

Form 3160-3  
(June 2015)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0137  
Expires: January 31, 20185. Lease Serial No.  
NMLC0049648B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

RED LAKE 33 FEDERAL COM  
4H1a. Type of work: ☒ DRILL ☐ REENTER  
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other  
1c. Type of Completion: ☐ Hydraulic Fracturing ☒ Single Zone ☐ Multiple Zone2. Name of Operator  
SPUR ENERGY PARTNERS LLC

9. API Well No.

30-015-49407

3a. Address  
9655 KATY FREEWAY, SUITE 500 Houston TX 770243b. Phone No. (include area code)  
(832)930-854810. Field and Pool, or Exploratory  
RED LAKE / GLORIETA-YESO

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)

At surface NESE / 1930 FSL / 1175 FEL / LAT 32.788706 / LONG -104.278853

At proposed prod. zone NWSW / 1650 FSL / 50 FWL / LAT 32.7885814 / LONG -104.3090361

11. Sec., T. R. M. or Blk. and Survey or Area  
SEC 33 / T17S / R27E / NMP

14. Distance in miles and direction from nearest town or post office\*

12. County or Parish  
EDDY13. State  
NM15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any) 1 feet

16. No of acres in lease

17. Spacing Unit dedicated to this well  
24018. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft. 20 feet19. Proposed Depth  
3040 feet / 10619 feet

20. BLM/BIA Bond No. in file

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
3507 feet22. Approximate date work will start\*  
05/01/202223. Estimated duration  
10 days

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.

2. A Drilling Plan.

3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).

5. Operator certification.

6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature  
(Electronic Submission)Name (Printed/Typed)  
SARAH CHAPMAN / Ph: (832)930-8613Date  
02/27/2019Title  
Regulatory DirectoryApproved by (Signature)  
(Electronic Submission)Name (Printed/Typed)  
Cody Layton / Ph: (575)234-5959Date  
03/07/2022Title  
Assistant Field Manager Lands & MineralsOffice  
CARLSBAD

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.

(Continued on page 2)

\*(Instructions on page 2)



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 Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 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

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-015- 49407</b>		<sup>2</sup> Pool Code <b>51120</b>	<sup>3</sup> Pool Name <b>RED LAKE; GLORIETA-YESO</b>
<sup>4</sup> Property Code <b>332720</b>	<sup>5</sup> Property Name <b>RED LAKE 33 FEDERAL COM</b>		<sup>6</sup> Well Number <b>4H</b>
<sup>7</sup> OGRID NO. <b>328947</b>	<sup>8</sup> Operator Name <b>SPUR ENERGY PARTNERS LLC.</b>		<sup>9</sup> Elevation <b>3520'</b>

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
<b>K</b>	<b>33</b>	<b>17S</b>	<b>27E</b>		<b>2169</b>	<b>SOUTH</b>	<b>2230</b>	<b>WEST</b>	<b>EDDY</b>

<sup>11</sup> 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
<b>L</b>	<b>32</b>	<b>17S</b>	<b>27E</b>		<b>1650</b>	<b>SOUTH</b>	<b>50</b>	<b>WEST</b>	<b>EDDY</b>

<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
<b>240</b>			

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

<p><sup>16</sup> <u>GEODETIC DATA</u> NAD 83 GRID - NM EAST</p> <p><u>SURFACE LOCATION (SL)</u> N: 650928.4 - E: 556300.4 LAT: 32.7894247° N LONG: 104.2846422° W</p> <p><u>FIRST TAKE POINT (FTP)</u> 1826' FSL &amp; 2536' FWL SEC 33 N: 650574.8 - E: 556592.9 LAT: 32.7884522° N LONG: 104.2836909° W</p> <p><u>LAST TAKE POINT (LTP)</u> 1651' FSL &amp; 100' FWL SEC 32 N: 650618.7 - E: 548854.2 LAT: 32.7885803° N LONG: 104.3088734° W</p> <p><u>BOTTOM HOLE (BH)</u> N: 650619.1 - E: 548804.2 LAT: 32.7885814° N LONG: 104.3090361° W</p> <p><u>CORNER DATA</u> NAD 83 GRID - NM EAST</p> <p>A: FOUND BRASS CAP "1941" N: 648970.6 - E: 548724.7</p> <p>B: FOUND BRASS CAP "1941" N: 651525.8 - E: 548770.4</p> <p>C: FOUND BRASS CAP "1941" N: 654078.0 - E: 548816.7</p> <p>D: FOUND BRASS CAP "1941" N: 654056.4 - E: 551501.0</p> <p>E: FOUND BRASS CAP "1941" N: 654037.2 - E: 554186.5</p> <p>F: FOUND BRASS CAP "1941" N: 654033.7 - E: 556720.4</p> <p>G: FOUND BRASS CAP "1941" N: 654030.2 - E: 559253.9</p> <p>H: FOUND BRASS CAP "1941" N: 651379.9 - E: 559254.2</p> <p>I: FOUND BRASS CAP "1941" N: 648731.5 - E: 559255.2</p> <p>J: FOUND BRASS CAP "1941" N: 648746.6 - E: 556678.3</p> <p>K: FOUND BRASS CAP "1941" N: 648833.7 - E: 553990.1</p> <p>L: FOUND BRASS CAP "1941" N: 648902.9 - E: 551358.1</p> <p>M: FOUND BRASS CAP "1941" N: 651435.4 - E: 554088.9</p>	<p><sup>17</sup> <b>OPERATOR CERTIFICATION</b> <i>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.</i></p> <p><u>Sarah Chapman</u> 4/21/2021 Signature Date <b>SARAH CHAPMAN</b> Printed Name <b>SCHAPMAN@SPUREPLLC.COM</b> E-mail Address</p> <p><sup>18</sup> <b>SURVEYOR CERTIFICATION</b> <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p> <p><b>12-21-2020</b> Date of Survey Signature and Seal of Professional Surveyor  <b>19680</b> Certificate Number REV: BH, LTP &amp; FTP MOVE - 3/26/21 <b>LS20120810R</b></p>
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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:** SPUR ENERGY PARTNERS LLC **OGRID:** 328947 **Date:** 03 / 24 / 2022

**II. Type:** ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: \_\_\_\_\_

**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 Water BBL/D
RED LAKE 33 FEDERAL COM 4H	30-015-	K-33-17S-27E	2169' FSL 2230' FWL	304 BBL/D	608 MCF/D	2738 BBL/D
RED LAKE 33 FEDERAL COM 5H	30-015-	K-33-17S-27E	2170' FSL 2270' FWL	147 BBL/D	147 MCF/D	1616 BBL/D
RED LAKE 33 FEDERAL COM 6H	30-015-	K-33-17S-27E	2172' FSL 2310' FWL	207 BBL/D	145 MCF/D	1425 BBL/D
RED LAKE 33 FEDERAL COM 7H	30-015-	K-33-17S-27E	2171' FSL 2290' FWL	259 BBL/D	181 MCF/D	1425 BBL/D
RED LAKE 33 FEDERAL COM 8H	30-015-	K-33-17S-27E	2170' FSL 2250' FWL	243 BBL/D	730 MCF/D	2738 BBL/D

**IV. Central Delivery Point Name:** RED LAKE 33 FEDERAL COM NORTH TANK 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 Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
RED LAKE 33 FEDERAL COM 4H	30-015-	12/19/2023	12/28/2023	01/05/2024	01/18/2024	01/18/2024
RED LAKE 33 FEDERAL COM 5H	30-015-	12/10/2023	12/18/2023	01/05/2024	01/18/2024	01/18/2024
RED LAKE 33 FEDERAL COM 6H	30-015-	12/01/2023	12/08/2023	01/05/2024	01/18/2024	01/18/2024
RED LAKE 33 FEDERAL COM 7H	30-015-	11/22/2023	11/30/2023	01/05/2024	01/18/2024	01/18/2024
RED LAKE 33 FEDERAL COM 8H	30-015-	12/29/2023	01/04/2024	01/05/2024	01/18/2024	01/18/2024

**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 ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

**XIII. Line Pressure.** Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

**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**

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:	<i>Sarah Chapman</i>
Printed Name:	SARAH CHAPMAN
Title:	REGULATORY DIRECTOR
E-mail Address:	SCHAPMAN@SPURENERGY.COM
Date:	03/24/2022
Phone:	832-930-8613
<b>OIL CONSERVATION DIVISION</b> (Only applicable when submitted as a standalone form)	
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

## Spur Energy Partners LLC – Red Lake 33 Federal Com 4H

### 1. Geologic Formations

TVD of target	3040'
MD at TD	10618'

Formation	Depth	Lithology	Expected Fluids
Quaternary	0'	Dolomite, other: Caliche	Useable Water
Seven Rivers	275'	Sandstone, Dolomite	Natural Gas, Oil
Queen	775'	Sandstone, Dolomite	Natural Gas, Oil
Grayburg	970'	Limestone, Dolomite	Natural Gas, Oil
San Andres	1485'	Limestone, Dolomite	Natural Gas, Oil
Glorieta	2825'	Dolomite, Siltstone	Natural Gas, Oil
Top Yeso	2905'	Dolomite	Natural Gas, Oil
Drinkard	4460'	Dolomite	Natural Gas, Oil
Base of Yeso	5000'	Dolomite	Natural Gas, Oil

\*H<sub>2</sub>S, water flows, loss of circulation, abnormal pressures, etc.

### 2. Casing Program

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

#### *Primary Plan:*

Hole Size (in)	Casing Interval		Csg. Size (in)	Weight (lbs)	Grade	Conn.	SF	SF Burst	Body SF	Joint SF
	From (ft)	To (ft)					Collapse		Tension	Tension
12.25	0	1500	9.625	36	J-55	BTC	1.125	1.2	1.4	1.4
8.75	0	3400	7	32	L-80	BK-HT	1.125	1.2	1.4	1.4
8.75	3400	10618	5.5	20	L-80	BK-HT	1.125	1.2	1.4	1.4
							SF Values will meet or Exceed			

**Spur Energy Partners LLC – Red Lake 33 Federal Com 4H**

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

**3. Cementing Program****Primary Plan:**

Casing String	Top (ft)	Bottom (ft)	% Excess
Surface (Lead)	0	950	100%
Surface (Tail)	950	1500	165%
Production (Lead)	0	2400	0%
Production (Tail)	2400	10618	50%

Casing String	# Sks	Wt. (lb/gal)	Yld (ft3/sack)	H2O (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface (Lead)	270	12.2	2.31	13.48	8:12	Clas C Premium Plus Cement
Surface (Tail)	259	13.2	1.84	9.92	6:59	Clas C Premium Plus Cement
Production (Lead)	152	10.8	2.54	15.29	N/A	Clas C Premium Plus Cement
Production (Tail)	1639	13	1.81	9.81	N/A	Clas C Premium Plus Cement



**Spur Energy Partners LLC – Red Lake 33 Federal Com 4H****4. Pressure Control Equipment****\*Spur Energy Partners LLC variance for flex hose\***

1. Spur requests a variance to use a flex line from the BOP to the choke manifold. Documentation will be attached in the APD and be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no bends).

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
12.25" Hole	13-5/8"	5M	Annular	✓	70% of working pressure
		5M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram	✓	
			Double Ram		
			Other*		
8.75" Hole	13-5/8"	5M	Annular	✓	70% of working pressure
		5M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram	✓	
			Double Ram		
			Other*		

**\*Spur Energy Partners LLC will be utilizing a 5M BOP\***

Condition	Specify what type and where?
BH Pressure at deepest TVD	1407 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	105°F

\*Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or 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. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.	
Y	Are anchors required by manufacturer?

**Spur Energy Partners LLC – Red Lake 33 Federal Com 4H**

	A conventional wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. See attached schematics.
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**5. BOP Break Testing Request**

Spur Energy Partners LLC requests permission to adjust the BOP break testing requirements as follows:

BOP break test under the following conditions:

- After a full BOP test is conducted
- When skidding to drill the production section, where the surface casing point is shallower than the 3 Bone Spring or 10,000 TVD.
- When skidding to drill a production section that does not penetrate the 3<sup>rd</sup> Bone Spring or deeper.

If the kill line is broken prior to skid, four tests will be performed.

- 1) The void between the wellhead and the spool (this consists of two tests)
- 2) The spool between the kill lines and the choke manifold (this consists of two tests)

If the kill line is not broken prior to skid, two tests will be performed.

- 1) The void between the wellhead and the pipe rams

**6. Mud Program**

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Spur will use a closed mud system.

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From (ft)	To (ft)				
0	1500	Water-Based Mud	8.6-8.9	32-36	N/C
1500	10618	Water-Based Mud	8.6-8.9	32-36	N/C

What will be used to monitor the loss or gain of fluid?	PVT/PASON/Visual Monitoring
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**Spur Energy Partners LLC – Red Lake 33 Federal Com 4H****7. Logging and Testing Procedures**

<b>Logging, Coring and Testing.</b>		
Yes	Will run GR from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.	
No	Logs are planned based on well control or offset log information.	
No	Drill stem test? If yes, explain	
No	Coring? If yes, explain	
<b>Additional logs planned</b>		<b>Interval</b>
No	Resistivity	
No	Density	
No	CBL	
Yes	Mud log	ICP - TD
No	PEX	

**8. Drilling Conditions**

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.

Hydrogen Sulfide (H <sub>2</sub> S) monitors will be installed prior to drilling out the surface shoe. If H <sub>2</sub> S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
N	H <sub>2</sub> S is present
Y	H <sub>2</sub> S Plan attached

**Total estimated cuttings volume:** 1008 bbls.

**Spur Energy Partners LLC – Red Lake 33 Federal Com 4H****9. Other facets of operation**

	<b>Yes/No</b>
Will more than one drilling rig be used for drilling operations? If yes, describe. Spur Energy Partners LLC. requests the option to contract a Surface Rig to drill, set surface casing, and cement for this well. If the timing between rigs is such that Spur Energy Partners LLC. would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the spudder rig.	Yes

## Attachments

- ☒ Directional Plan  
☒ H2S Contingency Plan  
☒ Akita 57 Attachments  
☒ BOP Schematics  
☒ Transcend Spudder Rig Attachments

**10. Company Personnel**

<b>Name</b>	<b>Title</b>	<b>Office Phone</b>	<b>Mobile Phone</b>
Christopher Hollis	Drilling Manager	832-930-8629	713-380-7754
Johnny Nabors	Senior Vice President Operations	832-930-8502	281-904-8811



# **Spur Energy Partners, LLC**

**Eddy County, NM (NAD 83 - NME)**

**RED LAKE 33 FED COM**

**#4H**

**Wellbore #1**

**Plan: Plan #1**

## **Standard Planning Report**

**27 April, 2021**





## Planning Report



<b>Database:</b>	WBDS_SQL_2	<b>Local Co-ordinate Reference:</b>	Well #4H
<b>Company:</b>	Spur Energy Partners, LLC	<b>TVD Reference:</b>	RKB = 20' @ 3540.00usft (Akita 57)
<b>Project:</b>	Eddy County, NM (NAD 83 - NME)	<b>MD Reference:</b>	RKB = 20' @ 3540.00usft (Akita 57)
<b>Site:</b>	RED LAKE 33 FED COM	<b>North Reference:</b>	Grid
<b>Well:</b>	#4H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1		

<b>Project</b>	Eddy County, NM (NAD 83 - NME)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		

Site		RED LAKE 33 FED COM			
Site Position:		Northing:	653,242.90 usft	Latitude:	32.7957871
From:	Map	Easting:	555,677.40 usft	Longitude:	-104.2866662
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.025

Well	#4H					
Well Position	+N/-S	-2,314.50 usft	Northing:	650,928.40 usft	Latitude:	32.7894246
	+E/-W	623.00 usft	Easting:	556,300.40 usft	Longitude:	-104.2846422
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,520.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2020	4/26/2021	6.936	60.311	47,766.83109187

<b>Design</b>	Plan #1				
<b>Audit Notes:</b>					
<b>Version:</b>		<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	270.33	

<b>Plan Survey Tool Program</b>	<b>Date</b>	4/26/2021			
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>	
1	0.00	10,617.64	Plan #1 (Wellbore #1)	MWD+IGRF	
				OWSG MWD + IGRF or WM	

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.000	
1,050.16	15.00	131.34	1,041.62	-64.51	73.32	2.00	2.00	0.00	131.344	
2,230.09	15.00	131.34	2,181.32	-266.28	302.64	0.00	0.00	0.00	0.000	
3,126.49	60.00	270.33	2,940.08	-352.22	-45.01	8.00	5.02	15.50	143.234	
3,326.49	60.00	270.33	3,040.08	-351.22	-218.21	0.00	0.00	0.00	0.000	
3,632.79	90.63	270.33	3,116.81	-349.53	-510.99	10.00	10.00	0.00	0.000	
10,618.54	90.63	270.33	3,040.00	-309.30	-7,496.20	0.00	0.00	0.00	0.000	PLAT 4H BHL: 165(



## Planning Report



<b>Database:</b>	WBDS_SQL_2	<b>Local Co-ordinate Reference:</b>	Well #4H
<b>Company:</b>	Spur Energy Partners, LLC	<b>TVD Reference:</b>	RKB = 20' @ 3540.00usft (Akita 57)
<b>Project:</b>	Eddy County, NM (NAD 83 - NME)	<b>MD Reference:</b>	RKB = 20' @ 3540.00usft (Akita 57)
<b>Site:</b>	RED LAKE 33 FED COM	<b>North Reference:</b>	Grid
<b>Well:</b>	#4H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>PLAT 4H SHL: 2169' FSL &amp; 2230' FWL</b>									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	2.00	131.34	399.98	-1.15	1.31	-1.32	2.00	2.00	0.00
500.00	4.00	131.34	499.84	-4.61	5.24	-5.27	2.00	2.00	0.00
600.00	6.00	131.34	599.45	-10.37	11.78	-11.84	2.00	2.00	0.00
700.00	8.00	131.34	698.70	-18.42	20.93	-21.04	2.00	2.00	0.00
800.00	10.00	131.34	797.47	-28.75	32.68	-32.84	2.00	2.00	0.00
900.00	12.00	131.34	895.62	-41.35	47.00	-47.24	2.00	2.00	0.00
1,000.00	14.00	131.34	993.06	-56.21	63.89	-64.21	2.00	2.00	0.00
1,050.16	15.00	131.34	1,041.62	-64.51	73.32	-73.69	2.00	2.00	0.00
1,100.00	15.00	131.34	1,089.76	-73.03	83.00	-83.42	0.00	0.00	0.00
1,200.00	15.00	131.34	1,186.35	-90.13	102.44	-102.96	0.00	0.00	0.00
1,300.00	15.00	131.34	1,282.94	-107.23	121.87	-122.49	0.00	0.00	0.00
1,400.00	15.00	131.34	1,379.53	-124.33	141.31	-142.02	0.00	0.00	0.00
1,500.00	15.00	131.34	1,476.12	-141.44	160.74	-161.56	0.00	0.00	0.00
1,600.00	15.00	131.34	1,572.71	-158.54	180.18	-181.09	0.00	0.00	0.00
1,700.00	15.00	131.34	1,669.30	-175.64	199.62	-200.62	0.00	0.00	0.00
1,800.00	15.00	131.34	1,765.90	-192.74	219.05	-220.16	0.00	0.00	0.00
1,900.00	15.00	131.34	1,862.49	-209.84	238.49	-239.69	0.00	0.00	0.00
2,000.00	15.00	131.34	1,959.08	-226.94	257.92	-259.22	0.00	0.00	0.00
2,100.00	15.00	131.34	2,055.67	-244.04	277.36	-278.76	0.00	0.00	0.00
2,200.00	15.00	131.34	2,152.26	-261.14	296.79	-298.29	0.00	0.00	0.00
2,230.09	15.00	131.34	2,181.32	-266.28	302.64	-304.17	0.00	0.00	0.00
<b>PLAN #4H KOP: 2230.09' MD</b>									
2,250.00	13.76	135.35	2,200.61	-269.67	306.24	-307.79	8.00	-6.25	20.15
2,300.00	11.03	149.09	2,249.45	-278.01	312.88	-314.47	8.00	-5.46	27.48
2,350.00	9.26	169.64	2,298.68	-286.08	316.06	-317.70	8.00	-3.54	41.10
2,400.00	9.03	194.96	2,348.07	-293.83	315.77	-317.46	8.00	-0.46	50.64
2,450.00	10.45	217.27	2,397.36	-301.23	312.01	-313.74	8.00	2.83	44.61
2,500.00	12.98	232.65	2,446.33	-308.25	304.79	-306.56	8.00	5.06	30.77
2,550.00	16.11	242.64	2,494.73	-314.85	294.16	-295.97	8.00	6.26	19.97
2,600.00	19.55	249.32	2,542.32	-321.00	280.17	-282.01	8.00	6.89	13.37
2,650.00	23.17	254.03	2,588.88	-326.66	262.88	-264.75	8.00	7.23	9.42
2,700.00	26.89	257.51	2,634.18	-331.81	242.37	-244.28	8.00	7.44	6.96
2,750.00	30.68	260.19	2,678.00	-336.43	218.75	-220.69	8.00	7.57	5.37
2,800.00	34.51	262.34	2,720.12	-340.50	192.14	-194.09	8.00	7.66	4.29
2,850.00	38.37	264.10	2,760.34	-343.98	162.65	-164.63	8.00	7.72	3.52
2,900.00	42.25	265.58	2,798.46	-346.87	130.44	-132.44	8.00	7.77	2.97
2,950.00	46.15	266.86	2,834.29	-349.16	95.67	-97.68	8.00	7.80	2.55
2,997.90	49.90	267.94	2,866.32	-350.76	60.10	-62.12	8.00	7.82	2.25
<b>PLAT 4H FTP: 1826' FSL &amp; 2536' FWL</b>									
3,000.00	50.06	267.98	2,867.67	-350.82	58.49	-60.51	8.00	7.83	2.11
3,050.00	53.99	268.98	2,898.43	-351.86	19.10	-21.13	8.00	7.84	2.00
3,100.00	57.92	269.88	2,926.42	-352.26	-22.32	20.29	8.00	7.86	1.81
3,126.49	60.00	270.33	2,940.08	-352.22	-45.01	42.98	8.00	7.87	1.69
3,200.00	60.00	270.33	2,976.84	-351.85	-108.67	106.64	0.00	0.00	0.00
3,300.00	60.00	270.33	3,026.84	-351.35	-195.27	193.25	0.00	0.00	0.00
3,326.49	60.00	270.33	3,040.08	-351.22	-218.21	216.19	0.00	0.00	0.00
3,350.00	62.35	270.33	3,051.42	-351.10	-238.81	236.78	10.00	10.00	0.00
3,400.00	67.35	270.33	3,072.66	-350.84	-284.06	282.03	10.00	10.00	0.00



## Planning Report



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<b>Site:</b>	RED LAKE 33 FED COM	<b>North Reference:</b>	Grid
<b>Well:</b>	#4H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
3,450.00	72.35	270.33	3,089.88	-350.57	-330.98	328.95	10.00	10.00	0.00	
3,500.00	77.35	270.33	3,102.94	-350.29	-379.23	377.20	10.00	10.00	0.00	
3,550.00	82.35	270.33	3,111.75	-350.01	-428.43	426.40	10.00	10.00	0.00	
3,600.00	87.35	270.33	3,116.23	-349.72	-478.21	476.19	10.00	10.00	0.00	
3,632.79	90.63	270.33	3,116.81	-349.53	-510.99	508.97	10.00	10.00	0.00	
PLAN #4H LP: 3632.79' MD										
3,700.00	90.63	270.33	3,116.07	-349.15	-578.19	576.17	0.00	0.00	0.00	
3,800.00	90.63	270.33	3,114.97	-348.57	-678.19	676.17	0.00	0.00	0.00	
3,900.00	90.63	270.33	3,113.87	-347.99	-778.18	776.16	0.00	0.00	0.00	
4,000.00	90.63	270.33	3,112.77	-347.42	-878.17	876.15	0.00	0.00	0.00	
4,100.00	90.63	270.33	3,111.67	-346.84	-978.16	976.15	0.00	0.00	0.00	
4,200.00	90.63	270.33	3,110.57	-346.27	-1,078.15	1,076.14	0.00	0.00	0.00	
4,300.00	90.63	270.33	3,109.47	-345.69	-1,178.15	1,176.14	0.00	0.00	0.00	
4,400.00	90.63	270.33	3,108.38	-345.11	-1,278.14	1,276.13	0.00	0.00	0.00	
4,500.00	90.63	270.33	3,107.28	-344.54	-1,378.13	1,376.12	0.00	0.00	0.00	
4,600.00	90.63	270.33	3,106.18	-343.96	-1,478.12	1,476.12	0.00	0.00	0.00	
4,700.00	90.63	270.33	3,105.08	-343.39	-1,578.12	1,576.11	0.00	0.00	0.00	
4,800.00	90.63	270.33	3,103.98	-342.81	-1,678.11	1,676.11	0.00	0.00	0.00	
4,900.00	90.63	270.33	3,102.88	-342.23	-1,778.10	1,776.10	0.00	0.00	0.00	
5,000.00	90.63	270.33	3,101.78	-341.66	-1,878.09	1,876.09	0.00	0.00	0.00	
5,100.00	90.63	270.33	3,100.68	-341.08	-1,978.09	1,976.09	0.00	0.00	0.00	
5,200.00	90.63	270.33	3,099.58	-340.51	-2,078.08	2,076.08	0.00	0.00	0.00	
5,300.00	90.63	270.33	3,098.48	-339.93	-2,178.07	2,176.08	0.00	0.00	0.00	
5,400.00	90.63	270.33	3,097.38	-339.35	-2,278.06	2,276.07	0.00	0.00	0.00	
5,500.00	90.63	270.33	3,096.28	-338.78	-2,378.05	2,376.06	0.00	0.00	0.00	
5,600.00	90.63	270.33	3,095.18	-338.20	-2,478.05	2,476.06	0.00	0.00	0.00	
5,700.00	90.63	270.33	3,094.08	-337.63	-2,578.04	2,576.05	0.00	0.00	0.00	
5,800.00	90.63	270.33	3,092.98	-337.05	-2,678.03	2,676.05	0.00	0.00	0.00	
5,900.00	90.63	270.33	3,091.88	-336.48	-2,778.02	2,776.04	0.00	0.00	0.00	
6,000.00	90.63	270.33	3,090.78	-335.90	-2,878.02	2,876.03	0.00	0.00	0.00	
6,100.00	90.63	270.33	3,089.68	-335.32	-2,978.01	2,976.03	0.00	0.00	0.00	
6,200.00	90.63	270.33	3,088.58	-334.75	-3,078.00	3,076.02	0.00	0.00	0.00	
6,300.00	90.63	270.33	3,087.48	-334.17	-3,177.99	3,176.02	0.00	0.00	0.00	
6,400.00	90.63	270.33	3,086.38	-333.60	-3,277.99	3,276.01	0.00	0.00	0.00	
6,500.00	90.63	270.33	3,085.28	-333.02	-3,377.98	3,376.00	0.00	0.00	0.00	
6,600.00	90.63	270.33	3,084.19	-332.44	-3,477.97	3,476.00	0.00	0.00	0.00	
6,700.00	90.63	270.33	3,083.09	-331.87	-3,577.96	3,575.99	0.00	0.00	0.00	
6,800.00	90.63	270.33	3,081.99	-331.29	-3,677.95	3,675.99	0.00	0.00	0.00	
6,900.00	90.63	270.33	3,080.89	-330.72	-3,777.95	3,775.98	0.00	0.00	0.00	
7,000.00	90.63	270.33	3,079.79	-330.14	-3,877.94	3,875.97	0.00	0.00	0.00	
7,100.00	90.63	270.33	3,078.69	-329.56	-3,977.93	3,975.97	0.00	0.00	0.00	
7,200.00	90.63	270.33	3,077.59	-328.99	-4,077.92	4,075.96	0.00	0.00	0.00	
7,300.00	90.63	270.33	3,076.49	-328.41	-4,177.92	4,175.96	0.00	0.00	0.00	
7,400.00	90.63	270.33	3,075.39	-327.84	-4,277.91	4,275.95	0.00	0.00	0.00	
7,500.00	90.63	270.33	3,074.29	-327.26	-4,377.90	4,375.94	0.00	0.00	0.00	
7,600.00	90.63	270.33	3,073.19	-326.68	-4,477.89	4,475.94	0.00	0.00	0.00	
7,700.00	90.63	270.33	3,072.09	-326.11	-4,577.89	4,575.93	0.00	0.00	0.00	
7,800.00	90.63	270.33	3,070.99	-325.53	-4,677.88	4,675.93	0.00	0.00	0.00	
7,900.00	90.63	270.33	3,069.89	-324.96	-4,777.87	4,775.92	0.00	0.00	0.00	
8,000.00	90.63	270.33	3,068.79	-324.38	-4,877.86	4,875.91	0.00	0.00	0.00	
8,100.00	90.63	270.33	3,067.69	-323.80	-4,977.85	4,975.91	0.00	0.00	0.00	
8,200.00	90.63	270.33	3,066.59	-323.23	-5,077.85	5,075.90	0.00	0.00	0.00	
8,300.00	90.63	270.33	3,065.49	-322.65	-5,177.84	5,175.89	0.00	0.00	0.00	
8,400.00	90.63	270.33	3,064.39	-322.08	-5,277.83	5,275.89	0.00	0.00	0.00	





## Planning Report



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<b>Company:</b>	Spur Energy Partners, LLC	<b>TVD Reference:</b>	RKB = 20' @ 3540.00usft (Akita 57)
<b>Project:</b>	Eddy County, NM (NAD 83 - NME)	<b>MD Reference:</b>	RKB = 20' @ 3540.00usft (Akita 57)
<b>Site:</b>	RED LAKE 33 FED COM	<b>North Reference:</b>	Grid
<b>Well:</b>	#4H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
8,500.00	90.63	270.33	3,063.29	-321.50	-5,377.82	5,375.88	0.00	0.00	0.00	
8,600.00	90.63	270.33	3,062.19	-320.93	-5,477.82	5,475.88	0.00	0.00	0.00	
8,700.00	90.63	270.33	3,061.10	-320.35	-5,577.81	5,575.87	0.00	0.00	0.00	
8,800.00	90.63	270.33	3,060.00	-319.77	-5,677.80	5,675.86	0.00	0.00	0.00	
8,900.00	90.63	270.33	3,058.90	-319.20	-5,777.79	5,775.86	0.00	0.00	0.00	
9,000.00	90.63	270.33	3,057.80	-318.62	-5,877.79	5,875.85	0.00	0.00	0.00	
9,100.00	90.63	270.33	3,056.70	-318.05	-5,977.78	5,975.85	0.00	0.00	0.00	
9,200.00	90.63	270.33	3,055.60	-317.47	-6,077.77	6,075.84	0.00	0.00	0.00	
9,300.00	90.63	270.33	3,054.50	-316.89	-6,177.76	6,175.83	0.00	0.00	0.00	
9,400.00	90.63	270.33	3,053.40	-316.32	-6,277.75	6,275.83	0.00	0.00	0.00	
9,500.00	90.63	270.33	3,052.30	-315.74	-6,377.75	6,375.82	0.00	0.00	0.00	
9,600.00	90.63	270.33	3,051.20	-315.17	-6,477.74	6,475.82	0.00	0.00	0.00	
9,700.00	90.63	270.33	3,050.10	-314.59	-6,577.73	6,575.81	0.00	0.00	0.00	
9,800.00	90.63	270.33	3,049.00	-314.01	-6,677.72	6,675.80	0.00	0.00	0.00	
9,900.00	90.63	270.33	3,047.90	-313.44	-6,777.72	6,775.80	0.00	0.00	0.00	
10,000.00	90.63	270.33	3,046.80	-312.86	-6,877.71	6,875.79	0.00	0.00	0.00	
10,100.00	90.63	270.33	3,045.70	-312.29	-6,977.70	6,975.79	0.00	0.00	0.00	
10,200.00	90.63	270.33	3,044.60	-311.71	-7,077.69	7,075.78	0.00	0.00	0.00	
10,300.00	90.63	270.33	3,043.50	-311.13	-7,177.68	7,175.77	0.00	0.00	0.00	
10,400.00	90.63	270.33	3,042.40	-310.56	-7,277.68	7,275.77	0.00	0.00	0.00	
10,500.00	90.63	270.33	3,041.30	-309.98	-7,377.67	7,375.76	0.00	0.00	0.00	
10,568.54	90.63	270.33	3,040.55	-309.59	-7,446.20	7,444.29	0.00	0.00	0.00	
<b>PLAT 4H LTP: 1651' FSL &amp; 100' FWL</b>										
10,600.00	90.63	270.33	3,040.20	-309.41	-7,477.66	7,475.76	0.00	0.00	0.00	
10,618.54	90.63	270.33	3,040.00	-309.30	-7,496.20	7,494.29	0.00	0.00	0.00	
<b>PLAT 4H BHL: 1650' FSL &amp; 50' FWL</b>										

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	
PLAT 4H SHL: 2169' F - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	650,928.40	556,300.40	32.7894246	-104.2846422	
PLAN #4H KOP: 223C - plan hits target center - Point	0.00	0.00	2,181.32	-266.28	302.64	650,662.12	556,603.04	32.7886923	-104.2836578	
PLAT 4H BHL: 1650' F - plan hits target center - Point	0.00	0.00	3,040.00	-309.30	-7,496.20	650,619.10	548,804.20	32.7885816	-104.3090360	
PLAT 4H LTP: 1651' F - plan misses target center by 0.11usft at 10568.54usft MD (3040.55 TVD, -309.59 N, -7446.20 E) - Point	0.00	0.00	3,040.55	-309.70	-7,446.20	650,618.70	548,854.20	32.7885804	-104.3088733	
PLAN #4H LP: 3632.7 - plan hits target center - Point	0.00	0.00	3,116.81	-349.53	-510.99	650,578.87	555,789.41	32.7884645	-104.2863056	
PLAT 4H FTP: 1826' F - plan misses target center by 347.75usft at 2997.90usft MD (2866.32 TVD, -350.76 N, 60.10 E) - Point	0.00	0.00	3,125.00	-353.60	292.50	650,574.80	556,592.90	32.7884523	-104.2836910	



## Planning Report



<b>Database:</b>	WBDS_SQL_2	<b>Local Co-ordinate Reference:</b>	Well #4H
<b>Company:</b>	Spur Energy Partners, LLC	<b>TVD Reference:</b>	RKB = 20' @ 3540.00usft (Akita 57)
<b>Project:</b>	Eddy County, NM (NAD 83 - NME)	<b>MD Reference:</b>	RKB = 20' @ 3540.00usft (Akita 57)
<b>Site:</b>	RED LAKE 33 FED COM	<b>North Reference:</b>	Grid
<b>Well:</b>	#4H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1		





Company: Spur Energy Partners, LLC  
Project: Eddy County, NM (NAD 83 - NME)  
Site: RED LAKE 33 FED COM  
Well: #4H  
Wellbore: Wellbore #1  
Rig: Akita 57  
Design: Plan #1 / 12:09, April 27 2021

WELL DETAILS: #4H

RKB = 20' @ 3540.00usft (Akita 57)

3520.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	650928.40	556300.40	32.7894246	-104.2846423

DESIGN TARGET DETAILS

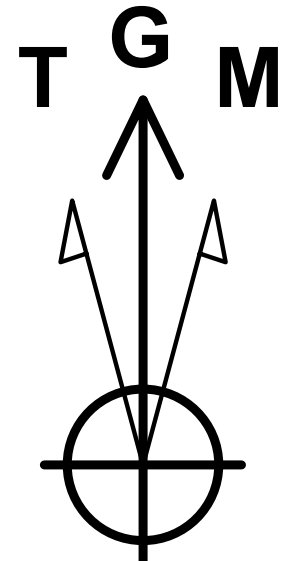
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PLAT 4H SHL: 2169' FSL & 2230' FWL	0.00	0.00	0.00	650928.40	556300.40	32.7894246	-104.2846423
PLAN #4H KOP: 2230.09' MD	2181.32	-266.28	302.64	650662.12	556603.04	32.7886923	-104.2836578
PLAT 4H BHL: 1650' FSL & 50' FWL	3040.00	-309.30	-7496.20	650619.10	548804.20	32.7885815	-104.3090360
PLAT 4H LTP: 1651' FSL & 100' FWL	3040.55	-309.70	-7446.20	650618.70	548854.20	32.7885804	-104.3088733
PLAN #4H LP: 3632.79' MD	3116.81	-349.53	-510.99	650578.87	555789.41	32.7884645	-104.2863056
PLAT 4H FTP: 1826' FSL & 2536' FWL	3125.00	-353.60	292.50	650574.80	556592.90	32.7884523	-104.2836910

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00
3	1050.16	15.00	131.34	1041.62	-64.51	73.32	2.00	-73.69
4	2230.09	15.00	131.34	2181.32	-266.28	302.64	0.00	-304.17
5	3126.49	60.00	270.33	2940.08	-352.22	-45.01	8.00	42.98
6	3326.49	60.00	270.33	3040.08	-351.22	-218.21	0.00	216.19
7	3632.79	90.63	270.33	3116.81	-349.53	-510.99	10.00	508.97
8	10618.54	90.63	270.33	3040.00	-309.30	-7496.20	0.00	7494.29

CORRECTION REFERENCE DATA:

To convert a Magnetic Direction to a Grid Direction, Add 6.910°  
To convert a True Direction to a Grid Direction, Subtract 0.026°  
To convert a Magnetic Direction to a True Direction, Add 6.936° East  
Magnetic Declination: 6.936°  
Grid Convergence: 0.026° West  
Magnetic Dip Angle: 60.311°  
Magnetic Field Strength: 47766.83109187nT

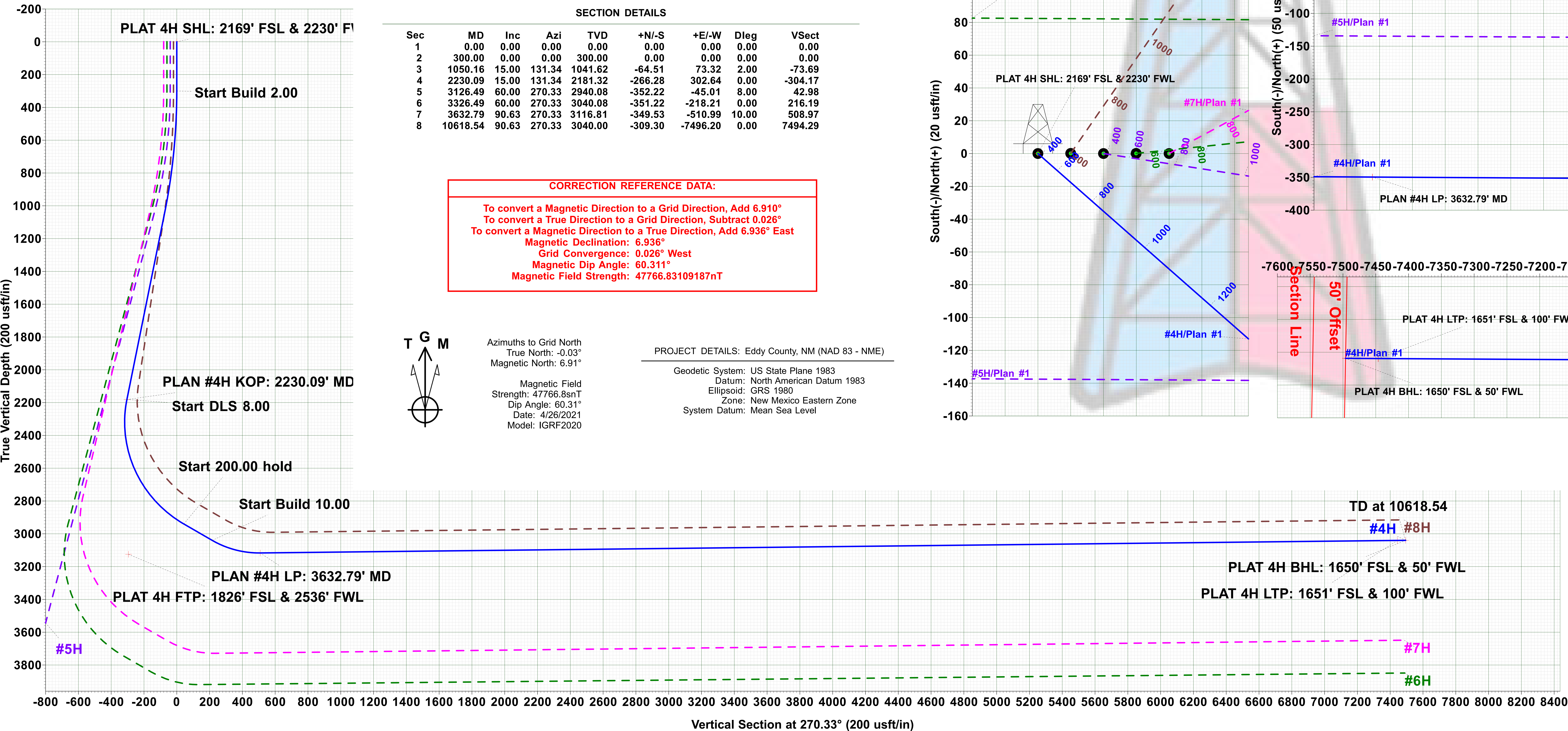
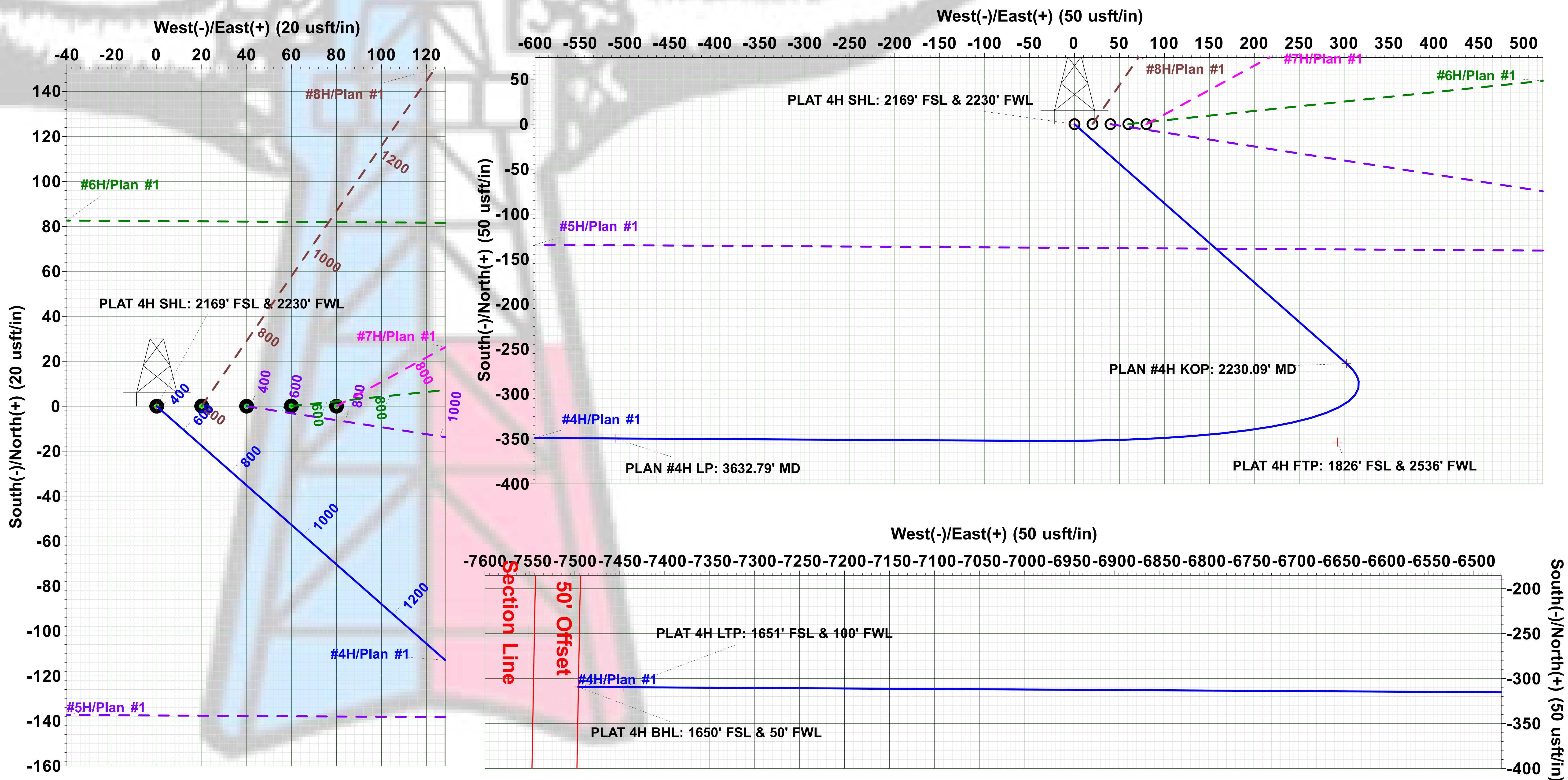
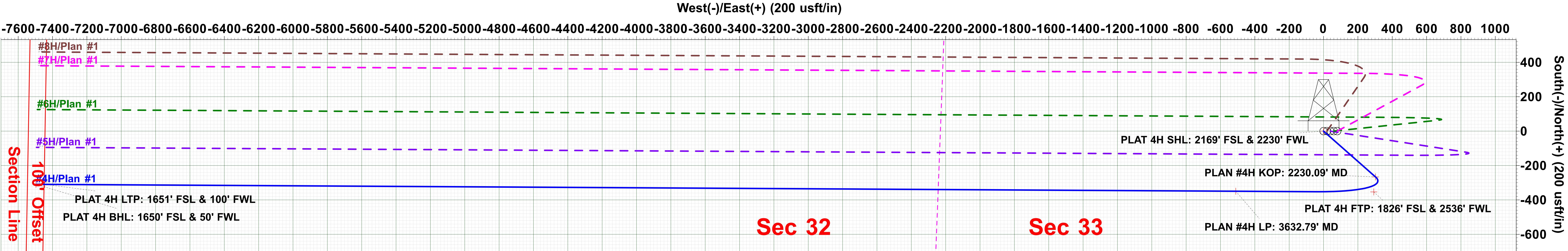


Azimuths to Grid North  
True North: -0.03°  
Magnetic North: 6.91°

Magnetic Field  
Strength: 47766.83nT  
Dip Angle: 60.31°  
Date: 4/26/2021  
Model: IGRF2020

PROJECT DETAILS: Eddy County, NM (NAD 83 - NME)

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: New Mexico Eastern Zone  
System Datum: Mean Sea Level



Disclaimer:  
All Plan Details, boundary  
lines and offset well  
location/ survey data is  
provided by customer and  
subject to customer  
approval.



Plan: Plan #1 (#4H/Wellbore #1) Akita 57

Created By: Matthew May Date: 12:09, April 27 2021





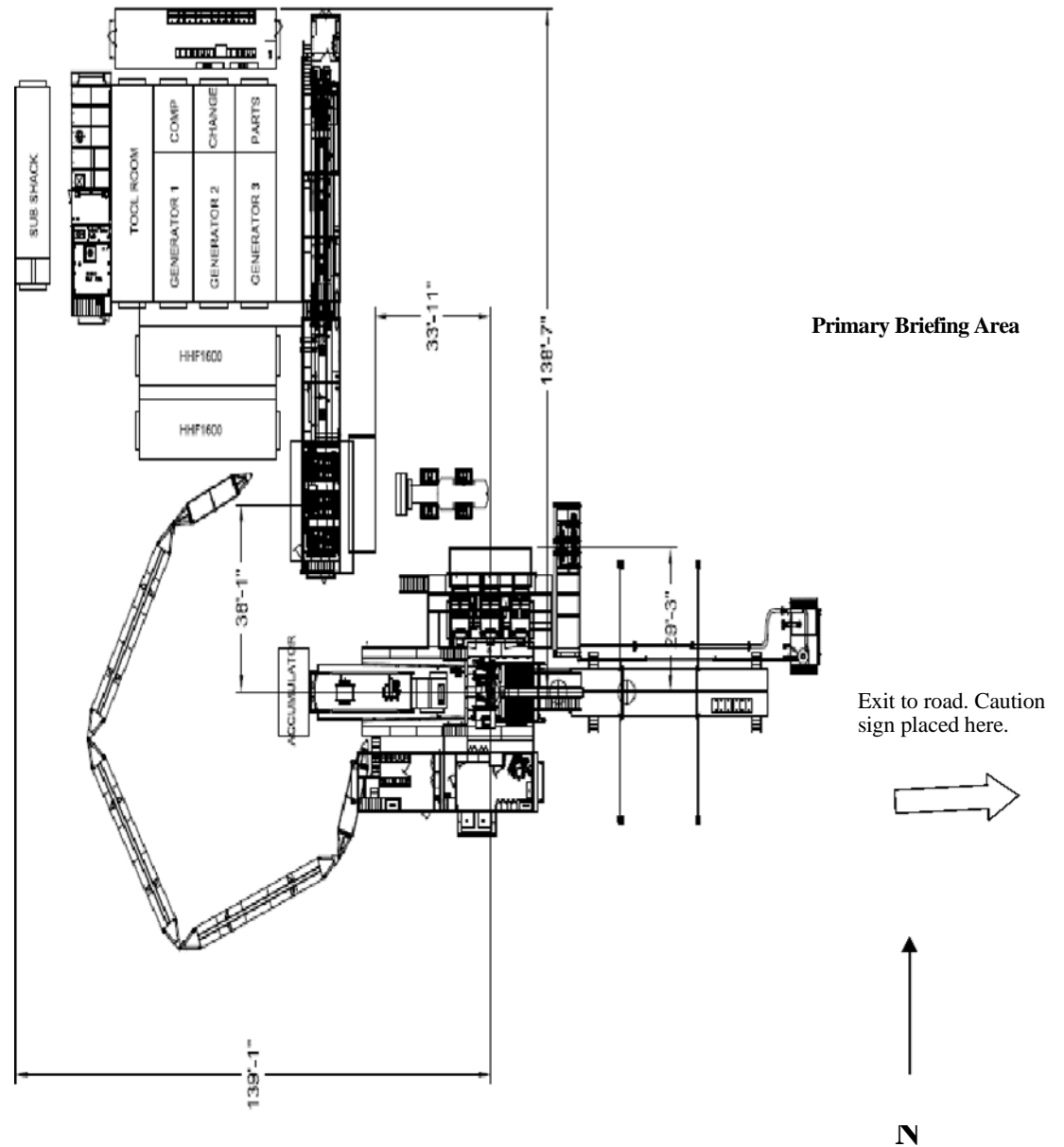
## **Permian Drilling Hydrogen Sulfide Drilling Operations Plan Red Lake 33 Federal Com 4H**

Open drill site. No homes or buildings are near the proposed location.

### **1. Escape**

Personnel shall escape upwind of wellbore in the event of an emergency gas release. Escape can take place through the lease road on the Southeast side of the location. Personnel need to move to a safe distance and block the entrance to location. If the primary route is not an option due to the wind direction, then a secondary egress route should be taken.

Secondary Briefing Area



WIND: Prevailing winds are from the Southwest

Secondary Egress



# RIG # 57<sub>1,150 HP Double Mast Drilling Rig</sub>

## SUBSTRUCTURE

One Piece Step Down

Floor Height: 18' 9" (on 4' pony sub moving system)

Clear Height (beneath rotary beams): 15' 5"

Rotary Capacity: 400,000 lbf

Max Pipe Setback: 400,000 lbf

Note: All floor heights above are based on the substructure sitting on 6" mats & 4' pony sub moving system

## MAST

106' telescoping, Drill Line: 1-1/8"

Static Hook Load: 440,000 lbf

Racking Capacity: 18,000' of 4" DP, 12,500' of 5" DP

## DRAWWORKS

TSM 850 425,000lbs w/ 10 Lines

Input Power: 1,150 hp AC traction motor

Main Brake: 1,150 hp AC traction motor (Dynamic)

Aux Parking Brake: Eaton brake & drum / band brake system

## TOP DRIVE

Tesco EXI 600 AC 350 Ton: Max speed 220 rpm,

Continuous Drill Torque: 30,000 ft-lbs

Max Torque (Make / Break): 45,000 ft-lbs

600 hp AC induction motor & drive system with PLC

250 Ton 5 x 36" Becket Block Assembly

## IRON ROUGHNECK

NOV ST-90C Conn Range: 4 1/4" to 8 1/2"

Spin Speed: 75 rpm nominal on 5" drill pipe

Spin Torque: 1,750 ft-lbs

Maximum Make-up torque: 60,000 ft-lbs

Maximum Break-out torque: 80,000 ft-lbs

## ROTARY TABLE

National 27 1/2" 500 Ton with hydraulic drive to position tools only

27 1/2" Diameter opening

## POWER SYSTEM

VFD, MCC, Eaton Drives, Current Power Systems Controls, three Caterpillar C32 gen sets, 1220 BHP.

## MUD PUMP #1

HHF1600 Triplex Rated Power: 1600 hp

Stroke: 12"

Input Power: 1500 hp AC traction motor

Pressure Rating: 5000 psi

## MUD PUMP #2

HHF1600 Triplex Rated Power: 1600 hp

Stroke: 12"

Input Power: 1500 hp AC traction motor

Pressure Rating: 5000 psi

## MUD TANKS

Two Tank system w/ 1200 bbls total capacity

Shakers: Three MI Swaco Mongoose 4 panel dual motion

Mud Gas Separator: MI Swaco 4' OD x 12' tall

Pill Tank: 54 bbls

## MUD SYSTEM

5000 psi Max Pressure

5" Main plumbing and standpipe

## SCALPING TANK

Main Tank: 186 bbls capacity

Trip Tank: 24 bbls capacity

Shakers: Three NOV Venom shakers dual motion

## BOP (NACE)

11" x 5000 psi WP Spherical Annular

11" x 5000 psi WP Double Ram

11" x 5000 psi WP Single Ram (Optional)

## MANIFOLD

3-1/8" 5,000 psi c/w two 3 1/8" manual chokes

## ACCUMULATOR

CTI: 160 gal 6 station 3000 psi, c/w N2 Backup & electric triplex pump

## CATWALK

Ja-co Power Catwalk, tubular max length 47' 6", max OD 13 5/8", max weight 10,000lbs

## TUBULARS

Drill Pipe: Supplied as needed, per availability

Drill Collars & heavywate: Supplied as needed, per availability

## MISC.

Water Tank: 409 bbls; Fuel Tank 189 bbls; Screw Compressor

Boiler: 125 hp with Full Winterization

## MOVING SYSTEM:

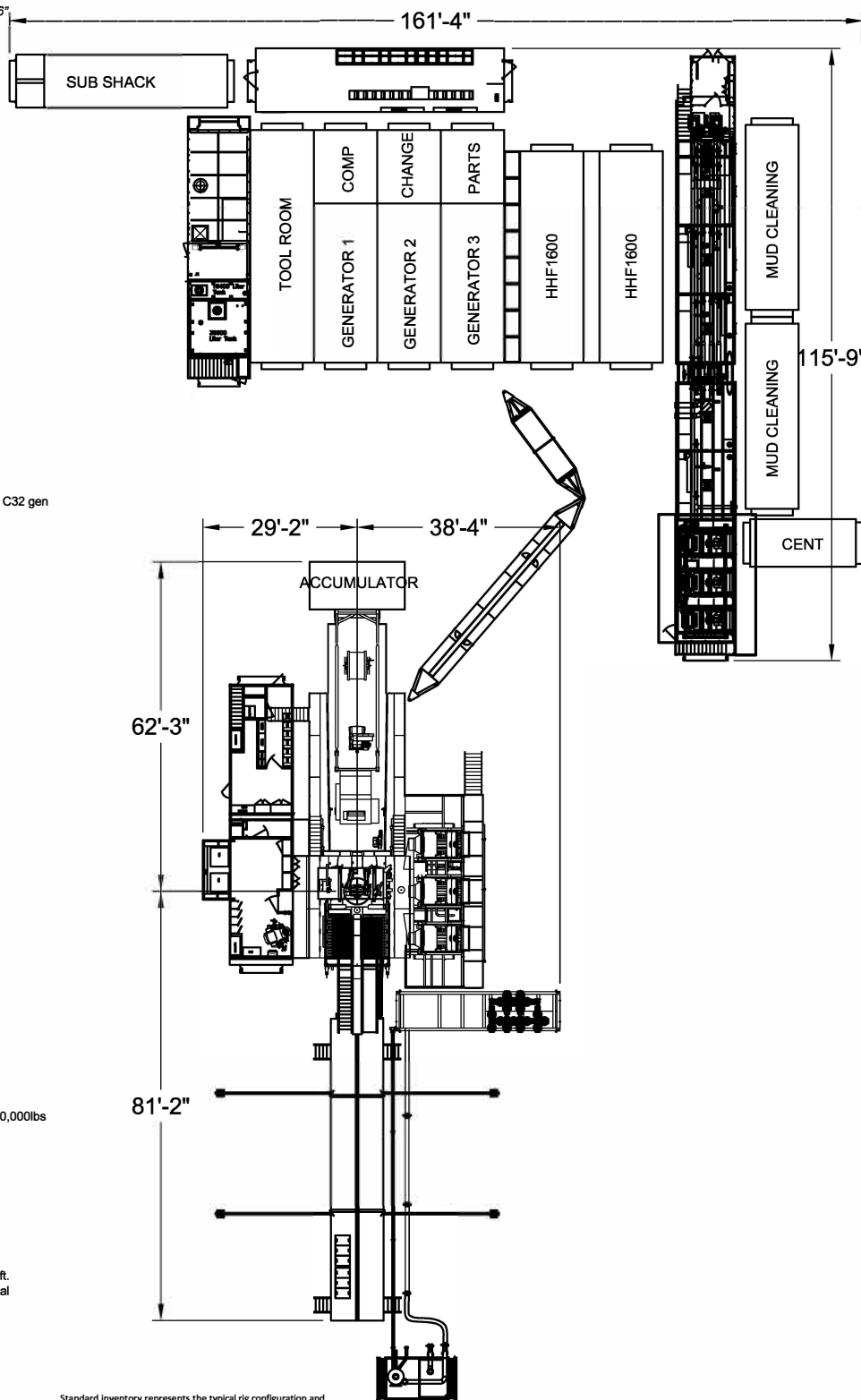
Walking beam hydraulic pony sub moving system for linear motion & side shift.

350' of Utility Suitcase style [50' lengths] connection for hydraulic and electrical supply.

## TOOL/ STORAGE/ CAMP

Parts Storage Room and Tool House Room

Rig Manage Trailer: 14' x 44' skid mounted

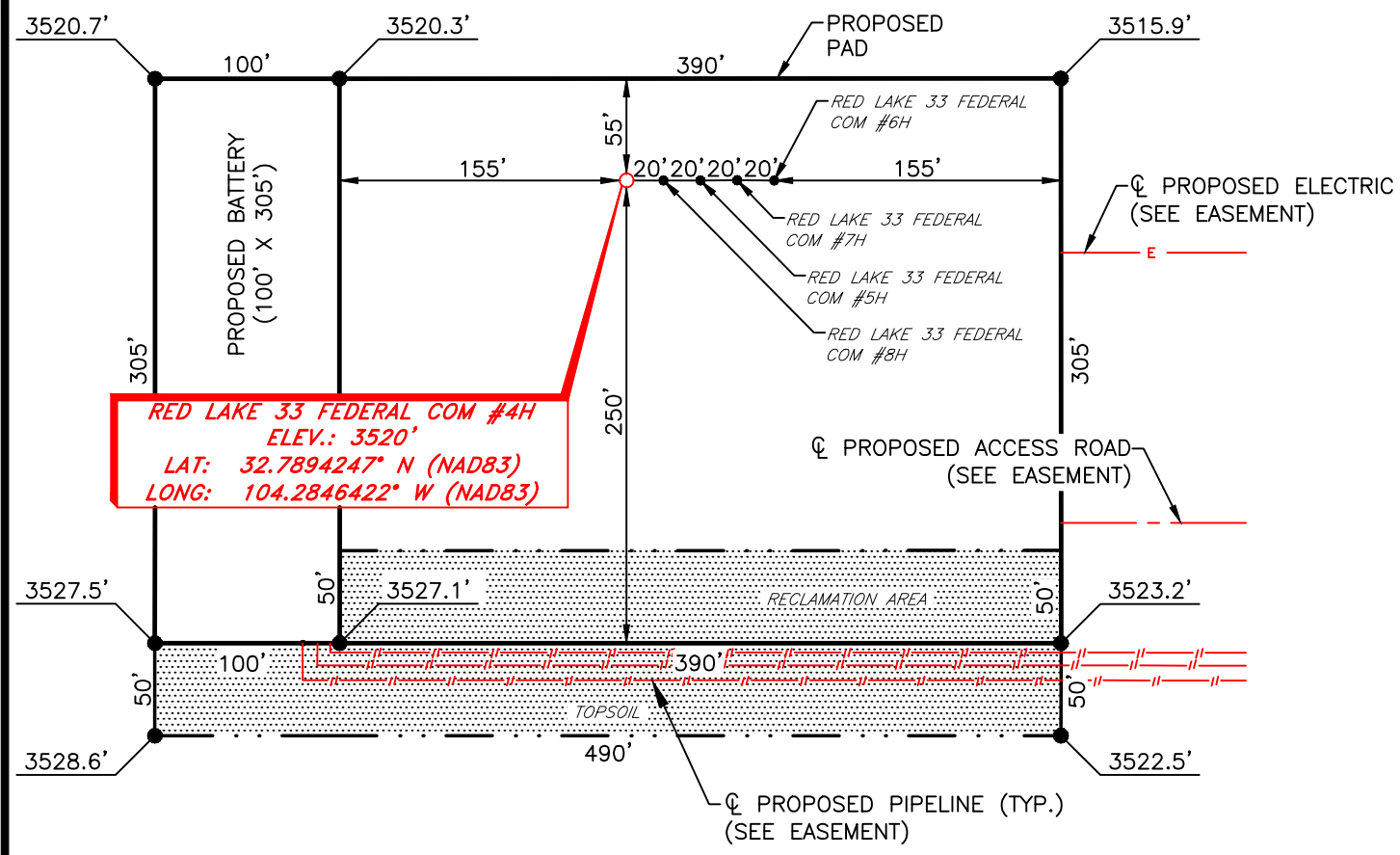


Standard inventory represents the typical rig configuration and inventory available, but specifications are subject to slight modifications from time to time due to customer requirements.

All ratings quoted herein are manufacturer specifications. AKITA's normal operating parameters are 90% of manufacturer mast ratings and 80% of mud pump manufacturer pressure rating. Operation of rig equipment beyond these parameters requires approval from AKITA field office management.

© AKITA DRILLING August, 2020

SPUR ENERGY PARTNERS LLC.  
RED LAKE 33 FEDERAL COM #4H  
(2169' FSL & 2230' FWL)  
SECTION 33, T17S, R27E  
N. M. P. M., EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

From the intersection of CR #201 (Chalk Bluff Rd.) and U.S. Hwy 82 (Lovington Hwy);  
Go South on CR #201 approx. 3.4 miles to a lease road on the left;  
Turn left and go East approx. 0.3 miles to a "Y";  
Keep left at "Y" and continue East approx. 0.2 miles road turns left;  
Turn left and go Northeast approx. 0.2 miles to a lease road on the right;  
Turn right and go South approx. 425 feet to a proposed road on the right;  
Turn right and go West approx. 400 feet to location on right.



SCALE: 1" = 100'  
0 50 100  
BEARINGS ARE  
NAD 83 GRID - NM EAST  
DISTANCES ARE GROUND

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this unclassified survey of a well location from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett  
Robert M. Howett NM PS 19680



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NO.	REVISION	DATE
JOB NO.:	LS20120810	
DWG. NO.:	20120810-4	

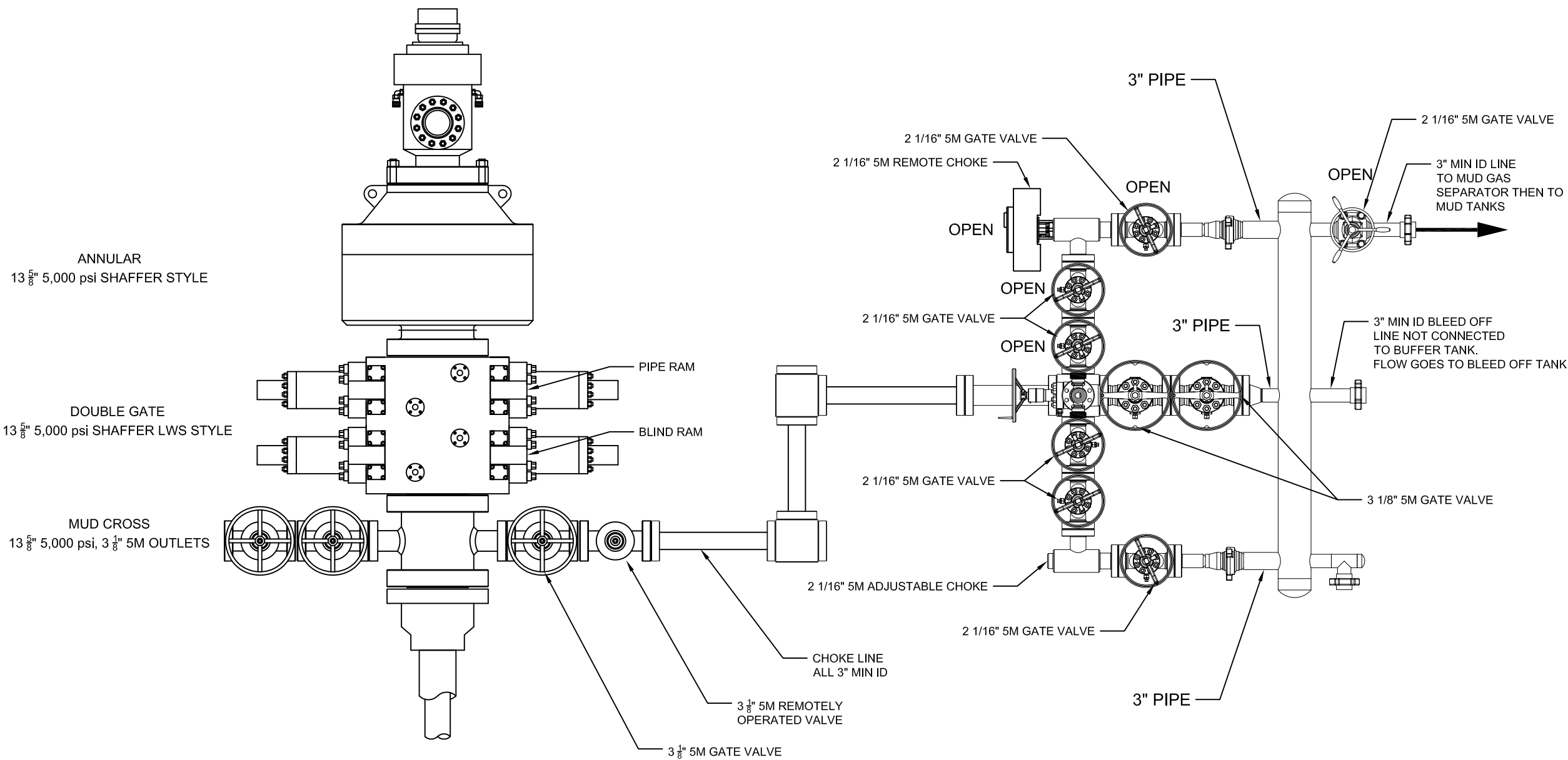


701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 100'
DATE: 12-21-2020
SURVEYED BY: JF/JH
DRAWN BY: GA
APPROVED BY: RMH
SHEET: 1 OF 1

<b>TRANSCEND RIG 4</b>	Contractor Specification
Make	Schram
Model	TXD 130
Year of Manufacture	2006
Truck Mounted	YES
Rated Drilling Depth	130,000# hook load
Rated Depth with Tubing	
Derrick Height	69' 9"
Derrick Type	Telescoping Hydraulic
Derrick Capacity	130,000#
Elevators	N/A
Drawworks	760 HP Detroit
Wire Diameter	Hydraulic
Workfloor Max Height	8'
Tongs	Hydraulic Iron Roughneck
Slips	Manual Slips
Included Tubing Handling Tools	<ul style="list-style-type: none"> <li>• 13 3/8" handling tools</li> </ul>
Included Rod Handling Tools	85jts of 4.5" drill pipe
BOP Class Compatibility	
Weight Indicator	Hydraulic
Rig Safety Equipment	Eye wash station, fire extengushers, wind sock
Pad Size Requirements/Limitations	60' x 60'
Guy Line Spacing	N/A
Other Supplied Rig Equipment	<p>Standard Rig Hand Tools:</p> <ul style="list-style-type: none"> <li>• (2) 36" pipe wrenches</li> <li>• (2) 24" pipe wrenches</li> <li>• (2) 18" pipe wrenches</li> <li>• (1) 24" crescent wrench</li> <li>• (2) 12" crescent wrenches</li> <li>• (1) 4 lb shop hammer</li> <li>• (1) 12 lb sledge hammer</li> <li>• (1) 4 foot pry bar</li> <li>• Vehicles for Contractor personnel</li> <li>• Air Impact Wrench with Sockets</li> <li>• Mud Scales (as needed)</li> </ul> <p>1- F800 pump  1- Pill pit 80bbl  1- 400 bbl mud mix  1- Shaker 150mesh  1- 500 bbl fresh water frac tank</p>





Notes  
-  
-  
-

No.	Revision	Date
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**AKITA**  
DRILLING LTD.  
2302 8th Street, Nisku Alberta  
T9E 7Z2 Tel: (780) 955-6700

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Date	5-6-2021	Scale	NTS
Desn / Chk'd By	BG	File Name	R57 13 5M dou..
Project	R57		
RIG 57 BOP SCHEMATIC			

**District I**

1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**

811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**

1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**

1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS

Action 93523

**CONDITIONS**

Operator: Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024	OGRID: 328947
	Action Number: 93523
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

**CONDITIONS**

Created By	Condition	Condition Date
kpickford	Notify OCD 24 hours prior to casing & cement	3/29/2022
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104	3/29/2022
kpickford	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	3/29/2022
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	3/29/2022
kpickford	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	3/29/2022