Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. DRILL REENTER 1a. Type of work: 1b. Type of Well: Gas Well Oil Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing Single Zone Multiple Zone 2. Name of Operator 9. API Well No. 30-025-53464 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory 4. Location of Well (Report location clearly and in accordance with any State requirements.\*) 11. Sec., T. R. M. or Blk. and Survey or Area At surface At proposed prod. zone 14. Distance in miles and direction from nearest town or post office\* 12. County or Parish 13. State 15. Distance from proposed\* 16. No of acres in lease 17. Spacing Unit dedicated to this well location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 18. Distance from proposed location\* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above). 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. SUPO must be filed with the appropriate Forest Service Office). 6. Such other site specific information and/or plans as may be requested by the 25. Signature Name (Printed/Typed) Date Title Approved by (Signature) Date Name (Printed/Typed) Title Office Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Conditions of approval, if any, are attached. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction



#### Millie Mile 13-24 Fed Com #101H

#### APD - Geology COAs (Not in Potash or WIPP)

- For at least one well per pad (deepest well within initial development preferred) the record of the drilling rate (ROP) along with the Gamma Ray (GR) and Neutron (CNL) well logs run from TVD to surface in the vertical section of the hole shall be submitted to the BLM office as well as all other logs run on the full borehole 30 days from completion. Any other logs run on the wellbore, excluding cement remediation, should also be sent. Only digital copies of the logs in .TIF or .LAS formats are necessary; paper logs are no longer required. Logs shall be emailed to blm-cfo-geology@doimspp.onmicrosoft.com. Well completion report should have .pdf copies of any CBLs or Temp Logs run on the wellbore.
- Exceptions: In areas where there is extensive log coverage (in particular the salt zone
  adjacent to a pad), Operators are encouraged to contact BLM Geologists to discuss if
  additional GR and N logs are necessary on a pad. Operator may request a waiver of the GR
  and N log requirement due to good well control or other reasons to be approved by BLM
  Geologist prior to well completion. A waiver approved by BLM must be attached to
  completion well report to satisfy COAs.
- The top of the Rustler, top and bottom of the Salt, and the top of the Capitan Reef (if present) are to be recorded on the Completion Report.

#### Please be aware:

H2S has been reported from multiple formations within one mile of the proposed project.
 Measurements up to 600ppm were recorded from the Seven Rivers, Bone Spring, and Morrow.

Questions? Contact Chris Armistead, BLM Geologist at 575-234-5715 or carmistead@blm.gov

Released to Imaging: 9/5/2024 7:54:51 AM Approval Date: 08/09/2024

Form C-102

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazon Road, Artec, NM 87410 District IV 1220 S. St Francis Dr., NM 87505

Phone: (505) 476-3460 Fax (505) 476-3462

# State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr.

Santa Fe, NM 87505

Revised August 1, 2011 Submit one copy to appropriate

District Office AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

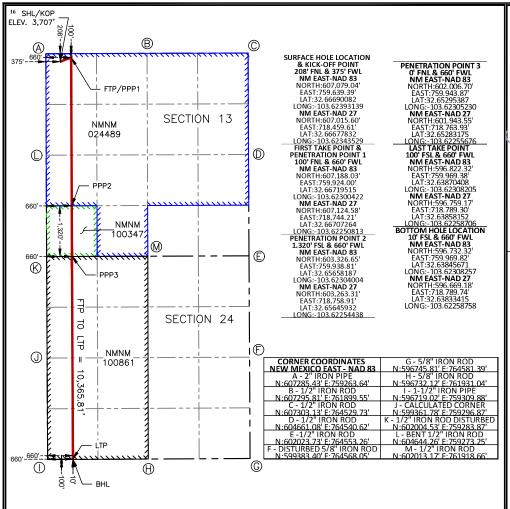
ſ	<sup>1</sup> API Numbe	er	<sup>2</sup> Pool Code		<sup>3</sup> Pool Name	
	30-025-53464	•	27230		GEM; BONE SPRING E	AST
Γ	4 Property Code		<sup>5</sup> Pr	operty Name		6 Well Number
	336234		MILLIE MIL	E 13-24 FED COI	VI	#101H
ſ	<sup>7</sup> OGRID No. 332	544		perator Name	PBEX Operations, I	<sup>9</sup> Elevation
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Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County					
D	13	19 S	33 E		208'	NORTH	375'	WEST	LEA					
"Bottom Hole Location If Different From Surface														

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	24 19 5		33 E		10'	SOUTH	660'	WEST	LEA
12 Dedicated Acres	13 Joint of	r Infill 14 C	onsolidation	Code 15 Or	rder No.				

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



#### 17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

5/13/24 Signature Date Mikah Thomas Printed Name Date mikah@pbex.com

Email Address

Date

#### 18 SURVEYOR CERTIFICATION

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

MEXIL

MARK J. MURRAY P.L.S. NO. 12177

Released to Imaging: 9/5/2024 7:54:51 AM

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# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

**OPERATOR'S NAME: EGL Resources Incorporated** 

LEASE NO.: NMNM24489

**LOCATION:** | Section 13, T.19 S., R.33 E., NMPM

COUNTY: Lea County, New Mexico

WELL NAME & NO.: Millie Mile 13-24 Fed Com 101H

BOTTOM HOLE FOOTAGE | 10'/S & 660'/W

**ATS/API ID: ATS-23-2297** 

APD ID: | 10400093843

Sundry ID: N/a

**Date APD Submitted:** N/a

WELL NAME & NO.: Millie Mile 13-24 Fed Com 102H

**BOTTOM HOLE FOOTAGE** | 10'/S & 1980'/W

ATS/API ID: ATS-23-2298 APD ID: 10400093846

APD ID: | 104000938 Sundry ID: | N/a

Date APD Submitted: N/a

WELL NAME & NO.: Millie Mile 13-24 Fed Com 202H

**BOTTOM HOLE FOOTAGE** 10°/S & 1980°/W

ATS/API ID: ATS-23-2300 APD ID: 10400093839

Sundry ID: N/a

Date APD Submitted: N/a

COA

H2S	Yes ▼		
Potash	None		
Cave/Karst Potential	Low		
Cave/Karst	☐ Critical		
Potential			
Variance	□ None	Flex Hose	Other
Wellhead	Conventional and Multibow	/  🔽	
Other	□4 String	Capitan Reef	□WIPP
		None ▼	
Other	Pilot Hole	☐ Open Annulus	
	None 🔻		
Cementing	Contingency Squeeze	Echo-Meter	Primary Cement
	None ▼	None -	Squeeze
	_		None -
Special	□ Water	<b>☑</b> COM	□ Unit
Requirements	Disposal/Injection		
Special	☐ Batch Sundry	Waste Prevention	
Requirements		None	
Special	☐ Break Testing	☐ Offline	☐ Casing
Requirements		Cementing	Clearance
Variance			

#### A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Seven Rivers** formation. As a result, the Hydrogen Sulfide area must meet **43 CFR part 3170 Subpart 3176** requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

#### **B. CASING**

- 1. The 13-3/8 inch surface casing shall be set at approximately 1835 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt when present, and below usable fresh water) and cemented to the surface. The surface hole shall be 17 1/2 inch in diameter.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8** hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 8-5/8 inch intermediate casing is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above.
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

#### C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2.

#### **Option 1:**

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 8-5/8 inch intermediate casing shoe shall be 5000 (5M) psi.

#### Option 2:

Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the 13-3/8 inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi.

- a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.

#### D. SPECIAL REQUIREMENT (S)

#### **Communitization Agreement**

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR part 3170 Subpart 3171

- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

## **GENERAL REQUIREMENTS**

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

✓ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per **43** CFR part **3170** Subpart **3172** as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

#### A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.
- B. PRESSURE CONTROL
- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR part 3170 Subpart 3172 and API STD 53 Sec. 5.3.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke

manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be

- initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to 43 CFR part 3170 Subpart 3172 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR part 3170 Subpart 3172.

#### C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

#### D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and

disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

Long Vo (LVO) 6/27/2024



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

# Operator Certification Data Report 08/15/2024

#### **Operator**

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: MIKAH THOMAS Signed on: 01/18/2024

Title: Owner

Street Address: 6102 E COUNTY ROAD 59

City: MIDLAND State: TX Zip: 79705

Phone: (432)661-7106

Email address: MIKAH.THOMAS@PERMIANCOMPLIANCE.COM

**Field** 

Representative Name: Justin Carter

**Street Address:** 

City: State: Zip:

Phone:

Email address: justin@pbex.com



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT Application Data

**APD ID:** 10400093843

**Operator Name: EGL RESOURCES INCORPORATED** 

Well Name: MILLIE MILE 13-24 FED COM

Well Type: OIL WELL

**Submission Date:** 08/29/2023

Highlighted data reflects the most recent changes **Show Final Text** 

Well Number: 101H

Well Work Type: Drill

#### **Section 1 - General**

APD ID: 10400093843 Tie to previous NOS? N **Submission Date:** 08/29/2023

**BLM Office:** Carlsbad **User: MIKAH THOMAS** Title: Owner

Federal/Indian APD: FED Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM24489 Lease Acres:

Allotted? Reservation: Surface access agreement in place?

Agreement in place? NO Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? Y

**Permitting Agent? NO** APD Operator: EGL RESOURCES INCORPORATED

Operator letter of

#### **Operator Info**

Operator Organization Name: EGL RESOURCES INCORPORATED

Operator Address: P O BOX 10886

Operator PO Box: P O BOX 10886

**Operator City: MIDLAND** State: TX

**Operator Phone:** (432)687-6560

**Operator Internet Address:** 

#### **Section 2 - Well Information**

Well in Master Development Plan? NO **Master Development Plan name:** 

Well in Master SUPO? NO Master SUPO name:

Well in Master Drilling Plan? NO Master Drilling Plan name:

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H Well API Number:

Field/Pool or Exploratory? Field and Pool Field Name: GEM Pool Name: BONE SPRING

**EAST** 

**Zip:** 79702

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL

Is the proposed well in a Helium production area? N Use Existing Well Pad? N New surface disturbance?

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name: Millie Number: 1

Well Class: HORIZONTAL

Mile 13-24 Fed Com
Number of Legs: 1

Well Work Type: Drill
Well Type: OIL WELL
Describe Well Type:
Well sub-Type: INFILL

Describe sub-type:

Distance to town: 28 Miles Distance to nearest well: 220 FT Distance to lease line: 199 FT

Reservoir well spacing assigned acres Measurement: 320 Acres

Well plat: 23\_101303\_Millie\_Mile\_13\_24\_Fed\_Com\_101H\_C102\_Rev\_2\_20240513114051.pdf

23\_101303\_Millie\_Mile\_13\_24\_Fed\_Com\_101H\_C102\_Supplemental\_Pages\_20240513114055.pdf

#### **Section 3 - Well Location Table**

Survey Type: RECTANGULAR

**Describe Survey Type:** 

Datum: NAD83 Vertical Datum: NAVD88

Survey number: 12177 Reference Datum: KELLY BUSHING

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
SHL Leg #1	208	FNL	375	FW L	19S	33E	13	Aliquot NWN W	32.66690 08	- 103.6239 313	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 24489	370 7	0	0	Υ
KOP Leg #1	208	FNL	375	FW L	19S	33E		Aliquot NWN W	32.66877 17	- 103.6233 248	LEA	1	NEW MEXI CO	F	NMNM 24489	- 508 0	884 5	878 7	Υ

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
PPP Leg #1-1	100	FNL	660	FW L	19S	33E	13	Aliquot NWN W	32.66719 52	- 103.6230 042	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 24489	- 565 3	975 4	936 0	Y
PPP Leg #1-2	0	FNL	660	FW L	19S	33E	13	Aliquot SWS W	32.65658 18	- 103.6230 4	LEA		NEW MEXI CO	F	NMNM 100347	- 565 3	136 13	936 0	Υ
PPP Leg #1-3	0	FNL	660	FW L	19S	33E	24	Aliquot NWN W	32.65295 38	- 103.6230 523	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 100861	- 565 3	149 33	936 0	Y
EXIT Leg #1	100	FSL	660	FW L	19S	33E	24	Aliquot SWS W	32.63870 4	- 103.6230 82	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 100861	- 565 3	201 00	936 0	Y
BHL Leg #1	10	FSL	660	FW L	19S	33E	24	Aliquot SWS W	32.63845 67	- 103.6230 825	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 100861	- 565 3	202 08	936 0	Y

reflects the most

recent changes



**APD ID:** 10400093843

# U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

# Drilling Plan Data Report 08/15/2024

Submission Date: 08/29/2023 Highlighted data

Operator Name: EGL RESOURCES INCORPORATED

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

Well Type: OIL WELL Well Work Type: Drill Show Final Text

## **Section 1 - Geologic Formations**

Formation			True Vertical	Measured		Mineral Resources	Producing
ID	Formation Name	Elevation		Depth	Lithologies		Formatio
13932677	QUATERNARY	3707	0	0	ALLUVIUM	NONE	N
13932678	RUSTLER	2142	1565	1565	ANHYDRITE, LIMESTONE, SANDSTONE	NONE	N
13932679	TOP SALT	1837	1870	1870	ANHYDRITE, SALT	NONE	N
13932658	BASE OF SALT	592	3115	3125	ANHYDRITE, SALT	NONE	N
13932659	YATES	422	3285	3285	ANHYDRITE, DOLOMITE, SANDSTONE, SHALE	NONE	N
13932676	SEVEN RIVERS	-3	3710	3730	ANHYDRITE, DOLOMITE, SANDSTONE, SHALE	NONE	N
13932680	QUEEN	-573	4280	4310	ANHYDRITE, DOLOMITE, SANDSTONE, SHALE	NATURAL GAS, OIL	N
13932660	GRAYBURG	-863	4570	4610	ANHYDRITE, DOLOMITE, SANDSTONE, SHALE	NONE	N
13932661	SAN ANDRES	-1393	5100	5130	ANHYDRITE, DOLOMITE, SANDSTONE, SHALE	NONE	N
13932682	CHERRY CANYON	-1963	5670	5710	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	N
13932683	BRUSHY CANYON	-2653	6360	6400	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	N
13932662	BONE SPRING LIME	-4153	7860	7890	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	N
13932663	BONE SPRING 1ST	-5373	9080	9130	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	Y

#### **Section 2 - Blowout Prevention**

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

Pressure Rating (PSI): 5M Rating Depth: 15000

**Equipment:** A 13.625" 5M Blowout Preventer system will be installed on a multi-bowl (speed head) wellhead with a 13.625" flanged casing spool. Top flange of casing spool will be set in a cellar below ground level. BOP system will consist of a single pipe ram on the bottom, mud cross, double pipe ram with blind rams on bottom and pipe rams on top, and annular preventer. Blowout preventer will be installed on top of the 13.375 surface casing and will remain installed to TD of the well. Wellhead, blowout preventer, and choke manifold diagram are included.

#### Requesting Variance? YES

**Variance request:** Variance is requested to use a co-flex hose between the BOP system and choke manifold. A typical co-flex pressure test certificate is attached. An equipment specific co-flex pressure test certificate will be on site when testing the BOP.

**Testing Procedure:** All casing strings will be tested in accordance with Onshore Order 2 III.B.1.h. The BOP system will be isolated and tested by an independent tester to 250 psi low and 5,000 psi high for 10 minutes per CFR 3172 requirements. The Surface Casing will be pressure tested to 250 psi low and 1500 psi high. Intermediate Casing will be pressure tested to 250 psi low and (.22 psi x Shoe TVD, which is equivalent to 1159.4 psi OR 1,500 psi, whichever is higher) for 30 minutes

#### **Choke Diagram Attachment:**

5M\_Choke\_EGL\_20240206155833.pdf

#### **BOP Diagram Attachment:**

5M BOP EGL 20240206155841.pdf

#### **Section 3 - Casing**

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	1835	0	1835	3707	1872	1835	J-55		OTHER - BTC	1.12 5	1.12 5	DRY	1.6	DRY	1.6
2	INTERMED IATE	9.87 5	8.625	NEW	API	N	0	5280	0	5250	3709	-1543	5280	P- 110	-	L	1.12 5	1.12 5	DRY	1.6	DRY	1.6
3	PRODUCTI ON	7.87 5	5.5	NEW	API	N	0	20208	0	20208	3709	- 16501	20208	P- 110		OTHER - DWC/C-IS +	1.12 5	1.12 5	DRY	1.6	DRY	1.6

#### **Casing Attachments**

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

1.0	CIN	~ A+	ナつへ	nm	_ntc
U.a	2111	u Al	Lau		ents
	;				

Casing ID: 1

String

**SURFACE** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

#### Casing Design Assumptions and Worksheet(s):

 $Casing\_Design\_Assmpt\_3\_string\_casing\_20240118070431.pdf$ 

13.375\_54.5000\_0.3800\_J55\_data\_sheet\_20240513115318.pdf

Casing ID: 2

String

**INTERMEDIATE** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

#### Casing Design Assumptions and Worksheet(s):

Casing\_Design\_Assmpt\_3\_string\_casing\_20240118070753.pdf

8.625\_P110HP\_TALON\_HTQ\_Casing\_Spec\_20230407121740\_20240123192426.pdf

Casing ID: 3

String

**PRODUCTION** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

#### Casing Design Assumptions and Worksheet(s):

Casing\_Design\_Assmpt\_3\_string\_casing\_20240118071151.pdf

5.5in\_P110\_EC\_Casing\_Spec\_20240123192542.pdf

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

#### **Section 4 - Cement**

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1200	751	2.22	12.5	1667. 22	100	Class C	Gel, Accelerator, LCM
SURFACE	Tail		1200	1835	479	1.84	13.2	882.3	100	Class C	Gel, Accelerator, LCM
INTERMEDIATE	Lead		0	4530	308	4.65	10.5	1432. 7	100	Class C or Class H	Fluid Loss, Retarder, LCM, Possibly Beads
INTERMEDIATE	Tail		4530	5280	130	1.83	13.2	237.9	100	Class C or Class H	Fluid Loss, Retarder, LCM
PRODUCTION	Lead		4780	9100	211	4.3	10.5	909.4	20	Class H	Fluid Loss, Retarder, LCM
PRODUCTION	Tail		9100	2020 8	1427	1.68	13	2397. 3	20	Class H	Fluid Loss, Retarder, LCM

#### **Section 5 - Circulating Medium**

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: An electronic PVT mud system will monitor flow rate, pump pressure, stroke rate, and volume. All necessary mud products (barite, bentonite, LCM) to control weight and fluid loss will be on site at all times. Mud program may change due to hole conditions. A closed loop system will be used.

Describe the mud monitoring system utilized: electronic PVT mud system

### **Circulating Medium Table**

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	НА	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1835	WATER-BASED MUD	8.3	8.3							

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

Top Depth	88 Bottom Depth	ed F PD W SALT SATURATED	7.0 Min Weight (lbs/gal)	C Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	Н	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
5280	2020 8	OIL-BASED MUD	9.7	9.7							

## **Section 6 - Test, Logging, Coring**

List of production tests including testing procedures, equipment and safety measures:

A 2-person mud logging program will be used from 3000 to TD. GR log will be acquired by MWD tools from the intermediate casing to TD.

List of open and cased hole logs run in the well:

GAMMA RAY LOG,

Coring operation description for the well:

No core or drill stem test is planned.

#### **Section 7 - Pressure**

Anticipated Bottom Hole Pressure: 5980 Anticipated Surface Pressure: 3920

Anticipated Bottom Hole Temperature(F): 215

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

**Contingency Plans geohazards** 

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

EGL\_H2S\_Plan\_20240118071959.pdf

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

#### **Section 8 - Other Information**

#### Proposed horizontal/directional/multi-lateral plan submission:

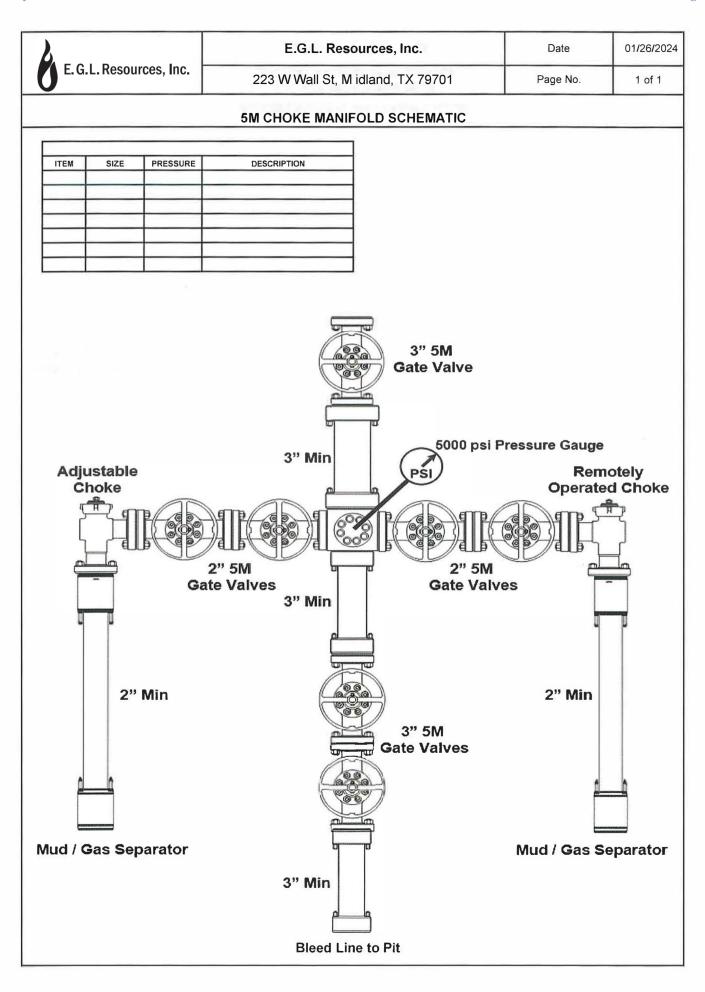
Millie\_Mile\_13\_24\_Fed\_Com\_101H\_\_Plan\_3\_\_20240513121235.pdf
Millie\_Mile\_13\_24\_Fed\_Com\_101H\_\_Plan\_3\_AC\_Report\_20240513121237.pdf
Millie\_Mile\_13\_24\_Fed\_Com\_101H\_\_Plan\_3\_Plot\_20240513121240.pdf

#### Other proposed operations facets description:

#### Other proposed operations facets attachment:

Choke\_Kill\_Line\_Certs\_20240513115619.pdf
Rig\_597ST\_\_\_l2\_\_Rig\_Layout\_Pad\_\_20240513115627.pdf
Speedhead\_Specs\_3string\_20230407122522\_20240513115630.pdf
Wellhead\_3T\_Design\_20240513115633.pdf

#### **Other Variance attachment:**

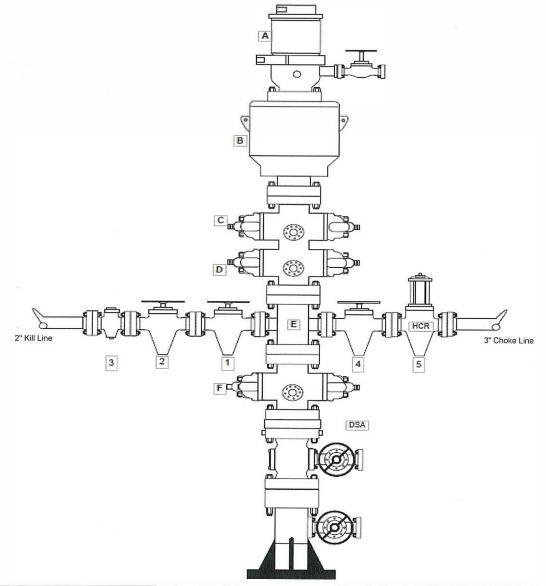




E.G.L. Resources, Inc.	Date	1/26/2024
223 W Wall St, Midland, TX 79701	Page No.	1 of 1

#### **5M BLOWOUT PREVENTER SCHEMATIC**

	BLO	WOUT PREVENTOR	COMPONENTS
ITEM	SIZE	PRESSURE	DESCRIPTION
Α	13-5/8"	1,500 psi	Rotating Head + Valve
В	13-5/8"	5,000 psi	Annular Preventer
С	13-5/8"	5,000 psi	Pipe Rams
D	13-5/8"	5,000 psi	Blind Rams
E	13-5/8"	5,000 psi	Mud Cross
F	13-5/8"	5,000 psi	Pipe Rams



TEM	SIZE	PRESSURE	DESCRIPTION
1	2"	5,000 psi	Gate Valve
2	2"	5,000 psi	Gate Valve
3	2"	5,000 psi	Check Valve

ITEM         SIZE         PRESSURE         DESCRIPTION           4         3"         5,000 psi         Gate Valve           5         3"         5,000 psi         HCR Valve			CHOKE LINE	
- Cate valve	ITEM	SIZE	PRESSURE	DESCRIPTION
5 3" 5,000 psi HCR Valve	4	3"	5,000 psi	Gate Valve
	5	3"	5,000 psi	HCR Valve

#### 3-string Casing Design Assumptions

#### **Surface Casing**

Collapse:  $DF_C = 1.125$ 

- a. Full internal Evacuation: Collapse force is equal to mud gradient (0.433 psi/ft) in which the casing will be run and internal evacuation of casing.
- b. Cementing: Collapse force is equal net force of the planned cement slurry gradient (0.718 psi/ft) in which the casing will be run and internal force equivalent to fresh water displacement gradient (0.433 psi/ft).

Burst:  $DF_B = 1.125$ 

a. Casing Pressure Test: According to BLM Onshore Order No. 2 with 0.22 psi/ft or 1500 psi, whichever is greater but not to exceed 70% of the minimum internal yield.

Tensile:  $DF_T = 1.60$ 

 a. Overpull: A tensile force of 100,000 lbs over string weight with a buoyancy factor of 0.8727 in water (8.33 ppg).

#### **Intermediate Casing**

Collapse:  $DF_c = 1.125$ 

- a. Full Internal Evacuation: Collapse force is equal to mud gradient (0.531 psi/ft) in which the casing will be run and internal evacuation of casing.
- b. Cementing: Collapse force is equal net force of the planned cement slurry gradient (0.626 psi/ft) in which the casing will be run and internal force equivalent to the displacement of fluid gradient.

Burst:  $DF_B = 1.125$ 

- a. Casing Pressure Test: According to BLM Onshore Order No. 2 with 0.22 psi/ft or 1500 psi, whichever is greater but to exceed 70% of the minimum internal yield.
- b. Gas Kick: Internal burst load of a 50 bbl gas kick at the casing with drill pipe in the hole. External force will be 10.2 ppg brine water gradient (0.531 psi/ft) and internal force will be with 10.0 ppg brine water gradient (0.521 psi/ft) with gas kick.

Tensile:  $DF_T = 1.60$ 

a. Overpull: A tensile force of 100,000 lbs over string weight with a buoyancy factor of 0.8441 in brine water (10.2 ppg).

#### **Production Casing**

Collapse:  $DF_C = 1.125$ 

- a. Full Internal Evacuation: Collapse force is equal to mud gradient (0.531 psi/ft) in which the casing will be run and internal evacuation of casing.
- b. Cementing: Collapse force is equal net force of the planned cement slurry gradient (0.688 psi/ft) in which the casing will be run and internal force equivalent to fresh water displacement gradient (0.433 psi/ft).

Burst:  $DF_B = 1.125$ 

a. Pressure Test: Pressure test will be to 80% of Internal Yield Pressure of casing intended for fracture stimulation.

Tensile:  $DF_T = 1.60$ 

a. Overpull: A tensile force of 100,000 lbs over string weight with a buoyancy factor of 0.8472 in oil-based mud (10.0 ppg).

**MECHANICAL PROPERTIES** 

# U. S. Steel Tubular Products 13.375" 54.50lb/ft (0.380" Wall) J55

Pipe

11/1/2023 1:00:21 PM

Minimum Yield Strength	55,000				psi	
Maximum Yield Strength	80,000				psi	
Minimum Tensile Strength	75,000				psi	
DIMENSIONS	Pipe	втс	LTC	STC		
Outside Diameter	13.375	14.375	0.000	14.375	in.	
Wall Thickness	0.380				in.	
Inside Diameter	12.615	12.615		12.615	in.	
Standard Drift	12.459	12.459	12.459	12.459	in.	
Alternate Drift		12.500			in.	
Nominal Linear Weight, T&C	54.50				lb/ft	
Plain End Weight	52.79				lb/ft	
PERFORMANCE	Pipe	втс	LTC	STC		
PERFORMANCE  Minimum Collapse Pressure	<b>Pipe</b> 1,130	<b>BTC</b> 1,130	<b>LTC</b> 1,130	<b>STC</b> 1,130	psi	
	•				psi psi	 
Minimum Collapse Pressure	1,130	1,130	1,130	1,130		  
Minimum Collapse Pressure Minimum Internal Yield Pressure	1,130 2,740	1,130 2,740	1,130 2,740	1,130 2,740	psi	   
Minimum Collapse Pressure Minimum Internal Yield Pressure Minimum Pipe Body Yield Strength	1,130 2,740 853	1,130 2,740 	1,130 2,740	1,130 2,740 	psi 1,000 lbs	   
Minimum Collapse Pressure Minimum Internal Yield Pressure Minimum Pipe Body Yield Strength Joint Strength	1,130 2,740 853	1,130 2,740  909	1,130 2,740 	1,130 2,740  514	psi 1,000 lbs 1,000 lbs	   
Minimum Collapse Pressure Minimum Internal Yield Pressure Minimum Pipe Body Yield Strength Joint Strength Reference Length	1,130 2,740 853 	1,130 2,740  909 11,119	1,130 2,740  	1,130 2,740  514 6,290	psi 1,000 lbs 1,000 lbs	   
Minimum Collapse Pressure Minimum Internal Yield Pressure Minimum Pipe Body Yield Strength Joint Strength Reference Length  MAKE-UP DATA	1,130 2,740 853   <b>Pipe</b>	1,130 2,740  909 11,119 BTC	1,130 2,740    LTC	1,130 2,740  514 6,290	psi 1,000 lbs 1,000 lbs ft	    
Minimum Collapse Pressure Minimum Internal Yield Pressure Minimum Pipe Body Yield Strength Joint Strength Reference Length  MAKE-UP DATA Make-Up Loss	1,130 2,740 853   <b>Pipe</b>	1,130 2,740  909 11,119 <b>BTC</b> 4.81	1,130 2,740    LTC	1,130 2,740  514 6,290 <b>STC</b> 3.50	psi 1,000 lbs 1,000 lbs ft in.	

втс

LTC

STC

# UNCONTROLLED

#### **Notes**

#### **Legal Notice**

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U. S. Steel Tubular Products 460 Wildwood Forest Drive, Suite 300S Spring, Texas 77380 1-877-893-9461 connections@uss.com www.usstubular.com

#### 3-string Casing Design Assumptions

#### **Surface Casing**

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Tensile:  $DF_T = 1.60$ 

 a. Overpull: A tensile force of 100,000 lbs over string weight with a buoyancy factor of 0.8727 in water (8.33 ppg).

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Collapse:  $DF_c = 1.125$ 

- a. Full Internal Evacuation: Collapse force is equal to mud gradient (0.531 psi/ft) in which the casing will be run and internal evacuation of casing.
- b. Cementing: Collapse force is equal net force of the planned cement slurry gradient (0.626 psi/ft) in which the casing will be run and internal force equivalent to the displacement of fluid gradient.

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Tensile:  $DF_T = 1.60$ 

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a. Overpull: A tensile force of 100,000 lbs over string weight with a buoyancy factor of 0.8472 in oil-based mud (10.0 ppg).

Received by OCD: 8/19/2024 12:31:24 PM

# **Technical Specifications**

Connection Type: Size(O.D.): Weight (Wall): Grade:

DWC/C-IS PLUS Casing 5-1/2 in 20.00 lb/ft (0.361 in) VST P110 EC

standard

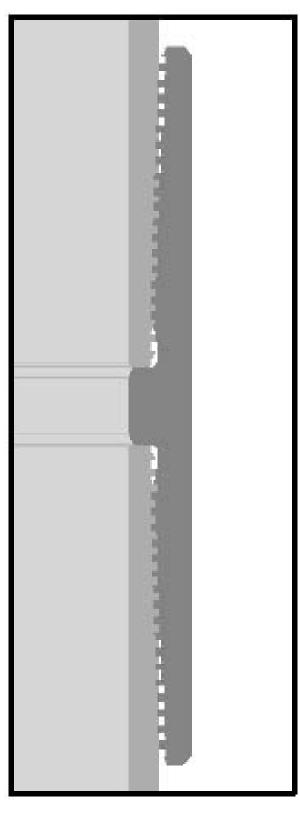
VST P110 EC 125,000 135,000	Material Grade Minimum Yield Strength (psi) Minimum Ultimate Strength (psi)
5.500 4.778 0.361 20.00 19.83 5.828	Pipe Dimensions Nominal Pipe Body O.D. (in) Nominal Pipe Body I.D.(in) Nominal Wall Thickness (in) Nominal Weight (lbs/ft) Plain End Weight (lbs/ft) Nominal Pipe Body Area (sq in)
729,000 12,090 14,360 13,100	Pipe Body Performance Properties Minimum Pipe Body Yield Strength (lbs) Minimum Collapse Pressure (psi) Minimum Internal Yield Pressure (psi) Hydrostatic Test Pressure (psi)
6.300 4.778 4.653 4.13 5.828 100.0	Connection Dimensions Connection O.D. (in) Connection I.D. (in) Connection Drift Diameter (in) Make-up Loss (in) Critical Area (sq in) Joint Efficiency (%)
729,000 26,040 728,000 729,000 12,090 14,360 104.2	Connection Performance Properties Joint Strength (lbs) Reference String Length (ft) 1.4 Design Factor API Joint Strength (lbs) Compression Rating (lbs) API Collapse Pressure Rating (psi) API Internal Pressure Resistance (psi) Maximum Uniaxial Bend Rating [degrees/100 ft]
16,600 19,100 21,600	Appoximated Field End Torque Values Minimum Final Torque (ft-lbs) Maximum Final Torque (ft-lbs) Connection Yield Torque (ft-lbs)



VAM USA 4424 W. Sam Houston Pkwy. Suite 150 Houston, TX 77041 Phone: 713-479-3200

Fax: 713-479-3234

E-mail: VAMUSAsales@vam\_usa.com



For detailed information on performance properties, refer to DWC Connection Data Notes on following page(s).

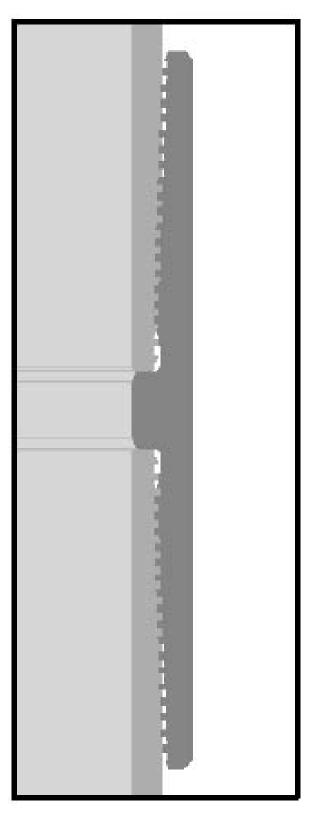
Connection specifications within the control of VAM USA were correct as of the date printed. Specifications are subject to change without notice. Certain connection specifications are dependent on the mechanical properties of the pipe. Mechanical properties of mill proprietary pipe grades were obtained from mill publications and are subject to change. Properties of mill proprietary grades should be confirmed with the mill. Users are advised to obtain current connection specifications and verify pipe mechanical properties for each application.

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## DWC Connection Data Notes:

- DWC connections are available with a seal ring (SR) option.
- All standard DWC/C connections are interchangeable for a give pipe OD. DWC connections are interchangeable with DWC/C-SR connections of the same OD and wall.
- Connection performance properties are based on nominal pipe body and connection dimensions.
- DWC connection internal and external pressure resistance is calculated using the API rating for buttress connections. API Internal pressure resistance is calculated from formulas 31, 32, and 35 in the API Bulletin 5C3.
- DWC joint strength is the minimum pipe body yield strength multiplied by the connection critical area.
- API joint strength is for reference only. It is calculated from formulas 42 and 43 in the API Bulletin 5C3.
- Bending efficiency is equal to the compression efficiency.
- The torque values listed are recommended. The actual torque required may be affected by field conditions such as temperature, thread compound, speed of make-up, weather conditions, etc.
- Connection yield torque is not to be exceeded.
- Reference string length is calculated by dividing the joint strength by both the nominal weight in air and a design factor (DF) of 1.4. These values are offered for reference only and do not include load factors such as bending, buoyancy, temperature, load dynamics, etc.
- DWC connections will accommodate API standard drift diameters.



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2/6/2015

#### 3-string Casing Design Assumptions

#### **Surface Casing**

Collapse:  $DF_C = 1.125$ 

- a. Full internal Evacuation: Collapse force is equal to mud gradient (0.433 psi/ft) in which the casing will be run and internal evacuation of casing.
- b. Cementing: Collapse force is equal net force of the planned cement slurry gradient (0.718 psi/ft) in which the casing will be run and internal force equivalent to fresh water displacement gradient (0.433 psi/ft).

Burst:  $DF_B = 1.125$ 

a. Casing Pressure Test: According to BLM Onshore Order No. 2 with 0.22 psi/ft or 1500 psi, whichever is greater but not to exceed 70% of the minimum internal yield.

Tensile:  $DF_T = 1.60$ 

 a. Overpull: A tensile force of 100,000 lbs over string weight with a buoyancy factor of 0.8727 in water (8.33 ppg).

#### **Intermediate Casing**

Collapse:  $DF_c = 1.125$ 

- a. Full Internal Evacuation: Collapse force is equal to mud gradient (0.531 psi/ft) in which the casing will be run and internal evacuation of casing.
- b. Cementing: Collapse force is equal net force of the planned cement slurry gradient (0.626 psi/ft) in which the casing will be run and internal force equivalent to the displacement of fluid gradient.

Burst:  $DF_B = 1.125$ 

- a. Casing Pressure Test: According to BLM Onshore Order No. 2 with 0.22 psi/ft or 1500 psi, whichever is greater but to exceed 70% of the minimum internal yield.
- b. Gas Kick: Internal burst load of a 50 bbl gas kick at the casing with drill pipe in the hole. External force will be 10.2 ppg brine water gradient (0.531 psi/ft) and internal force will be with 10.0 ppg brine water gradient (0.521 psi/ft) with gas kick.

Tensile:  $DF_T = 1.60$ 

a. Overpull: A tensile force of 100,000 lbs over string weight with a buoyancy factor of 0.8441 in brine water (10.2 ppg).

#### **Production Casing**

Collapse:  $DF_C = 1.125$ 

- a. Full Internal Evacuation: Collapse force is equal to mud gradient (0.531 psi/ft) in which the casing will be run and internal evacuation of casing.
- b. Cementing: Collapse force is equal net force of the planned cement slurry gradient (0.688 psi/ft) in which the casing will be run and internal force equivalent to fresh water displacement gradient (0.433 psi/ft).

Burst:  $DF_B = 1.125$ 

a. Pressure Test: Pressure test will be to 80% of Internal Yield Pressure of casing intended for fracture stimulation.

Tensile:  $DF_T = 1.60$ 

a. Overpull: A tensile force of 100,000 lbs over string weight with a buoyancy factor of 0.8472 in oil-based mud (10.0 ppg).

#### DRAFT



#### **U. S. Steel Tubular Products**

#### 8 5/8 32.00 lb (0.352) P110 HP

#### **USS-TALON HTQ™RD9.000**

	PIPE	CONNECTION			
MECHANICAL PROPERTIES				[6]	
Minimum Yield Strength	125,000		psi		
Maximum Yield Strength	140,000		psi		
Minimum Tensile Strength	130,000		psi		_
DIMENSIONS					UNCONTROLLED
Outside Diameter	8.625	9.000	in.		
Wall Thickness	0.352		in.		No.
Inside Diameter	7.921	7.921	in.		Ξ
Drift - API	7.796		in.		8
Nominal Linear Weight, T&C	32.00	32.00	lbs/ft		Z
Plain End Weight	31.13		lbs/ft		_
SECTION AREA					
Cross Sectional Area   Critical Area	9.149	9.149	sq. in.		
Joint Efficiency		100%	%	[2]	
PERFORMANCE					
Minimum Collapse Pressure	4,530	4,530	psi		
Minimum Internal Yield Pressure	8,930	8,930	psi		
Minimum Pipe Body Yield Strength	1,144,000		lbs		
Joint Strength		1,144,000	lbs		
Compression Rating		1,144,000	lbs		
Reference Length		23,833	ft	[5]	_
Maximum Uniaxial Bend Rating		66.4	deg/100 ft	[3]	Ū
MAKE-UP DATA					
Minimum Make-Up Torque		20,200	ft-lbs	[4]	_ <u>_</u>
Maximum Make-Up Torque		26,000	ft-lbs	[4]	2
Maximum Operating Torque		119,000	ft-lbs	[4]	Š
Make-Up Loss		5.58	in.		_

#### Notes:

- Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
- 2) Compressive & Tensile Connection Efficiencies are calculated by dividing the connection critical area by the pipe body area.
- 3) Uniaxial bending rating shown is structural only, and equal to compression efficiency.
- 4) Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
- Reference length is calculated by joint strength divided by Nominal Linear Weight, T&C with 1.5 safety factor.
- 6) Coupling must meet minimum mechanical properties of the pipe.

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Manual USS Product Data Sheet 2019 Rev29



# H<sub>2</sub>S Drilling Operations Plan

- a. All personnel will be trained in H<sub>2</sub>S working conditions as required by Onshore Order 6 before drilling out of the surface casing.
- b. Two briefing areas will be established. Each will be at least 150' from the wellhead, perpendicular from one another, and easily entered and exited. See  $H_2S$  page 5 for more details.
- c. A remote-controlled choke, mud-gas separator, and a rotating head will be installed before drilling or testing any formation expected to contain H<sub>2</sub>S.
- d. H<sub>2</sub>S Safety Equipment/Systems:
  - i. Well Control Equipment
  - Flare line will be ≥150' from the wellhead and ignited by a pilot light.
  - Beware of  $SO_2$  created by flaring.
  - Choke manifold will include a remotely operated choke.
  - Mud gas separator
  - II. Protective Equipment for Essential Personnel
  - Every person on site will be required to wear a personal H<sub>2</sub>S and SO<sub>2</sub> monitor at all times while on site. Monitors will not be worn on hard hats. Monitors will be worn on the front of the chest.
  - One self-contained breathing apparatus (SCBA) 30-minute rescue pack will be at each briefing area. Two 30-minute SCBA packs will be stored in the safety trailer.
  - Four work/escape packs will be on the rig floor. Each pack will have a long enough hose to allow unimpaired work activity.
  - Four emergency escape packs will be in the doghouse for emergency evacuation.
  - Hand signals will be used when wearing protective breathing apparatus.
  - Stokes litter or stretcher
  - Two full OSHA compliant body harnesses
  - A 100-foot long x 5/8 inch OSHA compliant rope
  - One 20-pound ABC fire extinguisher

#### iii. H<sub>2</sub>S Detection & Monitoring Equipment

- Every person on site will be required to wear a personal  $H_2S$  and  $SO_2$  monitor at all times while on site. Monitors will not be worn on hard hats. Monitors will be worn on the front of the chest.
- A stationary detector with three sensors will be in the doghouse.
- Sensors will be installed on the rig floor, bell nipple, and at the end of the flow line or where drilling fluids are discharged.
- Visual alarm will be triggered at 10 ppm.
- Audible alarm will be triggered at 10 ppm.
- Calibration will occur at least every 30 days. Gas sample tubes will be kept in the safety trailer.

#### iv. Visual Warning System

- Color-coded H<sub>2</sub>S condition sign will be set at the entrance to the pad.
- Color-coded condition flag will be installed to indicate current H₂S conditions.
- Two wind socks will be installed that will be visible from all sides.

#### v. Mud Program

- A water based mud with a pH of  $\geq 10$  will be maintained to control corrosion, H<sub>2</sub>S gas returns to the surface, and minimize sulfide stress cracking and embrittlement.
- Drilling mud containing  $H_2S$  gas will be degassed at an optimum location for the rig configuration.
- This gas will be piped into the flare system.
- Enough mud additives will be on location to scavenge and/or neutralize H<sub>2</sub>S where formation pressures are unknown.

# vi. Metallurgy

- All equipment that has the potential to be exposed to H<sub>2</sub>S will be suitable for H<sub>2</sub>S service.
- Equipment that will meet these metallurgical standards include the drill string, casing, wellhead, BOP assembly, casing head and spool, rotating head, kill lines, choke, choke manifold and lines, valves, mud-gas separators, DST tools, test units, tubing, flanges, and other related equipment (elastomer packings and seals).

#### vii. Communication from well site

 Cell phones and/or two-way radios will be used to communicate from the well site.

#### Hydrogen Sulfide Drilling Operations Plan EGL Resources, Inc Section 15, T19S, R33E Lea County, NM

#### **Coordination with Authorities**

It is EGL's responsibility to work with the proper agencies to properly respond to a major release. Every response by EGL must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER). In case of release, the OCD must be notified no later than four hours after start of release. When reporting a release, EGL must possess necessary information about the release such as: directions to wellsite, wind direction, volume, and location of release, etc. See below for contact information of company, local, state, and national officials and agencies.

# EGL Resources, Inc Office .432-687-6560 Hobbs Agencies .911 City Police .575-397-9265 Fire Department .575-397-9308 State Police .575-885-3138 Emergency Planning .575-391-2983 New Mexico OCD .575-393-6161 (EMERGENCY: 575-370-3186) Bureau of Land Management .575-393-3612



# E.G.L. Resources, Inc.

Lea, County NM (NAD 83)
Millie Mile Pad
Millie Mile 13-24 Fed Com 101H

Wellbore #1

Plan: Plan 3

# **Standard Planning Report**

23 April, 2024







Database: 1 - EDM Production
Company: E.G.L. Resources, Inc.
Project: Lea, County NM (NAD 83)
Site: Millie Mile Pad

Millie Mile Pad
Millie Mile 13-24 Fed Com 101H

Wellbore: Wellbore #1

Design: Plan 3

Well:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Millie Mile 13-24 Fed Com 101H RKB 25' + GL 3708.57 @ 3733.57usft RKB 25' + GL 3708.57 @ 3733.57usft

Grid

Minimum Curvature

Project Lea, County NM (NAD 83)

Map System:US State Plane 1983Geo Datum:North American Datum 1983Map Zone:New Mexico Eastern Zone

System Datum:

Mean Sea Level

Site Millie Mile Pad

 Site Position:
 Northing:
 607,084.97 usft
 Latitude:
 32.66691567

 From:
 Map
 Easting:
 759,718.58 usft
 Longitude:
 -103.62367395

Position Uncertainty: 0.00 usft Slot Radius: 13-3/16 "

Well Millie Mile 13-24 Fed Com 101H

 Well Position
 +N/-S
 0.00 usft
 Northing:
 607,084.97 usft
 Latitude:
 32.66691714

 +E/-W
 0.00 usft
 Easting:
 759,638.58 usft
 Longitude:
 -103.62393391

Position Uncertainty 0.50 usft Wellhead Elevation: usft Ground Level: 3,708.57 usft

Grid Convergence: 0.38  $^{\circ}$ 

Wellbore #1 Wellbore Declination Magnetics **Model Name** Sample Date Dip Angle Field Strength (°) (°) (nT) 47,546.00000000 **BGGM 2023** 12/14/2023 6.49 60.47

Design Plan 3 Audit Notes: PLAN Tie On Depth: 0.00 Version: Phase: Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 180.00 0.00 0.00 0.00

Plan Survey Tool Program	Date	4/23/2024				
Depth From	Depth To	(usft)	(usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	20,207.63	Plan 3 (Wellbore #1)	MWD+IFR1+MS		
OWSG MWD + IFR1 + Multi-St						





Database: 1 - EDM Production
Company: E.G.L. Resources, Inc.
Project: Lea, County NM (NAD 83)

Site: Millie Mile Pad

Well: Millie Mile 13-24 Fed Com 101H

Wellbore: Wellbore #1

Design: Plan 3

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Millie Mile 13-24 Fed Com 101H RKB 25' + GL 3708.57 @ 3733.57usft RKB 25' + GL 3708.57 @ 3733.57usft

Grid

an Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,996.21	9.92	15.14	1,993.73	41.38	11.20	2.00	2.00	0.00	15.14	
5,562.11	9.92	15.14	5,506.27	634.60	171.72	0.00	0.00	0.00	0.00	
6,058.31	0.00	0.01	6,000.00	675.98	182.92	2.00	-2.00	0.00	180.00	
8,845.35	0.00	0.01	8,787.04	675.98	182.92	0.00	0.00	0.00	0.01	
9,745.35	90.00	172.20	9,360.00	108.32	260.68	10.00	10.00	0.00	172.20	
10,122.83	90.00	179.75	9,360.00	-267.95	287.16	2.00	0.00	2.00	90.00	
20,207.63	90.00	179.75	9,360.00	-10,352.65	331.24	0.00	0.00	0.00	0.00	MM 101H PBHL(10'





Database: 1 - EDM Production
Company: E.G.L. Resources, Inc.
Project: Lea, County NM (NAD 83)

Site: Millie Mile Pad

Well: Millie Mile 13-24 Fed Com 101H

Wellbore: Wellbore #1

Design: Plan 3

Local Co-ordinate Reference: TVD Reference:

MD Reference: North Reference:

**Survey Calculation Method:** 

Well Millie Mile 13-24 Fed Com 101H RKB 25' + GL 3708.57 @ 3733.57usft RKB 25' + GL 3708.57 @ 3733.57usft Grid

Design:	Plan 3								
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00 300.00	0.00 0.00	0.00 0.00	200.00 300.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00 800.00	0.00	0.00 0.00	700.00 800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00 0.00	0.00	900.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.									
1,600.00	2.00	15.14	1,599.98	1.68	0.46	-1.68	2.00	2.00	0.00
1,700.00	4.00	15.14	1,699.84	6.74	1.82	-6.74	2.00	2.00	0.00
1,800.00	6.00	15.14	1,799.45	15.15	4.10	-15.15	2.00	2.00	0.00
1,900.00	8.00	15.14	1,898.70	26.91	7.28	-26.91	2.00	2.00	0.00
1,996.21	9.92	15.14	1,993.73	41.38	11.20	-41.38	2.00	2.00	0.00
	hold at 1996.20								
2,000.00	9.92	15.14	1,997.47	42.01	11.37	-42.01	0.00	0.00	0.00
2,100.00	9.92	15.14	2,095.97	58.65	15.87	-58.65	0.00	0.00	0.00
2,200.00	9.92	15.14	2,194.47	75.28	20.37	-75.28	0.00	0.00	0.00
2,300.00	9.92	15.14	2,292.98	91.92	24.87	-91.92	0.00	0.00	0.00
2,400.00	9.92	15.14	2,391.48	108.55	29.37	-108.55	0.00	0.00	0.00
2,500.00	9.92	15.14	2,489.98	125.19	33.88	-125.19	0.00	0.00	0.00
2,600.00	9.92	15.14	2,588.49	141.83	38.38	-141.83	0.00	0.00	0.00
2,700.00	9.92	15.14	2,686.99	158.46	42.88	-158.46	0.00	0.00	0.00
2,800.00	9.92	15.14	2,785.50	175.10	47.38	-175.10	0.00	0.00	0.00
2,900.00	9.92	15.14	2,884.00	191.73	51.88	-191.73	0.00	0.00	0.00
3,000.00	9.92	15.14	2,982.50	208.37	56.38	-208.37	0.00	0.00	0.00
3,100.00	9.92	15.14	3,081.01	225.01	60.89	-225.01	0.00	0.00	0.00
3,200.00	9.92	15.14	3,179.51	241.64	65.39	-241.64	0.00	0.00	0.00
3,300.00	9.92	15.14	3,278.01	258.28	69.89	-258.28	0.00	0.00	0.00
3,400.00	9.92	15.14	3,376.52	274.91	74.39	-274.91	0.00	0.00	0.00
3,500.00	9.92	15.14	3,475.02	291.55	78.89	-291.55	0.00	0.00	0.00
3,600.00	9.92	15.14	3,573.52	308.19	83.39	-308.19	0.00	0.00	0.00
3,700.00 3,800.00	9.92 9.92	15.14 15.14	3,672.03 3,770.53	324.82 341.46	87.90 92.40	-324.82 -341.46	0.00 0.00	0.00 0.00	0.00 0.00
3,900.00	9.92	15.14	3,869.04	358.09	96.90	-358.09	0.00	0.00	0.00
4,000.00	9.92	15.14	3,967.54	374.73	101.40	-374.73	0.00	0.00	0.00
4,100.00 4,200.00	9.92 9.92	15.14 15.14	4,066.04 4,164.55	391.37 408.00	105.90 110.41	-391.37 -408.00	0.00 0.00	0.00 0.00	0.00 0.00
4,200.00	9.92 9.92	15.14	4,164.55	408.00 424.64	110.41	-408.00 -424.64	0.00	0.00	0.00
4,400.00	9.92	15.14	4,361.55	441.27	119.41	-441.27	0.00	0.00	0.00
4,500.00	9.92	15.14 15.14	4,460.06	457.91	123.91	-457.91	0.00	0.00	0.00
4,600.00 4,700.00	9.92 9.92	15.14 15.14	4,558.56 4,657.07	474.55 491.18	128.41 132.91	-474.55 -491.18	0.00 0.00	0.00 0.00	0.00 0.00
4,800.00	9.92	15.14	4,057.07	507.82	137.42	-491.16 -507.82	0.00	0.00	0.00
4,900.00	9.92	15.14	4,854.07	524.45	141.92	-524.45 544.00	0.00	0.00	0.00
5,000.00	9.92	15.14	4,952.58	541.09	146.42	-541.09	0.00	0.00	0.00



Well:

#### **Planning Report**



Database: 1 - EDM Production
Company: E.G.L. Resources, Inc.
Project: Lea, County NM (NAD 83)

Millie Mile 13-24 Fed Com 101H

Site: Millie Mile Pad

Wellbore: Wellbore #1

Design: Plan 3

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Well Millie Mile 13-24 Fed Com 101H RKB 25' + GL 3708.57 @ 3733.57usft RKB 25' + GL 3708.57 @ 3733.57usft Grid

nned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,100.00 5,200.00 5,300.00	9.92	15.14 15.14 15.14	5,051.08 5,149.58 5,248.09	557.73 574.36 591.00	150.92 155.42 159.92	-557.73 -574.36 -591.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
5,400.00	9.92	15.14	5,346.59	607.63	164.43	-607.63	0.00	0.00	0.00
5,500.00 5,562.11		15.14 15.14	5,445.10 5,506.27	624.27 634.60	168.93 171.72	-624.27 -634.60	0.00 0.00	0.00 0.00	0.00 0.00
Start Drop									
5,600.00 5,700.00		15.14 15.14	5,543.64 5,642.62	640.67 654.38	173.36 177.07	-640.67 -654.38	2.00 2.00	-2.00 -2.00	0.00 0.00
5,800.00 5,900.00		15.14 15.14	5,742.04 5,841.77	664.75 671.76	179.88 181.78	-664.75 -671.76	2.00 2.00	-2.00 -2.00	0.00 0.00
6,000.00		15.14	5,941.69	675.41	182.76	-675.41	2.00	-2.00 -2.00	0.00
6,058.31	0.00	0.01	6,000.00	675.98	182.92	-675.98	2.00	-2.00	0.00
6,100.00	. <b>04 hold at 6058.3</b> ′ 0.00	0.00	6,041.69	675.98	182.92	-675.98	0.00	0.00	0.00
6,200.00		0.00	6,141.69	675.98	182.92	-675.98	0.00	0.00	0.00
6,300.00	0.00	0.00	6,241.69	675.98	182.92	-675.98	0.00	0.00	0.00
6,400.00	0.00	0.00	6,341.69	675.98	182.92	-675.98	0.00	0.00	0.00
6,500.00	0.00	0.00	6,441.69	675.98	182.92	-675.98	0.00	0.00	0.00
6,600.00		0.00	6,541.69	675.98	182.92	-675.98	0.00	0.00	0.00
6,700.00		0.00	6,641.69	675.98	182.92	-675.98	0.00	0.00	0.00
6,800.00		0.00	6,741.69	675.98	182.92	-675.98	0.00	0.00	0.00
6,900.00		0.00	6,841.69	675.98	182.92	-675.98	0.00	0.00	0.00
7,000.00		0.00	6,941.69	675.98	182.92	-675.98	0.00	0.00	0.00
7,100.00 7,200.00		0.00	7,041.69 7,141.69	675.98 675.98	182.92 182.92	-675.98 -675.98	0.00	0.00	0.00
7,300.00		0.00	7,141.69	675.98	182.92	-675.98	0.00	0.00	0.00
7,400.00		0.00	7,341.69	675.98	182.92	-675.98	0.00	0.00	0.00
7,500.00		0.00	7,441.69	675.98	182.92	-675.98	0.00	0.00	0.00
				675.98	182.92			0.00	
7,600.00 7,700.00		0.00	7,541.69 7,641.69	675.98 675.98	182.92 182.92	-675.98 -675.98	0.00	0.00	0.00 0.00
7,800.00		0.00	7,741.69	675.98	182.92	-675.98	0.00	0.00	0.00
7,900.00		0.00	7,841.69	675.98	182.92	-675.98	0.00	0.00	0.00
8,000.00		0.00	7,941.69	675.98	182.92	-675.98	0.00	0.00	0.00
8,100.00		0.00	8,041.69	675.98	182.92	-675.98	0.00	0.00	0.00
8,200.00		0.00	8,141.69	675.98	182.92	-675.98	0.00	0.00	0.00
8,300.00	0.00	0.00	8,241.69	675.98	182.92	-675.98	0.00	0.00	0.00
8,400.00	0.00	0.00	8,341.69	675.98	182.92	-675.98	0.00	0.00	0.00
8,500.00		0.00	8,441.69	675.98	182.92	-675.98	0.00	0.00	0.00
8,600.00	0.00	0.00	8,541.69	675.98	182.92	-675.98	0.00	0.00	0.00
8,700.00		0.00	8,641.69	675.98	182.92	-675.98	0.00	0.00	0.00
8,800.00		0.00	8,741.69	675.98	182.92	-675.98	0.00	0.00	0.00
8,845.35 Start Build		0.00	8,787.04	675.98	182.92	-675.98	0.00	0.00	0.00
8,850.00		172.20	8,791.69	675.96	182.92	-675.96	10.00	10.00	0.00
8,900.00		172.20	8,841.61	673.40	183.27	-673.40	10.00	10.00	0.00
8,950.00	10.46	172.20	8,891.11	666.54	184.21	-666.54	10.00	10.00	0.00
9,000.00		172.20	8,939.82	655.43	185.74	-655.43	10.00	10.00	0.00
9,050.00		172.20	8,987.36	640.15	187.83	-640.15	10.00	10.00	0.00
9,100.00		172.20	9,033.39	620.83	190.47	-620.83	10.00	10.00	0.00
9,150.00	30.46	172.20	9,077.54	597.61	193.66	-597.61	10.00	10.00	0.00
9,200.00		172.20	9,119.47	570.66	197.35	-570.66	10.00	10.00	0.00
9,250.00	40.46	172.20	9,158.88	540.20	201.52	-540.20	10.00	10.00	0.00





Database: 1 - EDM Production
Company: E.G.L. Resources, Inc.
Project: Lea, County NM (NAD 83)

Site: Millie Mile Pad

Well: Millie Mile 13-24 Fed Com 101H

Wellbore: Wellbore #1
Design: Plan 3

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Millie Mile 13-24 Fed Com 101H RKB 25' + GL 3708.57 @ 3733.57usft RKB 25' + GL 3708.57 @ 3733.57usft Grid

lanned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,300.00 9,350.00 9,400.00	50.46	172.20 172.20 172.20	9,195.46 9,228.92 9,259.03	506.45 469.67 430.13	206.14 211.18 216.60	-506.45 -469.67 -430.13	10.00 10.00 10.00	10.00 10.00 10.00	0.00 0.00 0.00
9,450.00 9,500.00 9,550.00 9,600.00 9,650.00	65.46 70.46 75.46	172.20 172.20 172.20 172.20 172.20	9,285.54 9,308.26 9,327.02 9,341.66 9,352.08	388.15 344.04 298.14 250.79 202.36	222.35 228.39 234.68 241.16 247.80	-388.15 -344.04 -298.14 -250.79 -202.36	10.00 10.00 10.00 10.00 10.00	10.00 10.00 10.00 10.00 10.00	0.00 0.00 0.00 0.00 0.00
9,700.00 9,745.35	85.46	172.20 172.20	9,358.20 9,360.00	153.21 108.32	254.53 260.68	-153.21 -108.32	10.00 10.00	10.00 10.00	0.00 0.00
Start DLS 2	2.00 TFO 90.00								
9,800.00 9,900.00 10,000.00	90.00 90.00	173.29 175.29 177.29	9,360.00 9,360.00 9,360.00	54.11 -45.39 -145.17	267.58 277.52 283.99	-54.11 45.39 145.17	2.00 2.00 2.00	0.00 0.00 0.00	2.00 2.00 2.00
10,100.00 10,122.83		179.29 179.75	9,360.00 9,360.00	-245.12 -267.95	286.97 287.16	245.12 267.95	2.00 2.00	0.00 0.00	2.00 2.00
Start 10084	I.80 hold at 10122	2.83 MD							
10,200.00 10,300.00		179.75 179.75	9,360.00 9,360.00	-345.12 -445.12	287.49 287.93	345.12 445.12	0.00 0.00	0.00 0.00	0.00 0.00
10,400.00		179.75	9,360.00	-545.12	288.37	545.12	0.00	0.00	0.00
10,500.00 10,600.00	90.00	179.75 179.75	9,360.00 9,360.00	-645.12 -745.12	288.81 289.24	645.12 745.12	0.00 0.00	0.00 0.00	0.00 0.00
10,700.00		179.75	9,360.00	-845.12	289.68	845.12	0.00	0.00	0.00
10,800.00 10,900.00		179.75 179.75	9,360.00 9,360.00	-945.12 -1,045.11	290.12 290.55	945.12 1,045.11	0.00 0.00	0.00 0.00	0.00 0.00
11,000.00	90.00	179.75	9,360.00	-1,145.11	290.99	1,145.11	0.00	0.00	0.00
11,100.00	90.00	179.75	9,360.00	-1,245.11	291.43	1,245.11	0.00	0.00	0.00
11,200.00	90.00	179.75	9,360.00	-1,345.11	291.87	1,345.11	0.00	0.00	0.00
11,300.00	90.00	179.75	9,360.00	-1,445.11	292.30	1,445.11	0.00	0.00	0.00
11,400.00		179.75	9,360.00	-1,545.11	292.74	1,545.11	0.00	0.00	0.00
11,500.00		179.75	9,360.00	-1,645.11	293.18	1,645.11	0.00	0.00	0.00
11,600.00		179.75	9,360.00 9,360.00	-1,745.11	293.61	1,745.11	0.00	0.00	0.00
11,700.00		179.75	9,360.00	-1,845.11 1,045.11	294.05 294.49	1,845.11	0.00 0.00	0.00	0.00 0.00
11,800.00 11,900.00		179.75 179.75	9,360.00	-1,945.11 -2,045.10	294.49	1,945.11 2,045.10	0.00	0.00 0.00	0.00
12,000.00		179.75	9,360.00	-2,145.10	295.36	2,145.10	0.00	0.00	0.00
12,100.00		179.75 170.75	9,360.00	-2,245.10 2,345.10	295.80	2,245.10	0.00	0.00 0.00	0.00
12,200.00		179.75	9,360.00	-2,345.10	296.24	2,345.10	0.00		0.00
12,300.00 12,400.00		179.75 179.75	9,360.00 9,360.00	-2,445.10 -2,545.10	296.67 297.11	2,445.10 2,545.10	0.00 0.00	0.00 0.00	0.00 0.00
12,500.00 12,600.00		179.75 179.75	9,360.00 9,360.00	-2,645.10 -2,745.10	297.55 297.99	2,645.10 2,745.10	0.00 0.00	0.00 0.00	0.00 0.00
12,700.00		179.75	9,360.00	-2,845.10	298.42	2,845.10	0.00	0.00	0.00
12,800.00		179.75	9,360.00	-2,945.10	298.86	2,945.10	0.00	0.00	0.00
12,900.00		179.75	9,360.00	-3,045.10	299.30	3,045.10	0.00	0.00	0.00
13,000.00		179.75	9,360.00	-3,145.09	299.73	3,145.09	0.00	0.00	0.00
13,100.00		179.75	9,360.00	-3,245.09	300.17	3,245.09	0.00	0.00	0.00
13,200.00		179.75	9,360.00	-3,345.09	300.61	3,345.09	0.00	0.00	0.00
13,300.00 13,400.00		179.75 179.75	9,360.00 9,360.00	-3,445.09 -3,545.09	301.05 301.48	3,445.09 3,545.09	0.00 0.00	0.00 0.00	0.00 0.00
13,500.00		179.75	9,360.00	-3,645.09	301.92	3,645.09	0.00	0.00	0.00
13,600.00		179.75	9,360.00	-3,745.09	302.36	3,745.09	0.00	0.00	0.00
13,700.00		179.75	9,360.00	-3,845.09	302.79	3,845.09	0.00	0.00	0.00
13,800.00	90.00	179.75	9,360.00	-3,945.09	303.23	3,945.09	0.00	0.00	0.00





Database: 1 - EDM Production
Company: E.G.L. Resources, Inc.
Project: Lea, County NM (NAD 83)

Site: Millie Mile Pad

Well: Millie Mile 13-24 Fed Com 101H

Wellbore: Wellbore #1
Design: Plan 3

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Well Millie Mile 13-24 Fed Com 101H RKB 25' + GL 3708.57 @ 3733.57usft RKB 25' + GL 3708.57 @ 3733.57usft Grid

anned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,900.00	90.00	179.75	9,360.00	-4,045.09	303.67	4,045.09	0.00	0.00	0.00
14,000.00	90.00	179.75	9,360.00	-4,145.08	304.11	4,145.08	0.00	0.00	0.00
,			,	,					
14,100.00	90.00	179.75	9,360.00	-4,245.08	304.54	4,245.08	0.00	0.00	0.00
14,200.00	90.00	179.75	9,360.00	-4,345.08	304.98	4,345.08	0.00	0.00	0.00
14,300.00	90.00	179.75	9,360.00	-4,445.08	305.42	4,445.08	0.00	0.00	0.00
14,400.00	90.00	179.75	9,360.00	-4,545.08	305.85	4,545.08	0.00	0.00	0.00
14,500.00	90.00	179.75	9,360.00	-4,645.08	306.29	4,645.08	0.00	0.00	0.00
14,600.00	90.00	179.75	9,360.00	-4,745.08	306.73	4,745.08	0.00	0.00	0.00
14,700.00	90.00	179.75	9,360.00	-4,845.08	307.17	4,845.08	0.00	0.00	0.00
14,800.00	90.00	179.75	9,360.00	-4,945.08	307.60	4,945.08	0.00	0.00	0.00
14,900.00	90.00	179.75	9,360.00	-5,045.08	308.04	5,045.08	0.00	0.00	0.00
15,000.00	90.00	179.75	9,360.00	-5,145.08	308.48	5,145.08	0.00	0.00	0.00
15,100.00	90.00	179.75	9,360.00	-5,245.07	308.91	5,245.07	0.00	0.00	0.00
15,200.00	90.00	179.75	9,360.00	-5,345.07	309.35	5,345.07	0.00	0.00	0.00
15,300.00	90.00	179.75	9,360.00	-5,445.07	309.79	5,445.07	0.00	0.00	0.00
15,400.00	90.00	179.75	9,360.00	-5,545.07	310.23	5,545.07	0.00	0.00	0.00
15,500.00	90.00	179.75	9.360.00	-5.645.07	310.66	5,645.07	0.00	0.00	0.00
15,600.00	90.00	179.75	9.360.00	-5,745.07	311.10	5,745.07	0.00	0.00	0.00
15,700.00			9,360.00	,		,			
-,	90.00	179.75	,	-5,845.07	311.54	5,845.07	0.00	0.00	0.00
15,800.00	90.00	179.75	9,360.00	-5,945.07	311.97	5,945.07	0.00	0.00	0.00
15,900.00	90.00	179.75	9,360.00	-6,045.07	312.41	6,045.07	0.00	0.00	0.00
16,000.00	90.00	179.75	9,360.00	-6,145.07	312.85	6,145.07	0.00	0.00	0.00
16,100.00	90.00	179.75	9,360.00	-6,245.06	313.29	6,245.06	0.00	0.00	0.00
16,200.00	90.00	179.75	9,360.00	-6,345.06	313.72	6,345.06	0.00	0.00	0.00
16,300.00	90.00	179.75	9,360.00	-6,445.06	314.16	6,445.06	0.00	0.00	0.00
16,400.00	90.00	179.75	9,360.00	-6,545.06	314.60	6,545.06	0.00	0.00	0.00
16,500.00	90.00	179.75	9,360.00	-6,645.06	315.03	6,645.06	0.00	0.00	0.00
16,600.00	90.00	179.75	9,360.00	-6,745.06	315.47	6,745.06	0.00	0.00	0.00
16,700.00	90.00	179.75	9,360.00	-6,845.06	315.91	6,845.06	0.00	0.00	0.00
16,800.00	90.00	179.75	9,360.00	-6,945.06	316.35	6,945.06	0.00	0.00	0.00
,		179.75	,	,					
16,900.00	90.00		9,360.00	-7,045.06	316.78	7,045.06	0.00	0.00	0.00
17,000.00	90.00	179.75	9,360.00	-7,145.06	317.22	7,145.06	0.00	0.00	0.00
17,100.00	90.00	179.75	9,360.00	-7,245.06	317.66	7,245.06	0.00	0.00	0.00
17,200.00	90.00	179.75	9,360.00	-7,345.05	318.09	7,345.05	0.00	0.00	0.00
17,300.00	90.00	179.75	9,360.00	-7,445.05	318.53	7,445.05	0.00	0.00	0.00
17,400.00	90.00	179.75	9,360.00	-7,545.05	318.97	7,545.05	0.00	0.00	0.00
17.500.00	90.00	179.75	9,360.00	-7,645.05	319.41	7,645.05	0.00	0.00	0.00
17,600.00	90.00	179.75	9,360.00	-7,745.05 -7,745.05	319.84	7,745.05	0.00	0.00	0.00
,			-,	,		,			
17,700.00	90.00	179.75	9,360.00	-7,845.05	320.28	7,845.05	0.00	0.00	0.00
17,800.00	90.00	179.75	9,360.00	-7,945.05	320.72	7,945.05	0.00	0.00	0.00
17,900.00	90.00	179.75	9,360.00	-8,045.05	321.15	8,045.05	0.00	0.00	0.00
18,000.00	90.00	179.75	9,360.00	-8,145.05	321.59	8,145.05	0.00	0.00	0.00
18,100.00	90.00	179.75	9,360.00	-8,245.05	322.03	8,245.05	0.00	0.00	0.00
18,200.00	90.00	179.75	9,360.00	-8,345.04	322.47	8,345.04	0.00	0.00	0.00
18,300.00	90.00	179.75	9,360.00	-8,445.04	322.90	8,445.04	0.00	0.00	0.00
18,400.00	90.00	179.75	9,360.00	-8,545.04	323.34	8,545.04	0.00	0.00	0.00
18,500.00	90.00	179.75	9.360.00	-8,645.04	323.78	8,645.04	0.00	0.00	0.00
			9,360.00	-8,745.04 -8,745.04					
18,600.00	90.00	179.75		,	324.21	8,745.04	0.00	0.00	0.00
18,700.00	90.00	179.75	9,360.00	-8,845.04	324.65	8,845.04	0.00	0.00	0.00
18,800.00	90.00	179.75	9,360.00	-8,945.04	325.09	8,945.04	0.00	0.00	0.00
18,900.00	90.00	179.75	9,360.00	-9,045.04	325.53	9,045.04	0.00	0.00	0.00
19,000.00	90.00	179.75	9,360.00	-9,145.04	325.96	9,145.04	0.00	0.00	0.00
19,100.00	90.00	179.75	9,360.00	-9,245.04	326.40	9,245.04	0.00	0.00	0.00
19,200.00	90.00	179.75	9,360.00	-9,345.04	326.84	9,345.04	0.00	0.00	0.00





Database: 1 - EDM Production
Company: E.G.L. Resources, Inc.
Project: Lea, County NM (NAD 83)

Site: Millie Mile Pad

Well: Millie Mile 13-24 Fed Com 101H
Wellbore: #1

Wellbore: Wellbore #1
Design: Plan 3

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well Millie Mile 13-24 Fed Com 101H RKB 25' + GL 3708.57 @ 3733.57usft RKB 25' + GL 3708.57 @ 3733.57usft

Grid

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
19,300.00	90.00	179.75	9,360.00	-9,445.03	327.27	9,445.03	0.00	0.00	0.00
19,400.00	90.00	179.75	9,360.00	-9,545.03	327.71	9,545.03	0.00	0.00	0.00
19,500.00	90.00	179.75	9,360.00	-9,645.03	328.15	9,645.03	0.00	0.00	0.00
19,600.00	90.00	179.75	9,360.00	-9,745.03	328.59	9,745.03	0.00	0.00	0.00
19,700.00	90.00	179.75	9,360.00	-9,845.03	329.02	9,845.03	0.00	0.00	0.00
19,800.00	90.00	179.75	9,360.00	-9,945.03	329.46	9,945.03	0.00	0.00	0.00
19,900.00	90.00	179.75	9,360.00	-10,045.03	329.90	10,045.03	0.00	0.00	0.00
20,000.00	90.00	179.75	9,360.00	-10,145.03	330.33	10,145.03	0.00	0.00	0.00
20,100.00	90.00	179.75	9,360.00	-10,245.03	330.77	10,245.03	0.00	0.00	0.00
20,207.63	90.00	179.75	9,360.00	-10,352.65	331.24	10,352.65	0.00	0.00	0.00
TD at 20207.6	3								

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
MM 101H SHL - plan hits target cen - Point	0.00 ter	0.00	0.00	0.00	0.00	607,084.97	759,638.58	32.66691714	-103.62393391
MM 101H VP - plan hits target cen - Point	0.00 ter	0.00	6,500.00	675.98	182.92	607,760.95	759,821.50	32.66877171	-103.62332483
MM 101H KOP - plan hits target cen - Point	0.00 ter	0.00	8,787.04	675.98	182.92	607,760.95	759,821.50	32.66877171	-103.62332483
PPP3 MM 101H(0' FNL   - plan misses target - Point		0.00 Dusft at 1493	9,360.00 3.18usft MD	-5,078.27 (9360.00 TVD	305.29 ), -5078.26 N,	602,006.70 308.19 E)	759,943.87	32.65295388	-103.62305229
PPP2 MM 101H(0' FNL   - plan misses target - Point		0.00 9usft at 1361	9,360.00 3.22usft MD	-3,758.32 (9360.00 TVD	300.23 ), -3758.31 N,	603,326.65 302.42 E)	759,938.81	32.65658186	-103.62304004
MM 101H PBHL(10' FSL - plan hits target cen - Point		0.00	9,360.00	-10,352.65	331.24	596,732.32	759,969.82	32.63845671	-103.62308257
MM 101H LTP(100' FSL - plan misses target - Point	0.00 center by 17.6	0.00 63usft at 201	9,360.00 00.00usft M	-10,262.65 D (9360.00 TV	330.80 D, -10245.03	596,822.32 N, 330.77 E)	759,969.38	32.63870408	-103.62308205
MM 101H FTP/PPP1(10 - plan misses target - Point		0.00 32usft at 975	9,360.00 3.73usft MD	103.03 (9360.00 TVD	285.43 ), 100.03 N, 26	607,188.01 61.80 E)	759,924.01	32.66719508	-103.62300419

Casing Points							
	Measured Depth (usft)	Vertical Depth (usft)		Mana	Casing Diameter (")	Hole Diameter (")	
	(usit)	(usit)		Name	( )	( )	
	20,204.98	9,360.00	20" Casing		20	24	



Well:

#### **Planning Report**



Database: 1 - EDM Production
Company: E.G.L. Resources, Inc.
Project: Lea, County NM (NAD 83)

Millie Mile 13-24 Fed Com 101H

Site: Millie Mile Pad

Wellbore: Wellbore #1

Design: Plan 3

Local Co-ordinate Reference: TVD Reference:

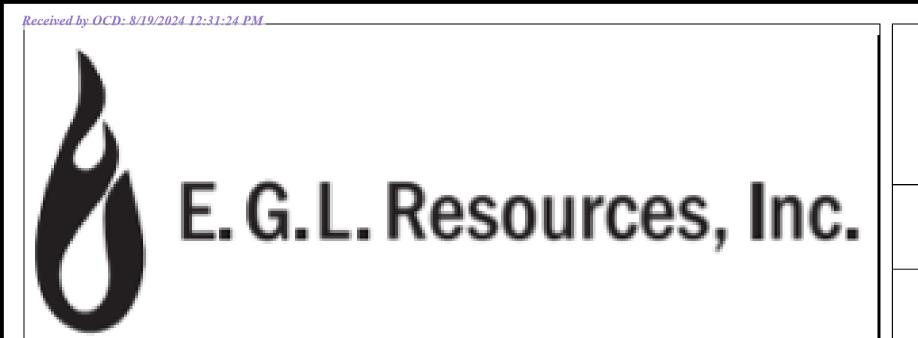
MD Reference:
North Reference:

Survey Calculation Method:

Well Millie Mile 13-24 Fed Com 101H RKB 25' + GL 3708.57 @ 3733.57usft RKB 25' + GL 3708.57 @ 3733.57usft

Grid

an Annotations										
Measured	Vertical	Local Coor	dinates							
Depth (usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment						
1,500.00	1,500.00	0.00	0.00	Start Build 2.00						
1,996.21	1,993.73	41.38	11.20	Start 3565.90 hold at 1996.20 MD						
5,562.11	5,506.27	634.60	171.72	Start Drop -2.00						
6,058.31	6,000.00	675.98	182.92	Start 2787.04 hold at 6058.31 MD						
8,845.35	8,787.04	675.98	182.92	Start Build 10.00						
9,745.35	9,360.00	108.32	260.68	Start DLS 2.00 TFO 90.00						
10,122.83	9,360.00	-267.95	287.16	Start 10084.80 hold at 10122.83 MD						
20,207.63	9,360.00	-10,352.65	331.24	TD at 20207.63						



Start Build 2.00

Start Drop -2.00

Start Build 10.00

Start DLS 2.00 TFO 90.00

1200-

1600

2000

2400

2800

3200

3600

4000

> 6000-

6800

7200

7600

8000

8400

8800

9200

9600

10000-

10400-

# Millie Mile 13-24 Fed Com 101H

WELL DETAILS: Millie Mile 13-24 Fed Com 101H

	+N/-S 0.00		+E/-W 0.00	N	10N: RKE orthing 7084.97		- 3708.5 Easting 59638.58		Latitude	Longitude 3.62393391
SECTION DETAILS										
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00	
1996.20	9.92	15.14	1993.73	41.38	11.20	2.00	15.14	-41.38	<b>Start 3565.90 hold</b>	at 1996.20 MD
5562.11	9.92	15.14	5506.27	634.60	171.72	0.00	0.00	-634.60	Start Drop -2.00	
6058.31	0.00	0.00	6000.00	675.98	182.92	2.00	180.00	-675.98	Start 2787.04 hold	at 6058.31 MD
8845.35	0.00	0.00	8787.04	675.98	182.92	0.00	0.00	-675.98	Start Build 10.00	
9745.35	90.00	172.20	9360.00	108.32	260.68	10.00	172.20	-108.32	Start DLS 2.00 TF	O 90.00
10122.83	90.00	179.75	9360.00	-267.95	287.16	2.00	90.00	267.95	Start 10084.80 hol	d at 10122.83 MD
20207.63	90.00	179.75	9360.00	-10352.65	331.24	0.00	0.00	10352.65	TD at 20207.63	

Project: Lea, County NM (NAD 83) Site: Millie Mile Pad Well: Millie Mile 13-24 Fed Com 101H Wellbore: Wellbore #1

Design: Plan 3

Depths: RKB 25' + GL 3708.57 @ 3733.57usft

Geodetic System: US State Plane 1983

Datum: North American Datum 1983

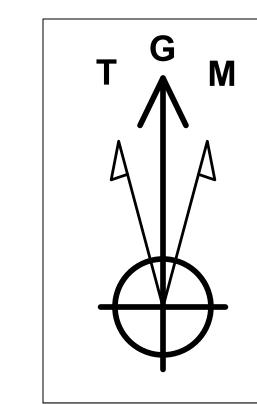
Ellipsoid: GRS 1980
New Mexico Eastern Zone Zone:

System Datum: Mean Sea Level

**SURVEY PROGRAM** Depth From Depth To Survey/Plan Tool 20207.63 Plan 3 (Wellbore #1) MWD+IFR1+MS

150-Millie Mile 13-24 Fed Com 202H Millie Mile 13-24 Fed Com 102H **Ø** Ø Ø Ø **Q** Millie Mile 13-24 Fed Com 601H Millie Mile 13-24 Fed Com 603H Millie Mile 13-24 Fed Com 101H Millie Mile 13-24 Fed Com 201H Millie Mile 13-24 Fed Com 602H Millie Mile 13-24 Fed Com 801H

West(-)/East(+) (50 usft/in)



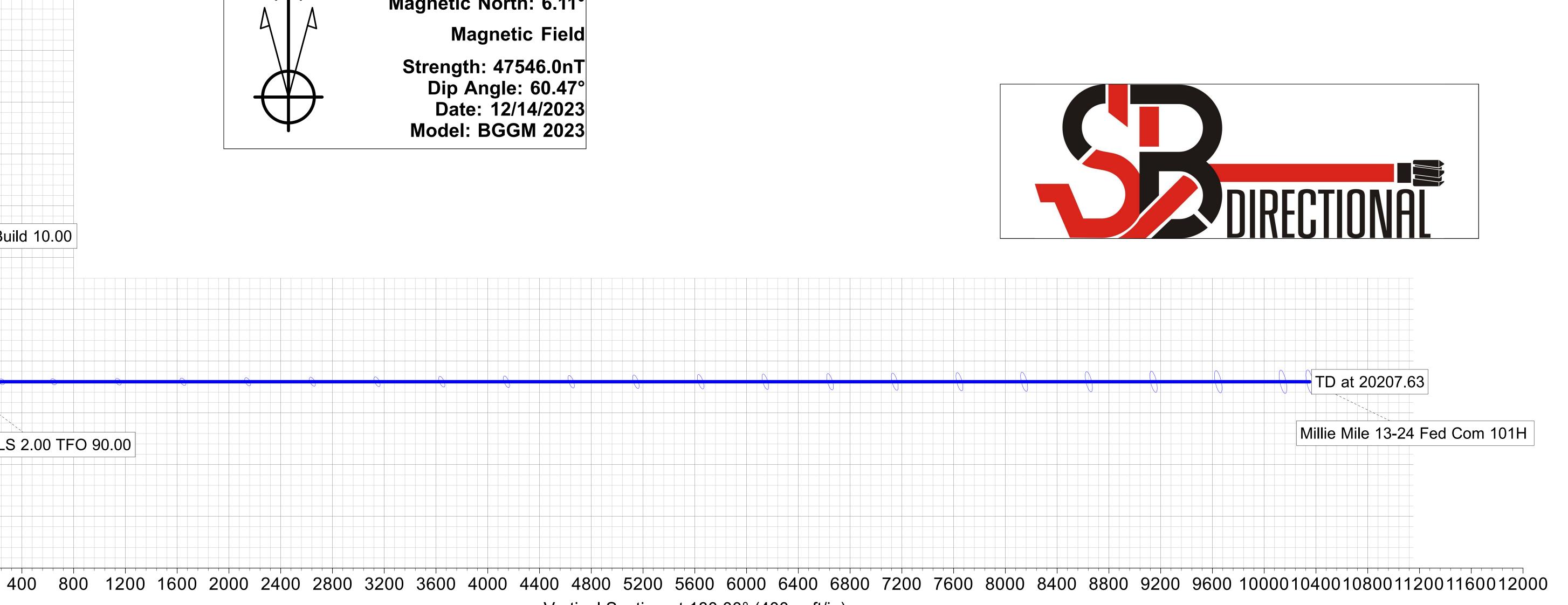
# **Azimuths to Grid North**

True North: -0.38° Magnetic North: 6.11°

Magnetic Field

Vertical Section at 180.00° (400 usft/in)

Strength: 47546.0nT Dip Angle: 60.47° Date: 12/14/2023 Model: BGGM 2023



Start Build 10.00 Start Drop -2.00 Start Build 2.00 Start DLS 2.00 TFO 90.00 MM 101H SHL MM 101H FTP/PPP1(100' FNL - 660' FWL) Sec 13<u>-1</u>95-33E PPP2 MM 101H(0 FNL 660' FWL) PPP3 MM 101H(0' FNL 660' FWL) 00 Sec 24-19S-33E -7200 100'/FSL Perf Line TD at 20207.63 -10400 MM 101H LTP(100' FSL - 660' FWL) MM 101H PBHL(10' FSL - 660' FWL) -11200

West(-)/East(+) (400 usft/in)

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#### LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

#### CERTIFICATE OF QUALITY

#### LTYY/QR-5.7.1-19B

№: LT2023-052-006

Customer Name	Austin Hose					
Product Name	Choke					
Product Specification	3"×10000psi×35ft (10.67m)	Quantity	8PCS			
Serial Number	7660103~7660110	FSL	FSL3			
Temperature Range	-29°C∼+121°C	Standard	API Spec 16C 3 <sup>rd</sup> edition			
Inspection Department	Q.C. Department	Inspection date	2023.04.22			

N. /	Inspecti	on Items	S			Inspection result	es .		
8 1	Appearance (	Checkin	g		In accordance with API Spec 16C 3 <sup>rd</sup> edition				
	Size and L	engths			In accordance with API Spec 16C 3 <sup>rd</sup> edition				
Г	Dimensions and Tolerances					In accordance with API Spec 16C 3 <sup>rd</sup> edition			
End Connections: 4-1	/16"×10000psi I	ntegral fla	ange for sour gas ser	vice	In accordance with API Spec 6A 21st edition				
	Hydrostatic	Testing			In accordan	ce with API Spec	16C 3 <sup>rd</sup> edition		
H y	product M	larking			In accordan	ce with API Spec	16C 3 <sup>rd</sup> edition		
Inspection cor	nclusion		The inspected ite	ms m	eet standard requiren	nents of API Spec	16C 3 <sup>rd</sup> edition		
Remark	Remarks								
Approver	Approver Jian long Chen Auditor					Inspector	Zhansheng Wang		



#### LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

#### HYDROSTATIC TESING REPORT

LTYY/QR-5.7.1-28

№: <u>230422006</u>

Product Name	Cho	Choke And Kill Hose			andard API Spec 16C 3 <sup>rd</sup> edition	
Product Specificatio	on 3"×100	3"×10000psi×35ft (10.67m)			ber	7660103
Inspection Equipmen	nt MTU	MTU-BS-1600-3200-E			ım	Water
Inspection Departme	ent (	Q.C. Department		Inspection I	Date	2023.04.20
<b>(</b>		Rate of le	ength chan	ge	•	
Standard requirement	At working pro	essure, the rate of le	ength chan	ge should not m	nore than $\pm 2\%$	6
Testing result	10000psi (69.0	)MPa) ,Rate of leng	th change	0.8%		
		Hydrosta	atic testing	5		
Standard requiremen	At 1.5 times we the second pre	vorking pressure, the ssure-holding perio	e initial pr d of not le	essure-holding p ss than one hou	period of not le r, no leaks.	ess than three minutes,
Testing result	15000psi (103	.5MPa), 3 min for t	he first tin	ne, 60 min for th	ne second time,	, no leakage
	13:00:18 13:10:08 13:10:58 13:11:46 13:12		110 100 100 100 100 100 100 100 100 100	31548 13:3548 13:41548 13:4544 13:	51:48 13:56:48 14:01:48 14:06:48 1	lethas telsas teztas tezess 1635:
Conclusion	The inspec	cted items meet stan	dard requ	irements of API	Spec 16C 3 <sup>rd</sup> 6	edition
Approver	Jiao long Chen	long Chen Auditor / lings			Inspector	Zhansheng Wang



#### LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

#### CERTIFICATE OF CONFORMANCE

№:LT230422014

Product Name: Choke And Kill Hose

Product Specification: 3"×10000psi×35ft(10.67m)

Serial Number: 7660103~7660110

End Connections: 4-1/16"×10000psi Integral flange for sour gas service

The Choke And Kill Hose assembly was produced by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD . in April 2023, and inspected by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD. according to API Spec 16C 3<sup>rd</sup> edition on April 22, 2023. The overall condition is good. This is to certify that the high pressure steel wire drilling hose assembly complies with all current standards and specifications for API Spec 16C 3<sup>rd</sup> edition .

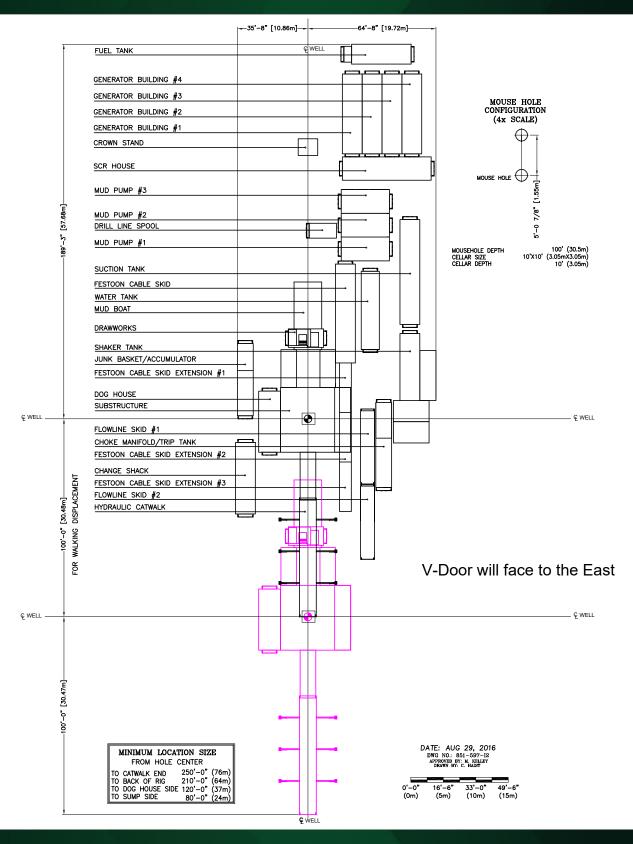
Jiao long Chen

QC Manager:

Date: April 22, 2023



# **RIG LAYOUT**



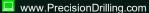
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#### **CALGARY**

525 8th Avenue S.W., Suite 800 Calgary, Alberta T2P 1G1 Canada 403.716.4500

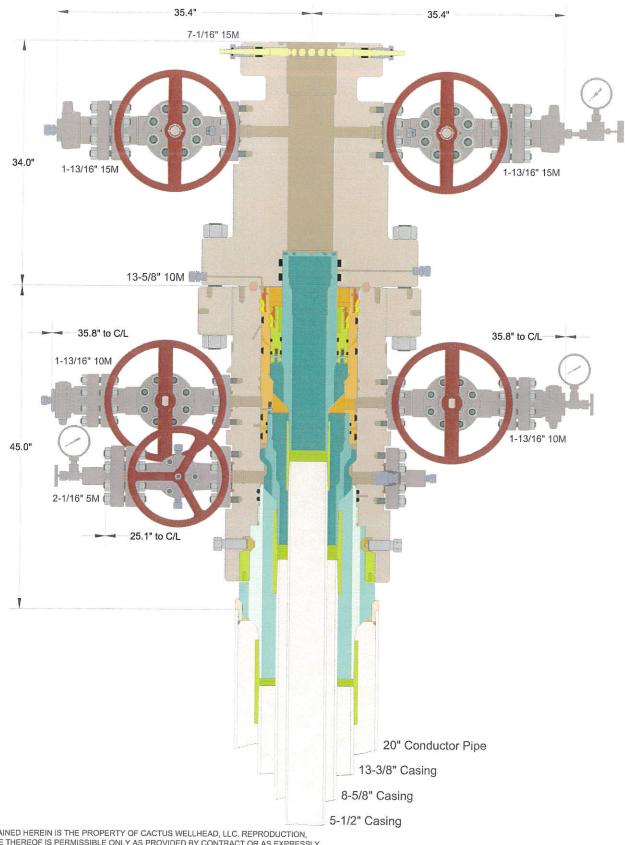
#### **HOUSTON**

10350 Richmond Ave., Suite 700 Houston, Texas 77042 USA 713.435.6100





info@PrecisionDrilling.com



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ALL DIMENSIONS APPROXIMATE

SDT-2810

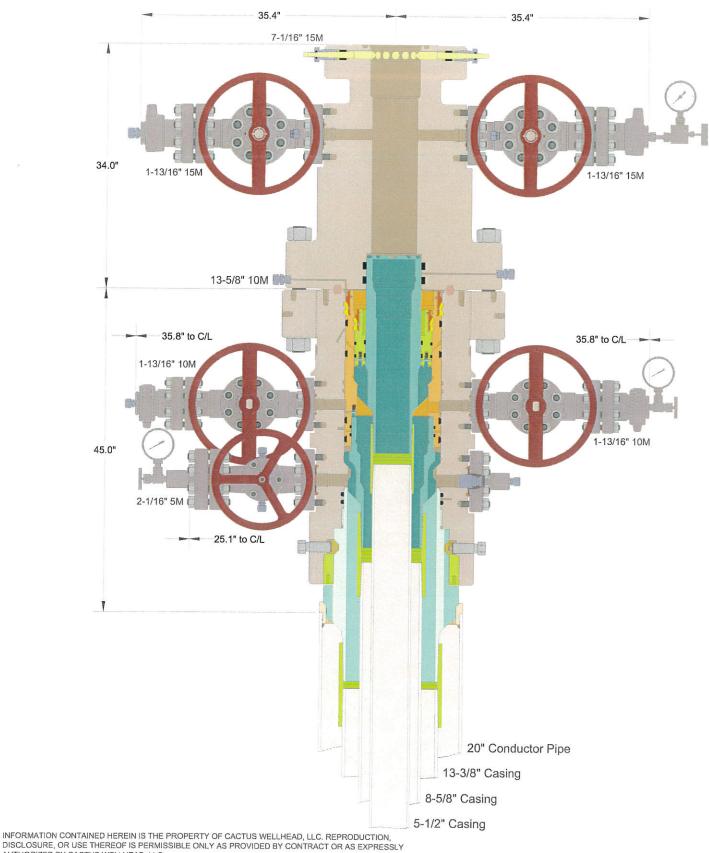
### CACTUS WELLHEAD LLC

20" x 13-3/8" x 8-5/8" x 5-1/2" MBU-3T-CFL-R-DBLO Wellhead With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head, And 13-3/8", 8-5/8" & 5-1/2" Pin Bottom Mandrel Hangers

DRAWN	DLE	11AUG20
APPRV		

DRAWING NO.

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AUTHORIZED BY CACTUS WELLHEAD, LLC.

# CACTUS WELLHEAD LLC

20" x 13-3/8" x 8-5/8" x 5-1/2" MBU-3T-CFL-R-DBLO Wellhead With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head, And 13-3/8", 8-5/8" & 5-1/2" Pin Bottom Mandrel Hangers Released to Imaging: 9/5/2024 7:54:51 AM

DRAWN	DLE	11AUG20
APPRV		
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DRAWING NO.

SDT-2810

ALL DIMENSIONS APPROXIMATE



U.S. Department of the Interior **BUREAU OF LAND MANAGEMENT** 

# SUPO Data Repo

APD ID: 10400093843

Submission Date: 08/29/2023

**Operator Name: EGL RESOURCES INCORPORATED** 

Well Name: MILLIE MILE 13-24 FED COM

Well Type: OIL WELL

Well Number: 101H

Well Work Type: Drill

Highlighted data reflects the most

recent changes **Show Final Text** 

#### **Section 1 - Existing Roads**

Will existing roads be used? YES

**Existing Road Map:** 

PBEX\_Millie\_Mile\_13\_24\_Fed\_Com\_Aerial\_Map\_20240513121320.pdf

PBEX\_Millie\_Mile\_13\_24\_Fed\_Com\_Aerial\_Road\_Route\_Map\_20240513121323.pdf

PBEX\_Millie\_Mile\_13\_24\_Fed\_Com\_Land\_Status\_Map\_20240513121325.pdf

PBEX\_Millie\_Mile\_13\_24\_Fed\_Com\_Topo\_Map\_20240513121330.pdf

PBEX\_Millie\_Mile\_13\_24\_Fed\_Com\_Vicinity\_Map\_20240513121334.pdf

**Existing Road Purpose: ACCESS** Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

**Existing Road Improvement Description:** 

**Existing Road Improvement Attachment:** 

#### Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

**New Road Map:** 

23\_101303\_Millie\_Mile\_13\_24\_Fed\_Com\_AR\_20240513115802.pdf

New road type: LOCAL

Length: 523.23

Feet

Width (ft.): 30

Max slope (%): 2

Max grade (%): 3

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: The access road will be constructed and maintained as necessary to prevent soil erosion and accommodate all-weather traffic. The road will be crowned and ditched with water

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

turnouts installed as necessary to provide for proper drainage along with access road route.

New road access plan or profile prepared? N

New road access plan

Access road engineering design? N

Access road engineering design

**Turnout?** N

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: Caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: Topsoil will be spread along location to help raise sub grade

Access other construction information: Caliche will be from Kenneth Smith's property of which we will have an SUA prior

to disturbance. The material meets BLM requirements and standards.

Access miscellaneous information:

Number of access turnouts: Access turnout map:

#### **Drainage Control**

New road drainage crossing: OTHER

**Drainage Control comments:** The access road and associated drainage structures will be constructed and maintained in accordance with road guidelines contained in the joint BLM/USFS publication: Surface Operating Standards for Oil and Gas Exploration and Development, The Gold Book, Fourth Edition and/or BLM Manual Section 9113 concerning road construction standards on projects subject to federal jurisdiction.

Road Drainage Control Structures (DCS) description: None

Road Drainage Control Structures (DCS) attachment:

#### **Access Additional Attachments**

#### **Section 3 - Location of Existing Wells**

**Existing Wells Map?** YES

Attach Well map:

PBEX\_Millie\_Mile\_13\_24\_Fed\_Com\_101H\_Existing\_Wells\_Map\_20240513120040.pdf
PBEX\_Millie Mile 13 24 Fed Com 101H Existing Wells Map Pg2 20240513120044.pdf

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

#### Section 4 - Location of Existing and/or Proposed Production Facilities

#### Submit or defer a Proposed Production Facilities plan? DEFER

**Estimated Production Facilities description:** One pad was staked with the BLM for construction and use as Central Tank Batteries (CTBs). The facility is the Millie Mile 13-24 Fed Com Central Tank Battery. A 3160-5 sundry notification will be submitted after construction with a site-security diagram and layout of the facility with associated equipment.

#### **Section 5 - Location and Types of Water Supply**

#### **Water Source Table**

Water source type: GW WELL

Water source use type: DUST CONTROL

SURFACE CASING

INTERMEDIATE/PRODUCTION

**CASING** 

Source latitude: 32.623993 Source longitude: -103.622398

Source datum: NAD83

Water source permit type: WATER WELL

PRIVATE CONTRACT

Water source transport method: TRUCKING

**PIPELINE** 

Source land ownership: FEDERAL

Source transportation land ownership: FEDERAL

Water source volume (barrels): 100000 Source volume (acre-feet): 12.88930963

Source volume (gal): 4200000

#### Water source and transportation

PBEX\_Millie\_Mile13\_24\_Fed\_Com\_Water\_Source\_Map\_20240513121425.pdf

**Water source comments:** The oil/gas production wells will be drilled using a combination of water mud systems as outlined in the Drilling Program. The water will be obtained from Ranger Water Resources and hauled to the location by transport truck or lay-flat lines using the existing and proposed roads depicted in the attached exhibits. No water well will be drilled on the location.

New water well? N

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

#### **New Water Well Info**

Well latitude: Well Longitude: Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft): Est thickness of aquifer:

**Aquifer comments:** 

**Aquifer documentation:** 

Well depth (ft): Well casing type:

Well casing outside diameter (in.): Well casing inside diameter (in.):

New water well casing?

Used casing source:

Drilling method: Drill material:

Grout material: Grout depth:

Casing length (ft.): Casing top depth (ft.):

Well Production type: Completion Method:

Water well additional information:

State appropriation permit:

**Additional information attachment:** 

#### **Section 6 - Construction Materials**

Using any construction materials: YES

**Construction Materials description:** Any construction material that may be required for surfacing the drill pad and access road will be from Kenneth Smith's caliche pit, all materials are BLM approved.

Construction Materials source location

PBEX\_Millie\_Mile\_13\_24\_Fed\_Com\_Caliche\_Source\_Map\_20240513121458.pdf

#### **Section 7 - Methods for Handling**

Waste type: DRILLING

Waste content description: Drill cuttings, drilling fluids, produced oil/water, other chemicals.

Amount of waste: 550 barrels

Waste disposal frequency: Daily

Safe containment description: Will be stored in steel pits until they are hauled to a state-approved disposal facility.

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL

**FACILITY** 

Disposal type description:

**Disposal location description:** Will be hauled to a state-approved disposal facility.

Received by OCD: 8/19/2024 12:31:24 PM

Page 58 of 81

**Operator Name: EGL RESOURCES INCORPORATED** 

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

Waste type: SEWAGE

Waste content description: Black and Grey Water

Amount of waste: 5 barrels

Waste disposal frequency: Daily

Safe containment description: Will be contained in plastic chemical toilets and disposed of properly at a state approved

disposal site.

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL

**FACILITY** 

Disposal type description:

Disposal location description: Will be disposed of properly at a state approved disposal site.

Waste type: GARBAGE

Waste content description: Trash

Amount of waste: 10 barrels

Waste disposal frequency: Daily

Safe containment description: Portable Trash Cage

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL

**FACILITY** 

Disposal type description: Public

Disposal location description: All trash will disposed of properly at a state approved disposal facility.

#### **Reserve Pit**

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

Reserve pit length (ft.) Reserve pit width (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

#### **Cuttings Area**

Cuttings Area being used? NO

Are you storing cuttings on location? N

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

**Description of cuttings location** 

Cuttings area length (ft.) Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

#### **Section 8 - Ancillary**

Are you requesting any Ancillary Facilities?: N

**Ancillary Facilities** 

#### Comments:

#### **Section 9 - Well Site**

#### **Well Site Layout Diagram:**

23\_101303\_Millie\_Mile\_13\_24\_Fed\_Com\_SS\_20240513121533.pdf 23\_101303\_Millie\_Mile\_13\_24\_Fed\_Com\_Site\_Plan\_20240513121537.pdf

Comments:

#### Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance Multiple Well Pad Name: Millie Mile 13-24 Fed Com

**Multiple Well Pad Number: 1** 

#### Recontouring

**Drainage/Erosion control construction:** The access road will be constructed and maintained as necessary to prevent soil erosion and accommodate all-weather traffic. The road will be crowned and ditched with water turnouts installed as necessary to provide for proper drainage along with access road route. **Drainage/Erosion control reclamation:** No reclamation needed.

Well pad proposed disturbance Well pad interim reclamation (acres): 0 Well pad long term disturbance

(acres): 7.27

Road proposed disturbance (acres): Road interim reclamation (acres): 0 Road long term disturbance (acres): 0

0.36

(acres): 0

Powerline proposed disturbance Powerline interim reclamation (acres): Powerline long term disturbance

(acres): 0 (acres): 0

Pipeline interim reclamation (acres): 0 Pipeline long term disturbance

**(acres)**: 0

Other proposed disturbance (acres): 0 Other interim reclamation (acres): 0 Other long term disturbance (acres): 0

Pipeline proposed disturbance

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

Total proposed disturbance: 7.63 Total interim reclamation: 12 Total long term disturbance: 4

#### **Disturbance Comments:**

**Reconstruction method:** Due to the facility being on the same pad as the well locations, there will not be any reclamation needed at this site until all wells have been plugged and abandoned.

**Topsoil redistribution:** The original stockpiled topsoil will be placed in the low spots, mainly the wester 1/3 of the location to help raise the sub grade. It will also be used to fill slopes that are inside the location as staked.

Soil treatment: None

Existing Vegetation at the well pad: Shinnery oak, mesquite, grasses

**Existing Vegetation at the well pad** 

Existing Vegetation Community at the road: Shinnery oak, mesquite, grasses

**Existing Vegetation Community at the road** 

Existing Vegetation Community at the pipeline: Shinnery oak, mesquite, grasses

**Existing Vegetation Community at the pipeline** 

Existing Vegetation Community at other disturbances: Shinnery oak, mesquite, grasses

**Existing Vegetation Community at other disturbances** 

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description

Will seed be harvested for use in site reclamation? N

Seed harvest description:

Seed harvest description attachment:

Seed

**Seed Table** 

**Seed Summary** 

**Total pounds/Acre:** 

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

Seed Type

Pounds/Acre

**ANNUAL GRASS** 

#### Seed reclamation

#### **Operator Contact/Responsible Official**

First Name: Mikah Last Name: Thomas

Phone: (432)661-7106 Email:

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? N

Existing invasive species treatment description:

**Existing invasive species treatment** 

**Weed treatment plan description:** Weed treatment will be performed on an as needed basis. If African rue is spotted, EGL Resources will enter into an agreement with the Carlsbad Soil and Water Conservation District.

Weed treatment plan

**Monitoring plan description:** Once the wells have been plugged and abandoned, EGL Resources will ensure full reclamation of the pad to BLM Standards.

Monitoring plan

**Success standards:** Once the wells have been plugged and abandoned, EGL Resources will ensure full reclamation of the pad to BLM Standards.

Pit closure description: No Pits will be used, a closed-loop system will be in place.

Pit closure attachment:

#### **Section 11 - Surface Ownership**

Disturbance type: EXISTING ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT, PRIVATE OWNERSHIP

Other surface owner description:

**BIA Local Office:** 

**BOR Local Office:** 

**COE Local Office:** 

**DOD Local Office:** 

**NPS Local Office:** 

**State Local Office:** 

Ope	rator Name: EGL RESOURCES INCORPORATED	
Well	Name: MILLIE MILE 13-24 FED COM	Well Number: 101H
Milita	ry Local Office:	
USFV	VS Local Office:	
Other	r Local Office:	
USFS	Region:	
USFS	Forest/Grassland:	USFS Ranger District:
	Surface use plan certification: NO	
	Surface use plan certification document:	
	Surface access agreement or bond: AGREEMENT	-
		A with Kenneth Smith will be signed and approved prior to
	BLM Surface Access Bond number:	
	USFS Surface access bond number:	
Distu	rbance type: NEW ACCESS ROAD	
Desci	ribe:	
Surfa	ce Owner: BUREAU OF LAND MANAGEMENT,PRIV	ATE OWNERSHIP
Other	surface owner description:	
BIA L	ocal Office:	
BOR	Local Office:	
COE	Local Office:	
DOD	Local Office:	
NPS I	Local Office:	
State	Local Office:	
Milita	ry Local Office:	
USFV	VS Local Office:	
Other	r Local Office:	
USFS	Region:	

**USFS** Ranger District:

**USFS Forest/Grassland:** 

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: AGREEMENT

Surface Access Agreement Need description: SUA with Kenneth Smith will be signed and approved prior to

any disturbance.

Surface Access Bond BLM or Forest Service:

**BLM Surface Access Bond number:** 

**USFS Surface access bond number:** 

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT, PRIVATE OWNERSHIP

Other surface owner description:

**BIA Local Office:** 

**BOR Local Office:** 

**COE Local Office:** 

**DOD Local Office:** 

**NPS Local Office:** 

**State Local Office:** 

**Military Local Office:** 

**USFWS Local Office:** 

Other Local Office:

**USFS** Region:

**USFS Forest/Grassland:** 

**USFS** Ranger District:

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: AGREEMENT

**Surface Access Agreement Need description:** SUA with Kenneth Smith will be signed and approved prior to any disturbance.

**Surface Access Bond BLM or Forest Service:** 

**BLM Surface Access Bond number:** 

**USFS Surface access bond number:** 

#### Section 12 - Other

Right of Way needed? N

Use APD as ROW?

ROW Type(s):

**ROW** 

**SUPO Additional Information:** 

Use a previously conducted onsite? Y

Previous Onsite information: Onsite review was done on April 9, 2024 with Chaz Sartin.

**Other SUPO** 

New\_Millie\_Mile\_SUPO\_Pad\_Move\_20240513122004.pdf

#### EGL Resources, LLC→ Millie Mile 13-24 Fed Com

#### Well Site Locations

The results of the Millie Mile 13-24 Fed Com will develop economic quantities of oil and gas with multiple primary formations targeted. Well locations are determined based on crosssection variations and details. Locations will be selected to minimize the likelihood of encountering faults and/or drilling hazards while still targeting suitably productive zones. If drilling results in an unproductive well, the well will be plugged and abandoned as soon as practical after the conclusion of production testing. Productive wells may be shut-in temporarily for BLM authorization for production activities and facilities.

#### Millie Mile 13-24 Fed Com

- Millie Mile 13-24 Fed Com 603H
- Millie Mile 13-24 Fed Com 102H
- Millie Mile 13-24 Fed Com 202H
- Millie Mile 13-24 Fed Com 201H
- Millie Mile 13-24 Fed Com 101H
- Millie Mile 13-24 Fed Com 601H
- Millie Mile 13-24 Fed Com 801H
- Millie Mile 13-24 Fed Com 602H

#### Surface Use Plan

#### 1. Existing Roads

A. From the intersection of US-180 and NM-18 in Hobbs, NM, Go West on US-180 Approx 15 miles. At the intersection of US-180 and NM-529 take a left and continue to go southwest on US-180 approx. 14.9 miles. Turn right onto existing lease road and go northwest approx. 2.08 miles. Turn right onto existing lease road and go northeast approx. 2.02 miles. Turn left onto existing lease road and go north approx. 1.92 miles. Turn left onto existing lease road and access roads and go west approx. 1.46 miles to northeast pad corner.

B. Transportation Plan identifying existing roads that will be used to access the project area is included from Coosa, LLC. marked as, 'Vicinity Map, Aerial Map, Aerial Road Route Map, Land Status Map, and Topo Map'.

C. All equipment and vehicles will be confined to the routes shown on the 'Vicinity Map, Aerial Map, Aerial Road Route Map, Land Status Map, and Topo Map' as provided by Coosa, LLC. D. Maintenance of the access roads will continue until abandonment and reclamation of the well pads has been completed.

#### 2. New or Upgraded Access Roads

A. **New Roads**. There are a total of approximately 523.23 feet of proposed and staked access roads to access the Millie Mile 13-24 Fed Com pad shown on the 'AR Map'.

B. Well Pads. The Millie Mile 13-24 Fed Com Aerial Road Route Map shows the location of the

proposed road that will need to be constructed to access the well pad.

- C. Anticipated Traffic. After well completion, travel to each well site will include one lease operator truck and two oil trucks per day until the Central Tank Batteries are completed. Upon completion of the Central Tank Batteries, one lease operator truck will continue to travel to each well site to monitor the working order of the wells and to check well equipment for proper operation. Two oil trucks will continue to travel to the Central Tank Batteries only for oil hauling until connected to a pipeline. Additional traffic will include one maintenance truck periodically throughout the year for pad upkeep and weed removal. Well service trips will include only the traffic necessary to work on the wells or provide chemical treatments periodically and as needed throughout the year.
- D. **Routing**. All equipment and vehicles will be confined to the travel routes laid out in the 'Vicinity Map' provided by Coosa, LLC.
- E. **Road Dimensions**. The maximum width of the driving surface of new roads will be 14 feet. The roads will be crowned and ditched with a 2% slope from the tip of the crown to the edge of the driving surface. The ditches will be 1 foot deep with 3:1 slopes. The driving surface will be made of 6" rolled and compacted caliche.

- F. **Surface Material**. Surface material will be native caliche. The average grade of all roads will be approximately 3%.
- G. Fence Cuts: None. H. Fences: None.
- I. Cattle Guards: None.
- J. **Turnouts**: None.
- K. Culverts: None.
- L. Cuts and Fills: Not significant.
- M. **Topsoil**. Approximately 6 inches of topsoil (root zone) will be stripped from the proposed access road and pad prior to any construction activity. The stripped topsoil will be spread along the western 1/3 of the location to help raise the sub grade and will be available to fill slopes inside the location as staked.
- N. **Maintenance**. The access road will be constructed and maintained as necessary to prevent soil erosion and accommodate all-weather traffic. The road will be crowned and ditched with water turnouts installed as necessary to provide for proper drainage along with access road route.
- O. **Drainage**. The access road and associated drainage structures will be constructed and maintained in accordance with road guidelines contained in the joint BLM/USFS publication: Surface Operating Standards for Oil and Gas Exploration and Development, The Gold Book, Fourth Edition and/or BLM Manual Section 9113 concerning road construction standards on projects subject to federal jurisdiction.

#### 3. Location of Existing Wells

A. See attached Existing Wells map.

#### 4. Ancillary Facilities

A. No off-pad ancillary facilities are planned during the exploration phase including, but not limited to campsites, airstrips or staging areas.

#### **5. Location of Proposed Production Facilities**

- A. **Production Facilities**. One pad was staked with the BLM for construction and use as Central Tank Batteries (CTBs). The facility is the Millie Mile 13-24 Fed Com Central Tank Battery. A 3160-5 sundry notification will be submitted after construction with a site-security diagram and layout of the facility with associated equipment.
- B. **Buried & Surface Flowlines**. Plans for this have not been determined. Prior to any flowlines being constructed, a 3160-5 will be submitted for approval.
- C. **Midstream Tie-In**. Midstream tie-in connections have not been finalized. Third party midstream company will acquire all necessary rights-of-way. If corridors are found needed in the future, they will be applied for via 3160-5.
- D. **Disposal Facilities**. Produced water will be hauled from the location to a commercial disposal facility prior to being tied into a salt water disposal flowline.
- E. **Flare**. Flare determination has not been finalized. Prior to construction, this will be submitted on a 3160-5.
- F. **Aboveground Structures**. All permanent (on site six months or longer) aboveground structures constructed or installed on location and not subject to safety requirements will be painted earth-tone colors such as 'shale green' to reduce the visual impacts of the built environment.
- G. **Containment Berms**. Containment berms will be constructed completely around any production facilities designed to hold fluids. The containment berms will be constructed of compacted subsoil, be sufficiently impervious, hold 1.5 times the capacity of the largest tank and away from cut or fill areas.
- H. **Electrical**. Electrical lines have not been finalized. Prior to any construction, a 3160-5 will be submitted for approval.

6. Location and Types of Water Supply

The oil/gas production wells will be drilled using a combination of water mud systems as outlined in the Drilling Program. The water will be obtained from Ranger Water Resources and hauled to the location by transport truck or lay-flat lines using the existing and proposed roads depicted in the attached exhibits. No water well will be drilled on the location. Shown on attached 'Water Source Map.'

Anticipated water usage for drilling includes an estimated 50,000 barrels bbls of water and anticipated water usage for completion includes an estimated 1,950,000 bbls of water for each horizontal well in a combination of fresh water and brine as detailed in the mud program in the drilling plans. These volumes are calculated with excess to accommodate any lost circulation or wash out that may occur. Actual water volumes used during operations will depend on the depth of the well, length of horizontal sections, and the losses that may occur during the operation.

#### 7. Construction Activities

A. Construction, reclamation, and/or routine maintenance will not be conducted during periods when the soil conditions for construction could lead to impacts to the surrounding environment, or when watershed damage is likely to occur because of these activities.

B. Any construction material that may be required for surfacing the drill pad and access road will be from a contractor having a permitted source of materials within the general area. No construction materials will be removed from federal lands without prior approval from the appropriate surface management agency. All roads and well pads will be constructed of 6" rolled and compacted caliche.

C. Anticipated Caliche Location will be from Kenneth Smith, attached map 'caliche source' is attached.

**8. Methods for Handling Waste • Cuttings**. The well will be drilled utilizing a closed-loop mud system. Drill cuttings will be held in roll-off style mud boxes and taken to a New Mexico Oil Conservation Division (NMOCD) approved disposal site.

• **Drilling Fluids**. These will be contained in steel mud pits and then taken to a NMOCD

approved commercial disposal facility.

• **Produced Fluids**. Water produced from the well during completion will be held temporarily in steel tanks and then taken to a NMOCD approved commercial disposal facility. Oil produced during operations will be stored in tanks until sold.

- **Sewage**. Portable, self-contained toilets will be provided for human waste disposal. Upon completion of drilling and completion activities, or as required, the toilet holding tanks will be pumped and the contents thereof disposed of in an approved sewage disposal facility. All state and local laws and regulations pertaining to the disposal of human and solid waste will be complied with. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- Garbage and Other Waste Materials. All garbage, junk and non-flammable waste materials will be contained in a self-contained, portable dumpster or trash cage, to prevent scattering and will be removed and deposited in an approved sanitary landfill. Immediately after drilling all debris and other waste materials on and around the well location not contained in the trash cage will be cleaned up and removed from the location. No potentially adverse materials or substances will be left on the location.
- **Debris**. Immediately after removal of the drilling rig, all debris and other waste materials not contained in the trash cage will be cleaned and removed from the well location. No potential adverse materials or substances will be left on location.
  - • Hazardous Materials. i. All drilling wastes identified as hazardous substances by the Comprehensive Environmental Response Compensation Liability Act (CERCLA) removed from the location, and not reused at another drilling location, will be disposed of at a hazardous waste facility approved by the U.S. Environmental Protection Agency (EPA).
  - ii. EGL Resources, LLC. and its contractors will comply with all applicable Federal, State, and local laws and regulations, existing or hereafter enacted/promulgated, regarding any hazardous material, as defined in this paragraph, that will be used, produced, transported or stored on the oil and gas lease. "Hazardous material" means any substance, pollutant or

contaminant that is listed as hazardous under the CERCLA of 1980, as amended, 42 U.S.C 9601 et seq., and its regulation. The definition of hazardous substances under CERLCA includes any "hazardous waste" as defined in the RCRA of 1976, as amended, 42 U.S.C. 6901 et seq., and its regulations. The term hazardous material also includes any nuclear by-product material as defined by the Atomic Energy Act of 1954, as amended, 42 U.C.S. 2011 et seq. The term does not include petroleum, including crude oil or any fraction thereof that is not otherwise specifically listed or designated as a hazardous substance under CERCLA Section 101 (14) U.S.C. 9601 (14) nor does the term include natural gas.

- iii. No hazardous substances or waste will be stored on location after completion of the well.
- iv. Chemicals brought to location will be on the Toxic Substance Control Act (TSCA) approved inventory list.
- v. All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in Notice to Lessees (NTL) 3A will be reported to the BLM Carlsbad Field Office. Major events will be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days.

#### 9. Well Site Layout

- A. **Rig Plat Diagrams**: There is one multi-well pad for the Millie Mile 13-24 Fed Com lease anticipated. This will allow enough space for cuts and fills, and storm water control. Well site layout is attached. This is currently an 8-well pad but should have additional room if there were to be additional wells added to the plan. Maps 'Site Plan and SS' are attached.
- B. **Closed-Loop System**: There will be no reserve pit as each well will be drilled utilizing a closed loop mud system. The closed loop system will meet the NMOCD requirements 19.15.17. C. **V-Door Orientation**: The pad was staked with v-door orientation to the East.
- D. All equipment and vehicles will be confined to the approved disturbed areas of this APD (i.e., access road and well pad).

#### 10. Plans for Surface Reclamation:

Due to the facility being on the same pad as the well locations, there will not be any reclamation needed at this site until all wells have been abandoned.

The original stockpiled topsoil will be placed in the low spots, mainly the western 1/3 of the location to help raise the sub grade. It will also be used to fill slopes that are inside the location as staked.

#### 11. Surface Ownership

A. 100% of the Millie Mile 13-24 Fed Com project area is under the administrative jurisdiction of the Bureau of Land Management.

Kenneth Smith is the grazing allottee, there will be an SUA agreed upon and approved prior to any disturbance.

B. The surface is multiple use with the primary uses of the region for grazing and to produce oil and gas.

#### 12. Other Information

Surveying

- Well Sites. Well pad locations have been staked. Surveys of the proposed access roads and well pad locations have been completed by Coosa, LLC, a registered professional land surveyor. Center stake surveys with access roads have been completed on Federal lands with Chaz Sartin, Bureau of Land Management Natural Resource Specialist in attendance, on April 9, 2024.
- Cultural Resources Archaeology: A Class III Cultural Resources Examination has been completed on the entire pad by Resi Solutions and the results will be forwarded to the BLM Office.
- **Dwellings and Structures**. There are no dwellings or structures within 2 miles of this location.

Soils and Vegetation

• Environmental Setting. Soils are classified as peyote soils and dune land (0-3% slopes) and KD-Kermit palomas (0-3% slopes). Maxie Fish, CHEMM and Cassie Aguillard, Bureau of Land Management Biologist were both at the onsite and said dunes in the SE corner as so isolated and

with the mesquite taking over, the Millie Mile 13-24 Fed Com pad would not affect the DSL habitat.

- **Traffic**. No truck traffic will be operated during periods or in areas of saturated ground when surface rutting could occur. The access road will be constructed and maintained as necessary to prevent soil erosion and accommodate all-weather traffic. The road will be crowned and ditched with water turnouts installed as necessary to provide for proper drainage along the access road
- Water. There is no permanent or live water in the immediate or within the project area.

13. Bond Coverage

Bond Coverage is Nationwide. Bond Number: COB 21235

**Operator's Representatives:** 

EGL Resources, Inc. representatives for ensuring compliance of the surface use plan are listed below:

Mikah Thomas Regulatory Manager EGL Resources, LLC 223 West Wall Street, Suite 900 Midland, Texas 79701 432-661-7106

Onsite: April 9, 2024, with Chaz Sartin- Bureau of Land Management NRS Cassie Aguillard- BLM Biologist

Maxie Fish- CHEMM

Jason Hawley- Construction Foreman

Tracy- Kenneth Smith's Field Representative



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

PWD Data Report

PWD disturbance (acres):

**APD ID:** 10400093843 **Submission Date:** 08/29/2023

**Operator Name:** EGL RESOURCES INCORPORATED

Well Name: MILLIE MILE 13-24 FED COM
Well Number: 101H
Well Type: OIL WELL
Well Work Type: Drill

#### **Section 1 - General**

Would you like to address long-term produced water disposal? NO

#### **Section 2 - Lined**

Would you like to utilize Lined Pit PWD options? N

**Produced Water Disposal (PWD) Location:** 

PWD surface owner:

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit

Pit liner description:

Pit liner manufacturers

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule

Lined pit reclamation description:

Lined pit reclamation

Leak detection system description:

Leak detection system

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

**Lined pit Monitor description:** 

**Lined pit Monitor** 

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information

#### **Section 3 - Unlined**

Would you like to utilize Unlined Pit PWD options? N

**Produced Water Disposal (PWD) Location:** 

PWD disturbance (acres):

PWD surface owner:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule

Unlined pit reclamation description:

Unlined pit reclamation

Unlined pit Monitor description:

**Unlined pit Monitor** 

Do you propose to put the produced water to beneficial use?

Beneficial use user

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic

State

**Unlined Produced Water Pit Estimated** 

Unlined pit: do you have a reclamation bond for the pit?

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

**Additional bond information** 

Section 4 -

Would you like to utilize Injection PWD options? N

**Produced Water Disposal (PWD) Location:** 

PWD surface owner: PWD disturbance (acres):

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: Injection well name:

Assigned injection well API number? Injection well API number:

Injection well new surface disturbance (acres):

**Minerals protection information:** 

Mineral protection

**Underground Injection Control (UIC) Permit?** 

**UIC Permit** 

Section 5 - Surface

Would you like to utilize Surface Discharge PWD options? N

**Produced Water Disposal (PWD) Location:** 

PWD surface owner: PWD disturbance (acres):

Surface discharge PWD discharge volume (bbl/day):

**Surface Discharge NPDES Permit?** 

**Surface Discharge NPDES Permit attachment:** 

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 -

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

Released to Imaging: 9/5/2024 7:54:51 AM

Well Name: MILLIE MILE 13-24 FED COM Well Number: 101H

Other PWD type description:

Other PWD type

Have other regulatory requirements been met?

Other regulatory requirements



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Bond Info Data
08/15/2024

**APD ID:** 10400093843

Operator Name: EGL RESOURCES INCORPORATED

Well Name: MILLIE MILE 13-24 FED COM

Well Type: OIL WELL

**Submission Date:** 08/29/2023

Well Number: 101H

Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

#### **Bond**

Federal/Indian APD: FED

**BLM Bond number: NM2693** 

**BIA Bond number:** 

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

**BLM** reclamation bond number:

Forest Service reclamation bond number:

**Forest Service reclamation bond** 

**Reclamation bond number:** 

**Reclamation bond amount:** 

**Reclamation bond rider amount:** 

Additional reclamation bond information

#### State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

#### NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

#### Section 1 – Plan Description Effective May 25, 2021

I. Operator: PBEX Operat	tions, LLC. OGRID: 332544	_ Date:08/15/2024	
II. Type: ⊠ Original □ Amer	ndment due to ☐ 19.15.27.9.D(6)(a) N	NMAC □ 19.15.27.9.D(6)(b) NMAC □ O	ther.
If Other, please describe:			
III Wall(s). Dravida tha fallar	ring information for each may an acce	mulated yeall an act of yealls muon acad to b	o duillad an muanaaad ta

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced
					Gas MC17D	Water BBL/D
Millie Mile 13-24 Fed Com 101H	30-025-	D-13-19S-33E	208 FNL 375 FWL	922	3105	2104
Millie Mile 13-24 Fed Com 102H	30-025-	D-13-19S-33E	208 FNL 435 FWL	922	3105	2104
Millie Mile 13-24 Fed Com 201H	30-025-	D-13-19S-33E	208 FNL 395 FWL	1176	1733	2585
Millie Mile 13-24 Fed Com 202H	30-025-	D-13-19S-33E	208 FNL 415 FWL	1176	1733	2585
Millie Mile 13-24 Fed Com 601H	30-025-	D-13-19S-33E	204 FNL 175 FWL	1142	3348	4174
Millie Mile 13-24 Fed Com 602H	30-025-	D-13-19S-33E	244 FNL 175 FWL	1142	3348	4174
Millie Mile 13-24 Fed Com 603H	30-025-	D-13-19S-33E	208 FNL 455 FWL	1142	3348	4174
Millie Mile 13-24 Fed Com 801H	30-025-	D-13-19S-33E	224 FNL 175 FWL	740	6964	3684

IV. Central Delivery Point Name:	Millie Mile 13-24 Fed Com Battery	[See 19.15.27.9(D)(1) NMAC
----------------------------------	-----------------------------------	----------------------------

**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached	Completion	Initial Flow	First Production
			Date	Commencement Date	Back Date	Date
Millie Mile 13-24 Fed Com 101H	30-025-	10/1/2025	10/16/2025	11/1/2025	11/28/2025	11/28/2025
Millie Mile 13-24 Fed Com 102H	30-025-	10/1/2025	10/16/2025	11/1/2025	11/28/2025	11/28/2025
Millie Mile 13-24 Fed Com 201H	30-025-	10/1/2025	10/16/2025	11/1/2025	11/28/2025	11/28/2025
Millie Mile 13-24 Fed Com 202H	30-025-	10/1/2025	10/16/2025	11/1/2025	11/28/2025	11/28/2025
Millie Mile 13-24 Fed Com 601H	30-025-	10/1/2025	10/16/2025	11/1/2025	11/28/2025	11/28/2025
Millie Mile 13-24 Fed Com 602H	30-025-	10/1/2025	10/16/2025	11/1/2025	11/28/2025	11/28/2025
Millie Mile 13-24 Fed Com 603H	30-025-	10/1/2025	10/16/2025	11/1/2025	11/28/2025	11/28/2025
Millie Mile 13-24 Fed Com 801H	30-025-	10/1/2025	10/16/2025	11/1/2025	11/28/2025	11/28/2025

- VI. Separation Equipment: 

  Attach a complete description of how Operator will size separation equipment to optimize gas capture.
- VII. Operational Practices: 

  ☐ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: 

Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☑ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

#### IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

#### X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map.   Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the
production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of
the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system $\square$ will $\square$ will not have capacity to gather 100% of the anticipated natu	ıral gas
production volume from the well prior to the date of first production.	

XIII. Line Pressure. Ope	erator 🗆 does 🗆 does	s not anticipate that its	existing well(s) of	connected to the s	ame segment,	or portion,	of the
natural gas gathering syst	em(s) described above	e will continue to mee	et anticipated incre	eases in line press	ure caused by	the new we	ll(s).

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1 1	Affach (	Inerator	s nlan f	o manage	nroduction	in resnonce	to the incr	eased line pressur	re

XIV. Confidentiality:  Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in
Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information
for which confidentiality is asserted and the basis for such assertion.

# Section 3 - Certifications Effective May 25, 2021

Effective May 25, 2021
Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:
☑ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or
□ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.  If Operator checks this box, Operator will select one of the following:
Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or
Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:  (a) power generation on lease; (b) power generation for grid; (c) compression on lease; (d) liquids removal on lease; (e) reinjection for underground storage; (f) reinjection for temporary storage; (g) reinjection for enhanced oil recovery; (h) fuel cell production; and (i) other alternative beneficial uses approved by the division.

#### Section 4 - Notices

- 1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:
- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: Mathalian
Printed Name: Mikah Thomas
Title: Regulatory Manager
E-mail Address: mikah@pbex.com
Date: 8/19/2024
Phone: 432.661.7106
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

#### NATURAL GAS MANAGEMEN PLAN

EGL Resources, Inc

#### VI. Separation Equipment:

Separation equipment installed at each EGL facility is designed for maximum anticipated throughput and pressure to minimize waste. Separation equipment is designed and built according to ASME Sec VIII Div I to ensure gas is separated from liquid streams according to projected production.

#### VII./VIII. Operational & Best Management Practices:

#### 1. General Requirements for Venting and Flaring of Natural Gas:

- In all circumstances, EGL will flare rather than vent unless flaring is technically infeasible and venting of natural gas will avoid a risk of an immediate and substantial adverse impact on safety, public health, or the environment.
- EGL installs and operates vapor recovery units (VRUs) in new facilities to minimize venting and flaring. If a VRU experiences operating issues, it is quickly assessed so that action can be taken to return the VRU to operation or, if necessary, facilities are shut-in to reduce the venting or flaring of natural gas.

#### 2. During Drilling Operations:

- Flare stacks will be located a minimum of 110 feet from the nearest surface hole location.
- If an emergency or malfunction occurs, gas will be flared or vented to avoid a risk of an immediate and substantial adverse impact on public health, safety or the environment and be properly reported to the NMOCD pursuant to 19.15.27.8.G.
- Natural gas is captured or combusted if technically feasible using best industry practices and control technologies, such as the use of separators (e.g., Sand Commanders) during normal drilling and completions operations.

#### 3. During Completions:

- EGL typically does not complete traditional flowback, instead EGL will flow produced oil, water, and gas to a centralized tank battery and continuously recover salable quality gas. If EGL completes traditional flowback, EGL conducts reduced emission completions as required by 40 CFR 60.5375a by routing gas to a gas flow line as soon as practicable once there is enough gas to operate a separator. Venting does not occur once there is enough gas to operate a separator
- Normally, during completion, a flare is not on-site. A Snubbing Unit will have a flare on-site, and the flare volume will be estimated.
- If natural gas does not meet pipeline quality specifications, the gas is sampled twice per week until the gas meets the specifications.

#### 4. During Production:

- An audio, visual and olfactory (AVO) inspection will be performed daily (at minimum) for active wells and facilities to confirm that all production equipment is operating properly and there are no leaks or releases except as allowed in Subsection D of 19.15.27.8 NMAC. Inactive, temporarily abandoned, or shut-in wells and facilities will be inspected weekly. Inspection records will be kept for a minimum of five years and will be available upon request by the division.
- Monitor manual liquid unloading for wells on-site, takes all reasonable actions to achieve a stabilized rate and pressure at the earliest practical time and takes reasonable actions to minimize venting to the maximum extent practicable.
- In all circumstances, EGL will flare rather than vent unless flaring is technically infeasible and venting of natural gas will avoid a risk of an immediate and substantial adverse impact on safety, public health, or the environment.
  - EGL's design for new facilities utilizes air-activated pneumatic controllers and pumps.

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#### NATURAL GAS MANAGEMEN PLAN

#### EGL Resources, Inc

- If natural gas does not meet pipeline quality specifications, the gas is sampled twice per week until the gas meets the specifications.
- EGL does not produce oil or gas until all flowlines, tank batteries, and oil/gas takeaway are installed, tested, and determined operational.

#### 5. Performance Standards

- Equipment installed at each facility is designed for maximum anticipated throughput and pressure to minimize waste. Tank pressure relief systems utilize soft seated or metal seated PSVs, as appropriate, which are both designed to not leak.
- Flare stack has been designed for proper size and combustion efficiency. The new flares will have a continuous pilot and will be located at least 100 feet from the well and storage tanks and will be securely anchored.
  - New tanks will be equipped with an automatic gauging system.
- An AVO inspection will be performed daily (at minimum) for active wells and facilities to confirm that all production equipment is operating properly and there are no leaks or releases except as allowed in Subsection D of 19.15.27.8 NMAC. Inactive, temporarily abandoned, or shut-in wells and facilities will be inspected weekly. Inspection records will be kept for a minimum of five years and will be available upon request by the division.

#### 6. Measurement or Estimation of Vented and Flared Natural Gas

- EGL estimates or measures the volume of natural gas that is vented, flared, or beneficially used during drilling operations, regardless of the reason or authorization for such venting or flaring.
- Where technically practicable, EGL will install meters on flares installed after May 25, 2021. Meters will conform to industry standards. Bypassing the meter will only occur for inspecting and servicing of the meter.

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

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 375125

#### **CONDITIONS**

Operator:	OGRID:
PBEX Operations, LLC	332544
223 West Wall Street	Action Number:
Midland, TX 79701	375125
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

#### CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	9/5/2024
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	9/5/2024
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	9/5/2024
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	9/5/2024
pkautz	If cement does not circulate on any string, a CBL is required for that string of casing	9/5/2024