

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 279684

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

1. Operator Name and Address Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024		2. OGRID Number 328947
		3. API Number 30-015-47255
4. Property Code 328505	5. Property Name NIRVANA	6. Well No. 001H

7. Surface Location

UL - Lot M	Section 27	Township 18S	Range 26E	Lot Idn M	Feet From 520	N/S Line S	Feet From 665	E/W Line W	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot P	Section 29	Township 18S	Range 26E	Lot Idn P	Feet From 410	N/S Line S	Feet From 1270	E/W Line E	County Eddy
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9. Pool Information

PENASCO DRAW;SA-YESO (ASSOC)	50270
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type Private	15. Ground Level Elevation 3370
16. Multiple N	17. Proposed Depth 9994	18. Formation Yeso	19. Contractor	20. Spud Date 7/1/2020
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	36	1200	550	0
Prod	8.5	7	32	3200	1963	0
Prod	8.5	5.5	20	9954	1963	0

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Blind	5	70	Control Technology Inc.

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 <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable.	OIL CONSERVATION DIVISION	
Signature:		
Printed Name: Electronically filed by Sarah Chapman	Approved By: Raymond Podany	
Title: Regulatory Director	Title: Geologist	
Email Address: schapman@spurepllc.com	Approved Date: 7/13/2020	Expiration Date: 7/13/2022
Date: 6/30/2020	Phone: 832-930-8613	Conditions of Approval Attached

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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 50270		³ Pool Name PENASCO DRAW; SA YESO	
⁴ Property Code		⁵ Property Name NIRVANA			⁶ Well Number 1H
⁷ OGRID NO. 328947		⁸ Operator Name SPUR ENERGY PARTNERS LLC.			⁹ Elevation 3370'

¹⁰ Surface Location

U/L or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
M	27	18S	26E		520	SOUTH	665	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

U/L or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	29	18S	26E		410	SOUTH	1270	EAST	EDDY

¹² Dedicated Acres 200	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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
N: 623121.3 - E: 528122.7
LAT: 32.7129939° N
LONG: 104.3762991° W

FIRST TAKE POINT
410' FSL 100' FEL (SEC.28)
N: 623013.5 - E: 527357.8
LAT: 32.7126968° N
LONG: 104.3787859° W

LAST TAKE POINT
410' FSL 1220' FEL (SEC.29)
N: 623040.0 - E: 520923.4
LAT: 32.7127064° N
LONG: 104.3997065° W

BOTTOM HOLE
N: 623040.2 - E: 520873.4
LAT: 32.7127609° N
LONG: 104.3998690° W

CORNER DATA
NAD 83 GRID - NM EAST

A: FOUND FENCE POST
N: 622614.8 - E: 516841.1

B: CALCULATED CORNER
N: 627902.6 - E: 516889.4

C: CALCULATED CORNER
N: 627898.4 - E: 522165.5

D: FOUND NAIL
N: 627894.1 - E: 527461.9

E: FOUND 5/8" REBAR
N: 627877.8 - E: 532755.3

F: FOUND 1.5"x0.6"x0.6" LIMESTONE ROCK
N: 625234.8 - E: 532747.8

G: FOUND REBAR
N: 622587.3 - E: 532746.3

H: FOUND COTTON SPINDLE
N: 622595.8 - E: 530101.6

I: FOUND REBAR
N: 622603.2 - E: 527457.4

J: CALCULATED CORNER
N: 622625.1 - E: 522141.2

K: FOUND 3/8" REBAR
N: 622636.0 - E: 519499.8

L: FOUND COTTON SPINDLE
N: 625243.8 - E: 527459.8

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

Signature: *Sarah Chapman* Date: 03/19/2020

Printed Name: SARAH CHAPMAN

E-mail Address: SCHAPMAN@SPUREPLLC.COM

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.

11-20-2019

Date of Survey

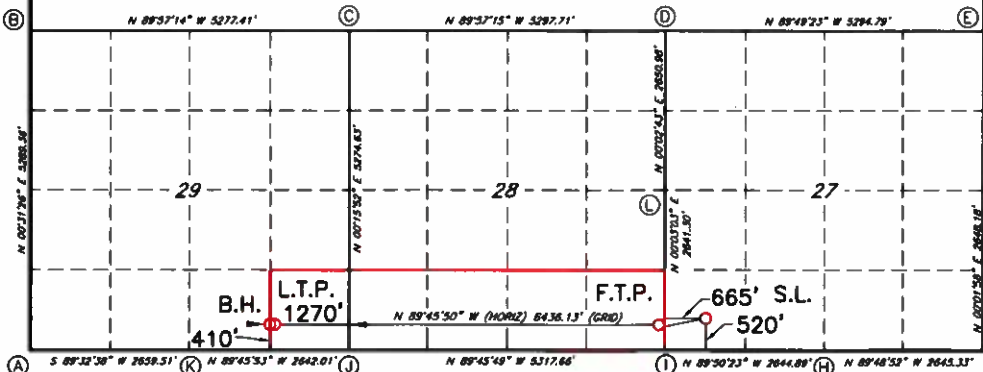
Signature and Seal of Professional Surveyor

19680

Certificate Number

REV: 3/4/20 LTP BHL

Job No.: LS19111092



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GAS CAPTURE PLAN

Date: 7/13/2020

☒ Original

Operator & OGRID No.: [328947] Spur Energy Partners LLC

☐ Amended - Reason for
Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
NIRVANA #001H	30-015-47255	M-27-18S-26E	0520S 0665W	3	Flared	WILL FLARE UNTIL GATHERING LINE TIE-IN

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to LUCID ENERGY DELAWARE, LLC and will be connected to LUCID ENERGY DELAWARE, LLC Low Pressure gathering system located in Eddy County, New Mexico. It will require 500' of pipeline to connect the facility to Low Pressure gathering system. Spur Energy Partners LLC provides (periodically) to LUCID ENERGY DELAWARE, LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Spur Energy Partners LLC and LUCID ENERGY DELAWARE, LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at LUCID ENERGY DELAWARE, LLC Processing Plant located in Sec. 25, Twn. 18S, Rng. 25E, Eddy County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on LUCID ENERGY DELAWARE, LLC system at that time. Based on current information, it is Spur Energy Partners LLC's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
 - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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Santa Fe, NM 87505

Form APD Comments

Permit 279684

PERMIT COMMENTS

Operator Name and Address: Spur Energy Partners LLC [328947] 9655 Katy Freeway Houston, TX 77024		API Number: 30-015-47255
		Well: NIRVANA #001H

Created By	Comment	Comment Date
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Form APD Conditions

Permit 279684

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: Spur Energy Partners LLC [328947] 9655 Katy Freeway Houston, TX 77024		API Number:	30-015-47255
		Well:	NIRVANA #001H
OCD Reviewer	Condition		
ksimmons	Will require a directional survey with the C-104		
ksimmons	Cement is required to circulate on both surface and intermediate1 strings of casing		



Spur Energy Partners, LLC

Eddy County, NM (NAD 83 - NME)

Nirvana

#1H

OH

Plan: Plan #1

Standard Plan With Toolface

04 February, 2020



Wellbenders

Standard Plan With Toolface

Company: Spur Energy Partners, LLC Project: Eddy County, NM (NAD 83 - NME) Site: Nirvana Well: #1H Wellbore: OH Design: Plan #1	Local Co-ordinate Reference: Well #1H TVD Reference: RKB=20' @ 3390.00usft (Akita 57) MD Reference: RKB=20' @ 3390.00usft (Akita 57) North Reference: Grid Survey Calculation Method: Minimum Curvature Database: WBDS_SQL_2
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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	Nirvana		
Site Position:		Northing:	623,161.20 usft
From:	Map	Easting:	528,122.80 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in
		Latitude:	32.713104
		Longitude:	-104.376299
		Grid Convergence:	-0.023 °

Well	#1H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft		Wellhead Elevation:
			usft
			Latitude:
			32.712994
			Longitude:
			-104.376299
			Ground Level:
			3,370.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	2/3/2020	7.081
			Dip Angle (°)
			60.348
			Field Strength (nT)
			47,870.21540266

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)
	0.00	0.00	0.00
			Direction (°)
			270.24

Survey Tool Program	Date 2/4/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
0.00	9,994.33	Plan #1 (OH)	MWD+IGRF
			Description
			OWSG MWD + IGRF or WMM



Wellbenders

Standard Plan With Toolface

Company:	Spur Energy Partners, LLC	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County, NM (NAD 83 - NME)	TVD Reference:	RKB=20' @ 3390.00usft (Akita 57)
Site:	Nirvana	MD Reference:	RKB=20' @ 3390.00usft (Akita 57)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	WBDS_SQL_2

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
600.00	2.00	118.80	599.98	-0.84	1.53	-1.53	2.00	2.00	0.00	118.801
700.00	4.00	118.80	699.84	-3.36	6.12	-6.13	2.00	2.00	0.00	0.000
800.00	6.00	118.80	799.45	-7.56	13.75	-13.78	2.00	2.00	0.00	0.000
900.00	8.00	118.80	898.70	-13.43	24.43	-24.49	2.00	2.00	0.00	0.000
1,000.00	10.00	118.80	997.47	-20.97	38.14	-38.23	2.00	2.00	0.00	0.000
1,083.80	11.68	118.80	1,079.77	-28.56	51.95	-52.07	2.00	2.00	0.00	0.000
1,100.00	11.68	118.80	1,095.63	-30.14	54.82	-54.94	0.00	0.00	0.00	0.000
1,200.00	11.68	118.80	1,193.56	-39.89	72.55	-72.72	0.00	0.00	0.00	0.000
1,300.00	11.68	118.80	1,291.49	-49.64	90.29	-90.49	0.00	0.00	0.00	0.000
1,400.00	11.68	118.80	1,389.42	-59.39	108.02	-108.27	0.00	0.00	0.00	0.000
1,500.00	11.68	118.80	1,487.36	-69.14	125.76	-126.04	0.00	0.00	0.00	0.000
1,600.00	11.68	118.80	1,585.29	-78.89	143.49	-143.82	0.00	0.00	0.00	0.000
1,700.00	11.68	118.80	1,683.22	-88.64	161.23	-161.60	0.00	0.00	0.00	0.000
1,780.75	11.68	118.80	1,762.29	-96.51	175.55	-175.95	0.00	0.00	0.00	0.000
1,800.00	10.65	121.55	1,781.18	-98.38	178.77	-179.18	6.00	-5.33	14.28	153.921
1,850.00	8.15	131.79	1,830.51	-103.16	185.35	-185.78	6.00	-5.00	20.48	151.224
1,900.00	6.11	149.77	1,880.13	-107.82	189.33	-189.78	6.00	-4.08	35.96	141.120
1,950.00	5.12	179.15	1,929.90	-112.35	190.70	-191.17	6.00	-1.98	58.76	123.272
2,000.00	5.74	210.59	1,979.68	-116.74	189.46	-189.95	6.00	1.26	62.87	94.025
2,050.00	7.60	231.18	2,029.35	-120.97	185.61	-186.12	6.00	3.71	41.18	62.722
2,100.00	10.03	242.84	2,078.76	-125.03	179.16	-179.69	6.00	4.85	23.33	42.267



Wellbenders

Standard Plan With Toolface

Company:	Spur Energy Partners, LLC	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County, NM (NAD 83 - NME)	TVD Reference:	RKB=20' @ 3390.00usft (Akita 57)
Site:	Nirvana	MD Reference:	RKB=20' @ 3390.00usft (Akita 57)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	WBDS_SQL_2

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
2,150.00	12.70	249.83	2,127.78	-128.91	170.13	-170.67	6.00	5.34	13.98	30.735
2,200.00	15.49	254.38	2,176.27	-132.60	158.54	-159.10	6.00	5.58	9.10	23.880
2,250.00	18.34	257.56	2,224.10	-136.09	144.43	-145.00	6.00	5.71	6.35	19.464
2,300.00	21.23	259.90	2,271.15	-139.37	127.83	-128.41	6.00	5.79	4.68	16.423
2,350.00	24.15	261.70	2,317.27	-142.44	108.79	-109.38	6.00	5.84	3.60	14.219
2,400.00	27.09	263.14	2,362.35	-145.28	87.36	-87.96	6.00	5.87	2.86	12.558
2,450.00	30.04	264.31	2,406.26	-147.88	63.60	-64.21	6.00	5.89	2.34	11.266
2,500.00	32.99	265.28	2,448.88	-150.24	37.57	-38.20	6.00	5.91	1.96	10.238
2,550.00	35.96	266.12	2,490.09	-152.35	9.35	-9.99	6.00	5.93	1.67	9.403
2,600.00	38.92	266.84	2,529.79	-154.21	-20.98	20.34	6.00	5.94	1.45	8.715
2,650.00	41.89	267.48	2,567.86	-155.81	-53.35	52.70	6.00	5.94	1.27	8.141
2,700.00	44.87	268.04	2,604.19	-157.15	-87.67	87.01	6.00	5.95	1.13	7.656
2,750.00	47.85	268.55	2,638.70	-158.22	-123.83	123.17	6.00	5.95	1.02	7.245
2,800.00	50.83	269.02	2,671.27	-159.02	-161.74	161.08	6.00	5.96	0.93	6.893
2,850.00	53.81	269.45	2,701.84	-159.55	-201.31	200.64	6.00	5.96	0.85	6.590
2,900.00	56.79	269.84	2,730.30	-159.80	-242.41	241.73	6.00	5.96	0.79	6.329
2,953.80	60.00	270.24	2,758.49	-159.77	-288.22	287.55	6.00	5.97	0.74	6.104
3,000.00	60.00	270.24	2,781.59	-159.60	-328.23	327.56	0.00	0.00	0.00	0.000
3,100.00	60.00	270.24	2,831.59	-159.24	-414.83	414.16	0.00	0.00	0.00	0.000
3,153.80	60.00	270.24	2,858.49	-159.05	-461.43	460.76	0.00	0.00	0.00	0.000
3,200.00	64.62	270.24	2,879.95	-158.88	-502.32	501.65	10.00	10.00	0.00	0.000
3,250.00	69.62	270.24	2,899.39	-158.69	-548.37	547.70	10.00	10.00	0.00	0.000
3,300.00	74.62	270.24	2,914.73	-158.50	-595.94	595.27	10.00	10.00	0.00	0.000
3,350.00	79.62	270.24	2,925.87	-158.30	-644.67	644.00	10.00	10.00	0.00	0.000
3,400.00	84.62	270.24	2,932.73	-158.09	-694.18	693.51	10.00	10.00	0.00	0.000
3,450.00	89.62	270.24	2,935.24	-157.89	-744.10	743.43	10.00	10.00	0.00	0.000
3,470.80	91.70	270.24	2,935.00	-157.80	-764.90	764.23	10.00	10.00	0.00	0.000



Wellbenders

Standard Plan With Toolface

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Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	WBDS_SQL_2

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
3,500.00	91.70	270.24	2,934.13	-157.68	-794.08	793.42	0.00	0.00	0.00	0.000
3,600.00	91.70	270.24	2,931.17	-157.27	-894.04	893.37	0.00	0.00	0.00	0.000
3,700.00	91.70	270.24	2,928.20	-156.85	-993.99	993.33	0.00	0.00	0.00	0.000
3,800.00	91.70	270.24	2,925.23	-156.44	-1,093.95	1,093.28	0.00	0.00	0.00	0.000
3,900.00	91.70	270.24	2,922.27	-156.03	-1,193.90	1,193.24	0.00	0.00	0.00	0.000
4,000.00	91.70	270.24	2,919.30	-155.62	-1,293.86	1,293.20	0.00	0.00	0.00	0.000
4,100.00	91.70	270.24	2,916.33	-155.21	-1,393.82	1,393.15	0.00	0.00	0.00	0.000
4,200.00	91.70	270.24	2,913.37	-154.79	-1,493.77	1,493.11	0.00	0.00	0.00	0.000
4,300.00	91.70	270.24	2,910.40	-154.38	-1,593.73	1,593.06	0.00	0.00	0.00	0.000
4,400.00	91.70	270.24	2,907.43	-153.97	-1,693.68	1,693.02	0.00	0.00	0.00	0.000
4,500.00	91.70	270.24	2,904.47	-153.56	-1,793.64	1,792.98	0.00	0.00	0.00	0.000
4,600.00	91.70	270.24	2,901.50	-153.14	-1,893.59	1,892.93	0.00	0.00	0.00	0.000
4,700.00	91.70	270.24	2,898.53	-152.73	-1,993.55	1,992.89	0.00	0.00	0.00	0.000
4,800.00	91.70	270.24	2,895.57	-152.32	-2,093.50	2,092.84	0.00	0.00	0.00	0.000
4,900.00	91.70	270.24	2,892.60	-151.91	-2,193.46	2,192.80	0.00	0.00	0.00	0.000
5,000.00	91.70	270.24	2,889.63	-151.49	-2,293.41	2,292.76	0.00	0.00	0.00	0.000
5,100.00	91.70	270.24	2,886.67	-151.08	-2,393.37	2,392.71	0.00	0.00	0.00	0.000
5,200.00	91.70	270.24	2,883.70	-150.67	-2,493.32	2,492.67	0.00	0.00	0.00	0.000
5,300.00	91.70	270.24	2,880.73	-150.26	-2,593.28	2,592.62	0.00	0.00	0.00	0.000
5,400.00	91.70	270.24	2,877.77	-149.84	-2,693.23	2,692.58	0.00	0.00	0.00	0.000
5,500.00	91.70	270.24	2,874.80	-149.43	-2,793.19	2,792.54	0.00	0.00	0.00	0.000
5,600.00	91.70	270.24	2,871.83	-149.02	-2,893.14	2,892.49	0.00	0.00	0.00	0.000
5,700.00	91.70	270.24	2,868.87	-148.61	-2,993.10	2,992.45	0.00	0.00	0.00	0.000
5,800.00	91.70	270.24	2,865.90	-148.20	-3,093.05	3,092.40	0.00	0.00	0.00	0.000
5,900.00	91.70	270.24	2,862.93	-147.78	-3,193.01	3,192.36	0.00	0.00	0.00	0.000
6,000.00	91.70	270.24	2,859.97	-147.37	-3,292.96	3,292.32	0.00	0.00	0.00	0.000
6,100.00	91.70	270.24	2,857.00	-146.96	-3,392.92	3,392.27	0.00	0.00	0.00	0.000



Wellbenders

Standard Plan With Toolface

Company:	Spur Energy Partners, LLC	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County, NM (NAD 83 - NME)	TVD Reference:	RKB=20' @ 3390.00usft (Akita 57)
Site:	Nirvana	MD Reference:	RKB=20' @ 3390.00usft (Akita 57)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	WBDS_SQL_2

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
6,200.00	91.70	270.24	2,854.03	-146.55	-3,492.87	3,492.23	0.00	0.00	0.00	0.000
6,300.00	91.70	270.24	2,851.07	-146.13	-3,592.83	3,592.18	0.00	0.00	0.00	0.000
6,400.00	91.70	270.24	2,848.10	-145.72	-3,692.78	3,692.14	0.00	0.00	0.00	0.000
6,500.00	91.70	270.24	2,845.14	-145.31	-3,792.74	3,792.10	0.00	0.00	0.00	0.000
6,600.00	91.70	270.24	2,842.17	-144.90	-3,892.69	3,892.05	0.00	0.00	0.00	0.000
6,700.00	91.70	270.24	2,839.20	-144.48	-3,992.65	3,992.01	0.00	0.00	0.00	0.000
6,800.00	91.70	270.24	2,836.24	-144.07	-4,092.60	4,091.96	0.00	0.00	0.00	0.000
6,900.00	91.70	270.24	2,833.27	-143.66	-4,192.56	4,191.92	0.00	0.00	0.00	0.000
7,000.00	91.70	270.24	2,830.30	-143.25	-4,292.51	4,291.88	0.00	0.00	0.00	0.000
7,100.00	91.70	270.24	2,827.34	-142.83	-4,392.47	4,391.83	0.00	0.00	0.00	0.000
7,200.00	91.70	270.24	2,824.37	-142.42	-4,492.42	4,491.79	0.00	0.00	0.00	0.000
7,300.00	91.70	270.24	2,821.40	-142.01	-4,592.38	4,591.74	0.00	0.00	0.00	0.000
7,400.00	91.70	270.24	2,818.44	-141.60	-4,692.33	4,691.70	0.00	0.00	0.00	0.000
7,500.00	91.70	270.24	2,815.47	-141.19	-4,792.29	4,791.66	0.00	0.00	0.00	0.000
7,600.00	91.70	270.24	2,812.50	-140.77	-4,892.24	4,891.61	0.00	0.00	0.00	0.000
7,700.00	91.70	270.24	2,809.54	-140.36	-4,992.20	4,991.57	0.00	0.00	0.00	0.000
7,800.00	91.70	270.24	2,806.57	-139.95	-5,092.16	5,091.52	0.00	0.00	0.00	0.000
7,900.00	91.70	270.24	2,803.60	-139.54	-5,192.11	5,191.48	0.00	0.00	0.00	0.000
8,000.00	91.70	270.24	2,800.64	-139.12	-5,292.07	5,291.44	0.00	0.00	0.00	0.000
8,100.00	91.70	270.24	2,797.67	-138.71	-5,392.02	5,391.39	0.00	0.00	0.00	0.000
8,200.00	91.70	270.24	2,794.70	-138.30	-5,491.98	5,491.35	0.00	0.00	0.00	0.000
8,300.00	91.70	270.24	2,791.74	-137.89	-5,591.93	5,591.30	0.00	0.00	0.00	0.000
8,400.00	91.70	270.24	2,788.77	-137.47	-5,691.89	5,691.26	0.00	0.00	0.00	0.000
8,500.00	91.70	270.24	2,785.80	-137.06	-5,791.84	5,791.22	0.00	0.00	0.00	0.000
8,600.00	91.70	270.24	2,782.84	-136.65	-5,891.80	5,891.17	0.00	0.00	0.00	0.000
8,700.00	91.70	270.24	2,779.87	-136.24	-5,991.75	5,991.13	0.00	0.00	0.00	0.000
8,800.00	91.70	270.24	2,776.90	-135.82	-6,091.71	6,091.08	0.00	0.00	0.00	0.000



Wellbenders

Standard Plan With Toolface

Company: Spur Energy Partners, LLC
Project: Eddy County, NM (NAD 83 - NME)
Site: Nirvana
Well: #1H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #1H
TVD Reference: RKB=20' @ 3390.00usft (Akita 57)
MD Reference: RKB=20' @ 3390.00usft (Akita 57)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WBDS_SQL_2

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
8,900.00	91.70	270.24	2,773.94	-135.41	-6,191.66	6,191.04	0.00	0.00	0.00	0.000
9,000.00	91.70	270.24	2,770.97	-135.00	-6,291.62	6,291.00	0.00	0.00	0.00	0.000
9,100.00	91.70	270.24	2,768.00	-134.59	-6,391.57	6,390.95	0.00	0.00	0.00	0.000
9,200.00	91.70	270.24	2,765.04	-134.18	-6,491.53	6,490.91	0.00	0.00	0.00	0.000
9,300.00	91.70	270.24	2,762.07	-133.76	-6,591.48	6,590.86	0.00	0.00	0.00	0.000
9,400.00	91.70	270.24	2,759.10	-133.35	-6,691.44	6,690.82	0.00	0.00	0.00	0.000
9,500.00	91.70	270.24	2,756.14	-132.94	-6,791.39	6,790.78	0.00	0.00	0.00	0.000
9,600.00	91.70	270.24	2,753.17	-132.53	-6,891.35	6,890.73	0.00	0.00	0.00	0.000
9,700.00	91.70	270.24	2,750.20	-132.11	-6,991.30	6,990.69	0.00	0.00	0.00	0.000
9,800.00	91.70	270.24	2,747.24	-131.70	-7,091.26	7,090.64	0.00	0.00	0.00	0.000
9,900.00	91.70	270.24	2,744.27	-131.29	-7,191.21	7,190.60	0.00	0.00	0.00	0.000
9,914.39	91.70	270.24	2,743.84	-131.23	-7,205.60	7,204.99	0.00	0.00	0.00	0.000
9,994.33	91.70	270.24	2,741.47	-130.90	-7,285.50	7,284.89	0.00	0.00	0.00	0.000

Checked By: _____ Approved By: _____ Date: _____

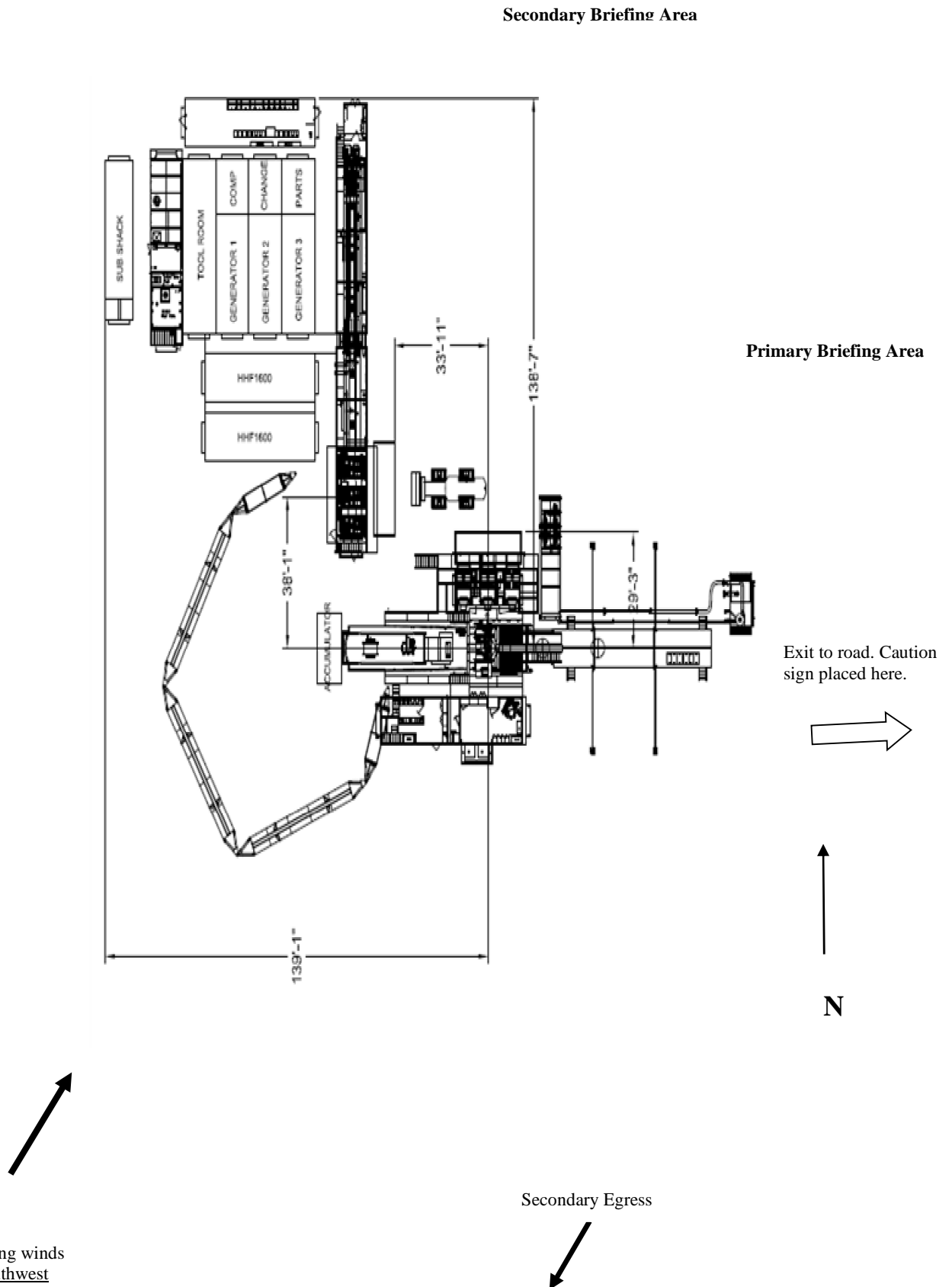


Permian Drilling Hydrogen Sulfide Drilling Operations Plan Nirvana 1H

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.



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

KZ 06/29/2018

Spur Energy Partners LLC. – Nirvana 1H

1. Geologic Formations

TVD of target	2675'	Pilot Hole Depth	N/A
MD at TD:	9954'	Deepest Expected fresh water:	397'

Delaware Basin

Formation	TVD - RKB	Expected Fluids
San Andres Upper	910	Losses
Glorieta Top	2,483	Losses
Yeso	2,597	Oil/Gas
Yeso Target	2935	Oil/Gas

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

2. Casing Program

Hole Size (in)	Casing Interval		Csg. Size (in)	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	Buoyant Body SF	Buoyant Joint SF
	From (ft)	To (ft)							Tension	Tension
12.25	0	1200	9.625	36	J-55	BTC	1.125	1.2	1.4	1.4
8.75	0	3200	7	32	L-80	BTC	1.125	1.2	1.4	1.4
8.75	3200	9954	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. – Nirvana 1H

	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.	Y
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?	N/A
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?	N
(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

Casing String	# Sk	Wt. (lb/gal)	Yld (ft ³ /sack)	H ₂ O (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface (Lead)	380	12.8	1.65	8.19	10:25	35/65 Poz C
Surface (Tail)	170	14.8	1.33	6.32	6:40	Class C Cement, Accelerator
Production (Lead)	690	12.8	2.63	9.7	N/A	50/50 Poz C
Production (Tail)	1273	14.8	1.38	6.686	N/A	50/50 Poz C

Casing String	Top (ft)	Bottom (ft)	% Excess
Surface (Lead)	0	950	100%
Surface (Tail)	950	1200	165%
Production (Lead)	0	5500	0%
Production (Tail)	5500	9954	50%

Spur Energy Partners LLC. – Nirvana 1H

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"	3M	Annular	✓	70% of working pressure
		3M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram	✓	
			Double Ram		
			Other*		
8.75" Hole	13-5/8"	3M	Annular	✓	70% of working pressure
		3M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram	✓	
			Double Ram		
			Other*		

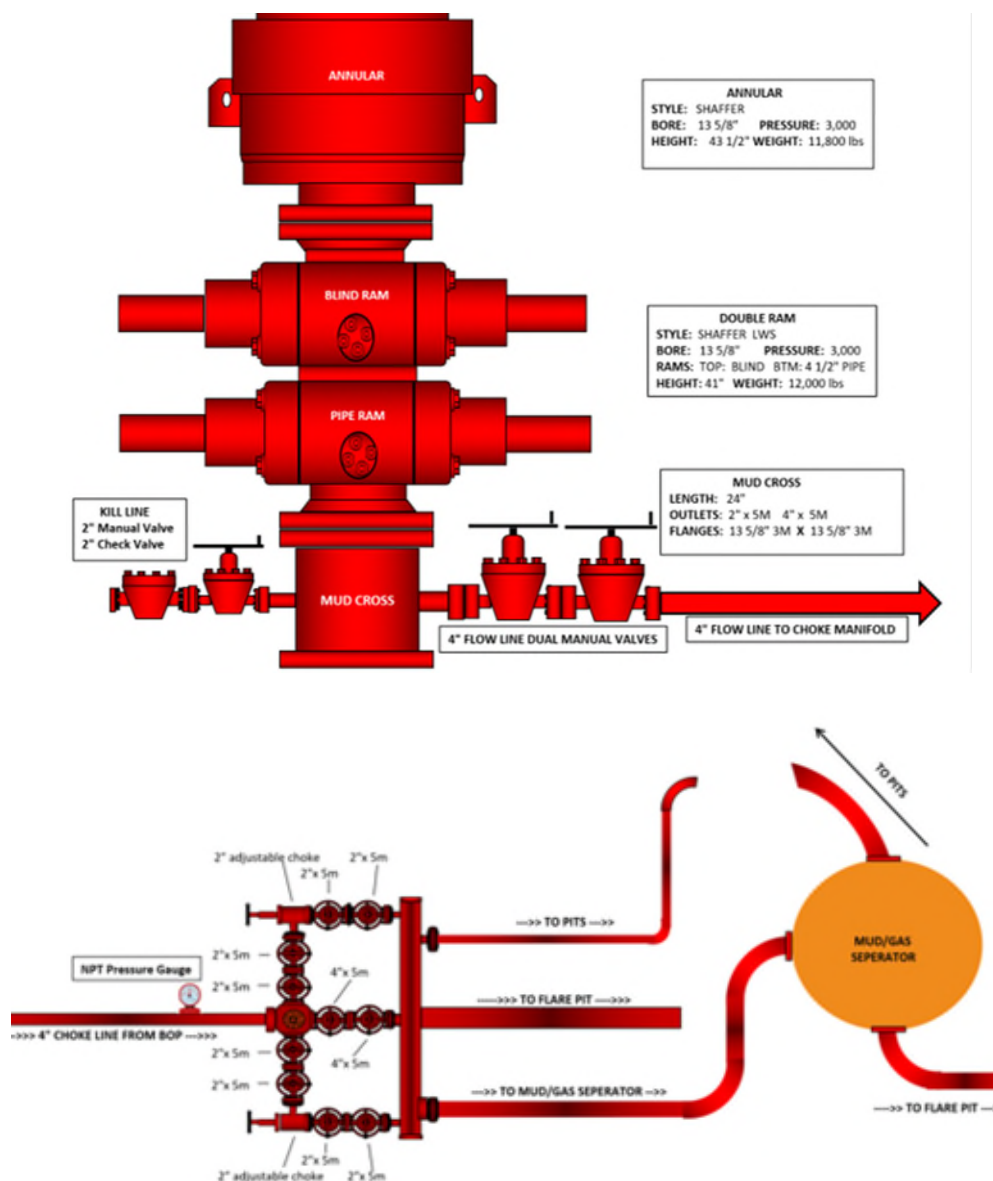
*Specify if additional ram is utilized.

Spur will utilize a 5M annular with a 5M BOPE stack. The 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.

	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.	
	Y	Are anchors required by manufacturer?
	A multibowl or a unionized multibowl 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. If any seal subject to test pressure is broken the system must be tested. We will test the flange connection of the wellhead with a test port that is directly in the flange. We are proposing that we will run the wellhead through the rotary prior to cementing surface casing as discussed with the BLM on October 8, 2015. See attached schematics.	

Spur Energy Partners LLC. – Nirvana 1H



The buffer tank and panic line will not be connected at any point during drilling operations.

Required safety valves, with appropriate wrenches and subs for the drill string being utilized, will be in the open position and accessible on the rig floor.

BOP Break Testing Request

Spur requests permission to adjust the BOP break testing requirements.
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 is set into the third Bone Spring or shallower.

Spur Energy Partners LLC. – Nirvana 1H

- When skidding to drill a production section that does not penetrate into the third Bone Spring or deeper.

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

- 1) The void between the wellhead and the pipe rams
- 2) The kill lines and the choke manifold

If the kill line is not broken prior to skid, only one test will be performed.

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

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From (ft)	To (ft)				
0	1200	Water-Based Mud	8.6-8.9	32-36	N/C
1200	9954	Water-Based Mud	8.6-8.9	32-36	N/C

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.

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

6. 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	

Spur Energy Partners LLC. – Nirvana 1H**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	1238 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	102°F

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

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

8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe. <ul style="list-style-type: none"> We plan to drill the two well pad in batch by section: all surface sections, and production sections. The wellhead will be secured with a night cap whenever the rig is not over the well. 	Yes
Will more than one drilling rig be used for drilling operations? If yes, describe.	No

Total estimated cuttings volume: 915.3 bbls.

Attachments

- ☒ Directional Plan
☒ H₂S Contingency Plan
☒ Rig Attachments
☒ Premium Connection Specs

9. Company Personnel

Name	Title	Office Phone	Mobile Phone
Christopher Hollis	Drilling Manager	832-930-8629	713-380-7754