Form C-101

August 1, 2011 Permit 305328

<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

1220 S. St Francis Dr., Santa Fe, NM 87505

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

•	ne and Address									2. OGF	RID Number		
Spu	r Energy Partners	LLC									328947		
965	5 Katy Freeway									3. API	Number		
Hou	ston, TX 77024										30-025-49	ô55	
Property Cod	le	5. Pro	perty Name							6. Well	No.		
331	866		JG 16 STA	TE NOR	TH COM						020H		
					7. Surfac	e Location							
L - Lot	Section	Township	Range		Lot Idn	Feet From		N/S Line	Fe	et From	E/W Line	Count	у
D	16	17S	32	E	D	12	280	N		80	W		Lea
				8	3. Proposed Bot	tom Hole Lo	cation						
L - Lot Section Township		Range	Lot Idn		Feet From		N/S Line		et From	E/W Line	County	,	
Α	16	17S	32	2E	Α	6	60	N		50	E		Lea
					9. Pool I	nformation							
IALJAMAR;Y	ESO, WEST									44	4500		
					Additional W	ell Informat	ion						
1. Work Type		12. Well Type		13. Ca	13. Cable/Rotary 14. Lease Type				15. Ground Level Elevation				
New	/ Well	OIL			State			State	4039				
6. Multiple		17. Proposed Dep		18. Fo	rmation		19. Contr	ractor	20. Spud Date				
N		11337	,		Paddock				2/20/2022				
epth to Groun	d water			Distan	Distance from nearest fresh water well Dista					Distance to nea	ance to nearest surface water		
We will he i	sing a closed-loo	p system in lieu of	lined nits										
	ionig a diocea lee	p oyotom in nou or	mod pito										
		,	•		roposed Casing								
Туре	Hole Size	Casing Size		Casing V	_	Sett	ing Depth		Sa	cks of Cement		Estimated	TOC
Surf	17.5	13.275		54			925			897		0	
Int1	12.25	9.625		3			4250			1264		0	
Prod Prod	8.75 8.75	7 5.5		3:			6100 11337			2347		0	

22. Proposed Blowout Prevention Program									
Type	Working Pressure	Test Pressure	Manufacturer						
Double Ram	5	70	Shaffer						

knowledge and	I have complied with 19.15.14.9 (A) N	true and complete to the best of my		OIL CONSI	ERVATION DIVISION		
Printed Name:	Electronically filed by Sarah Chap	man	Approved By:	Paul F Kautz	Paul F Kautz		
Title:	Regulatory Director		Title:	Geologist	Geologist		
Email Address:	schapman@spurenergy.com		Approved Date:	12/17/2021	Expiration Date: 12/17/2023		
Date:	12/16/2021	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

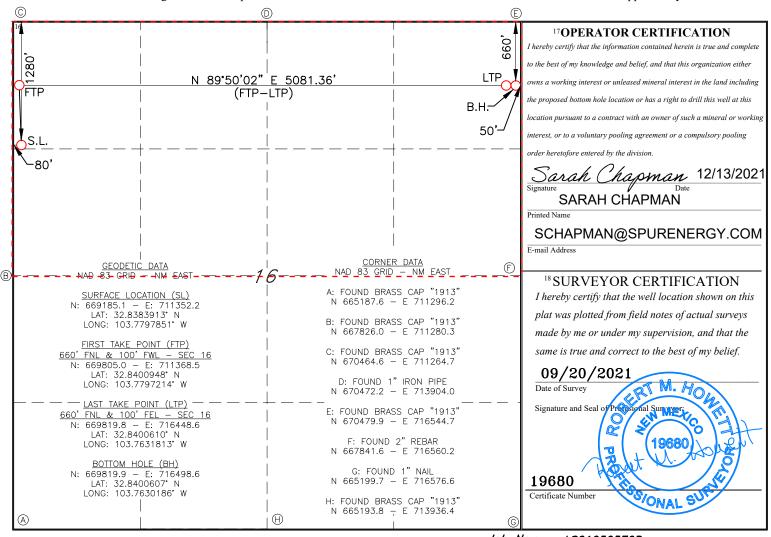
WELL LOCATION AND ACREAGE DEDICATION PLAT

30-025-49655	² Pool Code 44500	³ Pool Name MALJAMAR; YESO, WEST				
⁴ Property Code 331866	JG 16 S	⁵ Property Name STATE NORTH COM	⁶ Well Number 20H			
7 OGRID NO. 328947	SPUR ENE	8 Operator Name RGY PARTNERS LLC.	⁹ Elevation 4039 '			

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
D	16	17S	32E		1280	NORTH	80	WEST	LEA
	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
A	16	17S	32E		660	NORTH	50	EAST	LEA
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.



Job No.:

LS21050570R

Form APD Conditions

Permit 305328

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720

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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

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

PERMIT CONDITIONS OF APPROVAL

Op	erator Name and Address:	API Number:			
	Spur Energy Partners LLC [328947]	30-025-49655			
	9655 Katy Freeway	Well:			
	Houston, TX 77024	JG 16 STATE NORTH COM #020H			

OCD Reviewer	Condition
pkautz	Notify OCD 24 hours prior to casing & cement
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104
	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
	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
pkautz	1) SURFACE & INTERMEDIATE CASING - Cement must circulate to surface 2) PRODUCTION CASING - Cement must tie back into intermediate casing
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud



Spur Energy Partners, LLC

Lea County, NM (Nad-83/ NME) JG 16 STATE NORTH COM 20H

Wellbore #1

Plan: PLAN #1

Standard Planning Report

12 December, 2021



WBDS SQL 2 Database:

Company: Spur Energy Partners, LLC Project: Lea County, NM (Nad-83/ NME) JG 16 STATE NORTH COM Site:

Well: 20H Wellbore: Wellbore #1 Design: PLAN #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 20H

RKB = 20' @ 4059.00usft (AKITA 57) RKB = 20' @ 4059.00usft (AKITA 57)

Grid

Minimum Curvature

Project Lea County, NM (Nad-83/ NME)

Map System: Geo Datum:

Map Zone:

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

System Datum:

Mean Sea Level

JG 16 STATE NORTH COM Site

Northing: 669,185.10 usft 32.838391 Site Position: Latitude: From: Мар Easting: 711,352.20 usft Longitude: -103.779785 0.00 usft Slot Radius: 13.200 in **Grid Convergence:** 0.300 **Position Uncertainty:**

Well 20H

Well Position +N/-S

0.00 usft +E/-W 0.00 usft

Northing: Easting:

669.185.10 usft 711,352.20 usft

Latitude: Longitude:

32.838391 -103.779785

Position Uncertainty 0.00 usft Wellhead Elevation: **Ground Level:** 4,039.00 usft

Wellbore Wellbore #1 Dip Angle Magnetics **Model Name** Sample Date Declination Field Strength (°) (°) (nT) 47,780.74282342 IGRF2020 12/07/21 6.634 60.411

PLAN #1 Design Audit Notes: Version: Phase: **PLAN** Tie On Depth: 0.00 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 0.00 0.00 0.00 89.83

12/10/21 **Plan Survey Tool Program** Date

Depth From Depth To (usft)

(usft)

Survey (Wellbore)

Tool Name

Remarks

0.00

11,336.54 PLAN #1 (Wellbore #1)

MWD+IFR1+SAG+FDIR

OWSG MWD + IFR1 + Sag + F

Plan Sections Measured Vertical Dogleg Build Turn Depth Inclination Azimuth Depth +N/-S +E/-W Rate Rate Rate TFO (usft) (usft) (°/100ft) (°/100ft) (°/100ft) (°) (usft) (usft) (°) (°) Target 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.000 0.00 300.00 0.00 0.00 300.00 0.00 0.00 0.00 0.00 0.00 0.000 959.10 953.30 43.23 -61.88 2.00 13.18 304.94 2.00 0.00 304.942 4.672.78 13.18 304.94 4.569.13 528.29 -756.09 0.00 0.00 0.00 0.000 5,856.42 60.00 5,573.24 619.00 -293.38 6.00 3.96 12.24 148.216 89.83 6,056.42 60.00 89.83 5,673.24 619.50 -120.18 0.00 0.00 0.00 0.000 6,356.42 90.00 89.83 5,750.00 620.34 166.30 10.00 10.00 0.00 0.000 4. PLAN LP @ 6356.4 11,286.54 90.00 5,750.00 634.65 5,096.40 0.00 0.000 5. LTP 20H: 660' FNL 89.83 0.00 0.00 11,336.54 90.00 89.83 5,750.00 634.80 5,146.40 0.00 0.00 0.00 0.000 6. BHL 20H: 660' FNL



Database: WBDS_SQL_2

Company: Spur Energy Partners, LLC
Project: Lea County, NM (Nad-83/ NME)
Site: JG 16 STATE NORTH COM

 Well:
 20H

 Wellbore:
 Wellbore #1

 Design:
 PLAN #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well 20H

RKB = 20' @ 4059.00usft (AKITA 57) RKB = 20' @ 4059.00usft (AKITA 57)

Grid

ed 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
JG STATE	23 SHL (AL) - JG	STATE 9 SHL (A	AL) - JG STATE 2	21 SHL (AL) - 1.	. SHL 20H: 128	0' FNL, 80' FW	L - JG STATE 2	0 SHL (AL) - JG	STA
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	304.94	399.98	1.00	-1.43	-1.43	2.00	2.00	0.00
500.00	4.00	304.94	499.84	4.00	-5.72	-5.71	2.00	2.00	0.00
600.00	6.00	304.94	599.45	8.99	-12.86	-12.84	2.00	2.00	0.00
700.00	8.00	304.94	698.70	15.97	-22.85	-22.81	2.00	2.00	0.00
800.00	10.00	304.94	797.47	24.93	-35.68	-35.60	2.00	2.00	0.00
900.00	12.00	304.94	895.62	35.86	-51.32	-51.21	2.00	2.00	0.00
959.10	13.18	304.94	953.30	43.23	-61.88	-61.75	2.00	2.00	0.00
1,000.00	13.18	304.94	993.12	48.58	-69.52	-69.38	0.00	0.00	0.00
1,100.00	13.18	304.94	1,090.49	61.64	-88.22	-88.03	0.00	0.00	0.00
1,200.00	13.18	304.94	1,187.85	74.70	-106.91	-106.69	0.00	0.00	0.00
1,300.00	13.18	304.94	1,285.22	87.76	-125.60	-125.34	0.00	0.00	0.00
1,400.00	13.18	304.94	1,382.58	100.82	-144.30	-144.00	0.00	0.00	0.00
1,500.00	13.18	304.94	1,479.95	113.88	-162.99	-162.65	0.00	0.00	0.00
1,600.00	13.18	304.94	1,577.31	126.94	-181.68	-181.31	0.00	0.00	0.00
1,700.00	13.18	304.94	1,674.68	140.01	-200.38	-199.96	0.00	0.00	0.00
1,800.00	13.18	304.94	1,772.04	153.07	-219.07	-218.62	0.00	0.00	0.00
1,900.00	13.18	304.94	1,869.41	166.13	-237.76	-237.27	0.00	0.00	0.00
2,000.00	13.18	304.94	1,966.77	179.19	-256.46	-255.93	0.00	0.00	0.00
2,100.00	13.18	304.94	2,064.14	192.25	-275.15	-274.58	0.00	0.00	0.00
2,200.00	13.18	304.94	2,161.50	205.31	-293.85	-293.23	0.00	0.00	0.00
2,300.00	13.18	304.94	2,258.87	218.37	-312.54	-311.89	0.00	0.00	0.00
2,400.00	13.18	304.94	2,356.23	231.43	-331.23	-330.54	0.00	0.00	0.00
2,500.00	13.18	304.94	2,453.60	244.50	-349.93	-349.20	0.00	0.00	0.00
2,600.00	13.18	304.94	2,550.96	257.56	-368.62	-367.85	0.00	0.00	0.00
2,700.00	13.18	304.94	2,648.33	270.62	-387.31	-386.51	0.00	0.00	0.00
2,800.00	13.18	304.94	2,745.69	283.68	-406.01	-405.16	0.00	0.00	0.00
2,900.00	13.18	304.94	2,843.06	296.74	-424.70	-423.82	0.00	0.00	0.00
3,000.00	13.18	304.94	2,940.42	309.80	-443.39	-442.47	0.00	0.00	0.00
3,100.00	13.18	304.94	3,037.79	322.86	-462.09	-461.13	0.00	0.00	0.00
3,200.00		304.94	3,135.15	335.93	-480.78	-479.78	0.00	0.00	0.00
3,300.00	13.18	304.94	3,232.52	348.99	-499.47	-498.44	0.00	0.00	0.00
3,400.00		304.94	3,329.88	362.05	-518.17	-517.09	0.00	0.00	0.00
3,500.00		304.94	3,427.25	375.11	-536.86	-535.75	0.00	0.00	0.00
3,600.00		304.94	3,524.61	388.17	-555.55	-554.40	0.00	0.00	0.00
3,700.00		304.94	3,621.98	401.23	-574.25	-573.05	0.00	0.00	0.00
3,800.00		304.94	3,719.34	414.29	-592.94	-591.71	0.00	0.00	0.00
3,900.00		304.94	3,816.71	427.35	-611.63	-610.36	0.00	0.00	0.00
4,000.00		304.94	3,914.08	440.42	-630.33	-629.02	0.00	0.00	0.00
4,100.00		304.94	4,011.44	453.48	-649.02	-647.67	0.00	0.00	0.00
4,200.00		304.94	4,108.81	466.54	-667.72	-666.33	0.00	0.00	0.00
4,300.00		304.94	4,206.17	479.60	-686.41	-684.98	0.00	0.00	0.00
4,400.00		304.94	4,303.54	492.66	-705.10	-703.64	0.00	0.00	0.00
4,500.00		304.94	4,400.90	505.72	-723.80	-722.29	0.00	0.00	0.00
4,600.00		304.94	4,498.27	518.78	-742.49	-740.95	0.00	0.00	0.00
4,672.78		304.94	4,569.13	528.29	-756.09	-754.52	0.00	0.00	0.00
4,700.00	H @ 4672.78' MD 11.82	309.14	4,595.70	531.83	-760.80	-759.22	6.00	-4.99	15.43
,									
4,750.00	9.55	319.79	4,644.84	538.23	-767.46	-765.86	6.00	-4.54	21.30



Database: WBDS_SQL_2

Company: Spur Energy Partners, LLC
Project: Lea County, NM (Nad-83/ NME)
Site: JG 16 STATE NORTH COM

Well: 20H Wellbore: Wellbore #1 Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

RKB =

RKB = 20' @ 4059.00usft (AKITA 57) RKB = 20' @ 4059.00usft (AKITA 57)

Grid

Well 20H

ellbore: esign:	Wellbore #1 PLAN #1								
anned 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)
4,800.00	7.79	336.02	4,694.27	544.50	-771.51	-769.89	6.00	-3.53	32.45
4,850.00	6.93	358.63	4,743.87	550.61	-772.96	-771.33	6.00	-3.53 -1.73	45.23
4,900.00	7.29	22.87	4,793.49	556.55	-771.80	-770.15	6.00	0.73	48.48
4,950.00	8.74	41.90	4,843.01	562.30	-768.03	-766.36	6.00	2.89	38.05
5,000.00	10.83	54.62	4,892.29	567.85	-761.66	-759.97	6.00	4.19	25.44
5,050.00	13.28	63.00	4,941.19	573.18	-752.71	-751.01	6.00	4.89	16.75
5,100.00	15.91	68.73	4,989.57	578.28	-741.21	-739.49	6.00	5.27	11.46
		72.84			-727.18	-725.44			
5,150.00	18.65		5,037.31	583.12			6.00	5.48	8.22
5,200.00	21.46	75.92	5,084.27	587.71	-710.66	-708.91	6.00	5.62	6.16
5,250.00	24.32	78.31	5,130.33	592.02	-691.70	-689.94	6.00	5.71	4.78
5,300.00	27.20	80.22	5,175.36	596.05	-670.36	-668.59	6.00	5.77	3.83
5,350.00	30.10	81.79	5,219.24	599.78	-646.68	-644.90	6.00	5.81	3.14
5,400.00	33.02	83.11	5,261.84	603.21	-620.74	-618.95	6.00	5.84	2.64
5,450.00	35.95	84.24	5,303.04	606.32	-592.60	-590.80	6.00	5.86	2.25
5,450.00	აა.ჟა		0,000.04						
5,500.00	38.89	85.21	5,342.75	609.10	-562.35	-560.54	6.00	5.88	1.95
5,550.00	41.84	86.07	5,380.84	611.55	-530.06	-528.25	6.00	5.90	1.72
5,600.00	44.80	86.84	5,417.21	613.67	-495.83	-494.01	6.00	5.91	1.53
5,650.00	47.75	87.53	5,451.77	615.44	-459.74	-457.92	6.00	5.92	1.38
5,700.00	50.72	88.16	5,484.41	616.85	-421.91	-420.07	6.00	5.92	1.26
3,700.00	30.72	00.10	3,404.41		-421.31	-420.07		0.92	1.20
5,750.00	53.68	88.74	5,515.06	617.92	-382.42	-380.58	6.00	5.93	1.16
5,800.00	56.65	89.27	5,543.62	618.63	-341.39	-339.55	6.00	5.94	1.07
5,850.00	59.62	89.77	5,570.01	618.98	-298.93	-297.09	6.00	5.94	1.00
5,856.42	60.00	89.83	5,573.24	619.00	-293.38	-291.54	6.00	5.94	0.96
5,900.00	60.00	89.83	5,595.03	619.11	-255.64	-253.80	0.00	0.00	0.00
0,000.00			0,000.00						
6,000.00	60.00	89.83	5,645.03	619.36	-169.04	-167.20	0.00	0.00	0.00
6,056.42	60.00	89.83	5,673.24	619.50	-120.18	-118.34	0.00	0.00	0.00
6,100.00	64.36	89.83	5,693.57	619.62	-81.64	-79.81	10.00	10.00	0.00
6,150.00	69.36	89.83	5,713.22	619.75	-35.68	-33.84	10.00	10.00	0.00
6,200.00	74.36	89.83	5,728.78	619.89	11.82	13.66	10.00	10.00	0.00
6,209.19	75.28	89.83	5,731.19	619.91	20.69	22.53	10.00	10.00	0.00
3. FTP 20H:	660' FNL, 100' F	WL							
6,250.00	79.36	89.83	5,740.15	620.03	60.49	62.33	10.00	10.00	0.00
6,300.00	84.36	89.83	5,747.22	620.17	109.97	111.81	10.00	10.00	0.00
6,350.00	89.36	89.83	5,749.96	620.32	159.88	161.72	10.00	10.00	0.00
6,356.42	90.00	89.83	5,750.00	620.34	166.30	168.14	10.00	10.00	0.00
,		09.03	3,730.00	020.04	100.00	100.14	10.00	10.00	0.00
4. PLAN LP	@ 6356.42' MD								
6,400.00	90.00	89.83	5,750.00	620.46	209.88	211.72	0.00	0.00	0.00
6,500.00	90.00	89.83	5,750.00	620.75	309.88	311.72	0.00	0.00	0.00
6,600.00	90.00	89.83	5,750.00	621.04	409.88	411.72	0.00	0.00	0.00
6,700.00	90.00	89.83	5,750.00	621.33	509.88	511.72	0.00	0.00	0.00
6,800.00	90.00	89.83	5,750.00	621.62	609.88	611.72	0.00	0.00	0.00
6,900.00	90.00	89.83	5,750.00	621.91	709.88	711.72	0.00	0.00	0.00
7,000.00	90.00	89.83	5,750.00	622.20	809.88	811.72	0.00	0.00	0.00
7,100.00	90.00	89.83	5,750.00	622.50	909.88	911.72	0.00	0.00	0.00
7,100.00	90.00	89.83	5,750.00	622.79	1,009.88	1,011.72	0.00	0.00	0.00
7,300.00	90.00	89.83	5,750.00	623.08	1,109.88	1,111.72	0.00	0.00	0.00
7,400.00	90.00	89.83	5,750.00	623.37	1,209.88	1,211.72	0.00	0.00	0.00
7,500.00	90.00	89.83	5,750.00	623.66	1,309.87	1,311.72	0.00	0.00	0.00
7,600.00	90.00	89.83	5,750.00	623.95	1,409.87	1,411.72	0.00	0.00	0.00
7,700.00	90.00	89.83	5,750.00	624.24	1,509.87	1,411.72	0.00	0.00	0.00
7,800.00	90.00	89.83	5,750.00	624.53	1,609.87	1,611.72	0.00	0.00	0.00
7,900.00	90.00	89.83	5,750.00	624.82	1,709.87	1,711.72	0.00	0.00	0.00
8,000.00	90.00	89.83	5,750.00	625.11	1,809.87	1,811.72	0.00	0.00	0.00
8,100.00	90.00	89.83	5,750.00	625.40	1,909.87	1,911.72	0.00	0.00	0.00



Database: WBDS_SQL_2

Company: Spur Energy Partners, LLC
Project: Lea County, NM (Nad-83/ NME)
Site: JG 16 STATE NORTH COM

 Well:
 20H

 Wellbore:
 Wellbore #1

 Design:
 PLAN #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well 20H

RKB = 20' @ 4059.00usft (AKITA 57) RKB = 20' @ 4059.00usft (AKITA 57)

Grid

d 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)
8,200.00	90.00	89.83	5,750.00	625.69	2,009.87	2,011.72	0.00	0.00	0.00
8,300.00	90.00	89.83	5,750.00	625.98	2,109.87	2,111.72	0.00	0.00	0.00
8,400.00	90.00	89.83	5,750.00	626.27	2,209.87	2,211.72	0.00	0.00	0.00
8,500.00	90.00	89.83	5,750.00	626.56	2,309.87	2,311.72	0.00	0.00	0.00
8,600.00	90.00	89.83	5,750.00	626.85	2,409.87	2,411.72	0.00	0.00	0.00
8,700.00	90.00	89.83	5,750.00	627.14	2,509.87	2,511.72	0.00	0.00	0.00
8,800.00	90.00	89.83	5,750.00	627.43	2,609.87	2,611.72	0.00	0.00	0.00
8,900.00	90.00	89.83	5,750.00	627.72	2,709.87	2,711.72	0.00	0.00	0.00
9,000.00	90.00	89.83	5,750.00	628.01	2,809.87	2,811.72	0.00	0.00	0.00
9,100.00	90.00	89.83	5,750.00	628.30	2,909.87	2,911.72	0.00	0.00	0.00
9,200.00	90.00	89.83	5,750.00	628.59	3,009.87	3,011.72	0.00	0.00	0.00
9,300.00	90.00	89.83	5,750.00	628.89	3,109.87	3,111.72	0.00	0.00	0.00
9,400.00	90.00	89.83	5,750.00	629.18	3,209.87	3,211.72	0.00	0.00	0.00
9,500.00	90.00	89.83	5,750.00	629.47	3,309.87	3,311.72	0.00	0.00	0.00
9,600.00	90.00	89.83	5,750.00	629.76	3,409.87	3,411.72	0.00	0.00	0.00
9,700.00	90.00	89.83	5,750.00	630.05	3,509.87	3,511.72	0.00	0.00	0.00
9,800.00	90.00	89.83	5,750.00	630.34	3,609.87	3,611.72	0.00	0.00	0.00
9,900.00	90.00	89.83	5,750.00	630.63	3,709.86	3,711.72	0.00	0.00	0.00
10,000.00	90.00	89.83	5,750.00	630.92	3,809.86	3,811.72	0.00	0.00	0.00
10,100.00	90.00	89.83	5,750.00	631.21	3,909.86	3,911.72	0.00	0.00	0.00
10,200.00	90.00	89.83	5,750.00	631.50	4,009.86	4,011.72	0.00	0.00	0.00
10,300.00	90.00	89.83	5,750.00	631.79	4,109.86	4,111.72	0.00	0.00	0.00
10,400.00	90.00	89.83	5,750.00	632.08	4,209.86	4,211.72	0.00	0.00	0.00
10,500.00	90.00	89.83	5,750.00	632.37	4,309.86	4,311.72	0.00	0.00	0.00
10,600.00	90.00	89.83	5,750.00	632.66	4,409.86	4,411.72	0.00	0.00	0.00
10,700.00	90.00	89.83	5,750.00	632.95	4,509.86	4,511.72	0.00	0.00	0.00
10,800.00	90.00	89.83	5,750.00	633.24	4,609.86	4,611.72	0.00	0.00	0.00
10,900.00	90.00	89.83	5,750.00	633.53	4,709.86	4,711.72	0.00	0.00	0.00
11,000.00	90.00	89.83	5,750.00	633.82	4,809.86	4,811.72	0.00	0.00	0.00
11,100.00	90.00	89.83	5,750.00	634.11	4,909.86	4,911.72	0.00	0.00	0.00
11,200.00	90.00	89.83	5,750.00	634.40	5,009.86	5,011.72	0.00	0.00	0.00
11,286.54	90.00	89.83	5,750.00	634.65	5,096.40	5,098.26	0.00	0.00	0.00
5. LTP 20H:	660' FNL, 100' FE	EL							
11,300.00	90.00	89.83	5,750.00	634.69	5,109.86	5,111.72	0.00	0.00	0.00
11,336.54	90.00	89.83	5,750.00	634.80	5,146.40	5,148.26	0.00	0.00	0.00
6. BHL 20H:	660' FNL, 50' FE	L							



Database: WBDS_SQL_2

Company: Spur Energy Partners, LLC
Project: Lea County, NM (Nad-83/ NME)
Site: JG 16 STATE NORTH COM

 Well:
 20H

 Wellbore:
 Wellbore #1

 Design:
 PLAN #1

Local Co-ordinate Reference:

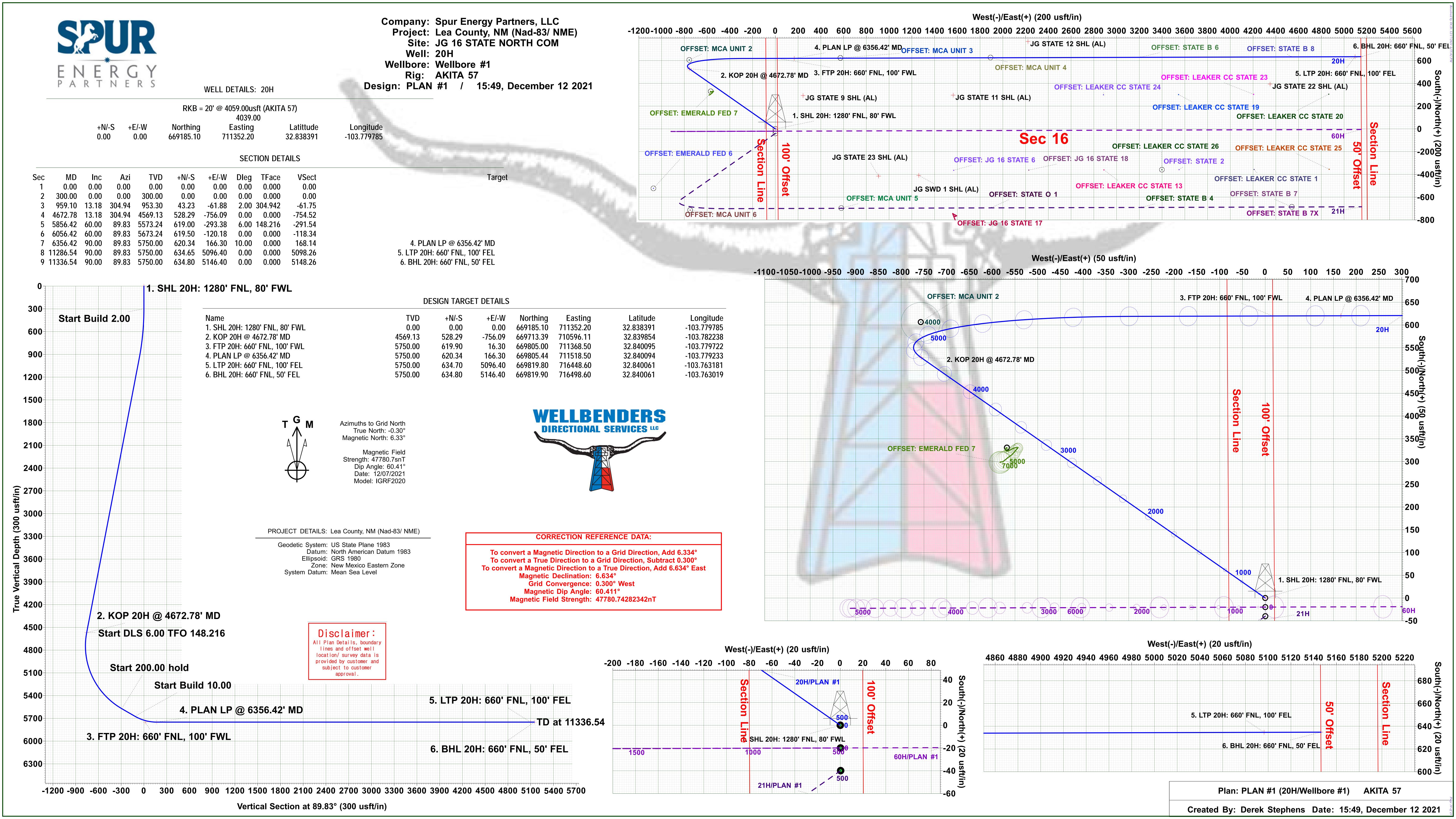
Survey Calculation Method:

TVD Reference: MD Reference: North Reference: Well 20H

RKB = 20' @ 4059.00usft (AKITA 57) RKB = 20' @ 4059.00usft (AKITA 57)

Grid

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
1. SHL 20H: 1280' FNL, - plan hits target cent - Point	0.00 ter	0.00	0.00	0.00	0.00	669,185.10	711,352.20	32.838391	-103.779785
2. KOP 20H @ 4672.78' - plan hits target cent - Point	0.00 er	0.00	4,569.13	528.29	-756.09	669,713.39	710,596.11	32.839854	-103.782238
6. BHL 20H: 660' FNL, 5 - plan hits target cent - Point	0.00 er	0.00	5,750.00	634.80	5,146.40	669,819.90	716,498.60	32.840061	-103.763019
5. LTP 20H: 660' FNL, 10 - plan misses target of - Point	0.00 center by 0.05	0.00 jusft at 11286	5,750.00 6.54usft MD	634.70 (5750.00 TVD	5,096.40 0, 634.65 N, 50	669,819.80 096.40 E)	716,448.60	32.840061	-103.763182
3. FTP 20H: 660' FNL, 1 - plan misses target o - Point	0.00 center by 19.3	0.00 2usft at 620	5,750.00 9.19usft MD	619.90 (5731.19 TVD	16.30 0, 619.91 N, 20	669,805.00 0.69 E)	711,368.50	32.840095	-103.779722
4. PLAN LP @ 6356.42' - plan hits target cent - Point	0.00 er	0.01	5,750.00	620.34	166.30	669,805.44	711,518.50	32.840094	-103.779233



1. Geologic Formations

TVD of Target	5,750'
MD at TD	11,337'

Formation	Depth	Lithology	Expected Fluids
Quaternary	0'	Dolomite, other: Caliche	Useable Water
Rustler	830'	Dolomite, Shale, Anhydrite	Other: Brackish Water
Top Salt	1042'	Anhydrite	Other: Salt
Tansill	2057'	Dolomite, Limestone	None
Yates	2162'	Sandstone	None
Seven Rivers	2515'	Dolomite, Sandstone	Natural Gas, Oil
Queen	3130'	Dolomite, Sandstone	Natural Gas, Oil
San Andres	3885'	Dolomite, Limestone	Natural Gas, Oil
Glorieta	5393'	Dolomits, Siltstone	Natural Gas, Oil
Yeso	5484'	Dolomite	Natural Gas, Oil
Blinebry	5915'	Dolomite	Natural Gas, Oil

^{*}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

Hala Siga (in)	Casing	Interval	Csg. Size	Weight	Grade	Crada	Veight	Comm	SF	SF Burst	Body SF	Joint SF
Hole Size (in)	From (ft)	To (ft)	(in)	(lbs)	Grade	Conn.	Collapse	or burst	Tension	Tension		
17.5	0	925	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4		
12.25	0	4250	9.625	36	J-55	BTC	1.125	1.2	1.4	1.4		
8.75	0	6100	7	32	L-80	BK-HT	1.125	1.2	1.4	1.4		
8.75	6100	11337	5.5	20	L-80	BK-HT	1.125	1.2	1.4	1.4		
								SF Values will 1	meet or Exceed	l		

	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 rd 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 nd 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?	
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 Tail	0	925	165%
Intermediate (Lead)	0	925	100%
Intermediate (Tail)	925	4250	100%
Production (Lead)	0	5100	100%
Production (Tail)	5100	11337	25%

Casing String	# Sks	Wt.	Yld	H20	500# Comp. Strength	Slurry Description	
		(lb/gal)	(ft3/sack)	(gal/sk)	(hours)		
Surface Tail	897	13.2	1.87	9.92	6:59	Clas C Premium Plus Cement	
Intermediate (Lead)	140	12	2.4	13.48	8:12	Clas C Premium Plus Cement	
Intermediate (Tail)	1124	13.2	1.87	9.92	6:59	Clas C Premium Plus Cement	
Production (Lead)	1161	11.4	2.42	15.29	N/A	Clas C Premium Plus Cement	
Production (Tail)	1186	13.2	1.56	9.81	N/A	Clas C Premium Plus Cement	

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	Туре	✓	Tested to:
		5M	Annular	✓	70% of working pressure
12.25" Hole	13-5/8"		Blind Ram ✓		
12.25" Hole	13-3/8	5M	Pipe Ram	✓	250 noi / 2000 noi
		JIVI	Double Ram 250 psi / 300		230 psi / 3000 psi
			Other*		
		5M	Annular	✓	70% of working pressure
8.75" Hole	13-5/8"		Blind Ram ✓ Pipe Ram ✓		
8./3 Hole	13-3/8	514			250: / 2000:
		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	2662 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	126°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.

Forma	tion integrity test will be performed per Onshore Order #2.			
On Ex	ploratory 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 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 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		Tyme Weight (nng)		Via on alter	Water Leas
From (ft)	To (ft)	Туре	Weight (ppg)	Viscosity	Water Loss
0	925	Water-Based Mud	8.6-8.9	32-36	N/C
925	4250	Brine	9.0-10.0	32-36	N/C
4250	11337	Brine	9.0-10.0	32-36	N/C

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

7. Logging and Testing Procedures

Logg	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 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, e	explain					
No	Coring? If yes, explain						
Addi	tional logs planned	Interval					
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.

Hyd	rogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S					
is de	is detected 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: 1105.6 bbls.

9. Other facets of operation

	Yes/No
Will more than one drilling rig be used for drilling operations? If yes, describe.	Yes
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, 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.	

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

Inten	t	As Dril	led											
API#	ł													
Оре	rator Nai	ne:				Prop	erty N	ame:	•					Well Number
Kick (Off Point	(KOP)												
UL	Section	Township	Range	Lot	Feet		From N	I/S	Feet		From	n E/W	County	
Latit	ude				Longitu	ıde							NAD	
First ⁻	Take Poir	it (FTP)												
UL	Section	Township	Range	Lot	Feet		From N	I/S	Feet		From	n E/W	County	
Latit	ude				Longitu	ıde							NAD	
Last 1	Section	t (LTP) Township	Pango	Lot	Feet	Eron	n N/C	Foot		From F	-/\\	Count		
Latit		Township	Range	Lot	Longitu		n N/S	Feet		From E	-/ vv	Count	У	
Latiti	ude				Longitu	iue						NAD		
Is this	s well the	defining w	vell for th	e Hori:	zontal Sp	pacing	g Unit?			7				
										_				
Is this	s well an	infill well?												
											· -			
	ll is yes p ng Unit.	iease provi	de API if	avaılak	oie, Opei	rator N	vame	and v	vell ni	umber	tor E	Jetinir	ng well to	or Horizontal
API #	!													
Ope	rator Nai	me:	1			Prop	erty N	ame:	:					Well Number
						1								V7.0C/20/2016

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: SPUR	ENERGY PA	RTNERS LLC	OGRID:	32894	7 Date: _	<u>10 / 16 / 202</u> 1				
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				
JG 16 STATE NORTH COM 20H	30-025-PEND	D-16-17S-32E	1280' FNL 80' FWL	364 BBL/D	613 MCF/D	1273 BBL/D				
JG 16 STATE NORTH COM 21H	30-025-PEND	D-16-17S-32E	1320' FNL 80' FWL	364 BBL/D	613 MCF/D	1273 BBL/D				
JG 16 STATE NORTH COM 60H	30-015-PEND	D-16-17S-32E	1300' FNL 80' FWL	274 BBL/D	274 MCF/D	891 BBL/D				
TV. Central Delivery Point Name: JG 16 STATE COM NORTH TANK BATTERY (See 19.15.27.9(D)(1) NMAC)										

IV. Central Delivery Point Name: ____JG 16 STATE 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
JG 16 STATE NORTH COM 20H	30-025-PEND	02/20/2022	02/26/2022	03/21/2022	04/06/2022	04/06/2022
JG 16 STATE NORTH COM 21H	30-025-PEND	03/09/2022	03/18/2022	03/21/2022	04/06/2022	04/06/2022
JG 16 STATE NORTH COM 60H	30-015-PEND	02/27/2022	03/08/2022	03/21/2022	04/06/2022	04/06/2022

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

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

XIII. Line l	Pressure. Operator	\square does \square does n	ot anticipate that its	existing well(s) c	onnected to	the same segment.	or portion,	of th
natural gas g	gathering system(s)	described above v	will continue to mee	t anticipated incre	ases in line p	oressure caused by	the new we	ell(s).

	olan to manage proc	luction in response to t	the increased line p	oressure
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XIV. Cor	nfidentiality: 🗆 Oper	ator asserts confidentia	lity pursuant to	Section 71-2	2-8 NMSA 1	1978 for the	information	provided in
Section 2	as provided in Paragra	ph (2) of Subsection D	of 19.15.27.9 NN	MAC, and atta	aches a full d	description of	f the specific	information
for which	confidentiality is asser	rted and the basis for su	ch assertion.					

(h)

(i)

Section 3 - Certifications

Effective May 25, 2021

1	
Operator certifies that, a	fter reasonable inquiry and based on the available information at the time of submittal:
one hundred percent of	to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering
hundred percent of the a into account the current	able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one nticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. box, Operator will select one of the following:
Well Shut-In. □ Operat D of 19.15.27.9 NMAC;	or will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection or
	an. □ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential
	es 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) (g)	reinjection for temporary storage; reinjection for enhanced oil recovery:
. (2)	TORRICCION FOR CHIMANICO ON TOCOVOLV.

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.

fuel cell production; and

- Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become (a) 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
- 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: 12/16/2021		
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.