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

Form C-101
August 1, 2011

Permit 297807

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024	328947
	3. API Number 30-015-48640

4. Property Code	5. Property Name	6. Well No.
331156	ROSE SOUTH	051H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
P	7	19S	26E	4	1105	S	700	W	Eddy

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
M	12	19S	25E	M	480	S	50	W	Eddy

9. Pool Information

PENASCO DRAW;SA-YESO (ASSOC)	50270

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		Private	3386
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	9315	Yeso		9/14/2021
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	12.25	9.625	35	1300	438	0
Prod	8.75	7	32	3700	1472	0
Prod	8.75	5.5	20	9315	1472	0

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5	5000	Shaffer

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.

Signature:

OIL CONSERVATION DIVISION

Printed Name:	Electronically filed by Sarah Chapman	Approved By:	Kurt Simmons	
Title:	Regulatory Director	Title:	Petroleum Specialist - A	
Email Address:	schapman@spurepllc.com	Approved Date:	7/2/2021	Expiration Date: 7/2/2023
Date:	6/29/2021 Phone: 832-930-8613	Conditions of Approval Attached		

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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

1 API Number	2 Pool Code	3 Pool Name
30-015-	50270	PENASCO DRAW; SA-YESO (ASSOC)

4 Property Code	5 Property Name	6 Well Number
	ROSE SOUTH	51H

7 OGRID NO.	8 Operator Name	9 Elevation
328947	SPUR ENERGY PARTNERS LLC.	3386'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
4	7	19S	26E		1105	SOUTH	700	WEST	EDDY

11 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	12	19S	25E		480	SOUTH	50	WEST	EDDY

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
320			

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.

16

GEODETIC DATA
NAD 83 GRID – NM EAST

SURFACE LOCATION (SL)
N: 607801.5 – E: 512403.7
LAT: 32.6708564° N
LONG: 104.4273629° W

FIRST TAKE POINT (FTP)
480' FSL & 100' FEL – SEC 12
N: 607184.8 – E: 511605.4
LAT: 32.6691593° N
LONG: 104.4299554° W

LAST TAKE POINT (LTP)
480' FSL & 100' FWL – SEC 12
N: 607171.1 – E: 506451.7
LAT: 32.6691084° N
LONG: 104.4467034° W

BOTTOM HOLE (BH)
N: 607171.2 – E: 506401.8
LAT: 32.6691079° N
LONG: 104.4468658° W

CORNER DATA
NAD 83 GRID – NM EAST

A: FOUND BOLT
N: 606691.2 – E: 506353.0

B: FOUND 1/2" REBAR
N: 612008.3 – E: 506339.4

C: FOUND 5/8" REBAR
N: 611978.8 – E: 511694.1

D: FOUND ALUM CAP "ILLEGIBLE"
N: 612006.0 – E: 514294.2

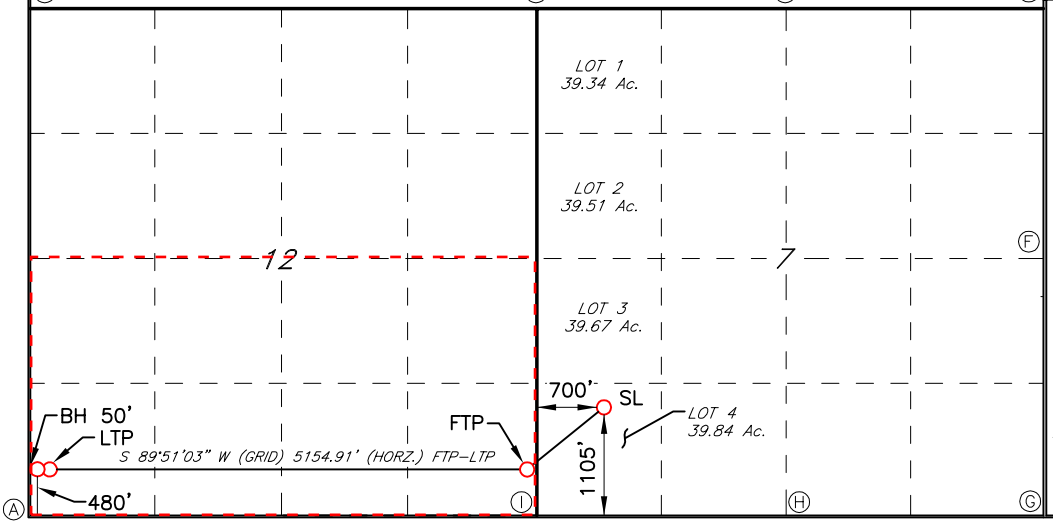
E: FOUND 3" PIPE
N: 612034.2 – E: 516918.2

F: FOUND SPIKE NAIL
N: 609327.0 – E: 516948.7

G: FOUND SPIKE NAIL
N: 606619.9 – E: 516980.1

H: FOUND 1" PIPE
N: 606673.4 – E: 514339.7

I: FOUND 1/2" REBAR
N: 606705.1 – E: 511706.5



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.

Sarah Chapman 06/22/2021
Signature Date

SARAH CHAPMAN
Printed Name

SCHAPMAN@SPUREPLLC.COM
E-mail Address

18 SURVEYOR CERTIFICATION

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

12-10-2020
Date of Survey

Signature and Seal of Professional Surveyor:

ROBERT M. HOWETT NEW MEXICO 19680 PROFESSIONAL SURVEYOR

19680
Certificate Number

LS20120752

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Santa Fe, NM 87505

Form APD Conditions

Permit 297807

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
Spur Energy Partners LLC [328947] 9655 Katy Freeway Houston, TX 77024	30-015-48640
	Well: ROSE SOUTH #051H

OCD Reviewer	Condition
ksimmons	Notify OCD 24 hours prior to casing & cement
ksimmons	Will require a File As Drilled C-102 and a Directional Survey with the C-104
ksimmons	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
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
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing
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

Spur Energy Partners LLC – Rose South 51H

1. Geologic Formations

Formation	Depth	Lithology	Expected Fluids
Quaternary	0'	Dolomite, other: Caliche	Useable Water
Top San Andres	925'	Dolomite, Limestone	Natural Gas, Oil
Lower San Andres	1985'	Dolomite, Limestone	Natural Gas, Oil
Glorieta	2525'	Dolomite, Siltstone	Natural Gas, Oil
Top Yeso	2650'	Dolomite	Natural Gas, Oil
Base Yeso	4215'	Dolomite	Natural Gas, Oil

*H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program

Primary Plan:

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

Hole Size (in)	Casing Interval		Csg. Size (in)	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	Body SF Tension	Joint SF Tension
	From (ft)	To (ft)								
12.25	0	1300	9.625	36	J-55	BTC	1.125	1.2	1.4	1.4
8.75	0	3700	7	32	L-80	BK-HT	1.125	1.2	1.4	1.4
8.75	3700	9315	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 – Rose South 51H

	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 3rd 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 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
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	1300	165%
Production (Lead)	0	2700	0%
Production (Tail)	2700	9315	50%

Casing String	# Sks	Wt. (lb/gal)	Yld (ft3/sack)	H20 (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)	168	13.2	1.84	9.92	6:59	Clas C Premium Plus Cement
Production (Lead)	169	11.8	2.54	15.29	N/A	Clas C Premium Plus Cement
Production (Tail)	1303	13.2	1.81	9.81	N/A	Clas C Premium Plus Cement

Spur Energy Partners LLC – Rose South 51H

4. Pressure Control Equipment

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 / 5000 psi
			Pipe Ram	✓	
			Double Ram		
			Other*		
8.75" Hole	13-5/8”	5M	Annular	✓	70% of working pressure
		5M	Blind Ram	✓	250 psi / 5000 psi
			Pipe Ram	✓	
			Double Ram		
			Other*		

Spur Energy Partners LLC will be utilizing a 5M BOP Stack

Condition	Specify what type and where?
BH Pressure at deepest TVD	1606 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	108°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?
	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.	

5. BOP Break Testing Request

Spur Energy Partners LLC requests permission to adjust the BOP break testing requirements as per the verbal agreement reached over the phone between SPUR/BLM on September 7, 2020. A separate sundry will be sent prior to spud that reflects the pad-based break testing plan.

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 3rd 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	1300	Water-Based Mud	8.6-8.9	32-36	N/C
1300	9315	Water-Based Mud	8.6-8.9	32-36	N/C

What will be used to monitor the loss or gain of fluid?	PVT/MD PASON/Visual Monitoring

Spur Energy Partners LLC – Rose South 51H

7. Logging and Testing Procedures

Logging, Coring and Testing.	
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

Additional logs planned		Interval
No	Resistivity	
No	Density	
No	CBL	
Yes	Mud log	SCP - 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 (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S 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	H2S is present
Y	H2S Plan attached

Total estimated cuttings volume: 882.3 bbls**.**

Spur Energy Partners LLC – Rose South 51H

9. Other facets of operation

	Yes/No
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
_x__ Directional Plan
_x__ H2S Contingency Plan
_x__ Akita 57 Attachments
_x__ Transcend Spudder Rig Attachments
_x__ BOP Schematics

10. Company Personnel

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

U. S. Steel Tubular Products

9.625 36/0.352 J55

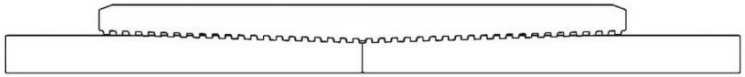
8/19/2015 9:44:40 AM

MECHANICAL PROPERTIES	Pipe	BTC	LTC	STC	
Minimum Yield Strength	55,000	--	--	--	psi
Maximum Yield Strength	80,000	--	--	--	psi
Minimum Tensile Strength	75,000	--	--	--	psi
DIMENSIONS	**Pipe**	**BTC**	**LTC**	**STC**	
Outside Diameter	9.625	10.625	10.625	10.625	in.
Wall Thickness	0.352	--	--	--	in.
Inside Diameter	8.921	8.921	8.921	8.921	in.
Standard Drift	8.765	8.765	8.765	8.765	in.
Alternate Drift	--	--	--	--	in.
Nominal Linear Weight, T&C	36.00	--	--	--	lbs/ft
Plain End Weight	34.89	--	--	--	lbs/ft
PERFORMANCE	**Pipe**	**BTC**	**LTC**	**STC**	
Minimum Collapse Pressure	2,020	2,020	2,020	2,020	psi
Minimum Internal Yield Pressure	3,520	3,520	3,520	3,520	psi
Minimum Pipe Body Yield Strength	564,000	--	--	--	lbs
Joint Strength	--	639	453	394	lbs
Reference Length	--	11,835	8,389	7,288	ft
MAKE-UP DATA	**Pipe**	**BTC**	**LTC**	**STC**	
Make-Up Loss	--	4.81	4.75	3.38	in.
Minimum Make-Up Torque	--	--	3,400	2,960	ft-lbs
Maximum Make-Up Torque	--	--	5,660	4,930	ft-lbs

U. S. Steel Tubular Products
10343 Sam Houston Park Dr., #120
Houston, TX 77064

1-877-893-9461
connections@uss.com
www.usstubular.com

PRECISION
Keeping You Connected.



SEMI PREMIUMCONNECTIONS
FIELD TESTED. FIELD PROVEN.

Precision Connections BK-HT
7 in. 32 lb/ft HC-L80 with 7.875 in. Coupling OD

Pipe Body

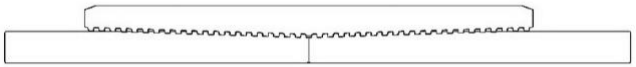
Nominal OD	7.000	inches
Nominal Weight	32.00	lb/ft
Wall Thickness	0.453	inches
Plain End Weight	31.67	lb/ft
Drift	6.000	inches
Nominal ID	6.094	inches
Grade	HC-L80	
Min Yield	80,000	lbf/in²
Min Tensile	95,000	lbf/in²
Critical Section Area	9.317	in²
Pipe Body Yield Strength	745	kips
Min Internal Yield Pressure	9,060	psi
Collapse Pressure	9,290	psi

Connection

Coupling OD	7.875	inches
Coupling Length	9.000	inches
Make Up Loss	4.500	inches
Critical Section Area	11.859	in²
Internal Pressure Rating	100%	
External Pressure Rating	100%	
Tension Efficiency	100%	
Connection Strength	745	kips
Compression Efficiency	100%	
Uniaxial Bend Rating	46.5	° / 100 ft
Min Make Up Torque	9,250	ft-lbs
Yield Torque	35,650	ft-lbs

v1.2 7/26/2018

PRECISION
Keeping You Connected.



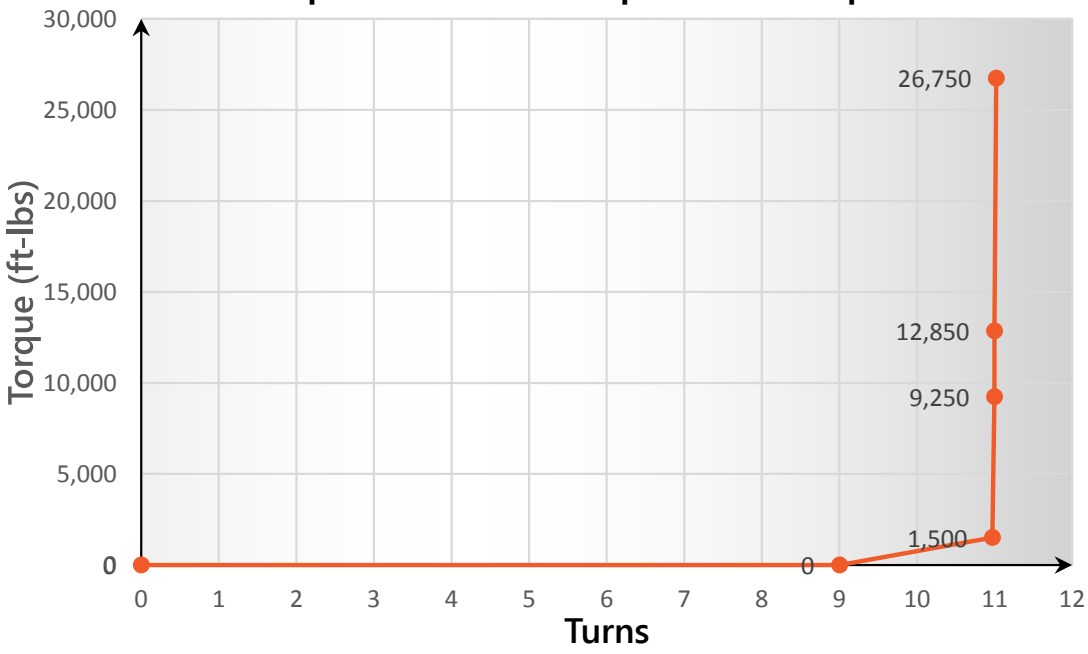
SEMI PREMIUMCONNECTIONS
FIELD TESTED. FIELD PROVEN.

Torque Data Sheet - Precision Connections BK-HT

7 in. 32 lb/ft HC-L80 with 7.875 in. Coupling OD

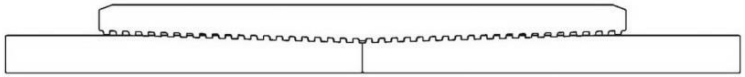
Min Make Up Torque	9,250	ft-lbs	Max Operating Torque	30,300	ft-lbs
Max Make Up Torque	26,750	ft-lbs	Yield Torque	35,650	ft-lbs
Optimum Torque	12,850	ft-lbs			

Representative Torque Turn Graph



v1.2 7/26/2018

PRECISION
Keeping You Connected.



SEMI PREMIUMCONNECTIONS
FIELD TESTED. FIELD PROVEN.

Precision Connections BK-HT
5.5 in. 20 lb/ft HC-L80 with 6.3 in. Coupling OD

Pipe Body

Nominal OD	5.500	inches
Nominal Weight	20.00	lb/ft
Wall Thickness	0.361	inches
Plain End Weight	19.81	lb/ft
Drift	4.653	inches
Nominal ID	4.778	inches
Grade	HC-L80	
Min Yield	80,000	lbf/in²
Min Tensile	95,000	lbf/in²
Critical Section Area	5.828	in²
Pipe Body Yield Strength	466	kips
Min Internal Yield Pressure	9,190	psi
Collapse Pressure	9,490	psi

Connection

Coupling OD	6.300	inches
Coupling Length	8.250	inches
Make Up Loss	4.125	inches
Critical Section Area	8.456	in²
Internal Pressure Rating	100%	
External Pressure Rating	100%	
Tension Efficiency	100%	
Connection Strength	466	kips
Compression Efficiency	100%	
Uniaxial Bend Rating	58.2	° / 100 ft
Min Make Up Torque	6,050	ft-lbs
Yield Torque	23,250	ft-lbs

v1.2 7/26/2018

PRECISION
Keeping You Connected.

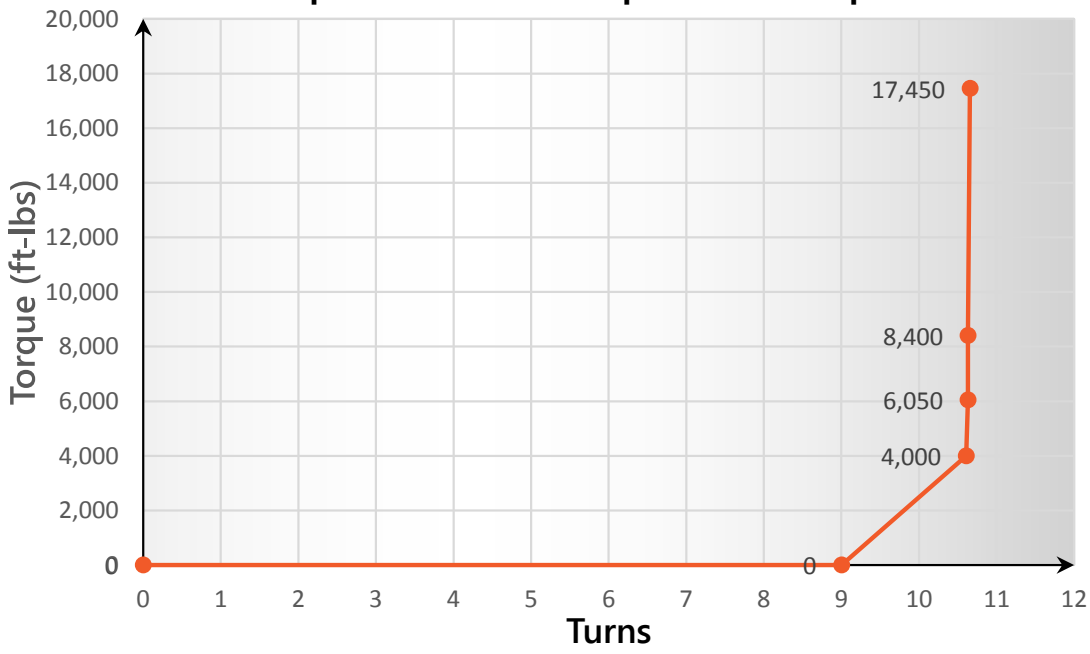
SEMI PREMIUMCONNECTIONS
FIELD TESTED. FIELD PROVEN.

Torque Data Sheet - Precision Connections BK-HT

5.5 in. 20 lb/ft HC-L80 with 6.3 in. Coupling OD

Min Make Up Torque	6,050	ft-lbs	Max Operating Torque	19,800	ft-lbs
Max Make Up Torque	17,450	ft-lbs	Yield Torque	23,250	ft-lbs
Optimum Torque	8,400	ft-lbs			

Representative Torque Turn Graph



v1.2 7/26/2018

Spur Energy Partners, LLC

Eddy County, NM (NAD 83 - NME)
ROSE SOUTH
#51H

Wellbore #1

Plan: PLAN #1

Standard Planning Report

24 June, 2021

Planning Report

Database:	WBDS_SQL_2	**Local Co-ordinate Reference:**	Well #51H
Company:	Spur Energy Partners, LLC	**TVD Reference:**	RKB = 20' @ 3406.00usft (AKITA 57)
Project:	Eddy County, NM (NAD 83 - NME)	**MD Reference:**	RKB = 20' @ 3406.00usft (AKITA 57)
Site:	ROSE SOUTH	**North Reference:**	Grid
Well:	#51H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PLAN #1		

Project Eddy County, NM (NAD 83 - NME)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site ROSE SOUTH

Site Position:		**Northing:**	607,781.50 usft	**Latitude:**	32.6708016
From:	Map	**Easting:**	512,403.70 usft	**Longitude:**	-104.4273627
Position Uncertainty:	0.00 usft	**Slot Radius:**	13.200 in	**Grid Convergence:**	-0.051 °

Well #51H

Well Position	**+N/-S**	20.00 usft	**Northing:**	607,801.50 usft	**Latitude:**	32.6708566
	+E/-W	0.00 usft	**Easting:**	512,403.70 usft	**Longitude:**	-104.4273628
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	3,386.00 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	6/24/2021	6.972	60.177	47,665.75990776

Design PLAN #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	269.85

Plan Survey Tool Program **Date** 6/24/2021

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	9,315.02	PLAN #1 (Wellbore #1)	MWD+IGRF	
				OWSG MWD + IGRF or WM	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
300.00	0.00	360.00	300.00	0.00	0.00	0.00	0.00	0.00	360.000	
961.06	13.22	155.80	955.21	-69.26	31.13	2.00	2.00	0.00	155.796	
2,497.31	13.22	155.80	2,450.74	-389.73	175.18	0.00	0.00	0.00	0.000	
4,109.78	91.43	269.85	3,470.00	-616.70	-798.30	6.00	4.85	7.07	113.184	PLAT #51H FTP: 48
9,265.10	91.43	269.85	3,341.25	-630.17	-5,952.00	0.00	0.00	0.00	0.000	PLAT #51H LTP: 48
9,315.02	91.43	269.85	3,340.00	-630.30	-6,001.90	0.00	0.00	0.00	0.000	PLAT #51H BHL: 48

SPUR ENERGY PARTNERS

Planning Report

WELLBENDERS DIRECTIONAL SERVICES

Database:	WBDS_SQL_2	**Local Co-ordinate Reference:**	Well #51H
Company:	Spur Energy Partners, LLC	**TVD Reference:**	RKB = 20' @ 3406.00usft (AKITA 57)
Project:	Eddy County, NM (NAD 83 - NME)	**MD Reference:**	RKB = 20' @ 3406.00usft (AKITA 57)
Site:	ROSE SOUTH	**North Reference:**	Grid
Well:	#51H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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
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	360.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	2.00	155.80	399.98	-1.59	0.72	-0.71	2.00	2.00	0.00
500.00	4.00	155.80	499.84	-6.37	2.86	-2.84	2.00	2.00	0.00
600.00	6.00	155.80	599.45	-14.31	6.43	-6.40	2.00	2.00	0.00
700.00	8.00	155.80	698.70	-25.43	11.43	-11.36	2.00	2.00	0.00
800.00	10.00	155.80	797.47	-39.70	17.84	-17.74	2.00	2.00	0.00
900.00	12.00	155.80	895.62	-57.10	25.67	-25.52	2.00	2.00	0.00
961.06	13.22	155.80	955.21	-69.26	31.13	-30.95	2.00	2.00	0.00
1,000.00	13.22	155.80	993.12	-77.38	34.78	-34.58	0.00	0.00	0.00
1,100.00	13.22	155.80	1,090.47	-98.24	44.16	-43.90	0.00	0.00	0.00
1,200.00	13.22	155.80	1,187.82	-119.10	53.54	-53.22	0.00	0.00	0.00
1,300.00	13.22	155.80	1,285.17	-139.96	62.91	-62.55	0.00	0.00	0.00
1,400.00	13.22	155.80	1,382.51	-160.82	72.29	-71.87	0.00	0.00	0.00
1,500.00	13.22	155.80	1,479.86	-181.68	81.67	-81.19	0.00	0.00	0.00
1,600.00	13.22	155.80	1,577.21	-202.54	91.04	-90.51	0.00	0.00	0.00
1,700.00	13.22	155.80	1,674.56	-223.41	100.42	-99.83	0.00	0.00	0.00
1,800.00	13.22	155.80	1,771.91	-244.27	109.80	-109.16	0.00	0.00	0.00
1,900.00	13.22	155.80	1,869.26	-265.13	119.17	-118.48	0.00	0.00	0.00
2,000.00	13.22	155.80	1,966.61	-285.99	128.55	-127.80	0.00	0.00	0.00
2,100.00	13.22	155.80	2,063.96	-306.85	137.93	-137.12	0.00	0.00	0.00
2,200.00	13.22	155.80	2,161.31	-327.71	147.30	-146.45	0.00	0.00	0.00
2,300.00	13.22	155.80	2,258.66	-348.57	156.68	-155.77	0.00	0.00	0.00
2,400.00	13.22	155.80	2,356.01	-369.43	166.06	-165.09	0.00	0.00	0.00
2,497.31	13.22	155.80	2,450.74	-389.73	175.18	-174.16	0.00	0.00	0.00
2,500.00	13.16	156.45	2,453.36	-390.29	175.43	-174.41	6.00	-2.33	24.23
2,550.00	12.32	169.54	2,502.14	-400.75	178.67	-177.62	6.00	-1.68	26.19
2,600.00	12.17	183.71	2,551.01	-411.26	179.30	-178.22	6.00	-0.30	28.33
2,650.00	12.73	197.41	2,599.85	-421.78	177.31	-176.21	6.00	1.13	27.40
2,700.00	13.92	209.38	2,648.51	-432.28	172.71	-171.58	6.00	2.38	23.95
2,750.00	15.60	219.17	2,696.86	-442.74	165.51	-164.35	6.00	3.35	19.58
2,800.00	17.62	226.94	2,744.78	-453.12	155.73	-154.54	6.00	4.05	15.53
2,850.00	19.89	233.07	2,792.13	-463.40	143.40	-142.18	6.00	4.53	12.26
2,900.00	22.32	237.96	2,838.77	-473.55	128.55	-127.31	6.00	4.87	9.77
2,950.00	24.87	241.91	2,884.59	-483.54	111.22	-109.95	6.00	5.10	7.90
3,000.00	27.51	245.15	2,929.46	-493.35	91.46	-90.17	6.00	5.27	6.49
3,050.00	30.21	247.87	2,973.24	-502.94	69.32	-68.01	6.00	5.40	5.43
3,100.00	32.96	250.17	3,015.84	-512.30	44.87	-43.53	6.00	5.49	4.61
3,150.00	35.74	252.15	3,057.11	-521.39	18.17	-16.81	6.00	5.57	3.97
3,200.00	38.55	253.89	3,096.97	-530.19	-10.70	12.09	6.00	5.62	3.46
3,250.00	41.39	255.42	3,135.28	-538.67	-41.67	43.08	6.00	5.67	3.06
3,300.00	44.24	256.78	3,171.96	-546.83	-74.66	76.09	6.00	5.71	2.73
3,350.00	47.11	258.02	3,206.89	-554.62	-109.56	111.01	6.00	5.73	2.47
3,400.00	49.99	259.14	3,239.99	-562.03	-146.29	147.76	6.00	5.76	2.25
3,450.00	52.88	260.17	3,271.16	-569.04	-184.74	186.23	6.00	5.78	2.06
3,500.00	55.77	261.13	3,300.32	-575.63	-224.82	226.32	6.00	5.80	1.91
3,550.00	58.68	262.02	3,327.38	-581.78	-266.40	267.92	6.00	5.81	1.79
3,600.00	61.59	262.86	3,352.28	-587.48	-309.38	310.91	6.00	5.82	1.68
3,650.00	64.50	263.66	3,374.94	-592.71	-353.63	355.18	6.00	5.83	1.59
3,700.00	67.42	264.41	3,395.31	-597.45	-399.04	400.61	6.00	5.84	1.51
3,750.00	70.35	265.14	3,413.32	-601.69	-445.49	447.06	6.00	5.85	1.45
3,800.00	73.27	265.84	3,428.92	-605.43	-492.84	494.42	6.00	5.85	1.40

SPUR ENERGY PARTNERS

Planning Report

WELLBENDERS DIRECTIONAL SERVICES

Database:	WBDS_SQL_2	**Local Co-ordinate Reference:**	Well #51H
Company:	Spur Energy Partners, LLC	**TVD Reference:**	RKB = 20' @ 3406.00usft (AKITA 57)
Project:	Eddy County, NM (NAD 83 - NME)	**MD Reference:**	RKB = 20' @ 3406.00usft (AKITA 57)
Site:	ROSE SOUTH	**North Reference:**	Grid
Well:	#51H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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)
3,850.00	76.20	266.51	3,442.09	-608.64	-540.96	542.55	6.00	5.86	1.36
3,900.00	79.13	267.18	3,452.77	-611.33	-589.73	591.32	6.00	5.86	1.32
3,950.00	82.06	267.82	3,460.94	-613.48	-639.00	640.61	6.00	5.86	1.30
4,000.00	84.99	268.46	3,466.58	-615.09	-688.65	690.26	6.00	5.86	1.28
4,050.00	87.92	269.10	3,469.66	-616.15	-738.54	740.15	6.00	5.87	1.27
4,100.00	90.86	269.73	3,470.20	-616.66	-788.53	790.14	6.00	5.87	1.26
4,109.78	91.43	269.85	3,470.00	-616.70	-798.30	799.91	6.00	5.87	1.26
4,200.00	91.43	269.85	3,467.75	-616.94	-888.50	890.11	0.00	0.00	0.00
4,300.00	91.43	269.85	3,465.25	-617.20	-988.47	990.08	0.00	0.00	0.00
4,400.00	91.43	269.85	3,462.75	-617.46	-1,088.43	1,090.05	0.00	0.00	0.00
4,500.00	91.43	269.85	3,460.25	-617.72	-1,188.40	1,190.02	0.00	0.00	0.00
4,600.00	91.43	269.85	3,457.76	-617.98	-1,288.37	1,289.98	0.00	0.00	0.00
4,700.00	91.43	269.85	3,455.26	-618.24	-1,388.34	1,389.95	0.00	0.00	0.00
4,800.00	91.43	269.85	3,452.76	-618.50	-1,488.31	1,489.92	0.00	0.00	0.00
4,900.00	91.43	269.85	3,450.26	-618.76	-1,588.28	1,589.89	0.00	0.00	0.00
5,000.00	91.43	269.85	3,447.77	-619.03	-1,688.24	1,689.86	0.00	0.00	0.00
5,100.00	91.43	269.85	3,445.27	-619.29	-1,788.21	1,789.83	0.00	0.00	0.00
5,200.00	91.43	269.85	3,442.77	-619.55	-1,888.18	1,889.80	0.00	0.00	0.00
5,300.00	91.43	269.85	3,440.27	-619.81	-1,988.15	1,989.77	0.00	0.00	0.00
5,400.00	91.43	269.85	3,437.78	-620.07	-2,088.12	2,089.73	0.00	0.00	0.00
5,500.00	91.43	269.85	3,435.28	-620.33	-2,188.09	2,189.70	0.00	0.00	0.00
5,600.00	91.43	269.85	3,432.78	-620.59	-2,288.06	2,289.67	0.00	0.00	0.00
5,700.00	91.43	269.85	3,430.28	-620.85	-2,388.02	2,389.64	0.00	0.00	0.00
5,800.00	91.43	269.85	3,427.79	-621.12	-2,487.99	2,489.61	0.00	0.00	0.00
5,900.00	91.43	269.85	3,425.29	-621.38	-2,587.96	2,589.58	0.00	0.00	0.00
6,000.00	91.43	269.85	3,422.79	-621.64	-2,687.93	2,689.55	0.00	0.00	0.00
6,100.00	91.43	269.85	3,420.29	-621.90	-2,787.90	2,789.52	0.00	0.00	0.00
6,200.00	91.43	269.85	3,417.80	-622.16	-2,887.87	2,889.48	0.00	0.00	0.00
6,300.00	91.43	269.85	3,415.30	-622.42	-2,987.83	2,989.45	0.00	0.00	0.00
6,400.00	91.43	269.85	3,412.80	-622.68	-3,087.80	3,089.42	0.00	0.00	0.00
6,500.00	91.43	269.85	3,410.30	-622.95	-3,187.77	3,189.39	0.00	0.00	0.00
6,600.00	91.43	269.85	3,407.81	-623.21	-3,287.74	3,289.36	0.00	0.00	0.00
6,700.00	91.43	269.85	3,405.31	-623.47	-3,387.71	3,389.33	0.00	0.00	0.00
6,800.00	91.43	269.85	3,402.81	-623.73	-3,487.68	3,489.30	0.00	0.00	0.00
6,900.00	91.43	269.85	3,400.31	-623.99	-3,587.65	3,589.27	0.00	0.00	0.00
7,000.00	91.43	269.85	3,397.82	-624.25	-3,687.61	3,689.24	0.00	0.00	0.00
7,100.00	91.43	269.85	3,395.32	-624.51	-3,787.58	3,789.20	0.00	0.00	0.00
7,200.00	91.43	269.85	3,392.82	-624.77	-3,887.55	3,889.17	0.00	0.00	0.00
7,300.00	91.43	269.85	3,390.32	-625.04	-3,987.52	3,989.14	0.00	0.00	0.00
7,400.00	91.43	269.85	3,387.83	-625.30	-4,087.49	4,089.11	0.00	0.00	0.00
7,500.00	91.43	269.85	3,385.33	-625.56	-4,187.46	4,189.08	0.00	0.00	0.00
7,600.00	91.43	269.85	3,382.83	-625.82	-4,287.42	4,289.05	0.00	0.00	0.00
7,700.00	91.43	269.85	3,380.33	-626.08	-4,387.39	4,389.02	0.00	0.00	0.00
7,800.00	91.43	269.85	3,377.84	-626.34	-4,487.36	4,488.99	0.00	0.00	0.00
7,900.00	91.43	269.85	3,375.34	-626.60	-4,587.33	4,588.95	0.00	0.00	0.00
8,000.00	91.43	269.85	3,372.84	-626.86	-4,687.30	4,688.92	0.00	0.00	0.00
8,100.00	91.43	269.85	3,370.34	-627.13	-4,787.27	4,788.89	0.00	0.00	0.00
8,200.00	91.43	269.85	3,367.85	-627.39	-4,887.24	4,888.86	0.00	0.00	0.00
8,300.00	91.43	269.85	3,365.35	-627.65	-4,987.20	4,988.83	0.00	0.00	0.00
8,400.00	91.43	269.85	3,362.85	-627.91	-5,087.17	5,088.80	0.00	0.00	0.00
8,500.00	91.43	269.85	3,360.35	-628.17	-5,187.14	5,188.77	0.00	0.00	0.00
8,600.00	91.43	269.85	3,357.86	-628.43	-5,287.11	5,288.74	0.00	0.00	0.00
8,700.00	91.43	269.85	3,355.36	-628.69	-5,387.08	5,388.71	0.00	0.00	0.00
8,800.00	91.43	269.85	3,352.86	-628.95	-5,487.05	5,488.67	0.00	0.00	0.00

SPUR ENERGY PARTNERS

Planning Report

WELLBENDERS DIRECTIONAL SERVICES

Database:	WBDS_SQL_2	**Local Co-ordinate Reference:**	Well #51H
Company:	Spur Energy Partners, LLC	**TVD Reference:**	RKB = 20' @ 3406.00usft (AKITA 57)
Project:	Eddy County, NM (NAD 83 - NME)	**MD Reference:**	RKB = 20' @ 3406.00usft (AKITA 57)
Site:	ROSE SOUTH	**North Reference:**	Grid
Well:	#51H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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)
8,900.00	91.43	269.85	3,350.37	-629.22	-5,587.01	5,588.64	0.00	0.00	0.00
9,000.00	91.43	269.85	3,347.87	-629.48	-5,686.98	5,688.61	0.00	0.00	0.00
9,100.00	91.43	269.85	3,345.37	-629.74	-5,786.95	5,788.58	0.00	0.00	0.00
9,200.00	91.43	269.85	3,342.87	-630.00	-5,886.92	5,888.55	0.00	0.00	0.00
9,265.10	91.43	269.85	3,341.25	-630.17	-5,952.00	5,953.63	0.00	0.00	0.00
9,300.00	91.43	269.85	3,340.38	-630.26	-5,986.89	5,988.52	0.00	0.00	0.00
9,315.02	91.43	269.85	3,340.00	-630.30	-6,001.90	6,003.53	0.00	0.00	0.00

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 #51H SHL: 110 - plan hits target center - Point	0.00	360.00	0.00	0.00	0.00	607,801.50	512,403.70	32.6708566	-104.4273628
PLAN #51H KOP @ 2 - plan hits target center - Point	0.00	0.00	2,450.74	-389.73	175.18	607,411.78	512,578.88	32.6697857	-104.4267924
PLAT #51H BHL: 480' - plan hits target center - Point	0.00	360.00	3,340.00	-630.30	-6,001.90	607,171.20	506,401.80	32.6691079	-104.4468656
PLAT #51H LTP: 480' - plan misses target center by 0.23usft at 9265.10usft MD (3341.25 TVD, -630.17 N, -5952.00 E) - Point	0.00	0.00	3,341.25	-630.40	-5,952.00	607,171.10	506,451.70	32.6691078	-104.4467035
PLAT #51H FTP: 480' - plan hits target center - Point	0.00	360.00	3,470.00	-616.70	-798.30	607,184.80	511,605.40	32.6691595	-104.4299553

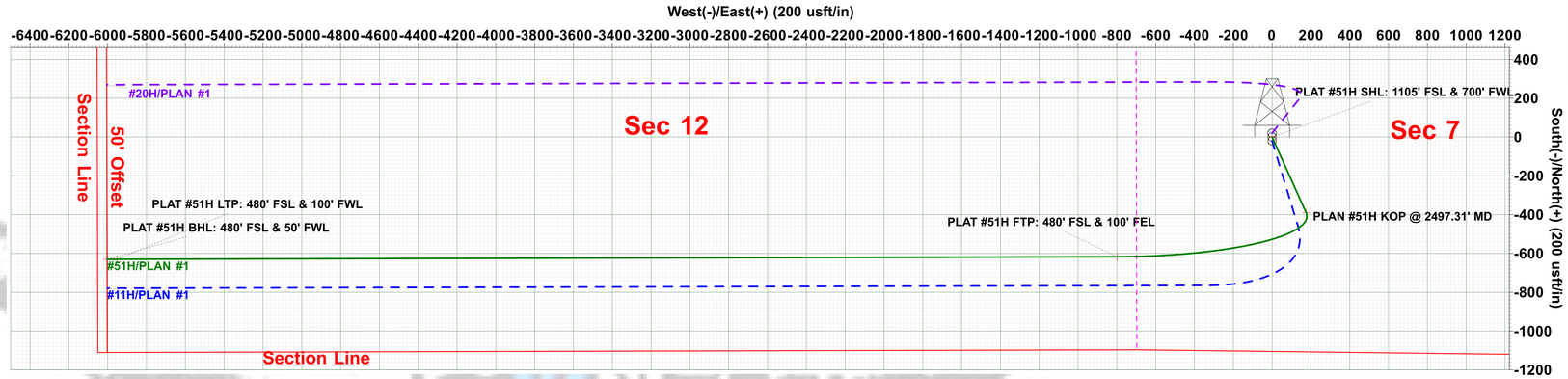
Company: Spur Energy Partners, LLC
Project: Eddy County, NM (NAD 83 - NME)
Site: ROSE SOUTH
Well: #51H
Wellbore: Wellbore #1
Rig: AKITA 57
Design: PLAN #1 / 8:42, June 24 2021

WELLBENDERS DIRECTIONAL SERVICES LLC

WELL DETAILS: #51H

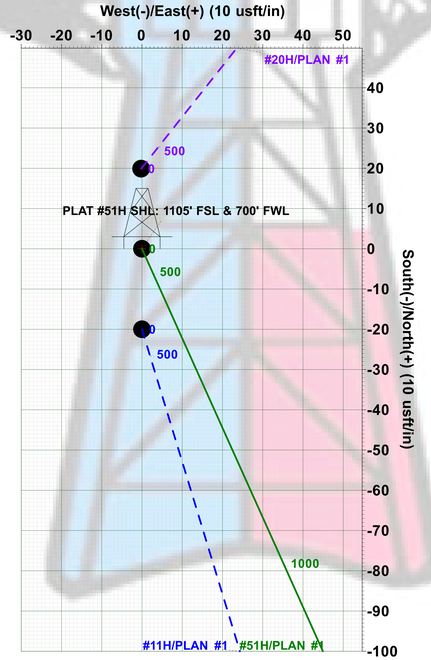
RKB = 20' @ 3406.00usft (AKITA 57)
3386.00

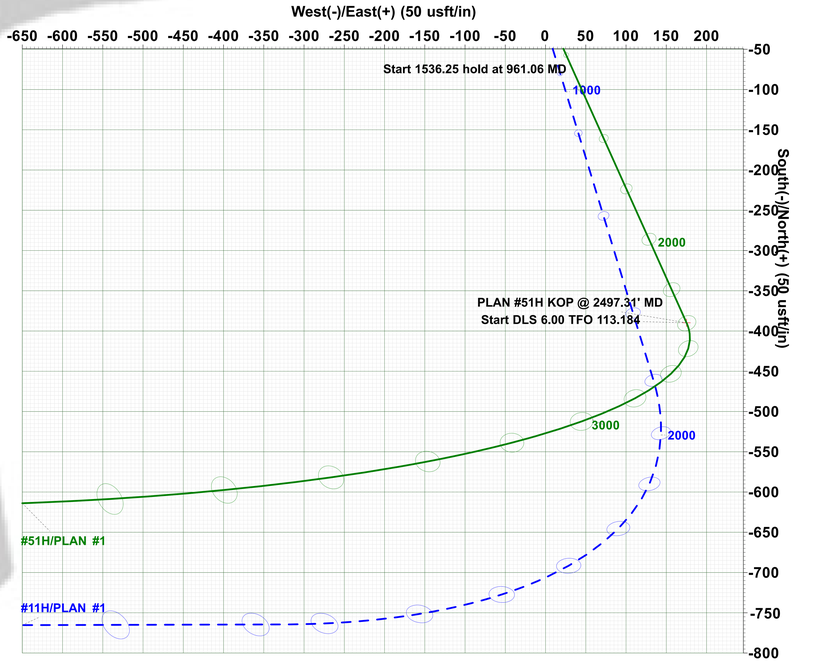
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	607801.50	512403.70	32.6708565	-104.4273628



DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PLAT #51H SHL: 1105' FSL & 700' FWL	0.00	0.00	0.00	607801.50	512403.70	32.6708565	-104.4273628
PLAN #51H KOP @ 2497.31' MD	2450.74	-389.73	175.18	607411.77	512578.88	32.6697857	-104.4267924
PLAT #51H BHL: 480' FSL & 50' FWL	3340.00	-630.30	-6001.90	607171.20	506401.80	32.6691079	-104.4468657
PLAT #51H LTP: 480' FSL & 100' FWL	3341.25	-630.40	-5952.00	607171.10	506451.70	32.6691078	-104.4467035
PLAT #51H FTP: 480' FSL & 100' FEL	3470.00	-616.70	-798.30	607184.80	511605.40	32.6691594	-104.4299553





SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	
2	300.00	0.00	360.00	300.00	0.00	0.00	0.00	360.000	0.00	
3	961.06	13.22	155.80	955.21	-69.26	31.13	2.00	155.796	-30.95	
4	2497.31	13.22	155.80	2450.74	-389.73	175.18	0.00	0.000	-174.16	
5	4109.77	91.43	269.85	3470.00	-616.70	-798.30	6.00	113.184	799.91	PLAT #51H FTP: 480' FSL & 100' FEL
6	9265.10	91.43	269.85	3341.25	-630.17	-5952.00	0.00	0.000	5953.63	PLAT #51H LTP: 480' FSL & 100' FWL
7	9315.02	91.43	269.85	3340.00	-630.30	-6001.90	0.00	0.000	6003.53	PLAT #51H BHL: 480' FSL & 50' FWL

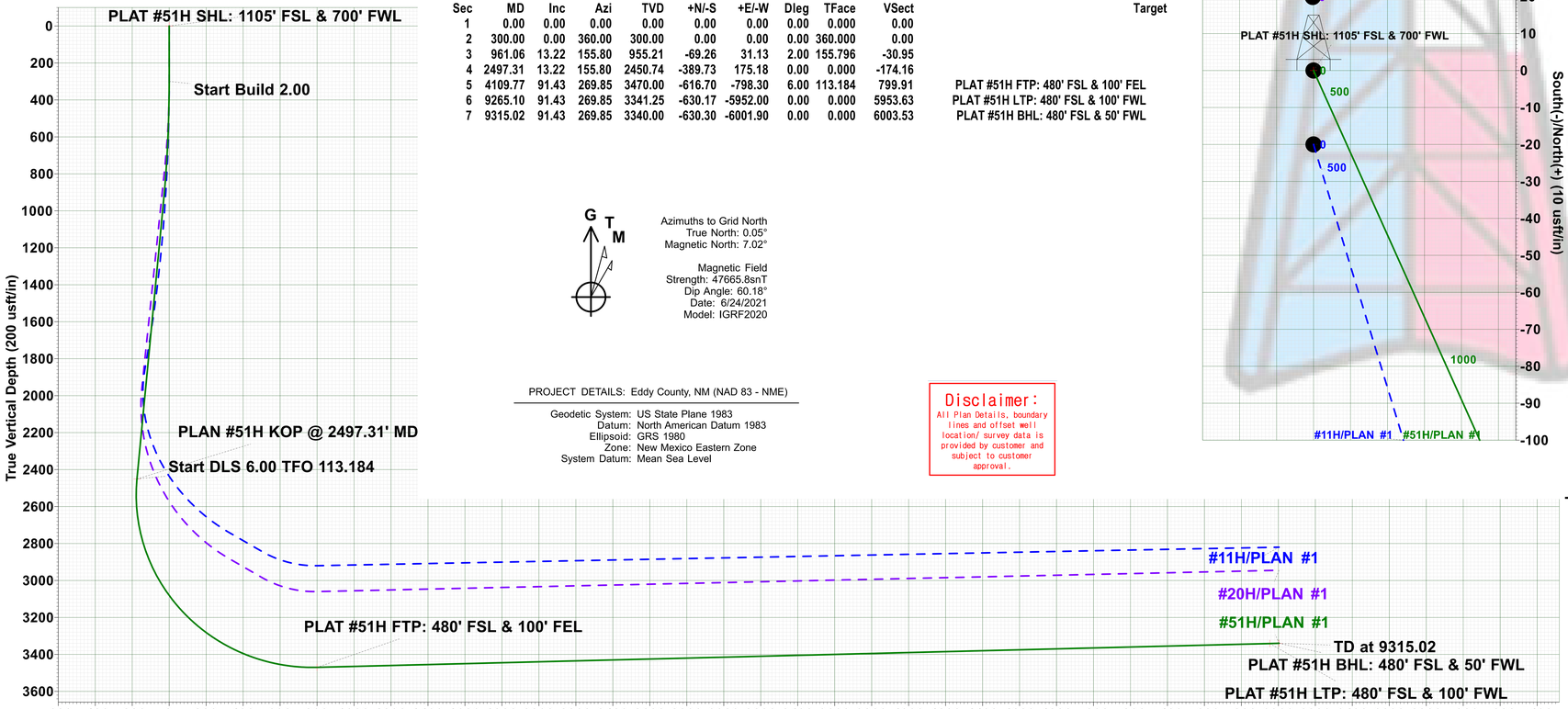
Azimuths to Grid North
True North: 0.05°
Magnetic North: 7.02°

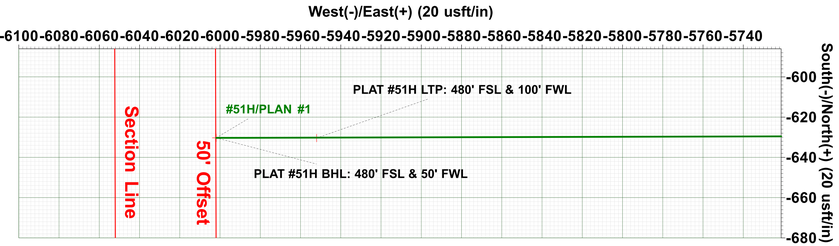
Magnetic Field
Strength: 47665.8snT
Dip Angle: 60.18°
Date: 6/24/2021
Model: IGRF2020

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 (#51H/Wellbore #1) AKITA 57

Created By: Matthew May Date: 8:42, June 24 2021

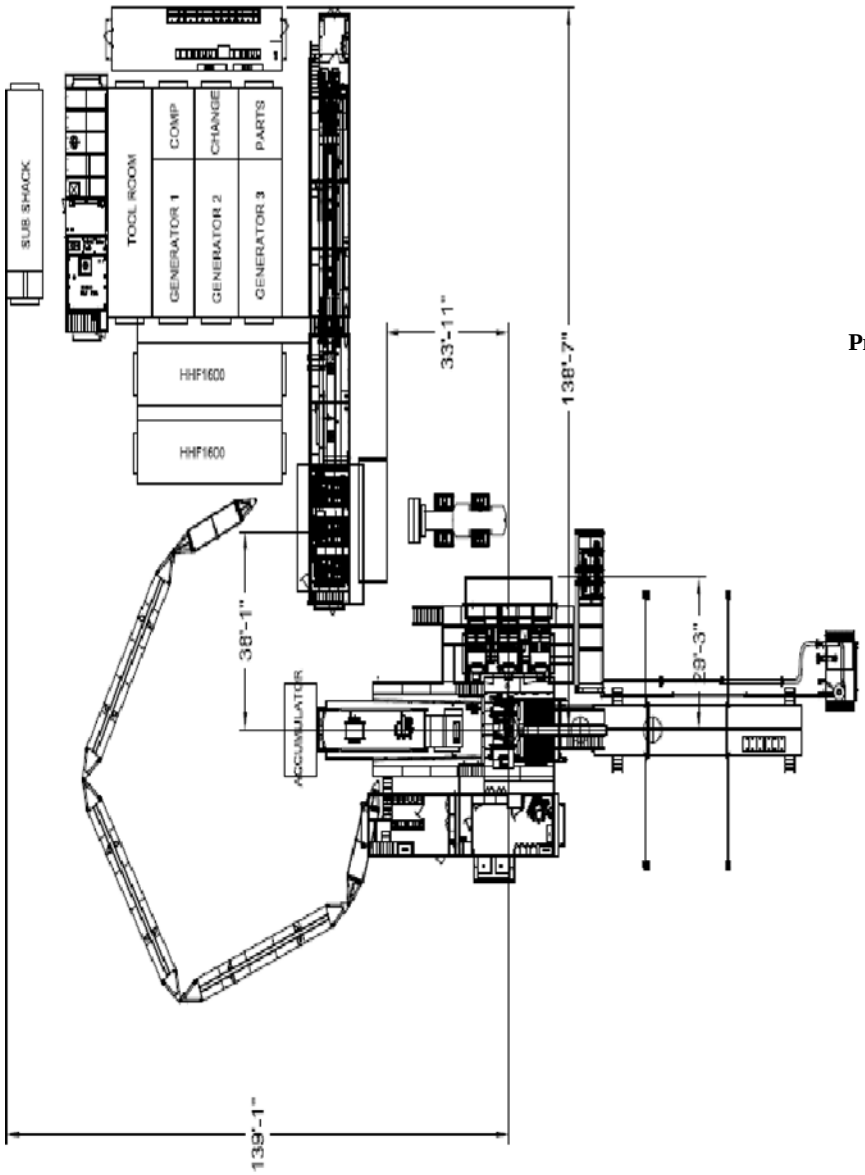
Permian Drilling
Hydrogen Sulfide Drilling Operations Plan
Rose South 51H

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



Primary Briefing Area

Exit to road. Caution sign placed here.

N

Secondary Egress

WIND: Prevailing winds are from the Southwest

Intent ☐ As Drilled ☐

API #

Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County

Latitude	Longitude	NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County

Latitude	Longitude	NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County

Latitude	Longitude	NAD

Is this well the defining well for the Horizontal Spacing Unit? ☐

Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

Operator Name:	Property Name:	Well Number

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:** 06 / 22 / 2021

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
ROSE SOUTH 11H		4-7-19S-26E	1085' FSL 700' FWL	457 BBL/D	475 MCF/D	1829 BBL/D
ROSE SOUTH 20H		4-7-19S-26E	1125' FSL 700' FWL	457 BBL/D	475 MCF/D	1829 BBL/D
ROSE SOUTH 51H		4-7-19S-26E	1105' FSL 700' FWL	356 BBL/D	556 MCF/D	1782 BBL/D

IV. Central Delivery Point Name: ROSE SOUTH CTB [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
ROSE SOUTH 11H		08/31/2021	09/06/2021	10/07/2021	10/18/2021	10/18/2021
ROSE SOUTH 20H		09/07/2021	09/13/2021	10/07/2021	10/18/2021	10/18/2021
ROSE SOUTH 51H		09/14/2021	09/21/2021	10/07/2021	10/18/2021	10/18/2021

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:	Sarah Chapman
Printed Name:	SARAH CHAPMAN
Title:	REGULATORY DIRECTOR
E-mail Address:	SCHAPMAN@SPUREPLLC.COM
Date:	06/22/2021
Phone:	832-930-8613

OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

Natural Gas Management Plan – Attachment

VI. Separation equipment will be sized by construction engineering staff based on anticipated daily production to ensure adequate capacity.

VII. Spur Energy Partners LLC ("Spur") will take the following actions to comply with the regulations listed in 19.15.27.8:

A. Spur will maximize the recovery of natural gas by minimizing waste, as defined by 19.15.2 NMAC, of natural gas through venting and flaring. Spur will ensure that our wells will be connected to a natural gas gathering system with sufficient capacity to transport natural gas.

B. All drilling operations will be equipped with a rig flare at least 100 feet from the nearest surface hole location. Rig flare will be utilized to combust any natural gas that is brought to surface during normal operations. In the case of emergency, flaring volumes will be reported appropriately.

C. During completion operations any natural gas brought to surface will be flared. Immediately following completion operations, wells will flow to permanent separation equipment. Produced natural gas from separation equipment will be sent to sales. If natural gas does not meet gathering pipeline specifications, Spur will flare for 60 days or until natural gas meets the pipeline specifications. Spur will ensure flare is properly sized and is equipped with an automatic igniter or continuous pilot. Gas samples will be taken twice per week and natural gas will be routed into a gathering system as soon as the pipeline specifications are met.

D. Natural gas will not be flared with the exception of 19.15.27.8(D)(1-4). If there is no adequate takeaway for the separator gas, wells will be shut-in until that natural gas gathering system is available with exception of emergency or malfunction situations. Volumes will be reported appropriately.

E. Spur will comply with performance standards pursuant to 19.15.27.8(E)(1-8). All equipment will be designed and sized to handle maximum pressures to minimize waste. Storage tanks constructed after May 25, 2021 will be equipped with an automatic gauging system that reduces venting of natural gas. Flare stacks installed or replaced after May 25, 2021 will be equipped with an automatic ignitor or continuous pilot. Spur will conduct AVO inspections as described in 19.15.27.8(E)(5)(a) with frequencies specified in 19.15.27.8(E)(5)(b) and (c). All emergencies or malfunctions will be resolved as quickly and safely as possible to minimize waste.

F. The volume of natural gas that is vented or flared as the result of an emergency or malfunction during drilling and/or completion operations will be estimated and reported accordingly. The volume of natural gas that is vented, flared or beneficially used during production operations, will be measured and reported accordingly. Spur will install equipment to measure the volume of natural gas flared from existing piping or a flowline piped from equipment such as high-pressure separators, heater treaters, or VRUs associated with a well or facility associated with a well authorized by an APD after May 25, 2021 that has an average daily production of less than 60,000 cubic feet of natural gas. If metering is not practicable due to circumstances such as low flow rate or low pressure venting or flaring, Spur will estimate the volume of flared or vented natural gas. Measuring equipment will conform to industry standards and will not be equipped with a manifold

that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing equipment.

VIII. For maintenance activities involving production equipment and compression, venting be limited to the depressurization of the subject equipment to ensure safe working conditions. For maintenance of production equipment, the associated producing wells will be shut-in to eliminate venting. For maintenance of VRUs, all natural gas normally routed to the VRU will be routed to flare.