<u>District I</u> 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 323829

Shaffer

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

. Operator Nar	ne and Address	•			•		2.	OGRID Number	•
Spu	r Energy Partners	LLC						328947	
	5 Katy Freeway						3.	API Number	
Hou	ston, TX 77024							30-015-498	98
Property Cod	le	6.	Well No.						
333	211		011H						
				7. 5	Surface Location				
JL - Lot	Section	Township	Range	nge Lot Idn Feet From N/S Line Feet From		Feet From	E/W Line	County	
Н	31	1	7S 28E	Ē	1844	N	1089	E	Eddy
				8. Propose	ed Bottom Hole Loca	tion			
JL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
Н	32	1	7S 28	E F	1950	N	50	) E	Eddy
				9. !	Pool Information				
								96830	

11. Work Type 12. Well Type 13. Cable/Rotary 14. Lease Type 15. Ground Level Elevation New Well OIL State 3702 16. Multiple 17. Proposed Depth 18. Formation 19. Contractor 20. Spud Date 9341 Paddock 9/17/2022 Distance from nearest fresh water well Depth to Ground water Distance to nearest surface water

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

Double Ram

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	36	1050	303	0
Prod	8.75	7	32	4050	1515	0
Prod	8.75	5.5	20	9341	1515	0

#### **Casing/Cement Program: Additional Comments**

22. Proposed Blowout Prevention Program Test Pressure Manufacturer Type Working Pressure

5000

5

knowledge and b	pelief. have complied with 19.15.14.9 (A)	true and complete to the best of my NMAC ⊠ and/or 19.15.14.9 (B) NMAC		OIL CONSERVATIO	ON DIVISION	
Printed Name:	Electronically filed by Sarah Cha	pman	Approved By:	Katherine Pickford		
Title:	Regulatory Director		Title:	Geoscientist		
Email Address:	Email Address: schapman@spurenergy.com			8/26/2022	Expiration Date: 8/26/2024	
Date:	8/24/2022 Phone: 832-930-8613			Conditions of Approval Attached		

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

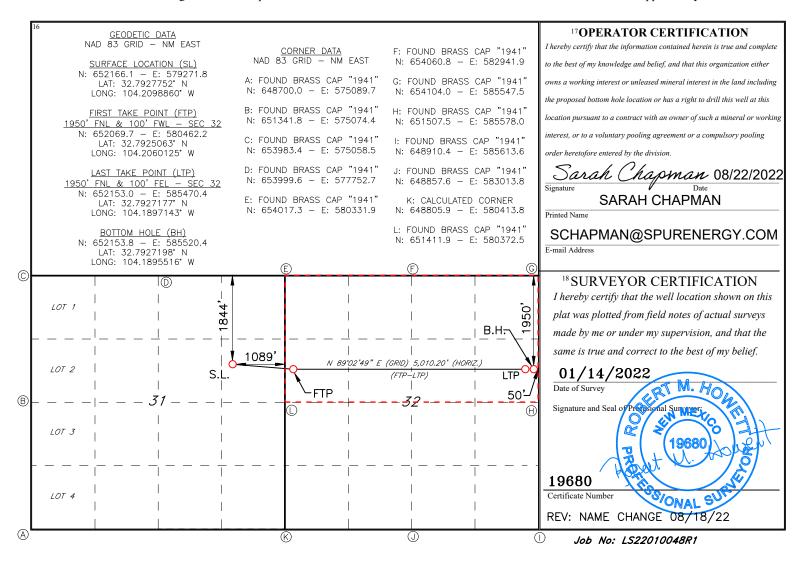
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Numbe	r	<sup>2</sup> Pool Code				<sup>3</sup> Pool Name					
30-0	15-498	98		96830			ARTE	SIA, GLORIE	ETA-YES	SO		
<sup>4</sup> Property Co	de		<sup>5</sup> Property Name									
333211			BLALOCK 32 STATE COM 11H									
7 OGRID 1			8 Operator Name 9 Elevation									
32894	17			SPUR	ENERGY	PA	RTNERS LLC				3702'	
<sup>10</sup> Surface Location												
UL or lot no.	Section	Township	Range	Lot Idn	Feet from t	he	North/South line	Feet From the	East/We	est line	County	
H	31	17S	28E		1844		NORTH	1089	EAS	ST	EDDY	
			11 <b>I</b>	Bottom F	Iole Locat	ion	If Different Fro	om Surface				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from t	he	North/South line	Feet from the	East/We	est line	County	
H	32	17S	28E		1950		NORTH	50	EAS	ST	EDDY	
12 Dedicated Acres	s 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.



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

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

kpickford Cement is required to circulate on both surface and intermediate1 strings of casing

drilling fluids and solids must be contained in a steel closed loop system

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

Form APD Conditions

Permit 323829

#### PERMIT CONDITIONS OF APPROVAL

Operator N	lame and Address:	API Number:							
	Spur Energy Partners LLC [328947]	30-015-49898							
	9655 Katy Freeway	Well:							
	Houston, TX 77024	BLALOCK 32 STATE COM #011H							
OCD	OCD Condition								
Reviewer									
kpickford	Notify OCD 24 hours prior to casing & cement								
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104								
kpickford	kpickford The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud								
kpickford	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 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,



# **Spur Energy Partners, LLC**

Eddy County, NM (NAD 83 - NME) BLALOCK 32 STATE 11H

Wellbore #1

Plan: PLAN #1

# **Standard Planning Report**

03 February, 2022



#### Planning Report

Database: Company: Project:

WBDS SQL 2

Spur Energy Partners, LLC Eddy County, NM (NAD 83 - NME)

**BLALOCK 32 STATE** Site:

Well: 11H Wellbore: Wellbore #1 Design: PLAN #1

Local Co-ordinate Reference:

**TVD Reference:** MD Reference: North Reference:

**Survey Calculation Method:** 

Well 11H

RKB = 20' @ 3722.00usft (AKITA 57) RKB = 20' @ 3722.00usft (AKITA 57)

Minimum Curvature

**Project** 

Eddy County, NM (NAD 83 - NME)

Map System: Geo Datum:

US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone

System Datum:

Mean Sea Level

Map Zone:

Site

Well

**BLALOCK 32 STATE** 

Site Position: From:

**Well Position** 

Мар

Northing: Easting: Slot Radius:

653,359.40 usft 579,373.10 usft

Latitude: Longitude: **Grid Convergence:** 

32.7960549 -104.2095518 0.067°

**Position Uncertainty:** 

11H

+N/-S

+E/-W

-1.193.30 usft

0.00 usft

Northing: Easting:

652.166.10 usft 579,271.80 usft

13.200 in

Latitude: Longitude:

32.7927752 -104.2098860

**Position Uncertainty** 

-101.30 usft 0.00 usft

Wellhead Elevation:

Ground Level:

3,702.00 usft

Wellbore

Wellbore #1

Declination Field Strength Magnetics **Model Name** Sample Date **Dip Angle** (°) (°) (nT) IGRF2020 01/28/22 6.814 60.301 47.696.53727731

Design

PLAN #1

**Audit Notes:** 

Version:

Phase:

**PLAN** 

Tie On Depth:

0.00

Vertical Section:

Depth From (TVD) (usft)

0.00

+N/-S (usft) 0.00

+E/-W (usft) 0.00

Direction (°) 89.05

**Plan Survey Tool Program** 

Date 02/03/22

**Depth From** (usft)

Depth To (usft)

Survey (Wellbore)

**Tool Name** 

Remarks

0.00

9,340.79 PLAN #1 (Wellbore #1) MWD+IFR1+SAG+FDIR OWSG MWD + IFR1 + Sag

**Plan Sections** Vertical Build Measured Dogleg Turn Depth Inclination **Azimuth** Depth +N/-S +E/-W Rate Rate Rate **TFO** (usft) (usft) (usft) (°/100ft) (°/100ft) (°/100ft) (°) (°) (usft) **Target** (°) 0.00 0.00 0.00 0.00 0.00 0.000 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 0.000 631.24 6.62 109.30 630.50 -6.3218.05 2.00 2.00 0.00 109.297 2.890.40 6.62 109.30 2.874.57 -92.45 264.04 0.00 0.00 0.00 0.000 3,787.31 60.00 3,598.27 -103.95 736.44 6.00 5.95 -2.26 -21.800 89.05 3,987.31 909.62 0.00 0.00 60.00 89.05 3,698.27 -101.07 0.00 0.000 10.00 0.000 3. FTP 11H: 1950' F 4,281.65 89.43 89.05 3,775.00 -96.40 1,190.40 10.00 0.00 9,290.78 89.43 89.05 3,824.51 -13.136,198.60 0.00 0.00 0.00 0.000 4. LTP 11H: 1950' F -12.309,340.79 89.43 89.05 3,825.00 6,248.60 0.00 0.00 0.00 0.000 5. BHL 11H: 1950' F



#### **Planning Report**

Database: Company: Project: WBDS\_SQL\_2

Spur Energy Partners, LLC Eddy County, NM (NAD 83 - NME)

Site: BLALOCK 32 STATE

Well: 11H
Wellbore: Wellbore #1
Design: PLAN #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well 11H

RKB = 20' @ 3722.00usft (AKITA 57) RKB = 20' @ 3722.00usft (AKITA 57)

Grid

Minimum Curvature

ned 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 <b>1. SHL 11H</b>	0.00 : <b>1844' FNL, 1</b>	0.00 <b>089' FEL</b>	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	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	2.00	109.30	399.98	-0.58	1.65	1.64	2.00	2.00	0.00
500.00	4.00	109.30	499.84	-2.31	6.59	6.55	2.00	2.00	0.00
600.00	6.00	109.30	599.45	-5.19	14.81	14.72	2.00	2.00	0.00
631.24	6.62	109.30	630.50	-6.32	18.05	17.95	2.00	2.00	0.00
700.00	6.62	109.30	698.80	-8.94	25.54	25.39	0.00	0.00	0.00
800.00	6.62	109.30	798.14	-12.76	36.43	36.21	0.00	0.00	0.00
900.00	6.62	109.30	897.47	-16.57	47.32	47.04	0.00	0.00	0.00
1,000.00	6.62	109.30	996.80	-20.38	58.21	57.86	0.00	0.00	0.00
1,100.00	6.62	109.30	1,096.13	-24.19	69.09	68.68	0.00	0.00	0.00
1,200.00	6.62	109.30	1,195.46	-28.00	79.98	79.51	0.00	0.00	0.00
1,300.00	6.62	109.30	1,294.80	-31.82	90.87	90.33	0.00	0.00	0.00
1,400.00	6.62	109.30	1,394.13	-35.63	101.76	101.16	0.00	0.00	0.00
1,500.00	6.62	109.30	1,493.46	-39.44	112.65	111.98	0.00	0.00	0.00
1,600.00	6.62	109.30	1,592.79	-43.25	123.54	122.80	0.00	0.00	0.00
1,700.00	6.62	109.30	1,692.13	-47.07	134.43	133.63	0.00	0.00	0.00
1,800.00	6.62	109.30	1,791.46	-50.88	145.31	144.45	0.00	0.00	0.00
1,900.00	6.62	109.30	1,890.79	-54.69	156.20	155.27	0.00	0.00	0.00
2,000.00	6.62	109.30	1,990.12	-58.50	167.09	166.10	0.00	0.00	0.00
2,100.00	6.62	109.30	2,089.46	-62.32	177.98	176.92	0.00	0.00	0.00
2,200.00	6.62	109.30	2,188.79	-66.13	188.87	187.75	0.00	0.00	0.00
2,300.00	6.62	109.30	2,288.12	-69.94	199.76	198.57	0.00	0.00	0.00
2,400.00	6.62	109.30	2,387.45	-73.75	210.64	209.39	0.00	0.00	0.00
2,500.00	6.62	109.30	2,486.78	-77.57	221.53	220.22	0.00	0.00	0.00
2,600.00	6.62	109.30	2,586.12	-81.38	232.42	231.04	0.00	0.00	0.00
2,700.00	6.62	109.30	2,685.45	-85.19	243.31	241.86	0.00	0.00	0.00
2,800.00	6.62	109.30	2,784.78	-89.00	254.20	252.69	0.00	0.00	0.00
2,890.40	6.62	109.30	2,874.57	-92.45	264.04	262.47	0.00	0.00	0.00
2. KOP 11H	@ 2890.40' N	/ID							
2,900.00	7.16	107.58	2,884.11	-92.81	265.13	263.56	6.00	5.60	-17.87
2,950.00	10.03	101.66	2,933.54	-94.64	272.37	270.77	6.00	5.74	-11.85
3,000.00	12.96	98.37	2,982.53	-96.33	282.19	280.55	6.00	5.86	-6.58
3,050.00	15.92	96.28	3,030.95	-97.90	294.55	292.89	6.00	5.91	-4.18
3,100.00	18.89	94.83	3,078.66	-99.33	309.44	307.75	6.00	5.94	-2.89
3,150.00	21.86	93.76	3,125.52	-100.62	326.79	325.08	6.00	5.95	-2.13
3,200.00	24.84	92.94	3,171.42	-101.77	346.58	344.84	6.00	5.96	-1.64
3,250.00	27.83	92.29	3,216.23	-102.78	368.73	366.98	6.00	5.97	-1.31
3,300.00	30.82	91.75	3,259.81	-103.63	393.20	391.43	6.00	5.98	-1.07
3,350.00	33.81	91.30	3,302.07	-104.34	419.92	418.13	6.00	5.98	-0.90
3,400.00	36.80	90.91	3,342.87	-104.90	448.81	447.01	6.00	5.98	-0.77
3,450.00	39.79	90.58	3,382.10	-105.30	479.79	477.98	6.00	5.99	-0.67
3,500.00	42.79	90.28	3,419.67	-105.54	512.78	510.96	6.00	5.99	-0.59
3,550.00	45.78	90.02	3,455.46	-105.63	547.69	545.86	6.00	5.99	-0.53
3,600.00	48.78	89.78	3,489.37	-105.57	584.42	582.59	6.00	5.99	-0.48
3,650.00	51.77	89.56	3,521.32	-105.35	622.87	621.03	6.00	5.99	-0.43
3,700.00	54.77	89.36	3,551.22	-104.97	662.93	661.10	6.00	5.99	-0.40
3,750.00	57.76	89.18	3,578.99	-104.44	704.51	702.68	6.00	5.99	-0.37
3,787.31	60.00	89.05	3,598.27	-103.95	736.44	734.62	6.00	5.99	-0.35



Site:

#### **Planning Report**

Database: Company: Project: WBDS\_SQL\_2

Spur Energy Partners, LLC Eddy County, NM (NAD 83 - NME)

BLALOCK 32 STATE

Well: 11H
Wellbore: Wellbore #1
Design: PLAN #1

**Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

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Well 11H

RKB = 20' @ 3722.00usft (AKITA 57)

RKB = 20' @ 3722.00usft (AKITA 57)

Minimum Curvature

Jesigii.	I LANTI								
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)
3,900.00 3,987.31 4,000.00 4,050.00	60.00 60.00 61.27 66.27	89.05 89.05 89.05 89.05	3,654.61 3,698.27 3,704.49 3,726.58	-102.33 -101.07 -100.88 -100.14	834.02 909.62 920.68 965.51	832.21 907.82 918.88 963.72	0.00 0.00 10.00 10.00	0.00 0.00 10.00 10.00	0.00 0.00 0.00 0.00
4,100.00 4,150.00 4,200.00 4,250.00 4,281.65	71.27 76.27 81.27 86.27 89.43	89.05 89.05 89.05 89.05 89.05	3,744.68 3,758.65 3,768.39 3,773.81 3,775.00	-99.36 -98.57 -97.75 -96.93 -96.40	1,012.10 1,060.08 1,109.10 1,158.78 1,190.40	1,010.31 1,058.30 1,107.33 1,157.02 1,188.64	10.00 10.00 10.00 10.00 10.00	10.00 10.00 10.00 10.00 10.00	0.00 0.00 0.00 0.00 0.00
	l: 1950' FNL, 1		3,773.00	-90.40	1,190.40	1,100.04	10.00	10.00	0.00
4,300.00 4,400.00 4,500.00 4,600.00 4,700.00	89.43 89.43 89.43 89.43 89.43	89.05 89.05 89.05 89.05 89.05	3,775.18 3,776.17 3,777.16 3,778.15 3,779.13	-96.09 -94.43 -92.77 -91.11 -89.45	1,208.75 1,308.73 1,408.71 1,508.69 1,608.68	1,206.99 1,306.99 1,406.98 1,506.98 1,606.97	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
4,800.00 4,900.00 5,000.00 5,100.00 5,200.00	89.43 89.43 89.43 89.43	89.05 89.05 89.05 89.05 89.05	3,780.12 3,781.11 3,782.10 3,783.09 3,784.08	-87.78 -86.12 -84.46 -82.80 -81.13	1,708.66 1,808.64 1,908.62 2,008.60 2,108.58	1,706.97 1,806.96 1,906.96 2,006.95 2,106.95	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
5,300.00 5,400.00 5,500.00 5,600.00 5,700.00	89.43 89.43 89.43 89.43	89.05 89.05 89.05 89.05 89.05	3,785.06 3,786.05 3,787.04 3,788.03 3,789.02	-79.47 -77.81 -76.15 -74.48 -72.82	2,208.56 2,308.55 2,408.53 2,508.51 2,608.49	2,206.94 2,306.94 2,406.93 2,506.93 2,606.92	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
5,800.00 5,900.00 6,000.00 6,100.00 6,200.00	89.43 89.43 89.43 89.43	89.05 89.05 89.05 89.05 89.05	3,790.01 3,790.99 3,791.98 3,792.97 3,793.96	-71.16 -69.50 -67.84 -66.17 -64.51	2,708.47 2,808.45 2,908.43 3,008.41 3,108.40	2,706.92 2,806.91 2,906.91 3,006.90 3,106.90	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
6,300.00 6,400.00 6,500.00 6,600.00 6,700.00	89.43 89.43 89.43 89.43 89.43	89.05 89.05 89.05 89.05 89.05	3,794.95 3,795.94 3,796.92 3,797.91 3,798.90	-62.85 -61.19 -59.52 -57.86 -56.20	3,208.38 3,308.36 3,408.34 3,508.32 3,608.30	3,206.89 3,306.89 3,406.88 3,506.88 3,606.87	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
6,800.00 6,900.00 7,000.00 7,100.00 7,200.00	89.43 89.43 89.43 89.43	89.05 89.05 89.05 89.05 89.05	3,799.89 3,800.88 3,801.87 3,802.85 3,803.84	-54.54 -52.87 -51.21 -49.55 -47.89	3,708.28 3,808.26 3,908.25 4,008.23 4,108.21	3,706.87 3,806.86 3,906.86 4,006.85 4,106.85	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
7,300.00 7,400.00 7,500.00 7,600.00 7,700.00	89.43 89.43 89.43 89.43	89.05 89.05 89.05 89.05	3,804.83 3,805.82 3,806.81 3,807.80 3,808.78	-46.22 -44.56 -42.90 -41.24 -39.58	4,208.19 4,308.17 4,408.15 4,508.13 4,608.12	4,206.85 4,306.84 4,406.84 4,506.83 4,606.83	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
7,800.00 7,900.00 8,000.00 8,100.00 8,200.00	89.43 89.43 89.43 89.43	89.05 89.05 89.05 89.05 89.05	3,809.77 3,810.76 3,811.75 3,812.74 3,813.73	-37.91 -36.25 -34.59 -32.93 -31.26	4,708.10 4,808.08 4,908.06 5,008.04 5,108.02	4,706.82 4,806.82 4,906.81 5,006.81 5,106.80	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
8,300.00 8,400.00 8,500.00 8,600.00	89.43 89.43 89.43	89.05 89.05 89.05 89.05	3,814.71 3,815.70 3,816.69 3,817.68	-29.60 -27.94 -26.28 -24.61	5,208.00 5,307.98 5,407.97 5,507.95	5,206.80 5,306.79 5,406.79 5,506.78	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00



#### **Planning Report**

Database: Company: Project: WBDS\_SQL\_2

Spur Energy Partners, LLC Eddy County, NM (NAD 83 - NME)

Site: BLALOCK 32 STATE

5. BHL 11H: 1950' FNL, 50' FEL

Well: 11H
Wellbore: Wellbore #1
Design: PLAN #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 11H

RKB = 20' @ 3722.00usft (AKITA 57)

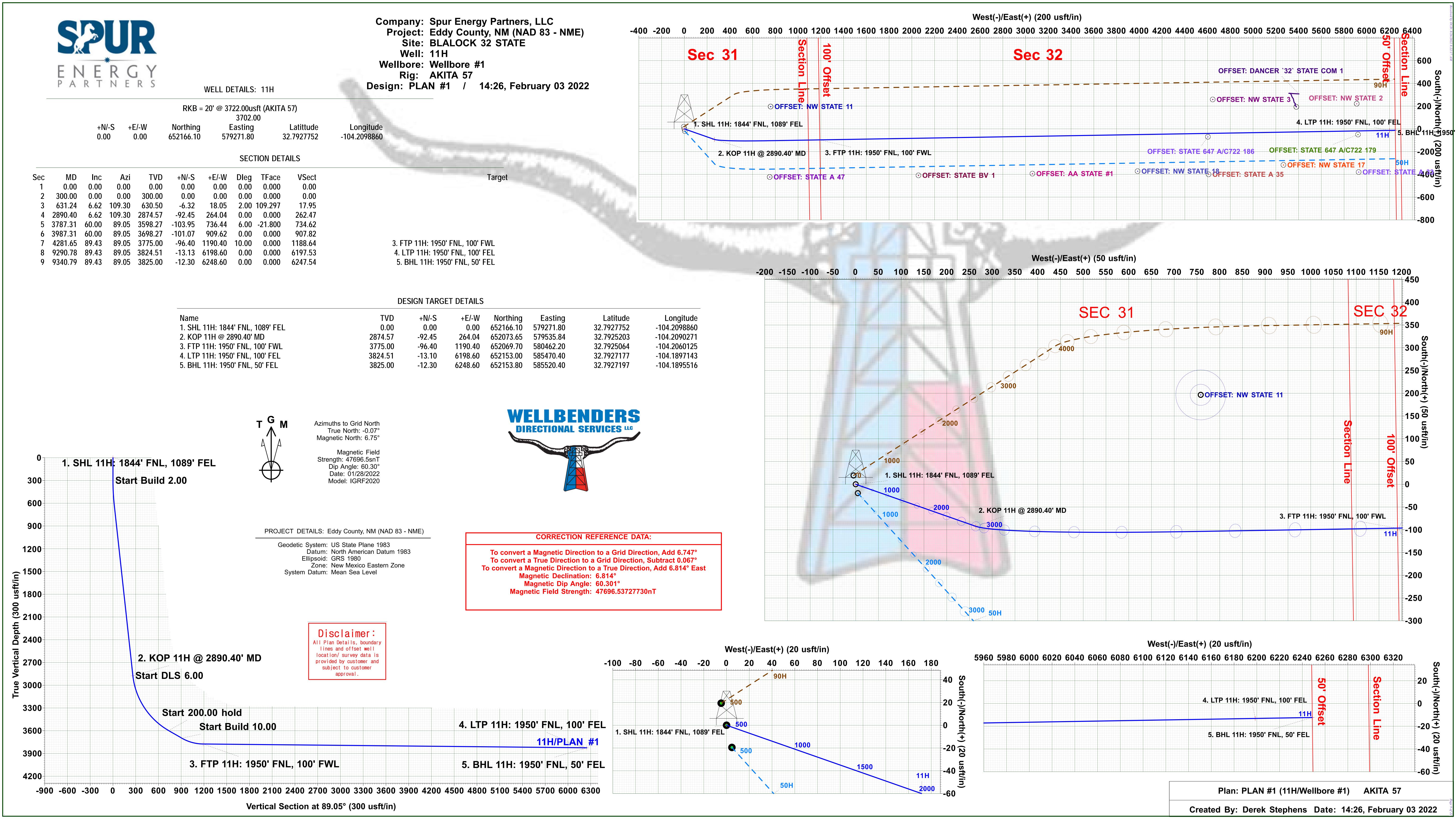
RKB = 20' @ 3722.00usft (AKITA 57)

Grid

Minimum Curvature

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)
8,700.00	89.43	89.05	3,818.67	-22.95	5,607.93	5,606.78	0.00	0.00	0.00
8,800.00 8,900.00 9,000.00 9,100.00 9,200.00	89.43 89.43 89.43 89.43	89.05 89.05 89.05 89.05 89.05	3,819.66 3,820.64 3,821.63 3,822.62 3,823.61	-21.29 -19.63 -17.97 -16.30 -14.64	5,707.91 5,807.89 5,907.87 6,007.85 6,107.83	5,706.77 5,806.77 5,906.76 6,006.76 6,106.75	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
9,290.78 <b>4. LTP 11</b> F	89.43 I: <b>1950' FNL, 1</b>	89.05 <b>00' FEL</b>	3,824.51	-13.13	6,198.60	6,197.53	0.00	0.00	0.00
9,300.00 9,340.79	89.43 89.43	89.05 89.05	3,824.60 3,825.00	-12.98 -12.30	6,207.82 6,248.60	6,206.75 6,247.54	0.00 0.00	0.00 0.00	0.00 0.00

Design Targets									
Target Name - hit/miss target Di - Shape	p Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
1. SHL 11H: 1844' FN - plan hits target cent - Point	0.00 ter	0.00	0.00	0.00	0.00	652,166.10	579,271.80	32.7927752	-104.2098860
2. KOP 11H @ 2890.4 - plan hits target cent - Point	0.00 ter	0.00	2,874.57	-92.45	264.04	652,073.66	579,535.84	32.7925203	-104.2090271
3. FTP 11H: 1950' FN - plan hits target cent - Point	0.00 ter	0.00	3,775.00	-96.40	1,190.40	652,069.70	580,462.20	32.7925064	-104.2060125
4. LTP 11H: 1950' FNI - plan misses target of Point	0.00 center by		- , -	-13.10 ft MD (3824.5	6,198.60 51 TVD, -13.	652,153.00 13 N, 6198.60 E)	585,470.40	32.7927177	-104.1897143
5. BHL 11H: 1950' FN - plan hits target cent - Point	0.00 ter	0.00	3,825.00	-12.30	6,248.60	652,153.80	585,520.40	32.7927197	-104.1895516



# 1. Geologic Formations

TVD of Target	3,825'
MD at TD	9,341'

Formation	Depth	Lithology	Expected Fluids
Quaternary	0'	Dolomite, other: Caliche	Useable Water
Tansill	260'	Sandstone, Dolomite	None
Yates	350'	Dolomite, Limestone, Shale, Siltstone	None
Seven Rivers	600'	Dolomite, Limestone	Natural Gas, Oil
Queen	1160'	Anhydrite, Dolomite, Sandstone	Natural Gas, Oil
Grayburg	1892'	Anhydrite	Natural Gas, Oil
San Andres	2199'	Dolomite	Natural Gas, Oil
Glorieta	3323'	Dolomite, Siltstone	Natural Gas, Oil
Paddock	3430'	Dolomite, Limestone	Natural Gas, Oil
Blinebry	3955'	Dolomite, Limestone	Natural Gas, Oil
Tubb	4925'	Dolomite, Limestone	Natural Gas, Oil

<sup>\*</sup>H2S, 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

Casing		Casing Into	erval		Weight			SF		Body SF	Joint SF
Formation Set Interval	Hole Size (in)	From (ft)	To (ft)	Csg. Size (in)	(lbs)	Grade	Conn.	Collapse	SF Burst	Tension	Tension
Seven Rivers	12.25	0	1075	9.625	36	J-55	BTC	1.125	1.2	1.4	1.4
N/A	8.75	0	4050	7	32	L-80	BK-HT	1.125	1.2	1.4	1.4
Yeso	8.75	4050	9341	5.5	20	L-80	BK-HT	1.125	1.2	1.4	1.4
							SI	Values will m	eet or Exceed		

	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?	N
If yes, are there two strings cemented to surface?	N/A
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

# 3. Cementing Program

Casing String	Top (ft)	Bottom (ft)	% Excess
Surface (Lead)	0	950	100%
Surface (Tail)	950	1075	100%
Production (Lead)	0	3050	100%
Production (Tail)	3050	9341	25%

Casing String	# Sks	Wt. (lb/gal)	Yld (ft3/sack)	H20 (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface (Lead)	259	12	2.4	13.48	8:12	Clas C Premium Plus Cement
Surface (Tail)	52	13.2	1.87	9.92	6:59	Clas C Premium Plus Cement
Production (Lead)	320	11.4	2.42	15.29	N/A	Clas C Premium Plus Cement
Production (Tail)	1195	13.2	1.56	9.81	N/A	Clas C Premium Plus Cement

#### **4. Pressure Control Equipment**

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	Туре		<b>*</b>	Tested to:
		5M	Annular		✓	70% of working pressure
12.25" Hole	13-5/8"		Blind Ram		✓	
12.25" Hole		5M	Pipe Ram		✓	250 psi / 3000 psi
			Double Ram			
			Other*			
		5M	Annular		✓	70% of working pressure
8.75" Hole	13-5/8"		Blind Ram Pipe Ram		✓	
6.75 Hole		5.4			✓	250 noi / 2000 noi
		5M	Double Ram	1		250 psi / 3000 psi
			Other*			

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

Condition	Specify what type and where?
BH Pressure at deepest TVD	1771 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	111°F

<sup>\*</sup>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.

Forma	tion integrity test will be performed per Onshore Order #2.			
On Ex	sploratory 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				
accord	lance 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 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.

De	Depth		Weight	Via a a a ita	Woten Legg	
From (ft)	To (ft)	Туре	(ppg)	Viscosity	Water Loss	
0	1075	Water-Based Mud	8.6-8.9	32-36	N/C	
1075	9341	Water-Based Mud	8.6-8.9	32-36	N/C	

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

#### 7. Logging and Testing Procedures

Logg	Logging, Coring and Testing.							
Yes	Will run GR from TD to	Will run GR from TD to surface (horizontal well – vertical portion of hole). Stated logs						
	run will be in the Comp	letion Report and submitted to the Bl	LM.					
No	Logs are planned based	on well control or offset log informa	tion.					
No	Drill stem test? If yes, explain							
No	Coring? If yes, explain							
Addi	tional logs planned	Interval						
No	Resistivity							
No	Density							
No	CBL							
Yes	Mud log	SCP - TD						

## 8. Drilling Conditions

PEX

No

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.

Hyd	rogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S
is de	etected in concentrations greater than 100 ppm, the operator will comply with the provisions
of O	Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and
form	nations will be provided to the BLM.
N	H2S is present
Y	H2S Plan attached

Total estimated cuttings volume: 851.5 bbls.

# 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/intermediate 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/intermediate 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\_\_ BOP Schematics
- \_x\_\_ Transcend Spudder Rig Attachments

# 10. Company Personnel

<u>Name</u>	<u>Title</u>	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



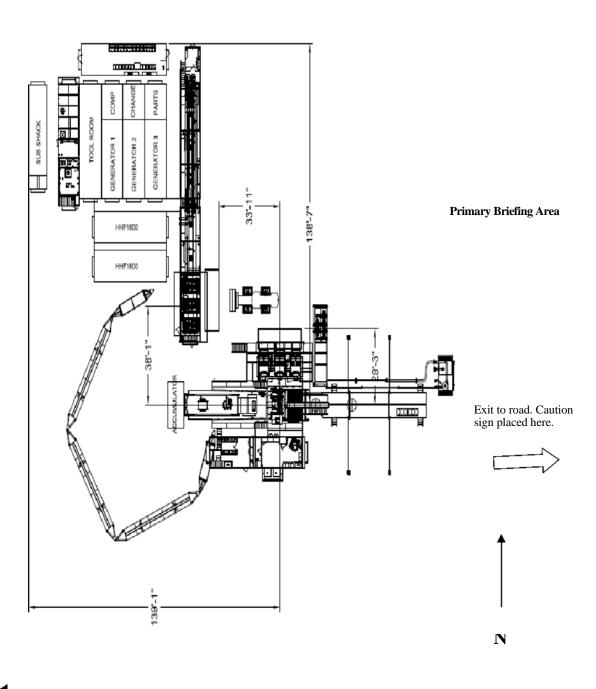
# Permian Drilling Hydrogen Sulfide Drilling Operations Plan Blalock 32 State Com 11H

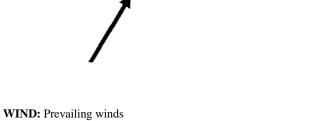
Open drill site. No homes or buildings are near the proposed location.

#### 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**





are from the Southwest



Intent	t	As Dril	led										
API#													
Ope	Operator Name:					Property	Name:	:					Well Number
Viel C	off Daint	(KOD)											
UL UL	Off Point	Township	Range	Lot	Feet	From	N/S	Feet		From E/	/w T	County	
							, 0						
Latitu	ıae				Longitu	ide						NAD	
<b>.</b>		. (575)											
UL	Section	t (FTP) Township	Range	Lot	Feet	From	N/S	Feet		From E/	/\ <b>/</b> /	County	
		TOWNSHIP	nunge	Lot				1000					
Latitu	ide				Longitu	ide						NAD	
Last I	ake Poin	t (LTP) Township	Pango	Lot	Feet	From N/S	Feet		From E/	/w   c	ount		
		TOWNSHIP	Range	LOT			reet		FIOIII E/		ounty	y 	
Latitu	ide				Longitu	ide				N	IAD		
					1					•			
									7				
Is this	well the	defining v	vell for th	e Hori:	zontal Sp	pacing Unit	? [						
Is this	well an i	infill well?			7								
15 (1115	wen an i	Wen.			_								
	l is yes pl ng Unit.	ease provi	de API if	availak	ole, Opei	rator Name	and v	vell n	umber 1	for De	finin	g well fo	r Horizontal
API#													
Ope	rator Nar	ne:	1			Property	Name:	:					Well Number
													KZ 06/20/2019

KZ 06/29/2018

#### 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: SPUF	R ENERGY P	ARTNERS LLC	OGRID:	328947		Date: <u>08</u>	<u>/ 24 / 2022</u>	
II. Type: ⊠ Original	☐ Amendment	due to □ 19.15.27	.9.D(6)(a) NMA	C □ 19.15.27.9.D	(6)(b) N	MAC □ Other	r.	
If Other, please describ	oe:							
III. Well(s): Provide the recompleted from a	_				wells pr	roposed to be d	lrilled or proposed to	
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D		cipated MCF/D	Anticipated Produced Water BBL/D	
BLALOCK 32 STATE COM 11H	30-015-	H-31-17S-28E	1844' FNL 1089' FEI	368 BBL/D	402	MCF/D	1839 BBL/D	
BLALOCK 32 STATE COM 50H	30-015-	H-31-17S-28E	1864' FNL 1085' FEI	316 BBL/D	346	MCF/D	1896 BBL/D	
BLALOCK 32 STATE COM 90H	30-015-	H-31-17S-28E	1825' FNL 1093' FEI	294 BBL/D	319	MCF/D	2040 BBL/D	
V. Anticipated Schedo proposed to be recomp					well or s		<u> </u>	
Well Name	API	Spud Date	TD Reached Date	Completion Commencement		Initial Flow Back Date	First Production Date	
BLALOCK 32 STATE COM 11H	30-015-	12/2/2022	12/10/2022	1/2/2023		1/22/2023	2/12/2023	
BLALOCK 32 STATE COM 50H	30-015-	12/10/2022	12/18/2022	1/2/2023		1/22/2023	2/12/2023	
BLALOCK 32 STATE COM 90H	30-015-	12/18/2022	12/26/2022	1/2/2023 1/22/2		1/22/2023	2/12/2023	
VI. Separation Equip VII. Operational Pra Subsection A through I	ctices: 🔀 Attac	ch a complete descr		-				
VIII. Best Managemed during active and plant			te description of	Operator's best r	nanager	ment practices	to minimize venting	

### 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.

X 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.

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

<b>XIII. Line Pressure.</b> Operator $\square$ does $\square$ does not anticipate that its existing well(s) connected to the same segment, or po	ortion, c	of the
natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the r	new wel	ll(s).

$\Box$	A 44 1. 4	O	1		•	4 - 41	1 1
	AHACH	Unerator's i	nian to mana	te nrodiiciion	in response	to the increase	a iine pressiire

XIV. Confidentia	lity: ☐ Operator	asserts confidentiali	ty pursuant to	Section 71-	-2-8 NMSA	1978 for the	information	provided in
Section 2 as provid	led in Paragraph (2	2) of Subsection D of	19.15.27.9 NN	MAC, and at	ttaches a full	description of	of the specific	information
for which confider	tiality is asserted	and the basis for such	n 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; compression on lease; (c) (d) liquids removal on lease; reinjection for underground storage; (e) **(f)** reinjection for temporary storage; (g) reinjection for enhanced oil recovery; fuel cell production; and (h)

# Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

other alternative beneficial uses approved by the division.

- (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@SPURENERGY.COM
Date: 08/24/2022
Phone:
832-930-8613
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval: