the Plant Manager, or designated supervisor will notify the EHS Manager and coordinate with the facility employees to implement the following spill and/or release procedures:

1. Evacuate the area if necessary
2. Call emergency response personnel, if necessary
3. Stop operation of equipment that is the source of the release or spill, including closing valves, stopping pumps, etc.
4. Contain the spill using absorbent booms, a trench dug in the soil surrounding the spill, etc.
5. Deploy absorbent materials to soak up spilled material.
6. Once spill is contained and area where spill or release occurred has been secured, the yard manager or facility manager will gather information required for notifications and reports as required by the New Mexico OCD:
    a. 19.15.29.9 Release Notification
        i. MorningStar shall notify the division of any unauthorized releases occurring during operations in accordance with the requirements of 19.15.29 NMAC
        ii. MorningStar shall notify the division in accordance with the 19.15.29 NMAC with respect to a release from a facility of oil or other water contaminants, in such quantity as may with reasonable probability be detrimental to water or exceed standards in Subsections A and B or C of 19.15.30.9 NMAC.
    b. 19.15.29.10 Reporting Requirements
        i. MorningStar shall report a major release (defined as unauthorized release of a volume, excluding gases, in excess of 25 barrels. An unauthorized release of volume that results in fire, will reach a water course, endanger public health or damage property or the environment. Unauthorized release of gases in excess of 500 MCF or a release of volume that may with reasonable probability be detrimental to water or exceed standards in Subsections A and B or C of 19.15.30.9 NMAC) by giving both immediate verbal notice and timely written notice pursuant to Subsections A of 19.15.29.10 NMAC
        ii. MorningStar shall report a minor release (defined as an unauthorized release of volume, greater than five barrels but not more than 25 barrels; or greater than 50 MCF but less than 500 MCF of gasses) by giving timely written notice pursuant to Subsections B of 19.15.29.10 NMAC.
    c. 19.15.29.10 Contents of Notification
        i. MorningStar shall provide immediate verbal notification within 24 hours of discovery of a major release > 25 bbls to the NMOCD. In addition, immediate verbal notification of a release of a volume that may with reasonable probability be detrimental to water or exceed the standards in Subsections A and B or C of 19.15.30.9 NMAC to the division's environmental bureau chief. The notification shall provide the information required on form C-141.

ii. MorningStar shall provide written timely notification within 15 days to the NMOCD by completing and filing form C-141. In addition, MorningStar shall provide timely written notification of a release of a volume that may with reasonable probability be detrimental to water or exceed the standards in Subsection A and B or C of 19.15.30.9 NMAC to the division's environmental bureau chief within 15 days after the release is discovered. The written notification shall verify the prior verbal notification and provide appropriate additions or corrections to the information contained in the prior verbal notification.

7. An appropriate remediation plan as required per rule 19.15.29.12 Corrective Action, will be submitted for approval before remediation is started. Remediation plans will be written in accordance with the NMOCD Rule 19.15.30.8 -19.15.30.21.

8.0 PUBLIC NOTICE

Public notices will be posted per 20.6.2.3108.B(1) NMAC at two locations; one at the entrance of the Plant off Texas Camp Rd and one at the intersection of Texas Camp Rd and Highway 238. The public notice will be published in the Lovington Leader based in Lovington, NM in a display ad at least 3 x 4 inches NOT in the classified or legal notice section of the newspaper for 1-day duration in English and Spanish. The following is the proposed notice:

"Notice is hereby given that pursuant to New Mexico Water Quality Control Commission regulations, the following groundwater discharge plan application has been submitted to the Director of the Oil Conservation Division, 1220 South St. Frances Drive, Santa Fe, NM 87505, telephone 505-476-3440.

MorningStar Operating LLC, 400 W. 7th St., Fort Worth, TX 76102 has submitted a Groundwater Discharge Permit Application for their Buckeye CO_2 Plant (Plant) located north of Texas Camp Road, approximately one mile southwest of Buckeye, Lea County, New Mexico. The facility location is in the SW ¼ of SE ¼ of Section 36, Township 17 South, Range 34 East at latitude/longitude 32.784532, -103.508311.

The plant originally began operation in November 1998 and is currently designed to handle 60 MMscfd of CO_2-rich gas along with entrained hydrocarbons and water. The plant utilizes the Ryan-Holmes process to recover hydrocarbons from the carbon dioxide rich gas stream that is produced with oil production from nearby fields. After the hydrocarbons are removed, the CO_2 gas stream (plus methane, ethane, and H_2S) is piped offsite for reinjection, i.e., enhanced oil recovery.

The plant collects liquid waste and contact stormwater via drain systems and injects it into the Glorieta/Paddock formation via OCD permitted injection wells at a total depth of 6,315 feet at a daily rate not to exceed 7,000 gallons. The total dissolved solids (TDS) concentration of the typically injected fluid is greater than 10,000 milligrams/liter (mg/l). Groundwater most likely to be affected by accidental discharge is at a depth from 115-120 feet and has a TDS of approximately 325 mg/l. The discharge plan addresses operation of the plant and associated surface facilities and provides a contingency plan in the event of accidental spills, leaks and other accidental discharges to the surface of the ground.

Any interested person may obtain further information from the Oil Conservation Division (OCD) and must submit written comments to the OCD Director at the address above. Any interested person may also request to be placed on a facility-specific mailing and/or email list for future notices by notifying the OCD Environmental Bureau at 1220 South St. Frances Drive, Santa Fe, NM 87505 telephone 505-476-3441.

The OCD contact by which interested parties may obtain information, submit comments, and request to be placed on a facility-specific mailing list for future notices is Leigh Barr, Administrative Permitting Supervisor, 505-795-1722, LeighP.Barr@emnrd.nm.gov. The OCD mailing address is 1220 South St. Francis Drive, Santa Fe, New Mexico, 87505. The website address for discharge permit notices can be found at https://www.emnrd.nm.gov/ocd/applications-permits-notifications/. The OCD will accept comments and statements of interest regarding the discharge permit application and will create a facility-specific mailing list for persons who wish to receive future notices.

9.0 ADDITIONAL INFORMATION

MorningStar does not foresee in the present or reasonably foreseeable future that the discharge permit will result in concentrations in excess of the standards of Section 20.6.2.3103 NMOAC.

10.0 FACILITY CLOSURE/POST CLOSURE PLAN

Pursuant to WQCC 20.6.2.3107(A)(11) NMAC, a facility closure/post closure plan should be submitted and should reference OCD guidelines for accepted remediation techniques and other closure guidelines. The closure plan should provide procedures to prevent the exceedance of standards of 20.6.2.3103 NMAC in groundwater after the cessation of operations. Since MorningStar recently acquired the Plant in 2022, the following general closure plan is provided:

1. When the plant permanently discontinues operations, all stored fluids in equipment and tanks will be removed and either sold, reused or disposed.
2. Sampling and clean-up of historical releases (if any) that could not be remediated due to infrastructure while in operation will be completed per State, Federal and local regulations in effect at the time of closure.
3. All surface equipment and infrastructure will be properly removed from the site and either sold, re-used, or disposed.
4. Underground pipelines will be flushed with fresh water, capped on both ends and abandoned in place.
5. After all surface equipment and infrastructure are removed, the plant surface area will be re-contoured to original slope and reseeded with native grasses.
6. Ongoing monitoring and maintenance of the re-vegetation will be completed for two successive growing sessions.
7. Ongoing monitoring and maintenance of ground water monitoring wells (if applicable) and annual report submittals to the OCD (not anticipated).

A cost estimate for the above closure plan is included in ***Attachment E***.

11.0 FINANCIAL ASSURANCE

20.6.2.3107(A)(11) NMAC requires that financial assurance be submitted to the OCD as part of the facility's Closure/Post Closure Plan. The facility must submit acceptable financial assurance in the amount of the facility's estimated closure and post closure cost within 30-days of OCD's approval of the Closure/Post Closure Plan. The financial assurance must be on OCD-prescribed forms, or forms otherwise acceptable to the OCD, payable to the OCD. Upon approval of the closure plan, MorningStar will provide financial assurance for closure of the Buckeye CO_2 Plant.

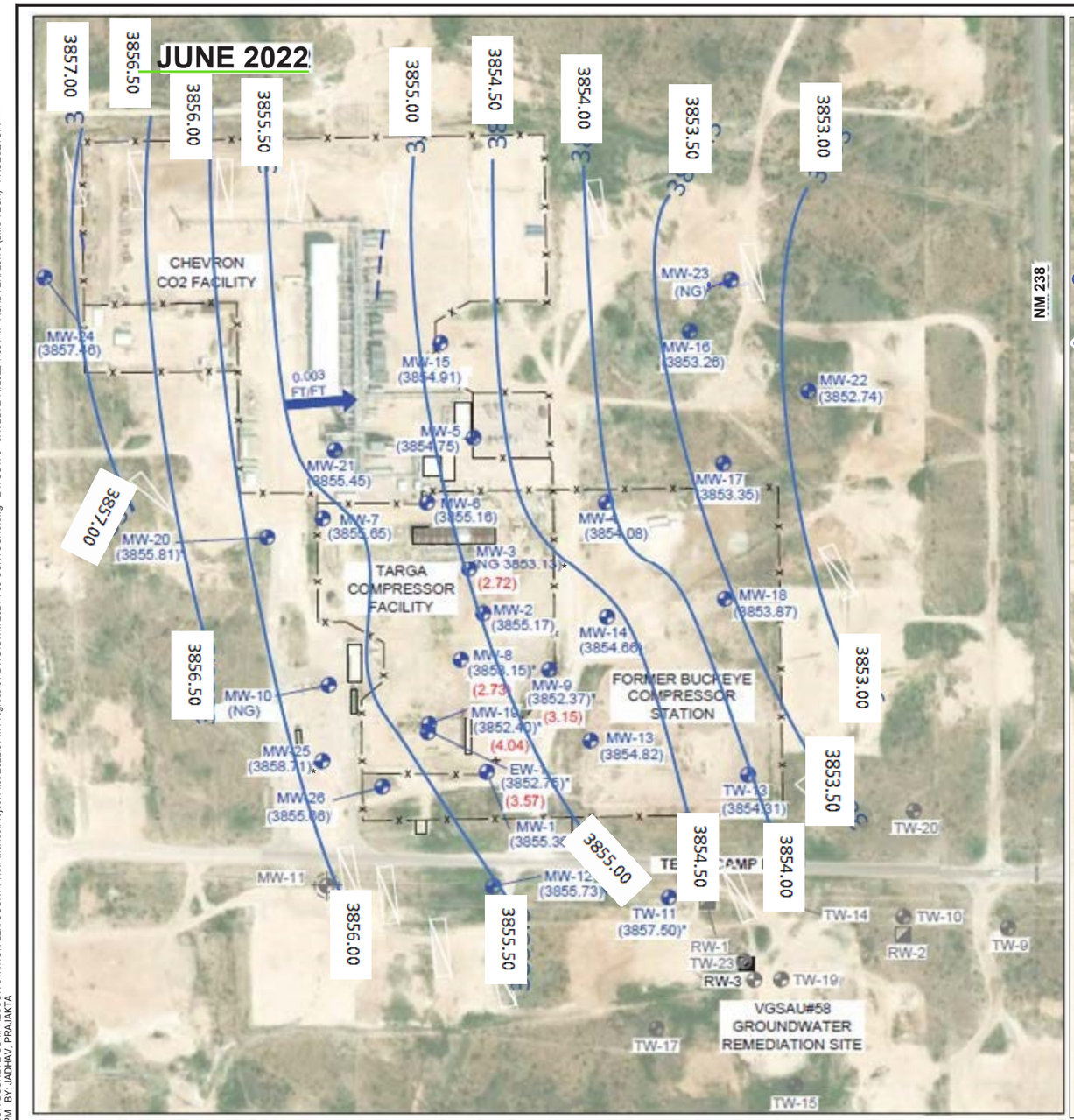
ATTACHMENT A

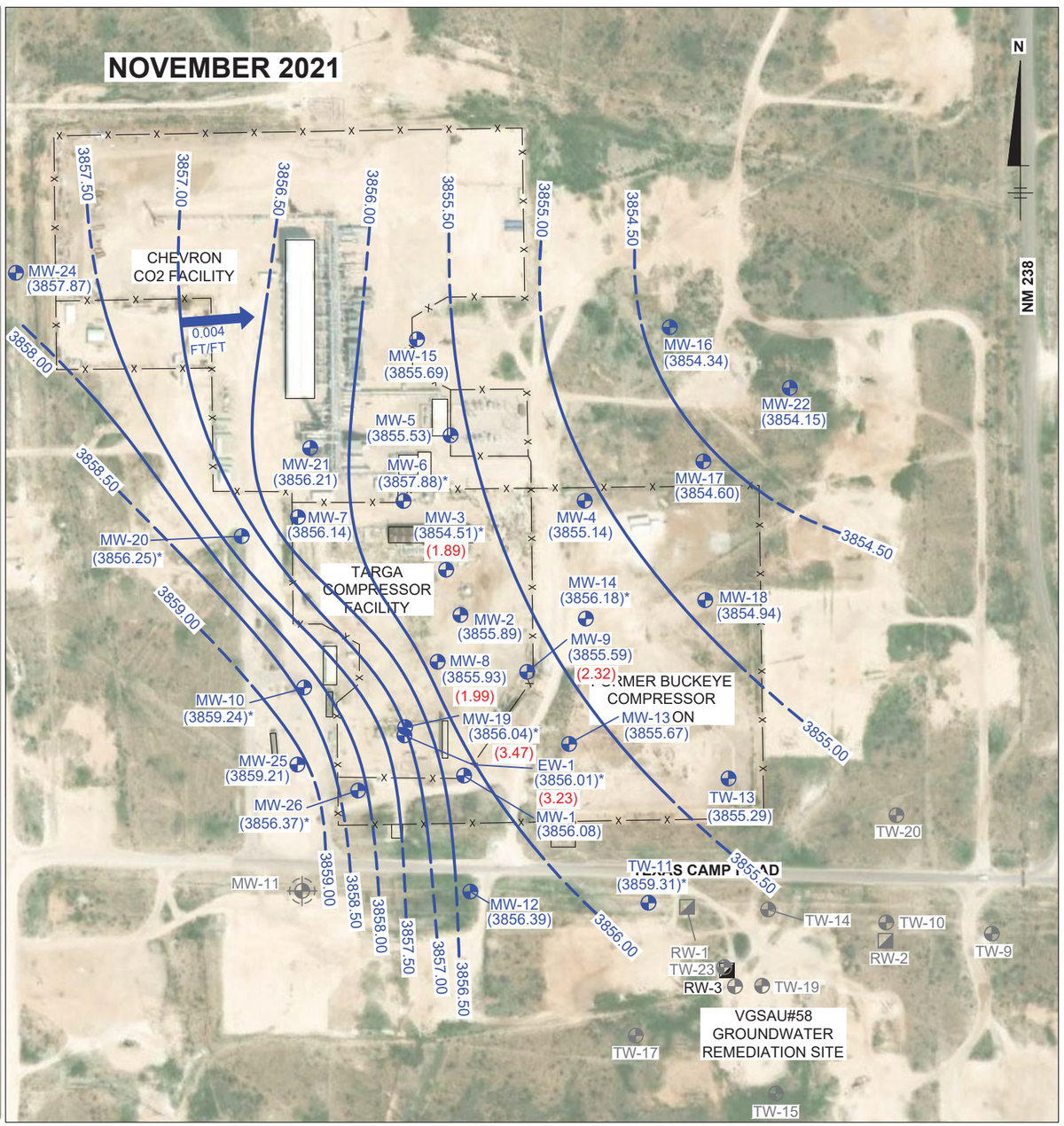
FACILITY MAPS AND FIGURES

	PROJECT	13658.04		
	PREPARED FOR	MORNINGSTAR OPERATING LLC		
	LOCATION	Section 36, Township 17 South, Range 34 East Lea County, NM		
N	**SHEET** 1 of 1	**DRAWN BY** AH	**REVIEWED BY** ET	**DATE** 01-27-2023

PEI

Figure 1
Site Location Map
Buckeye CO_2 Plant





LEGEND:

— x — x —	FENCE LINE	(3860.11)	GROUNDWATER ELEVATION IN FEET (FT)
MW-1	MONITORING WELL LOCATION	3860.00	GROUNDWATER ELEVATION CONTOUR (INTERVAL = 1 FT)
RW-1	RECOVERY WELL LOCATION		APPROXIMATE DIRECTION OF GROUNDWATER FLOW
	ABANDONED (PLUGGED) WELL LOCATION (2020)	0.004 FT/FT	APPROXIMATE HYDRAULIC GRADIENT (FEET/FOOT)
MW-11	DESTROYED WELL LOCATION		

(NG)	NOT GAUGED
(3.36)	LNAPL THICKNES IN FEET (FT)
*	WELLS NOT USED FOR CONTOURING

NOTE:

1. GROUNDWATER ELEVATIONS ARE FROM MEASUREMENTS OBTAINED ON JUNE 9 AND NOVEMBER 10, 2021.

0 300' 600'

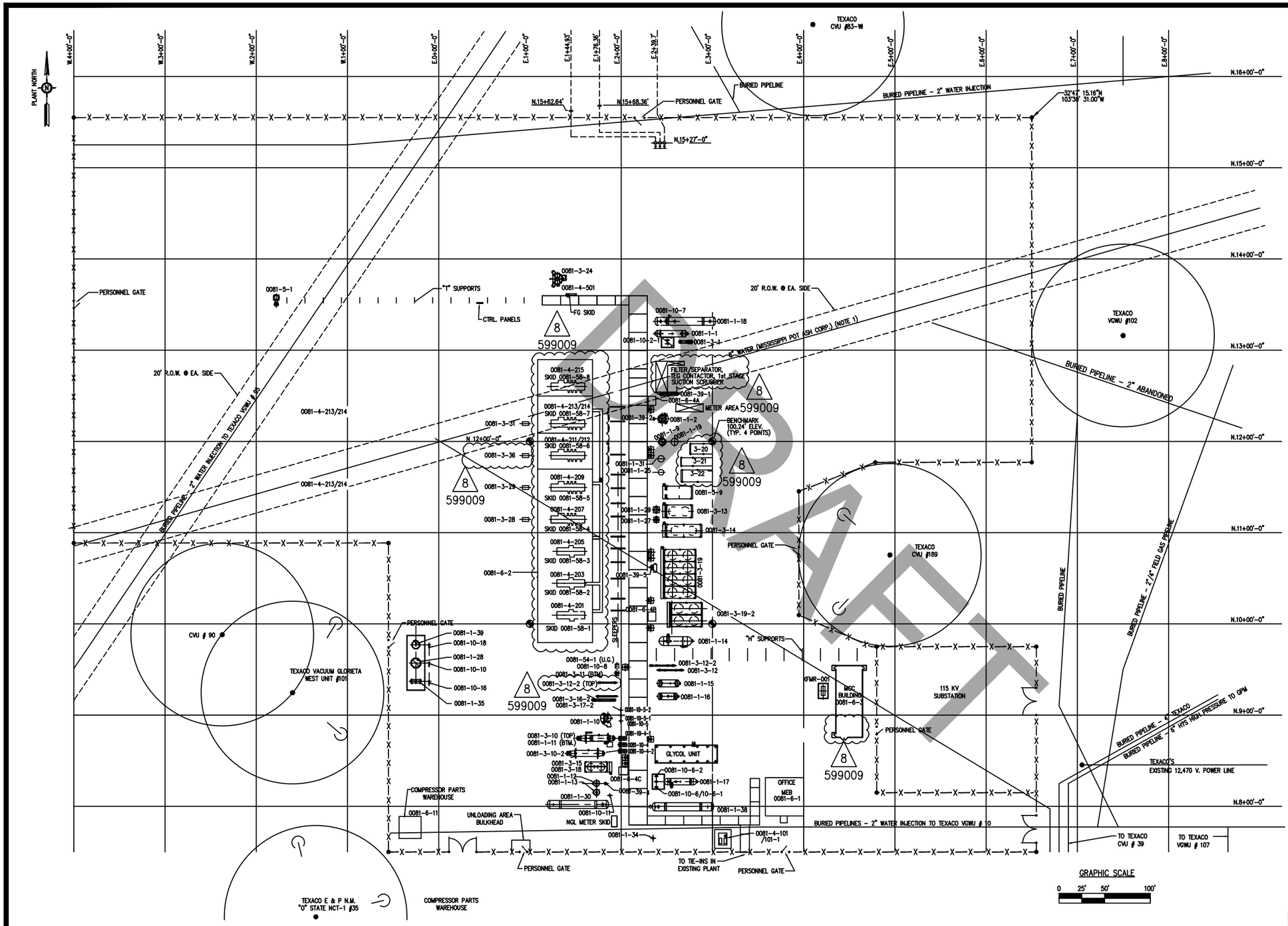
Approximate Scale: 1 in. = 300 ft.

BUCKEYE COMPRESSOR STATION
LEA COUNTY, NEW MEXICO

POTENTIOMETRIC SURFACE MAP NOVEMBER 2021 AND JUNE 2022

KANE
Environmental Engineering, Inc.

FIGURE 3



EQUIPMENT NUMBER	DESCRIPTION
	Buckeye CO2 Plant 0081 - Vacuum Carsbad Area
0081-6-1	Building- MAIN EQUIPMENT BUILDING
0081-6-2	Building - COMPRESSOR BUILDING
0081-6-3	Building - Motor Control Center BUILDING
0081-6-4-A	Building - FOXBORO ANALYZER SHELTERS (North)
0081-6-4-B	Building - FOXBORO ANALYZER SHELTERS (Middle)
0081-6-4-C	Building - FOXBORO ANALYZER SHELTERS (South)
0081-6-5	Building - AIR COMPRESSOR BUILDING
0081-6-6	Building - I&E SHOP/ OFFICE
0081-6-7	Building - H2S ANALYZER SHELTER
0081-6-8	Building - Warehouse
0081-6-9	Building - Storage Building
0081-6-10	Building - Fresh Water Pump Shed
0081-1-9	Vessel - 1ST STAGE SUCTION SCRUBBER
0081-1-41	Vessel - Potable Water Storage Tank
0081-1-42	Vessel - Potable Water Pressure Tank
0081-1-10	Vessel - PROPANE RECOVERY COLUMN
0081-1-11	Vessel - PRC REFLUX ACCUMULATOR
0081-1-18	Vessel - FLARE SEPARATOR
0081-1-27	Vessel - 3RD STAGE SUCTION SCRUBBER
0081-1-29	Vessel - 2ND STAGE SUCTION SCRUBBER
0081-1-18	Vessel - FLARE SEPARATOR
0081-1-34	Vessel - FUEL GAS SCRUBBER
0081-1-35	Vessel - ISO 460 LUBE OIL TANK
0081-1-39	Vessel - COOLANT STORAGE TANK
0081-1-28	Vessel -SAE 40 LUBE OIL STORAGE TANK
0081-10-16	ISO 460 LUBE OIL TRANFER PUMP
0081-10-17	METHANOL INJECTION PUMP
0081-10-18	COOLANT TRANFER PUMP
0081-10-28	POTABLE WATER PUMP
0081-10-8	PROCESS DRAIN SUMP PUMP
0081-10-10	SAE 40 LUBE OIL TRANSFER PUMP
0081-3-31	SAE 40 LUBE OIL ELECTRIC HEATER
0081-3-32	ISO 460 LUBE OIL ELECTRIC HEATER
	Inlet Gas System
0081-1-1	Vessel - Inlet Separator
0081-3-1	Exchanger - Inlet Feed Exchanger
0081-39-1	Vessel- Inlet Filter Separator
0081-10-2	Pump - INLET SEPARATOR LIQUIDS RETURN PUMP
0081-10-2-1	Pump - INLET SEPARATOR LIQUIDS RETURN PUMP (SPARE)
0081-3-9	1ST STAGE DISCHARGE COOLER
0081-3-13	2ND STAGE DISCHARGE COOLER
0081-3-14	3RD STAGE DISCHARGE COOLER
0081-3-20	1ST STAGE DISCHARGE COOLER
0081-3-21	2ND STAGE DISCHARGE COOLER
0081-3-22	3RD STAGE DISCHARGE COOLER
	Glycol System
0081-1-2	Vessel - Glycol Contactor
0081-1-3	Vessel - Glycol Flash Tank
0081-1-4	Vessel - RICH STRIPPER
0081-1-5	Vessel - LEAN STRIPPER
0081-1-6	Vessel - TEG SURGE TANK
0081-1-7	Vessel - SOLVENT WATER SEPARATOR
0081-1-8	Vessel - SOLVENT RECOVERY DRUM
0081-10-1	Pump - TEG PUMP
0081-10-1-1	Pump - TEG PUMP (SPARE)
0081-10-3	Pump - DRIZO SOLVENT PUMP
0081-10-3-1	Pump - DRIZO SOLVENT PUMP (SPARE)
0081-10-9	Pump - pH CONTROL PUMP
0081-1-26	Tank - pH CHEMICAL TANK
0081-3-30	Exchanger - LEANRICH TRIM COOLER
0081-3-3	Exchanger - TEG/TEG EXCHANGER
0081-3-4	Exchanger - TEG REBOILER
0081-3-5	Exchanger - LEAN TEG COOLER
0081-3-6	Exchanger - SOLVENT RECOVERY CONDENSER
0081-3-7	Exchanger - TEG STILL REFLUX CONDENSER
0081-3-8	Exchanger - SOLVENT SUPERHEATER
0081-1-40	Vessel - SOUR WATER STRIPPER
0081-54-2	Sump - TEG Filter Drain Pot
	Refrigerant System
0081-1-14	Vessel - REFRIGERANT SURGE DRUM
0081-1-15	Vessel - ECONOMIZER
0081-1-16	Vessel - REFRIGERANT SUCTION SCRUBBER
0081-1-36	Vessel - REFRIGERANT RECLAIMER #1
0081-1-37	Vessel - REFRIGERANT RECLAIMER #2
0081-39-5	Filter - PROPANE REFRIGERANT LO COALESCER
0081-3-19-A	Exhanger - REFRIGERANT CONDENSER
0081-3-19-B	Exhanger - REFRIGERANT CONDENSER
0081-3-19-C	Exhanger - REFRIGERANT CONDENSER
0081-3-19-D	Exhanger - REFRIGERANT CONDENSER
0081-3-19-E	Exhanger - REFRIGERANT CONDENSER
0081-3-19-F	Exhanger - REFRIGERANT CONDENSER
0081-3-19-G	Exhanger - REFRIGERANT CONDENSER
0081-3-19-H	Exhanger - REFRIGERANT CONDENSER
0081-3-2	REFLUX CONDENSER
0081-3-10	PRC REFLUX CONDENSER
0081-3-10-2	PRC REFLUX CONDENSER
0081-3-12	REFRIGERANT SUB-COOLER
0081-3-12-2	REFRIGERANT SUB-COOLER
0081-3-19-2-A	REFRIGERANT CONDENSER
0081-3-19-2-B	REFRIGERANT CONDENSER
	201 Refrigerant Skid
0081-4-201	REFRIGERANT COMPRESSOR
	203 Refrigerant Skid - 0081-58-2
0081-4-203	Refrigerant Compressor
	205 Refrigerant Skid - 0081-58-3
0081-4-205	Refrigerant Compressor
	207 Compressor Skid
0081-4-207	GAS COMPRESSOR
	209 Compressor Skid
0081-4-209	GAS COMPRESSOR
0081-3-29	0081-4-209 JACKET,PACKING WATER COOLER
	211 COMPRESSOR SKID
0081-4-211	SUPERIOR WG76 FRAME-RECIP
	213 COMPRESSOR SKID
0081-4-213	SUPERIOR WG76 FRAME-RECIP
	215 COMPRESSOR SKID
0081-4-215	GE FS504 GAS COMPRESSOR FRAME
	Hot Oil System
0081-3-24	HOT OIL HEATER
0081-4-102	HOT OIL Purge Fan
0081-1-17	Vessel - HOT OIL SURGE DRUM
0081-10-6	HOT OIL PUMP
0081-10-6-1	HOT OIL PUMP (SPARE)
0081-10--6-2	HOT OIL PUMP (SPARE)
0081-4-6A	NORTH HOT OIL PUMP SEAL COOLING FAN
0081-4-6B	SOUTH HOT OIL PUMP SEAL COOLING FAN
	NGL System
0081-10-11	NGL PRODUCT BOOSTER PUMP
0081-1-30	Vessel - NGL PRODUCT SURGE TANK
0081-1-12	Vessel - NGL TREATER
0081-1-13	Vessel - NGL TREATER
0081-10-19	NGL PIPELINE PUMP
0081-10-19-1	NGL PIPELINE PUMP (SPARE)
0081-57-1	NGL Pump Suction Damper
0081-57-2	NGL Pump Discharge Damper
0081-57-3	NGL Pump Suction Damper
0081-57-4	NGL Pump Discharge Damper
	Instrument System
0081-1-43	Wet Air Instrument Air Receiver
0081-1-38	Vessel - INSTRUMENT AIR RECEIVER
0081-4-101	AIR COMPRESSOR
0081-4-101-1	AIR COMPRESSOR (SPARE)
0081-39-11	INSTRUMENT AIR PREFILTER 1
0081-39-11-1	INSTRUMENT AIR PREFILTER 2
0081-39-12	PARTICULATE AFTER FILTER
0081-39-10-1	DESSICANT AIR DRYER
	Fuel System
0081-1-34	FUEL GAS SCRUBBER
	Flare System
0081-5-1	EMERGENCY FLARE
0081-1-18	FLARE SEPARATOR
0081-10-7	FLARE SEPARATOR PUMP
0081-5-9-A	EMERGENCY FLARE BLOWER FAN MOTOR

8
599009

BCYGP-ALL-CIV-PLT-MCB-0001

GENERAL NOTES:

REVISIONS

MK.	DESCRIPTION	DATE	BY	APPR
8	AS-BUILT PER FIELD WALKDOWN, MOC #559009	06/07/19	JCM	

MK.	DESCRIPTION	DATE	BY	APPR
7	REVISED AS NOTED	05/10/17	JDH	WRW
6	REVISED AS NOTED	4/24/09	JPF	WRW
5	ISSUE FOR CONSTRUCTION	3/17/09	JPF	WRW
4	ADDED COMPRESSOR PARTS WAREHOUSE	4/25/07	KEG	
3	ADD NEW COMPRESSORS & RELATED EQUIP.	3/14/07	KEG	
2	CORRECTED LOCATION 0081-1-13	8/18/05	KEG	
1	REVISED AS NOTED	1-26-98		
0	ISSUED FOR PHASE I DESIGN	1-26-98	TS	TFS

REFERENCE DRAWINGS

DRAWING NO.	DRAWING NO.

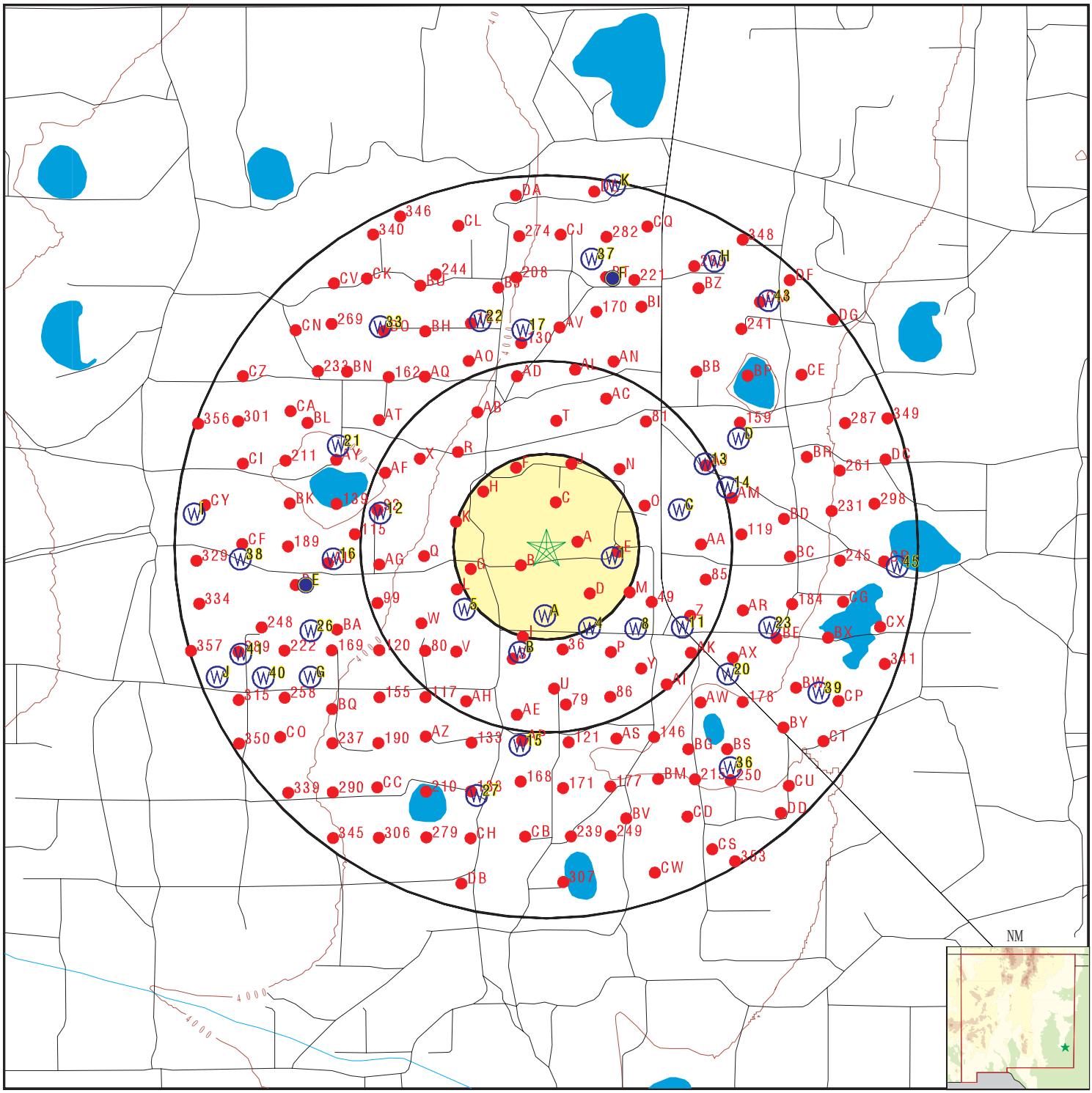
NOTICE

Chevron
MidContinent Alaska Business Unit

APPROVED:	DATE	TITLE:
CHECKED: TFS	12/97	BUCKEYE CO2 PLANT
DESIGNED:		AREA PLOT PLAN
DRAWN: DJS	6/96	LEA COUNTY, NEW MEXICO

EST. NO.: | SCALE: NONE | DWG. NO.: D-0081-72-001 | REV.: 8

PHYSICAL SETTING SOURCE MAP - 7236567.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: Buckeye CO2 Plant	CLIENT: Portnoy Environmental, Inc.
ADDRESS: Lea County, NM Lovington NM 88260	CONTACT: Alan Hopkins INQUIRY #: 7236567.2s
LAT/LONG: 32.786453 / 103.510607	DATE: January 27, 2023 6:53 pm

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

HOBBS OCD
MAR 28 2018
RECEIVED

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO.
30-025-24317

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☐ Other : INJECTION

7. Lease Name or Unit Agreement Name
VACUUM GRAYBURG SAN ANDRES UNIT

8. Well Number 18

2. Name of Operator
CHEVRON U.S.A. INC.

9. OGRID Number 4323

3. Address of Operator
6301 DEAUVILLE BLVD, MIDLAND, TX 79706

10. Pool name or Wildcat
VACUUM GRAYBURG SAN ANDRES

4. Well Location
Unit Letter K : 1330 feet from the SOUTH line and 1330 feet from the WEST line
Section 1 Township 18-S Range 34-E NMPM County LEA

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
3,993' (GL)

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☐			
OTHER: UPGRADE WELL & START WAG INJECTION ☐		OTHER: UPGRADE WELL & START WAG INJECTION ☒	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

VGSAU 18 Workover Summary 3/7-3/20/18:

- MIRU. Pull packer and tubing.
- Set RBP @ 4240' and test packer @ 4216', test casing - good.
- Set 2nd RBP @ 1500' and upgrade wellhead for WAG injection.
- Pull RBPs and cleanout well, tag at 4250' and cleanout to 4750'.
- Add perforations in the San Andres from 4329-4737' as shown in WBD attached.
- Perform 10,000 gal 15% NEFE HCl treatment under packer. POOH with packer
- RIH w/ packer and test casing, 550 psi for 30 minutes. RDMO.

The well will return to injection on water and then placed on WAG injection.

Spud Date: Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [signature] TITLE Production Engineer DATE 3/27/18

Type or print name Michael Stewart E-mail address: michael.stewart@chevron.com PHONE: 432-687-7431

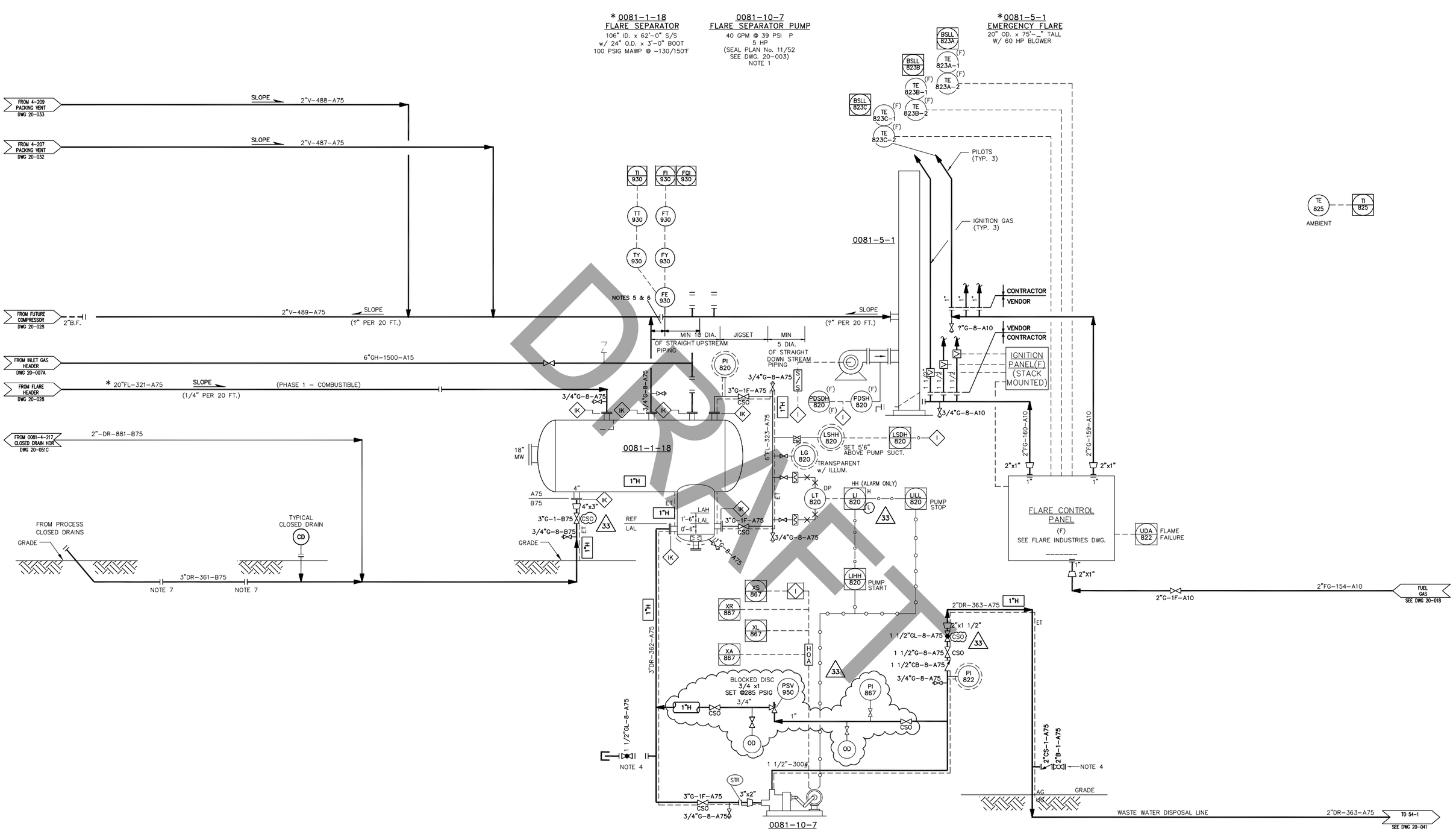
For State Use Only

APPROVED BY: Maley Brown TITLE AO/II DATE 3/28/2018
Conditions of Approval (if any):

RBDMS - CHART - ✓

ATTACHMENT B

ON-SITE DRAIN DRAWINGS



OPS DOC # BCYGP-UTIL1-PRO-PID-MCB-0003

GENERAL NOTES:

1. ADD PIPING LINE LOSSES TO REQUIRED PUMP ?P
2. PROVIDE REMOVABLE INSULATION JACKET.
3. * = LINE SIZED FOR 50x1.1 MMSCF/D OF INLET GAS
4. FOR POSSIBLE FUTURE ADDITION OF SPARE PUMP.
5. MIN. 10 DIA. OF UPSTREAM PIPING BETWEEN FLOW ELEMENT & TEE/ ELBOW.
6. MIN. 5 DIA. OF STRAIGHT PIPING BETWEEN FLOW ELEMENT & PT CONNECTION. NEW FLOW METER LOCATED UPSTREAM FE-821 A/B.
7. PER MOC #850714. 33

REVISIONS

MK.	DESCRIPTION	DATE	BY	APPR
29	MOC # 682589, LTI DRF #19516	10/11/19	PJG	KPMJ
30	AI LINE NUMBER ADDITIONS LTI DRF # 19578	11/07/19	PJG	KPMJ
31	AS-BUILT AS PER CVX REDLINES, MOC 816389 RE-316 LTI DRF #21276	09/03/21	ISP	DZKI
32	AS-BUILT PER CVX REDLINES, MOC #850714, BD DRF #21426	12/10/21	EB	DZKI
33	REVISED AS NOTED	09/21/22	SJH	JAT
18	GENERAL REVISIONS	2/13/08	KEG	–
19	MOC #30303	4/17/12	KEG	–
20	GENERAL REVISIONS	6/20/12	KEG	–
21	MOC #7180	3/4/14	KEG	K.DAVIS
22	MOC #74877	12/23/14	KEG	K.DAVIS
23	GENERAL REVISIONS	12/22/15	JDH	K.DAVIS
24	GENERAL REVISION CORRECTIONS	10/31/16	OHS	K.WOODS
25	AS-BUILT	04/28/17	OHS	–
26	REDLINE PER CVX, MOC #327316, DRF #18158	04/16/18	ASM	–
27	REVISED PER CVX REDLINES, MOC #461390	02/08/19	EV	KPMJ
28	REVISED PER CVX REDLINES, MOC #544819, MOC #599009	04/23/19	EV	KPMJ

REFERENCE DRAWINGS

DRAWING NO.	DRAWING NO.
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–	–

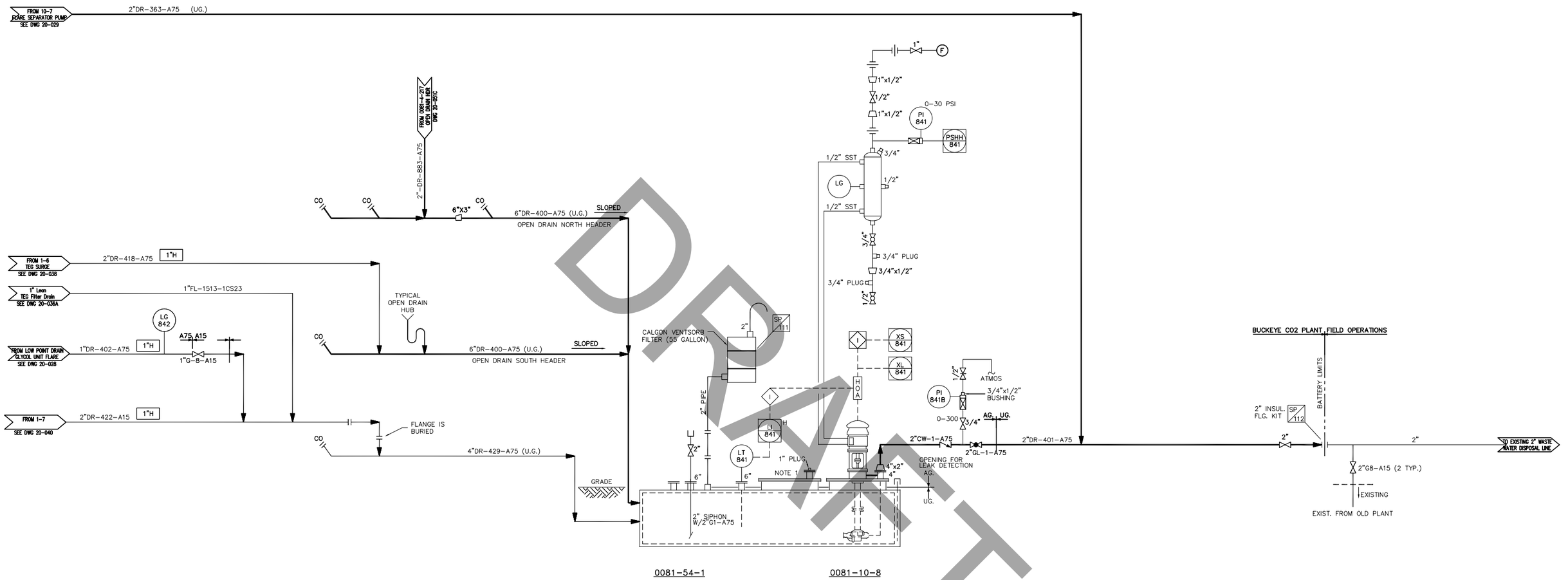
Z-Cat
Engineering and Project Management, LLC
TEXAS ENGINEERING FIRM F-23024

MORNINGSTAR OPERATING, LLC
FORT WORTH, TEXAS

APPROVED:	DATE:	TITLE:
–	–	BUCKEYE CO2 PLANT FLARE SYSTEM PIPING & INSTRUMENT DIAGRAM
CHECKED: MA	8/6/96	LEA COUNTY, NEW MEXICO
DESIGNED: –	–	
DRAWN: PJT	7/9/96	EST. NO.: 66-2052 · SCALE: NONE · DWG. NO.: D-0081-20-029 · REV.: 33

0081-54-1
PROCESS DRAIN SUMP
48" O.D. x 12'-0" LONG
22

0081-10-8
PROCESS DRAIN SUMP PUMP
45 GPM @ 160 PSIG
20 HP



0081-54-1 0081-10-8

FIM# BCYGP-DTEG-PRO-PID-MCB-0009

GENERAL NOTES:

1. SPARE CONNNECTION FOR FUTURE ADDITION OF SPARE PUMP.

REVISIONS

MK.	DESCRIPTION	DATE	BY	APPR	MK.	DESCRIPTION	DATE	BY	APPR
9	ISSUED FOR DESIGN	12/30/97	GLO	MA	17	AS-BUILT	04/28/17	OHS	–
10	ISSUED FOR HAZOP	01/23/98	DDK	MA	18	REVISED PER CVX REDLINES, MOC #461390	02/08/19	EV	KPMJ
11	ISSUED FOR CONSTRUCTION	02/23/98	GLO	MA	19	AS-BUILT PER FIELD WALKDOWN, MOC #599009	06/07/19	EV	–
12	REVISED AS NOTED	03/03/98	GLO	MA	20	AS-BUILT AS PER CVX REDLINES, MOC 818389 LTI DRF #21278	10/18/21	ISP	DZKI
13	REVISED AS NOTED	05/26/98	KB	–	21	AS-BUILT PER MOC REDLINES, MOC #857355 BD, DRF #21435	12/21/21	DLL	DZKI
14	REVISED AS NOTED	10/27/99	OH	–	22	REVISED AS NOTED	09/21/22	SJH	JAT
15	ADDITION 0081-4-217, HPF #14026 (IFA)	1/25/16	MTWC	JAC	–	–	–	–	–
16	ADDITION 0081-4-217, HPF #14026 (IFC)	04/08/16	MTWC	JAC	–	–	–	–	–

REFERENCE DRAWINGS

DRAWING NO.	DRAWING NO.
–	–
–	–
–	–
–	–
–	–
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–	–

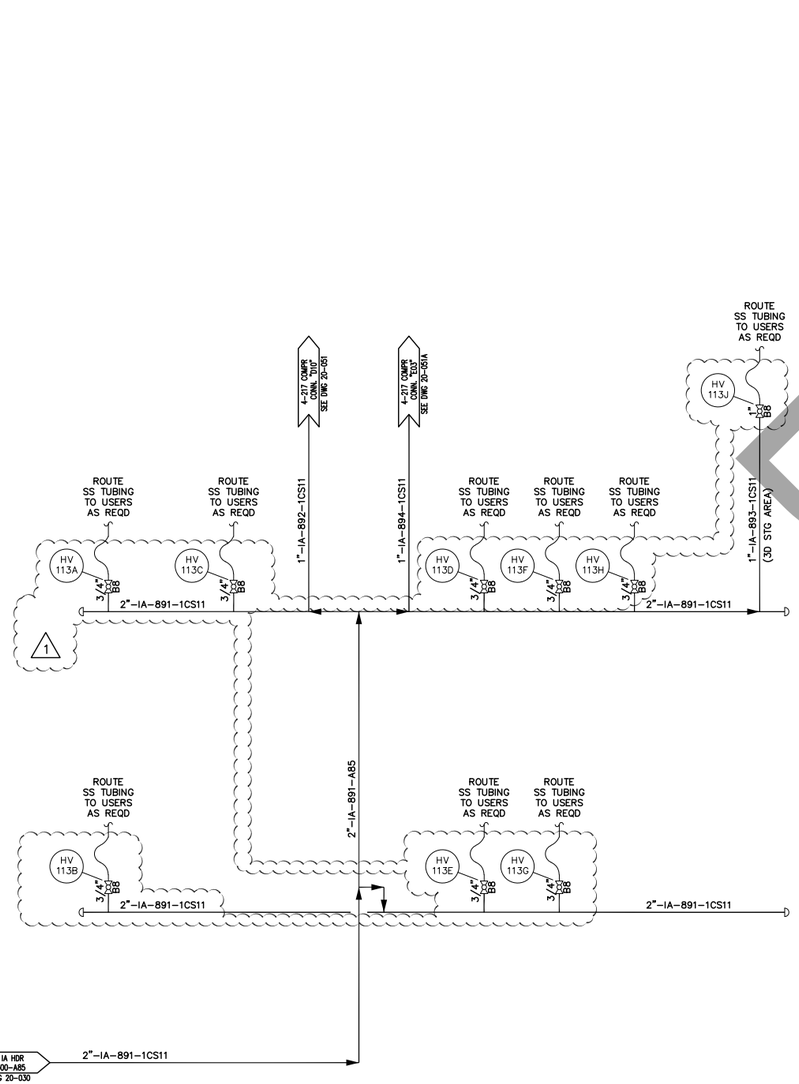
Z-Cat
Engineering and Project Management, LLC
TEXAS ENGINEERING FIRM F-23024

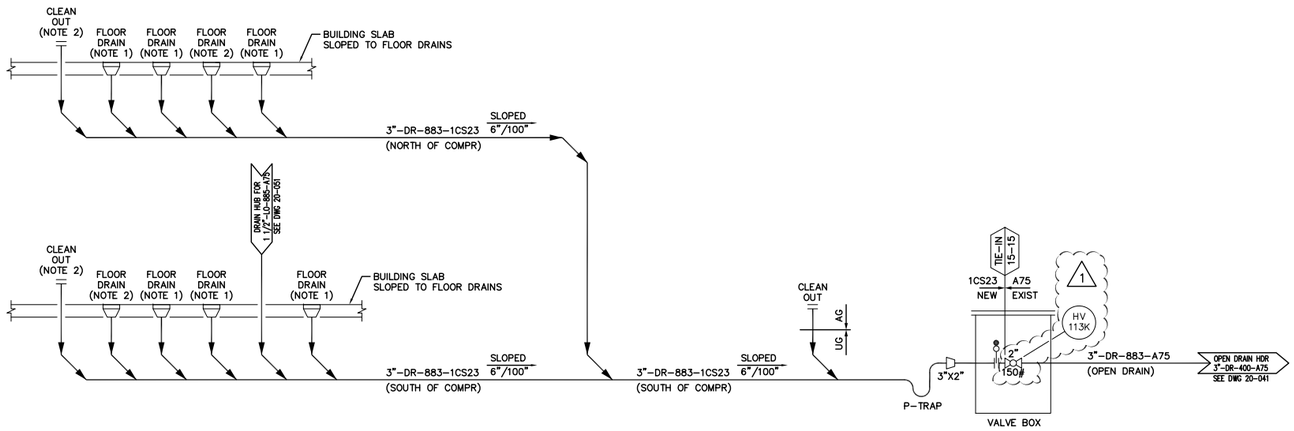
MORNINGSTAR OPERATING, LLC
FORT WORTH, TEXAS

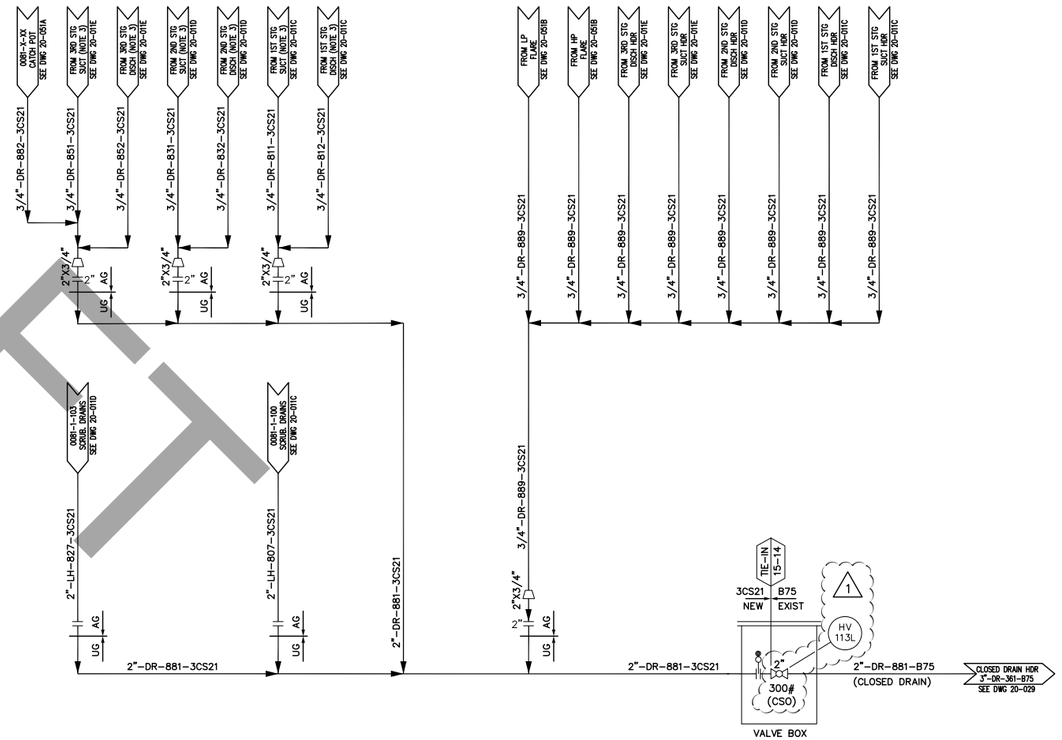
APPROVED:	DATE:
–	–
CHECKED: MA	8/6/96
DESIGNED: –	–
DRAWN: PJT	7/23/96

TITLE:
22 BUCKEYE CO2 PLANT
OPEN DRAIN SYSTEM
PIPING & INSTRUMENTATION DIAGRAM

EST. NO.: 66-2052 | SCALE: NONE | DWG. NO.: D-0081-20-041 | REV.: 22







FOR PROJECT 14026 ONLY
USED OLD TEXACO SPEC'S FOR VALVE TAGS (A1Q, B1Q, C1Q, E1Q, A75, & A85). NEED TO ADD TO END OF THE THREADED, SOCKET WELD, OR FLANGED VALVE TAGS THE FOLLOWING:
S = SOCKET WELD VALVE
ST = SOCKET WELD X THREADED VALVE
NOTHING = THREADED VALVE
SS = SS VALVE THREAD, SOCKET WELD, OR FLANGED.
(EXAMPLE GB, G8S, G8ST, G8SS, G1, G1SS. G1F, OR G1FSS).
PROJECT ENGINEER TO ORDER THE VALVE EQUAL TO NEW SPEC

OPS DOC # BCYGP-IN-PRO-PID-MCB-0022

GENERAL NOTES:
1. INSIDE BUILDING FLOOR CURB CONTAINMENT.
2. OUTSIDE BUILDING FLOOR CONTAINMENT.
3. LOW POINT WHEN FIG 8'S CLOSED FOR PURGING.

REVISIONS

MK.	DESCRIPTION	DATE	BY	APPR
1	REVISED TAG NUMBERS, HPF #14026	5/2/17	DMW	
0	ISSUED FOR CONSTRUCTION, HPF #14026	3/18/16	MTWC	JAC
E	RE-ISSUED FOR APPROVAL, HPF #14026	2/5/16	DMW	JAC
D	RE-ISSUED FOR APPROVAL, HPF #14026	1/25/16	DMW	JAC
C	ISSUED FOR APPROVAL, HPF #14026	12/03/15	MTWC	JAC
B	ISSUED FOR REVIEW	9/24/15	RPG	
A	ISSUED FOR REVIEW	9/15/15	RPG	

REFERENCE DRAWINGS

DRAWING NO.	DRAWING NO.

NOTICE

Chevron
MidContinent Alaska Business Unit

APPROVED: JAC	DATE 1/25/16
CHECKED: MTWC	1/22/16
DESIGNED: MTWC	12/3/15
DRAWN: SBO	3/20/14

TITLE:
BUCKEYE CO 2 PLANT
PIPING AND INSTRUMENT DIAGRAM
GAS COMPR (0081-4-217) CD, OD, & IA UTILITIES
LEA COUNTY, NEW MEXICO

EST. NO.: | SCALE NONE | DWG. NO.: D-0081-20-051C | REV. 1

D-0081-20-051C
20-051C

ATTACHMENT C

C-101 FORMS

vGWU I3 Satellite [fAPP2133455458]

General Facility Information

Operator:	[330132] MorningStar Operating LLC		
Status:	Active	**Type:**	Tank Battery - (TB)
District:	Hobbs	**Surface Owner:**	State
County:	Lea (25)		
Surface Location:	O-36-17S-34E 0 FNL 0 FEL		
Lat/Long:	32.785158,-103.512877 NAD83		
Quarter-Quarter:			
Directions:			

Notes

This facility was registered on 11/30/2021 by rlerios for CHEVRON U S A INC [4323] (action id: 64324).

Submit to Appropriate District Office
State Lease – 6 copies
Fee Lease – 5 copies

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-101
Revised 1-1-89

API NO. (assigned by OCD on New Wells) 30-025-31833

5. Indicate Type of Lease STATE [X] FEE [ ]

6. State Oil & Gas Lease No. B-1520-1

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work:
DRILL [X] RE-ENTER [ ] DEEPEN [ ] PLUG BACK [ ]

b. Type of Well:
OIL WELL [ ] GAS WELL [ ] OTHER [redacted]INJECTION SINGLE ZONE [X] MULTIPLE ZONE [ ]

7. Lease Name or Unit Agreement Name: VACUUM GLORIETA WEST UNIT

2. Name of Operator: TEXACO EXPLORATION AND PRODUCTION INC.

8. Well No. 4

3. Address of Operator: P. O. Box 3109, Midland, Texas 79702

9. Pool name or Wildcat: VACUUM GLORIETA

4. Well Location
Unit Letter L : 1410 Feet From The SOUTH Line and 1300 Feet From The WEST Line

Section 24 Township 17-SOUTH Range 34-EAST NMPM LEA County

10. Proposed Depth	11. Formation	12. Rotary or C.T.
6307'	GLORIETA/PADDOCK	ROTARY

13. Elevations (Show whether DF, RT, GR, etc.)	14. Kind & Status Plug. Bond	15. Drilling Contractor	16. Approx. Date Work will start
GR-4011'	BLANKET	TMBR/SHARP	DECEMBER 30, 1992

17. PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
11	8 5/8	24#	1550'	650	SURFACE
7 7/8	5 1/2	15.5# & 17#	6307'	1700	SURFACE

CEMENTING PROGRAM:
SURFACE CASING - 450 SX CLASS C w/ 4% GEL & 2% CacL2 (13.5ppg, 1.74cf/s, 9.1gw/s). F/B 200 SX CLASS C w/ 2% Cacl2 (14.8ppg, 1.34cf/s, 6.3gw/s).
PRODUCTION CASING - 1st STG: 350 SX CLASS H w/ 1/4# FLOCELE (15.6ppg, 1.18cf/s, 5.2gw/s).
DV TOOL @ 5000' - 2nd STG: 1250 SX 35/65 POZ CLASS H w/ 6% GEL, 5% SALT & 1/4# FLOCELE (12.8ppg, 1.94cf/s, 10.4gw/s). F/B 100 SX CLASS H (15.6ppg, 1.18cf/s, 5.2gw/s).

MOBIL OPERATES A WELL IN THIS QUARTER QUARTER SECTION AND HAS BEEN FURNISHED A COPY OF THIS APPLICATION.

UNORTHODOX LOCATION - GRANTED UNDER ORDER No. R-9714. LOCATION WAS MOVED BECAUSE OF A PIPELINE. APPROVAL FOR THE AMENDED LOCATION HAS BEEN FILED IN SANTA FE. (COPY ATTACHED)

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE C.P. Basham/cwh TITLE DRILLING OPERATIONS MANAGER DATE 12-17-92

TYPE OR PRINT NAME C. P. BASHAM TELEPHONE NO. (915) 688-4620

(This space for State Use) ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

APPROVED BY _____ TITLE _____ DATE JAN 14 1993

CONDITIONS OF APPROVAL, IF ANY:

Permit Expires 6 Months From Approval Date Unless Drilling Underway.

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised 1-1-89

WELL LOCATION AND ACREAGE DEDICATION PLAT
All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
TEXACO EXPL. AND PROD. Inc.	VACUUM GLORIETA WEST UNIT	4

Unit Letter	Section	Township	Range	County
L	24	17-South	34-East NMPM	Lea

Actual Footage Location of Well:
1410 feet from the South line and 1300 feet from the West line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
4011	Glorieta; Paddock	Vacuum Glorieta Pool	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

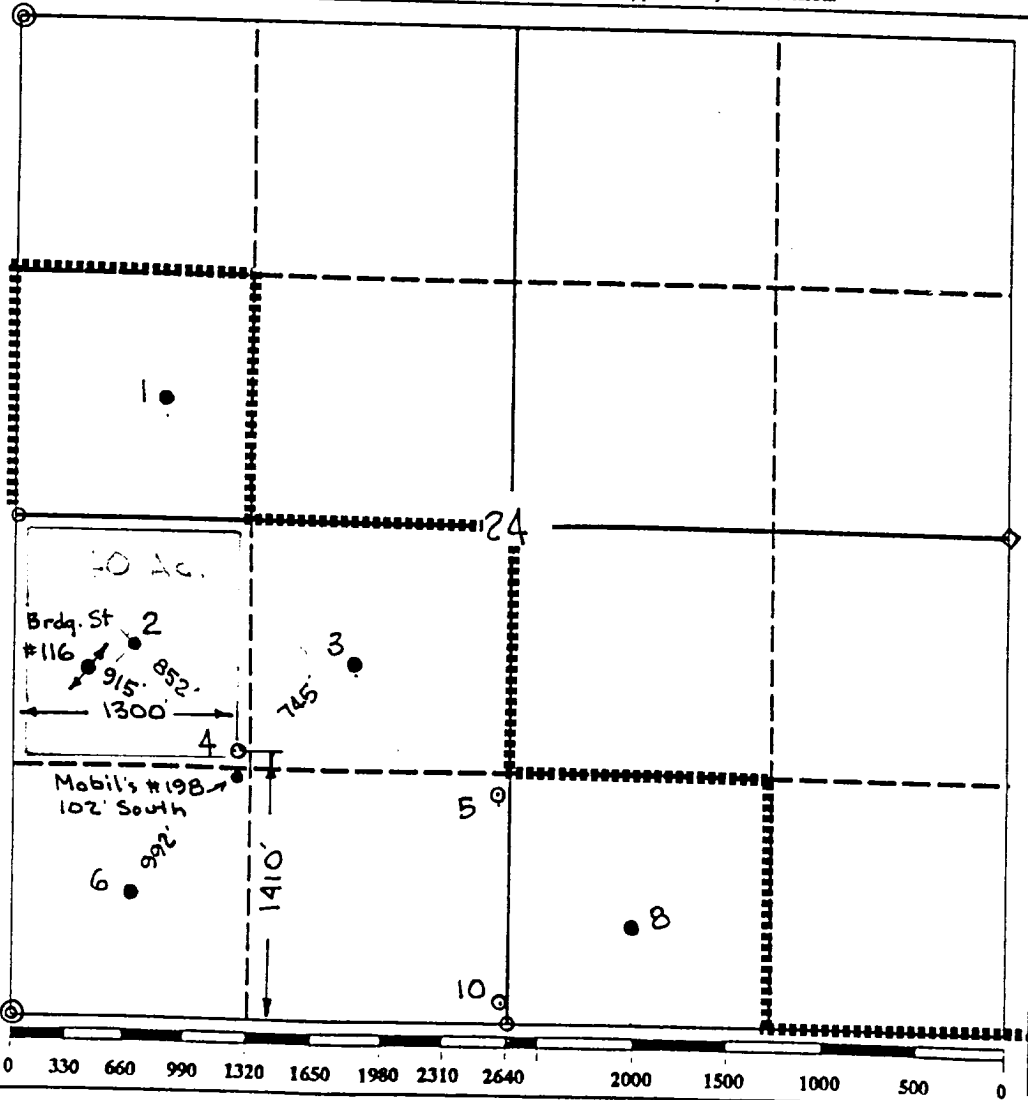
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☒ Yes ☐ No If answer is "yes" type of consolidation Unitization

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary. _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein in true and complete to the best of my knowledge and belief.

Signature: Royce D. Mariott

Printed Name: Royce D. Mariott

Position: Division Surveyor

Company: Texaco Expl. & Prod.

Date: December 11, 1992

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: November 30, 1992

Signature & Seal of Professional Surveyor: John S. Piper

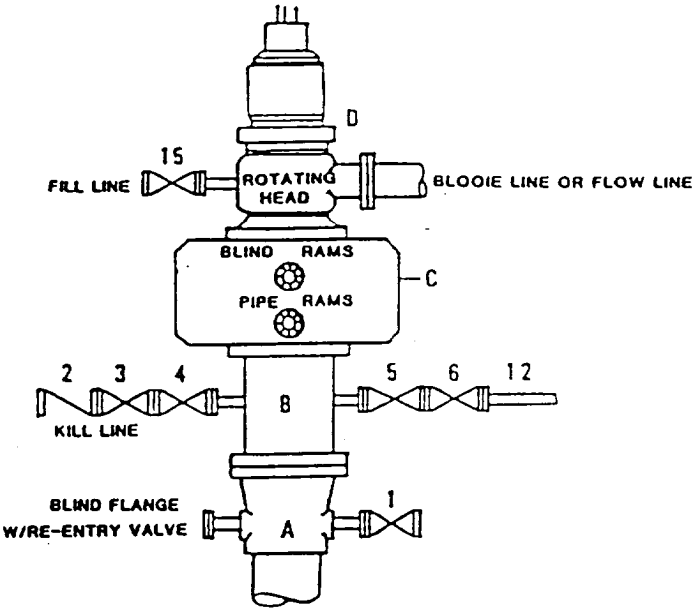
Certificate No. 7254 John S. Piper

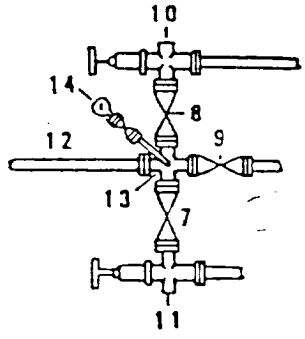
Lea Co. FB. 6, Pg. 62

DRILLING CONTROL
CONDITION II-B 3000 WP

FOR AIR DRILLING OR
WHERE NITROGEN OR AIR BLOWS ARE EXPECTED

H_2S TRIM REQUIRED
YES X NO





DRILLING CONTROL

MATERIAL LIST - CONDITION II - B

A	Texaco Wellhead
B	3000# W.P. drilling spool with a 2" minimum flanged outlet for kill line and 3" minimum flanged outlet for choke line.
C	3000# W.P. Dual ram type preventer, hydraulic operated with 1" steel, 3000# W.P. control lines (where sub-structure height is adequate, 2 - 3000# W.P. single ram type preventers may be utilized).
D	Rotating Head with fill up outlet and extended Blooie Line.
1,3,4, 7,8,	2" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve.
2	2" minimum 3000# W.P. back pressure valve.
[illegible]	[illegible]
12	3" minimum schedule 80, Grade "B", seamless line pipe.
13	2" minimum x 3" minimum 3000# W.P. flanged cross.
10,11	2" minimum 3000# W.P. adjustable choke bodies.
14	Cameron Mud Gauge or equivalent (location optional in choke line).
15	2" minimum 3000# W.P. flanged or threaded full opening steel gate valve, or Halliburton Lo Torc Plug valve.

TEXACO, INC
MIDLAND DIVISION
MIDLAND, TEXAS

SCALE	DATE	EST NO	DRG NO
DRAWN BY			
CHECKED BY			

EXHIBIT C

Texaco USA
Producing Department
Midland Division

PO Box 3109
Midland TX 79702-3109

December 17, 1992

GOV - STATE AND LOCAL GOVERNMENTS
Unorthodox Locations
Vacuum Glorieta West Unit
Well Nos. 4, 41, 68, 82, and 92
Lea County, New Mexico

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501-2088

Attention: Mr. David R. Catanach

Gentlemen:

Texaco Exploration and Production Inc. respectfully submits, for administrative approval, amended drilling locations for the captioned injection wells under Order No. R-9714.

Well Nos. 4, 41, and 68 were moved because of pipelines. Well No. 82 was moved because of an electric line. Well No. 92, permitted December 3, 1992, had to be moved because of topography. This move will avoid making a four foot cut to build the location.

Attached are Forms C-102 and a "detail" drawing showing the amended locations for each well.

Yours very truly,

C. P. Basham /cwh

C. P. Basham
Drilling Operations Manager

CWH:cwh

cc:NMOCD, P. O. Box 1980, Hobbs, NM 88240

TEXACO EXPLORATION AND PRODUCTION IN

JOB Vacuum G' -ieta West Uint Loc. 4

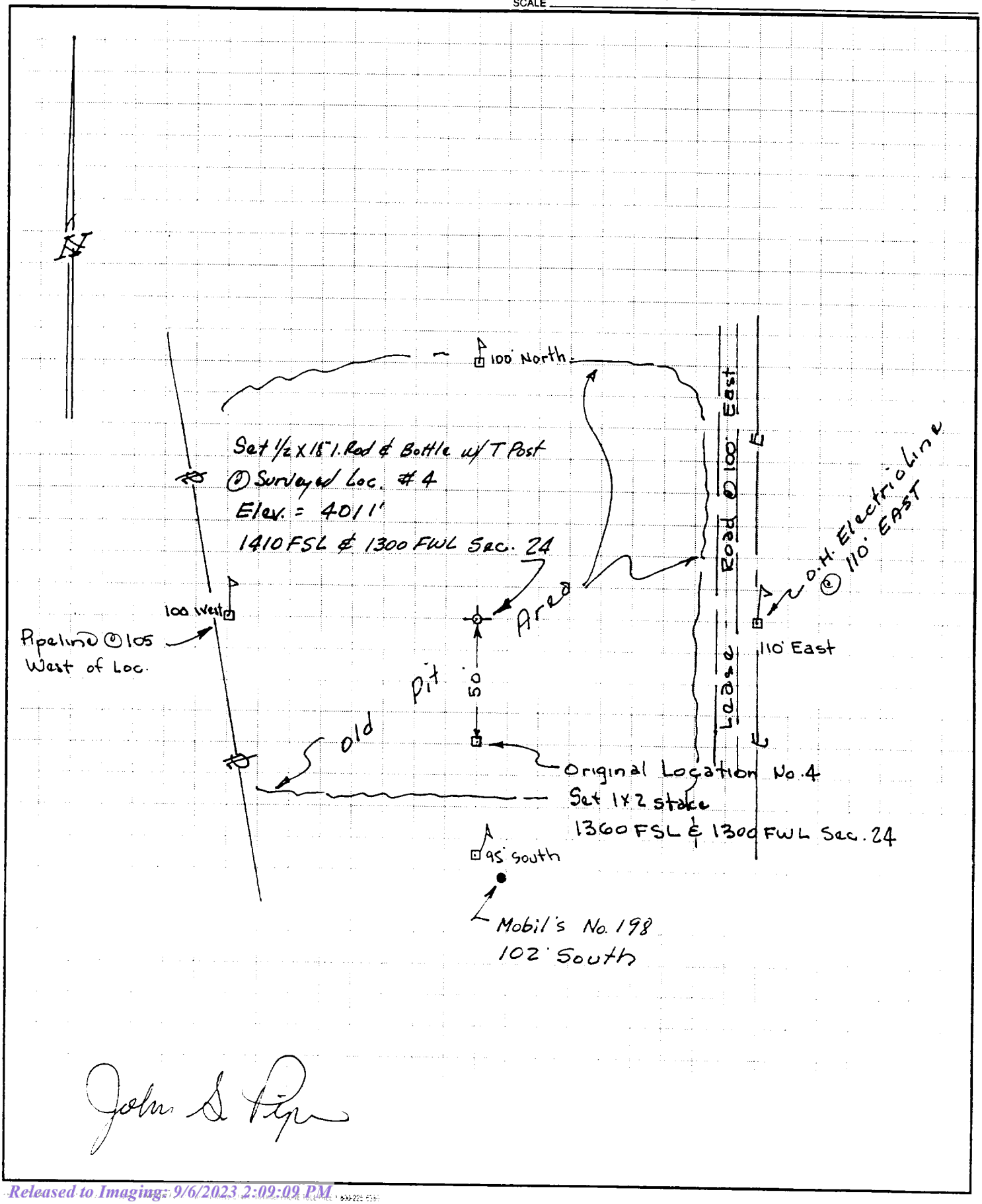
SHEET NO. 1 OF 2

CALCULATED BY O. Flores DATE 12/14/92

CHECKED BY J.S. Piper DATE 12/14/92

SCALE 1"=50 Feet

PIPER SURVEYING COMPANY
P.O. Box 60432
MIDLAND, TEXAS 79711
(915) 550-7810



John S Piper

Submit to Appropriate District Office
State Lease -- 6 copies
Fee Lease -- 5 copies

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-101
Revised 1-1-89

API NO. (assigned by OCD on New Wells) 30-025-31708

5. Indicate Type of Lease STATE [X] FEE [ ]

6. State Oil & Gas Lease No. B-2146

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work:
DRILL [X] RE-ENTER [ ] DEEPEN [ ] PLUG BACK [ ]

b. Type of Well:
OIL WELL [ ] GAS WELL [ ] OTHER WATER INJECTION SINGLE ZONE [X] MULTIPLE ZONE [ ]

7. Lease Name or Unit Agreement Name
VACUUM GLORIETA WEST UNIT

2. Name of Operator
TEXACO EXPLORATION AND PRODUCTION INC.

8. Well No.
79

3. Address of Operator
P. O. Box 3109, Midland, Texas 79702

9. Pool name or Wildcat
VACUUM GLORIETA

4. Well Location
Unit Letter K : 2561 Feet From The SOUTH Line and 1351 Feet From The WEST Line

Section 36 Township 17-SOUTH Range 34-EAST NMPM LEA County

10. Proposed Depth	11. Formation	12. Rotary or C.T.
6300'	GLORIETA/PADDOCK	ROTARY

13. Elevations (Show whether DF, RT, GR, etc.)	14. Kind & Status Plug. Bond	15. Drilling Contractor	16. Approx. Date Work will start
GR-4004'	BLANKET	TO BE SELECTED	SEPTEMBER 15, 1992

17. PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
17 1/2	13 3/8	48#	40'	REDI-MIX	SURFACE
11	8 5/8	24#	1550'	500	SURFACE
7 7/8	5 1/2	15.5#	6300'	1300	SURFACE

CEMENTING PROGRAM: CONDUCTOR - REDIMIX.
SURFACE CASING - 300 SX CLASS C w/ 4% GEL & 2% CacL2 (13.5ppg, 1.74cf/s, 9.1gw/s). F/B 200 SX CLASS C w/ 2% Cacl2 (14.8ppg, 1.34cf/s, 6.3gw/s).
PRODUCTION CASING - 1st STG: 300 SX CLASS H w/ 1/4# FLOCELE (15.6ppg, 1.18cf/s, 5.2gw/s). DV TOOL @ 5000' - 2nd STG: 750 SX 35/65 POZ CLASS H w/ 6% GEL, 5% SALT & 1/4# FLOCELE (12.8ppg, 1.94cf/s, 10.4gw/s). F/B 250 SX CLASS H w/ 1/4# FLOCELE (15.6ppg, 1.18cf/s, 5.2gw/s).

THERE ARE NO OTHER OPERATORS IN THIS QUARTER QUARTER SECTION.

UNORTHODOX LOCATION - EXCEPTION HAS BEEN REQUESTED (COPY ATTACHED).

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE C.P. Basham/cwh TITLE DRILLING OPERATIONS MANAGER DATE 09-02-92

TYPE OR PRINT NAME C. P. BASHAM TELEPHONE NO. (915) 688-4620

(This space for State Use)
APPROVED BY ORIGINAL SIGNED BY JERRY SEXTON DISTRICT I SUPERVISOR TITLE OCT DATE

CONDITIONS OF APPROVAL, IF ANY:

Permit Expires 6 Months From Approval Date Unless Drilling Underway.

ATTACHMENT D

INSPECTION LOG

Date & Time	Important or Gene	Reason	Equipment/Vessel	Description	Created By
5/11/22 20:30	General	Inspect/Test	Compressor 211;#See Comments	Vanzandt arrived to make sure the part fit correctly	Ryan Woolsey
5/16/22 9:00	Important	Inspect/Test	H2S and LEL alarms	H2S and LEL alarms tested	(d) Rosa Crews
5/20/22 15:30	Important	Inspect/Test	Compressor 213	Pressure tested C213	Jose Pineda
5/24/22 9:00	General	Swap/Change/Replace;#Inspect/Test	NGL Pumps	Triple H arrived to work on NGL pumps	Ryan Woolsey
5/24/22 12:30	General	Swap/Change/Replace;#Inspect/Test	NGL Pumps	Starting work on east NGL pump	Ryan Woolsey
6/5/22 8:30	Important	Open/Close;#Isolate/De-isolate;#Inspect/Test	TEG Rich Particulate Filters	Stem of south rich filter inlet valve blew out while filling the filter. Filters were bypassed and inlet and outlet were closed. Once all pressure and flow dropped the stem was hammered back into valve to close it. inlet and outlet were slowly opened then slowly closed the bypass. nothing appeared to be coming through the valve so the north filter was put back in service and the south is isolated and out of service until repairs can be made.	Ryan Woolsey
6/7/22 8:30	General	Start/On;#Inspect/Test	Refrigerant Condenser;#See Comments	Reset the E refirgerant fan to clear vibration alarm	Ryan Woolsey
6/7/22 9:30	Important	Swap/Change/Replace;#Inspect/Test	NGL Filter	Changed filter and testing for leaks	Ryan Woolsey
6/8/22 13:58	Important	Inspect/Test	See Comments	Copper strip in the oven	Jose Pineda
6/8/22 14:59	Important	Inspect/Test	See Comments	Copper strip no good 2b	Jose Pineda
6/8/22 15:25	Important	Inspect/Test	See Comments	Copper strip in the oven	Jose Pineda
6/8/22 16:25	Important	Inspect/Test	See Comments	Copper strip test good 1b	Jose Pineda
6/9/22 11:11	Important	Inspect/Test	See Comments	Cooper strip in the oven.	Joshua Urias
6/9/22 12:30	Important	Inspect/Test	See Comments	Copper strip tested good. A1.	Joshua Urias
6/17/22 9:00	General	Inspect/Test	Additive Pumps	we tested the middle additive pump and couldn't build up to PSI. we scheduled triple h to come out and work on it.	Gil Cordero
6/18/22 9:30	Important	Inspect/Test;#Shutdown/Off	Compressor 211	shut off do to knocking on cylinder #2	Gil Cordero
6/27/22 21:24	Important	Start/On;#Inspect/Test	Compressor 207	Restarted C207 to shoot temps.	Joshua Urias
6/30/22 7:00	General	Inspect/Test;#Pull Sample;#Report	See Comments	Guys to perform enviromental testing arrived to start work	Ryan Woolsey
7/12/22 11:15	Important	Inspect/Test	See Comments	Copper strip in the oven	Joshua Urias
7/12/22 12:15	Important	Inspect/Test	See Comments	1a on copper strip	Joshua Urias
7/14/22 8:00	General	Inspect/Test	Compressor 201;#Refrigerant Surge Drum	Juan did troubleshoot on LI-753 (level for propane surge tank) and got it working normal again. Juan also fixed the bad reading on PIC-1726	Gil Cordero
7/14/22 15:00	Important	Inspect/Test	PRC Reflux Condensers;#Refrigerant Surge Drum	Juan fixed the propane surge drum and worked the timing on the reflux condenser level control transmitters LIC-768 and LIC-1768 to help with valve output fluctuation.	Gil Cordero
8/2/22 9:00	General	Swap/Change/Replace;#Inspect/Test	NGL Pumps;#Additive Pumps	Triple H arrived to work on North additive and east NGL pump	Ryan Woolsey
8/2/22 9:30	General	Swap/Change/Replace;#Inspect/Test	NGL Pumps	Triple H finished work on east NGL pump. Swapped to east to check status and is no longer leaking from packing. West put back into service	Ryan Woolsey
8/8/22 13:45	Important	Inspect/Test/Pull Sample	See Comments	Pulled a sample from the discharge/outlet of the plant back to field. Found there to be a black sludge.	Gilbert Urias
8/17/22 13:30	Important	Inspect/Test/Pull Sample	NGL to Inlet valve	currently out of service due to oneOK doing maintenance on line. Removed spool on our side and spool on oneOKs side for pressure testing.	Jorge Chavez (c)
8/18/22 10:45	Important	Inspect/Test/Pull Sample	NGL Pumps	Pressure test NGL line from pumps to lact unit 300# used 6 Nitrogen bottles	Charles Tolsma
8/19/22 18:30	Important	Inspect/Test/Pull Sample	Copper Strip	Copper strip tested 1a	Gilbert Urias
8/26/22 10:00	General	Inspect/Test/Pull Sample;#Report	Reflux Pumps	Triple H arrived to get measurements on reflux pump	Ryan Woolsey
8/26/22 12:00	General	Inspect/Test/Pull Sample	Compressor 213;#See Comments	Braybeth finished work on 3rd stage bypass and is ready to test	Ryan Woolsey
8/26/22 12:30	General	Inspect/Test/Pull Sample	Compressor 213;#See Comments	Test on 3rd stage bypass valve was good and held 800#	Ryan Woolsey
8/30/22 7:30	General	Inspect/Test/Pull Sample	Compressor 209;#See Comments	Mechanics arrived to work on c209	Ryan Woolsey

8/30/22 9:00	General	Inspect/Test/Pull Sample;#Swap/Change/Replace	CO2 Coolers	Brandon and clark arrived to pickup new 3rd stage motor that was single speed rather than 2	Ryan Woolsey
8/30/22 15:30	General	Inspect/Test/Pull Sample;#Swap/Change/Replace	Reflux Pumps	Triple H arrived to pick up North reflux pump motor and pump	Ryan Woolsey
9/27/22 8:00	General	Inspect/Test/Pull Sample	H2S/LEL Monitors	Legacy safety is here to test H2S and LEL Monitors	Jimmie Ogas
10/5/22 19:55	Important	Inspect/Test/Pull Sample	Copper Strip	Copper strip in the oven	Joshua Urias
10/5/22 20:55	Important	Inspect/Test/Pull Sample	Copper Strip	1A on copper strip	Joshua Urias
10/21/22 13:21	General	Inspect/Test/Pull Sample	Compressor 213	Pressure testing 213	Gilbert Urias
10/25/22 6:00	General	Change/Replace/Repair;#Inspect/Test/Pull Sample	Compressor 207	Mader arrived to continue work on c207	Ryan Woolsey
10/25/22 13:30	General	Inspect/Test/Pull Sample	Hydrocarbon Bucket;#TEG Surge Tank;#Hot Oil Surge Drum	Pantechs arrived to retrieve hot oil and teg samples	Ryan Woolsey
10/27/22 20:55	Important	Inspect/Test/Pull Sample	Copper Strip	Bomb in the oven	Joshua Urias
10/27/22 21:55	Important	Inspect/Test/Pull Sample	Copper Strip	1A on copper strip	Joshua Urias
10/31/22 12:55	Important	Inspect/Test/Pull Sample	Compressor 213	Pressure tested 213, looks good	Gilbert Urias
11/1/22 10:00	Important	Inspect/Test/Pull Sample	Compressor 209	Pressure test	Clay Harris
11/3/22 10:00	Important	Inspect/Test/Pull Sample	See Comments	APC is working on heat trace to make sure everything is working	Gil Cordero
11/16/22 8:00	Important	Inspect/Test/Pull Sample	Compressor 209	Open valves and Pressure test 1st stage	Charles Tolsma
11/17/22 18:50	Important	Inspect/Test/Pull Sample	See Comments	went and checked personally and made sure pilot #2 was on.	Jorge Chavez (c)
11/19/22 12:00	Inspection	Inspect/Test/Pull Sample	See Comments	Inspected Flare pilots	Jose Pineda
11/22/22 20:00	Inspection	Inspect/Test/Pull Sample	Flare Separator	inspected pilot igniton on all three. all are burning normal	Gil Cordero
11/23/22 8:45	Inspection	Inspect/Test/Pull Sample	See Comments	Flare Pilot #2 alarm. Pilots were inspected to confirm they are working	Jose Pineda
11/23/22 10:12	Inspection	Inspect/Test/Pull Sample	See Comments	Flare Pilot #2 alarm. Pilots were inspected to confirm they are working.	Jose Pineda
11/24/22 21:42	Inspection	Inspect/Test/Pull Sample	See Comments	Flare pilot #2 alarm came in. Verified pilot was operating correctly	Joshua Urias
11/24/22 20:27	Inspection	Inspect/Test/Pull Sample	See Comments	Flare Pilot #2 alarm. Verified pilot was operating correctly	Joshua Urias
11/24/22 22:10	Inspection	Inspect/Test/Pull Sample	See Comments	Flare pilot #2 alarm came in. Verified pilot was operating correctly	Joshua Urias
11/24/22 22:19	Inspection	Inspect/Test/Pull Sample	See Comments	Flare pilot #2 alarm came in. Verified pilot was operating correctly. Alarm came in repeatedly	Joshua Urias
11/26/22 21:30	General	Inspect/Test/Pull Sample	H2S Analyzer	Reset analyzer	Joshua Urias
11/27/22 2:00	Inspection	Inspect/Test/Pull Sample	See Comments	Flare pilot #2 alarm came in. Verified pilot was operating correctly.	Joshua Urias
11/27/22 3:30	Inspection	Inspect/Test/Pull Sample	See Comments	Flare pilot #2 alarm came in. Verified pilot was operating correctly. Alarm came in repeatedly	Joshua Urias
11/29/22 9:30	General	Inspect/Test/Pull Sample	H2S Analyzer	Reset	Clay Harris
12/1/22 8:30	Inspection	Inspect/Test/Pull Sample	Fire Eyes	cleaned fire eyes and no smoke coming out vent.	Gil Cordero
12/1/22 8:30	Inspection	Inspect/Test/Pull Sample	See Comments	checked pilots to make sure they are working properly and they are.	Gil Cordero
12/1/22 20:00	Important	Change/Replace/Repair;#Open/Close;#Inspect/Test/Pull Sample	TEG Contactor;#3-way Valve;#TEG Reboiler;#TEG Surge Tank;#TEG Pumps;#Dewpoint Analyzer;#Drizo Pumps;#Hot Oil Pumps;#See Comments	Started to lose temps and flows throughout the TEG and Hot oil system. TIC 230/235 and LIC247A and FI232 all went bad output and could not be controlled in DCS. All controllers closed and caused us to manually open and closed valves outside to try and control the TEG system. Finally resolved after jimmie came out and was walked through the process by a schneider tech.	Ryan Woolsey
12/2/22 10:30	Inspection	Inspect/Test/Pull Sample	See Comments	inspected all flare pilots.	Jorge Chavez (c)
12/2/22 16:30	Inspection	Inspect/Test/Pull Sample	See Comments	inspected hot oil heater and all three pilots.	Jorge Chavez (c)
12/2/22 12:00	Inspection	Inspect/Test/Pull Sample	TEG Contactor	ATP checked heat trace on contactor, bridles and levels	Jorge Chavez (c)
12/6/22 7:00	General	Inspect/Test/Pull Sample	See Comments	all pilots are good and burning.	Jorge Chavez (c)
12/6/22 7:00	General	Inspect/Test/Pull Sample	H2S Analyzer	worked on H2S analyzer and is now up and running.	Jorge Chavez (c)
12/7/22 9:30	Inspection	Inspect/Test/Pull Sample	#3	inspected all flare pilot and the are working good	Gil Cordero

12/7/22 9:30	Inspection	Inspect/Test/Pull Sample	Hot Oil Heater;#Fire Eyes	inspected hot oil heater fire and check for smoke, all was good	Gil Cordero
12/7/22 9:00	Important	Inspect/Test/Pull Sample	See Comments	FI-353 was calibrated	Gil Cordero
12/7/22 10:00	Important	Inspect/Test/Pull Sample	See Comments	FIC-352 was calibrated	Gil Cordero
12/7/22 16:30	Important	Inspect/Test/Pull Sample	See Comments	WTA tried to calibrate FI-353 however he couldnt finish. he will be back some time next week with DCS expert to help calibrate.	Gil Cordero
12/16/22 20:30	Inspection	Inspect/Test/Pull Sample	#1	all pilots working as they should	Gil Cordero
12/17/22 0:00	Inspection	Inspect/Test/Pull Sample	#3		Jorge Chavez (c)
12/20/22 14:00	General	Inspect/Test/Pull Sample	Compressor 209	purge and pressure test done on 209. leak found and gaskets need replacing.	Ryan Woolsey
12/20/22 15:30	General	Change/Replace/Repair;#Inspect/Test/Pull Sample	Compressor 209	209 leak fixed and bypass valve positioner issue resolved. started the unit but common vibration alarm could not be cleared and it is thought that it is an eis issue	Ryan Woolsey
12/21/22 8:11	Inspection	Inspect/Test/Pull Sample	Flare Pilot #3	Alarm for Flare pilot #3 came in. Verified that pilot was still working.	Jose Pineda
12/21/22 20:30	General	Inspect/Test/Pull Sample	#3		Jorge Chavez (c)
12/24/22 21:12	Important	Inspect/Test/Pull Sample	Copper Strip	Bomb in the oven	Joshua Urias
12/24/22 22:15	Important	Inspect/Test/Pull Sample	Copper Strip	Bad test, liquid evaporated out of cylinder	Joshua Urias
12/24/22 22:27	Important	Inspect/Test/Pull Sample	Copper Strip	Bomb in the oven	Joshua Urias
12/24/22 23:30	Important	Inspect/Test/Pull Sample	Copper Strip	1A on copper strip	Joshua Urias
1/3/23 14:30	General	Inspect/Test/Pull Sample	See Comments	tech came to trouble shoot the Coriolis meter.	Gil Cordero
1/4/23 13:30	General	Inspect/Test/Pull Sample	See Comments	lab services came to pull samples	Gil Cordero
1/5/23 8:30	Inspection	Inspect/Test/Pull Sample;#Cleaned	Fire Eyes/Hot oil heater stack	cleaned fire eyes inspected hot oil heater for smoke or abnormal conditions **NO abnormal conditions found**	Jimmie Ogas
1/11/23 8:30	General	Inspect/Test/Pull Sample	See Comments	Pull samples	Charles Tolsma
1/18/23 10:30	Important	Inspect/Test/Pull Sample	See Comments	legacy came out to test and inspect sensor alarms on LELs and H2S	Jorge Chavez (c)
1/20/23 7:30	General	Inspect/Test/Pull Sample	Phase 1;#See Comments	Lab services arrived to calibrate inlet.	Ryan Woolsey
1/20/23 8:00	General	Inspect/Test/Pull Sample;#Change/Replace/Repair	Compressor 209	Apc arrived to work on vibration on c209	Ryan Woolsey
1/24/23 4:00	Inspection	Inspect/Test/Pull Sample	Flare Pilot #1;#Flare Pilot #2;#Flare Pilot #3	Pilot alarms and pilot IR camera out alarms came in. Visually inspected flare for proper pilot operations.	Joshua Urias
2/2/23 8:00	Inspection	Inspect/Test/Pull Sample	See Comments	Lab services pull weekly samples	Charles Tolsma
2/2/23 9:00	General	Cleaned;#Inspect/Test/Pull Sample	Fire Eyes/Hot oil heater stack		Charles Tolsma
2/8/23 18:30	General	Inspect/Test/Pull Sample;#Blowdown/ESD	Compressor 207	Pressure tested c207 3rd stage after valve replacement	Ryan Woolsey
2/9/23 12:30	Important	Inspect/Test/Pull Sample	Inlet Feed Exchanger	lab services.	Jorge Chavez (c)
2/9/23 19:30	Inspection	Inspect/Test/Pull Sample	#3	tested flare pilot and camera everything looked normal. flare remained lit	Gil Cordero
2/10/23 4:00	Inspection	Inspect/Test/Pull Sample;#Setpoint Change	Flare Pilot #1;#Flare Pilot #2;#Flare Pilot #3	inspected flare pilot again after pilots out alarm and everything still looks good. flare remains lit. we did increase flower speed and fuel gas to flare.	Gil Cordero
2/14/23 7:00	General	Inspect/Test/Pull Sample	#3	inspected	Miguel Venegas (c)
2/14/23 7:00	Inspection	Inspect/Test/Pull Sample	See Comments	replace trasmiter pic 605 ,, and replace gauge on it	Miguel Venegas (c)
2/15/23 8:00	Inspection	Inspect/Test/Pull Sample	#3	all pilots have been inspected	Jorge Chavez (c)
2/15/23 14:30	Important	Inspect/Test/Pull Sample	Compressor 213	moved around some tarps and plastics due to high winds	Jorge Chavez (c)
2/15/23 13:30	Important	Inspect/Test/Pull Sample	See Comments	legacy came out to calibrate some LEL sensors	Jorge Chavez (c)
2/17/23 3:09	Important	Inspect/Test/Pull Sample	Copper Strip	Bomb in the oven	Joshua Urias
2/17/23 4:10	Important	Inspect/Test/Pull Sample	Copper Strip	1A on copper strip	Joshua Urias
2/17/23 9:00	General	Inspect/Test/Pull Sample	Compressor 217	white tail arrived to remove shutdowns from scrubbers	Ryan Woolsey
2/19/23 10:00	Important	Inspect/Test/Pull Sample	Compressor 213	pressure testing and de isolating 213 to have it available for startup if needed	Ryan Woolsey

2/23/23 0:00	Inspection	Inspect/Test/Pull Sample	See Comments;#Flare Pilot #1;#Flare Pilot #2;#Flare Pilot #3	alarm came up for F813, confirmed everything was working right.	Jorge Chavez (c)
2/24/23 8:15	Important	Inspect/Test/Pull Sample	See Comments	TEAMS personel, arrive to test h2s analyzers, leaks,	Miguel Venegas (c)
2/26/23 9:00	General	Inspect/Test/Pull Sample	#3	test and inspect	Miguel Venegas (c)
2/28/23 3:30	Inspection	Inspect/Test/Pull Sample	See Comments	went and inspected after receiving alarm	Jorge Chavez (c)
2/28/23 4:10	Inspection	Inspect/Test/Pull Sample	#2	received and alarm for and pilots being out, went and inspected all pilots	Jorge Chavez (c)
2/28/23 16:05	Important	Inspect/Test/Pull Sample	Compressor 213	pressured tested ,,,ok ,everything fine	Miguel Venegas (c)
3/2/23 10:30	General	Cleaned;#Inspect/Test/Pull Sample	Fire Eyes/Hot oil heater stack		Charles Tolsma
3/2/23 11:45	General	Inspect/Test/Pull Sample	See Comments	Lab service here to get samples	Charles Tolsma
3/3/23 9:55	Inspection	Inspect/Test/Pull Sample	#3	Inspect flare pilots. All pilots on and working properly	Joshua Urias
3/10/23 10:00	Important	Inspect/Test/Pull Sample	Compressor 207	turn on to inspect cylinder to see if it was going to be needed to work on.	Jorge Chavez (c)
3/10/23 10:30	Important	Start/On;#Inspect/Test/Pull Sample	Compressor 209	turned on for testing proximity switch	Jorge Chavez (c)
3/17/23 5:30	Inspection	Inspect/Test/Pull Sample	#3	Verified flare pilots were working properly	Joshua Urias
3/22/23 19:30	Inspection	Inspect/Test/Pull Sample	#3	Inspect all flare pilots and verified pilots were lit.	Joshua Urias
3/23/23 20:00	Important	Inspect/Test/Pull Sample	See Comments	flare pilot camera out. went and inspected	Jorge Chavez (c)
3/23/23 21:15	Inspection	Inspect/Test/Pull Sample	Flare Pilot #1;#Flare Pilot #2;#Flare Pilot #3	inspect flare pilots and all clear	Jorge Chavez (c)
3/25/23 20:30	General	Inspect/Test/Pull Sample	#3	inspected all flare pilots	Jorge Chavez (c)
3/27/23 20:30	Inspection	Inspect/Test/Pull Sample	Methanol Pumps	23in in the methanol tank	Jorge Chavez (c)
3/30/23 8:30	General	Inspect/Test/Pull Sample	See Comments	Lab services to pull samples	Charles Tolsma
3/31/23 9:30	Inspection	Inspect/Test/Pull Sample;#Cleaned	Fire Eyes/Hot oil heater stack	Cleaned fire eyes/ inspected hot oil heater	Joshua Urias
4/3/23 11:30	Important	Inspect/Test/Pull Sample	TEG Pumps	Test East TEG pump motor bad wrote WO	Charles Tolsma
4/5/23 8:30	General	Inspect/Test/Pull Sample	See Comments	Lab services here to pull samples	Charles Tolsma
4/5/23 11:05	Important	Inspect/Test/Pull Sample	NGL Treaters	Tested H2S 2.5 PPM dragger tube	Charles Tolsma
4/8/23 10:04	Inspection	Inspect/Test/Pull Sample	#3		Jose Pineda
4/10/23 8:23	Inspection	Inspect/Test/Pull Sample	#1		Jose Pineda
4/10/23 13:56	Inspection	Inspect/Test/Pull Sample	#3		Jose Pineda
4/11/23 12:55	General	Inspect/Test/Pull Sample	#3	inspected camera and flare pilots.	Jorge Chavez (c)
4/13/23 19:09	Inspection	Inspect/Test/Pull Sample	#3	Inspected all flare pilots and verified proper funciton.	Joshua Urias
4/13/23 20:00	Inspection	Inspect/Test/Pull Sample	#3	Inspect all pilots	Joshua Urias
4/15/23 18:25	Inspection	Inspect/Test/Pull Sample	Flare Pilot #1;#Flare Pilot #2;#Flare Pilot #3	Inspected flare for proper function. Came in multiple times within a 10 minute span	Joshua Urias
4/13/23 19:30	Inspection	Inspect/Test/Pull Sample	#3	Inspected flare for proper function	Joshua Urias
4/20/23 19:30	General	Inspect/Test/Pull Sample	See Comments	21in in methanol tank	Jorge Chavez (c)
4/20/23 17:30	Important	Inspect/Test/Pull Sample	Compressor 213	cylinder 2 , no load function	Miguel Venegas (c)
4/26/23 8:00	General	Inspect/Test/Pull Sample	See Comments	lab services cam to calibrate the inlet gas meters	Gil Cordero
4/25/23 9:30	Inspection	Inspect/Test/Pull Sample	See Comments	lab services came to take samples	Gil Cordero
4/29/23 9:30	Inspection	Inspect/Test/Pull Sample	H2S/LEL Monitors	Legacy here to test LEL/H2S monitors	Charles Tolsma
4/29/23 10:00	Inspection	Inspect/Test/Pull Sample	Fire Eyes/Hot oil heater stack		Charles Tolsma
4/29/23 14:30	Inspection	Inspect/Test/Pull Sample	H2S/LEL Monitors	Legacy has left all H2S/LEL alarms are cleared will be back Monday to finish calibrating	Charles Tolsma
5/1/23 10:30	Inspection	Inspect/Test/Pull Sample	H2S/LEL Monitors	Legacy here for calibration on LEL/H2S monitors	Charles Tolsma
5/3/23 11:30	Inspection	Inspect/Test/Pull Sample	H2S/LEL Monitors	Legacy here to calibrate LEL/H2S monitors	Charles Tolsma
5/4/23 12:15	Important	Inspect/Test/Pull Sample	Compressor 207	Pressure tested C207	Jose Pineda
5/5/23 3:15	General	Inspect/Test/Pull Sample	#3	checked and tested	Miguel Venegas (c)

5/5/23 14:00	General	Inspect/Test/Pull Sample	See Comments	33in of methanol in tank	Jorge Chavez (c)
5/6/23 10:35	General	Inspect/Test/Pull Sample	#2	Inspected and tested Flare pilots to ensure they were working properly	Jose Pineda
5/8/23 8:20	Inspection	Inspect/Test/Pull Sample	#2	Inspected and tested Flare Pilots to ensure they were working properly	Jose Pineda
5/10/23 9:20	Inspection	Inspect/Test/Pull Sample	#1	Inspected and tested Flare Pilots to ensure they were working properly	Jose Pineda
5/12/23 9:30	General	Inspect/Test/Pull Sample;#Isolate/De-isolate	Compressor 213	Pressure test on 213 after repairs and is being de isolated	Ryan Woolsey
5/12/23 9:30	Inspection	Report;#Inspect/Test/Pull Sample	#3	Recieved ir camera pilot alarm. visually verified pilots were lit.	Ryan Woolsey
5/12/23 10:30	Inspection	Inspect/Test/Pull Sample;#Report	#3	Recieved ir camera pilot alarm. visually verified pilots were lit.	Ryan Woolsey
4/26/22 23:32	Important	Inspect/Test	See Comments	Cooper strip in the oven	Jose Pineda
5/4/22 15:00	General	Inspect/Test	See Comments	Test and calibrate LEL monitors, 4, 5, 6, 8, 10, 11, 12, 13, 17, 41, Bad sensors on 42 and 7	Charles Tolsma
5/5/22 7:20	Important	Inspect/Test	See Comments	Legacy Safety in to finish testing LEL alarms	Jose Pineda
5/7/22 7:00	Important	Inspect/Test	See Comments	Legacy Safety in to test H2S monitors	Jose Pineda
5/10/22 7:00	Important	Inspect/Test;#Report	Flare	Juan is here to inspect/repair the flare out-put indicator.	(d) Jack Crews

ATTACHMENT E

CLOSURE COST ESTIMATE

Buckey Retirement Obligation Cost Estimate

10-May-23

	Qty	Unit	Unit Value	Total
MAJOR EQUIPMENT REMOVAL				
Labor				
Disassembly	1,350	man days	$1,000	$1,350,000
Trucking				
Main Compression	30	truck days	$4,000	$120,000
Ryan-Holmes Plant	45	truck days	$4,000	$180,000
Flare System	4	truck days	$4,000	$16,000
Refrigeration System	25	truck days	$4,000	$100,000
TEG System	15	truck days	$4,000	$60,000
Product Storage / Pumping	10	truck days	$4,000	$40,000
Buildings	10	truck days	$4,000	$40,000
Miscellaneous Other (Instr. Air, utilities, etc.)	20	truck days	$4,000	$80,000
Sub Total				**$1,986,000**
LABOR AND SERVICES				
Soil Remediation	500	cub yards	$300	$150,000
Recontouring, seeding, vegetation monitoring	1	T&M	$100,000	$100,000
Analytical costs	250	sample	$200	$50,000
Cranes	30	days	$20,000	$600,000
Crane Mob/Demob				$10,000
Supervision	20	days	$2,000	$40,000
Miscellaneous				$20,000
Sub Total				**$970,000**
Grand Total				**$2,956,000**

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1625 N. French Dr., Hobbs, NM 88240
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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 261007

CONDITIONS

Operator: MorningStar Operating LLC 400 W 7th St Fort Worth, TX 76102	OGRID: 330132
	Action Number: 261007
	Action Type: [UF-DP] Discharge Permit (DISCHARGE PERMIT)

CONDITIONS

Created By	Condition	Condition Date
lbarr	None	9/6/2023