**District I**
1625 N. French Dr., Hobbs, NM 88240
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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 297243

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

| 1. Operator Name and Address | 2. OGRID Number |
|---|---|
| Spur Energy Partners LLC<br>9655 Katy Freeway<br>Houston, TX 77024 | 328947 |
| | 3. API Number: 30-015-48698 |

| 4. Property Code | 5. Property Name | 6. Well No. |
|---|---|---|
| 328505 | NIRVANA | 001H |

**7. Surface Location**

| UL - Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
|---|---|---|---|---|---|---|---|---|---|
| O | 29 | 18S | 26E | O | 890 | S | 2075 | E | Eddy |

**8. Proposed Bottom Hole Location**

| UL - Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
|---|---|---|---|---|---|---|---|---|---|
| P | 28 | 18S | 26E | P | 410 | S | 50 | E | Eddy |

**9. Pool Information**

| | |
|---|---|
| ATOKA;GLORIETA-YESO | 3250 |
| PENASCO DRAW;SA-YESO (ASSOC) | 50270 |

**Additional Well Information**

| 11. Work Type | 12. Well Type | 13. Cable/Rotary | 14. Lease Type | 15. Ground Level Elevation |
|---|---|---|---|---|
| New Well | OIL | | Private | 3417 |
| **16. Multiple** | **17. Proposed Depth** | **18. Formation** | **19. Contractor** | **20. Spud Date** |
| Y | 9762 | Yeso | | 7/15/2021 |
| Depth to Ground water | | Distance from nearest fresh water well | | Distance to nearest surface water |

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

**21. Proposed Casing and Cement Program**

| Type | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
|---|---|---|---|---|---|---|
| Surf | 12.25 | 9.625 | 36 | 1300 | 438 | 0 |
| Prod | 8.75 | 7 | 32 | 3050 | 1663 | 0 |
| Prod | 8.75 | 5.5 | 20 | 9762 | 1663 | 0 |

**Casing/Cement Program: Additional Comments**

**22. Proposed Blowout Prevention Program**

| Type | Working Pressure | Test Pressure | Manufacturer |
|---|---|---|---|
| Double Ram | 5 | 5000 | Shaffer |

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

Signature:

**OIL CONSERVATION DIVISION**

| | | | | |
|---|---|---|---|---|
| Printed Name: | Electronically filed by Sarah Chapman | Approved By: | Kurt Simmons | |
| Title: | Regulatory Director | Title: | Petroleum Specialist - A | |
| Email Address: | schapman@spurepllc.com | Approved Date: | 7/2/2021 | Expiration Date: 7/2/2023 |
| Date: | 6/21/2021 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 | 3 Pool Name |
|---|---|---|
| | 3250 | ATOKA; GLORIETA-YESO |

| 4 Property Code | 5 Property Name | 6 Well Number |
|---|---|---|
| | NIRVANA | 1H |

| 7 OGRID NO. | 8 Operator Name | 9 Elevation |
|---|---|---|
| 328947 | SPUR ENERGY PARTNERS LLC. | 3417' |

## 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 |
|---|---|---|---|---|---|---|---|---|---|
| O | 29 | 18S | 26E | | 890 | SOUTH | 2075 | EAST | EDDY |

## 11 Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| P | 28 | 18S | 26E | | 410 | SOUTH | 50 | EAST | EDDY |

| 12 Dedicated Acres | 13 Joint or Infill | 14 Consolidation Code | 15 Order No. |
|---|---|---|---|
| S/2 S/2 Sec 28 ~~200~~ 160 | | | |

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

16

GEODETIC DATA
NAD 83 GRID – NM EAST

SURFACE LOCATION (SL)
N: 623523.4 – E: 520070.8
LAT: 32.7140876° N
LONG: 104.4024794° W

FIRST TAKE POINT (FTP)
410' FSL & 1221' FEL – SEC 29
N: 623040.0 – E: 520922.5
LAT: 32.7127604° N
LONG: 104.3997093° W

LAST TAKE POINT (LTP)
410' FSL & 100' FEL – SEC 28
N: 623013.2 – E: 527357.8
LAT: 32.7126960° N
LONG: 104.3787859° W

BOTTOM HOLE (BH)
N: 623013.0 – E: 527407.8
LAT: 32.7126955° N
LONG: 104.3786234° W

CORNER DATA
NAD 83 GRID – NM EAST

A: FOUND 1/2" REBAR
N: 622614.8 – E: 516841.1

B: CALCULATED CORNER
N: 627902.6 – E: 516889.4

C: CALCULATED CORNER
N: 627898.4 – E: 522165.5

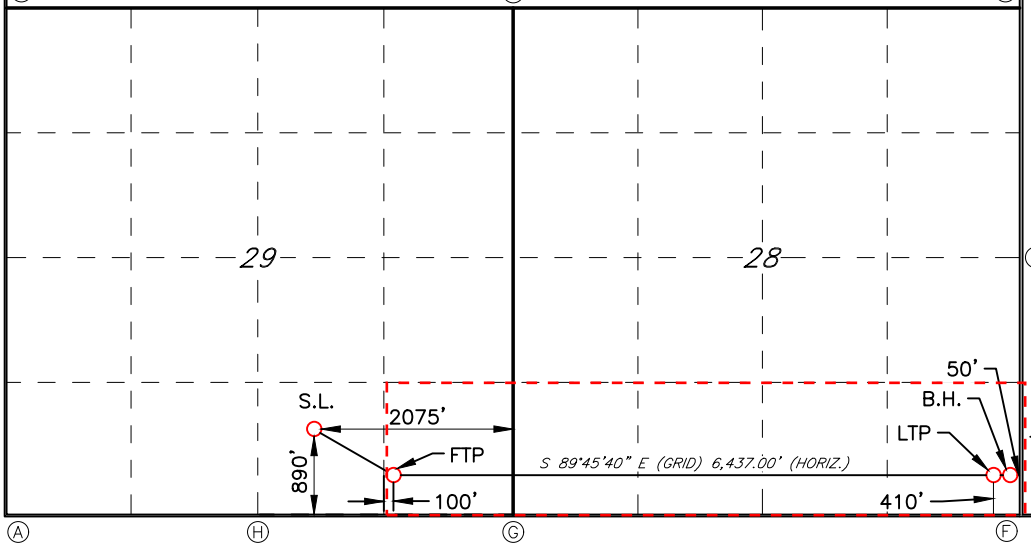
D: FOUND PK NAIL
N: 627894.1 – E: 527461.9

E: FOUND COTTON SPINDLE
N: 625243.8 – E: 527459.8

F: FOUND RAILROAD SPIKE
N: 622603.2 – E: 527457.4

G: CALCULATED CORNER
N: 622625.1 – E: 522141.2

H: FOUND 1/2" REBAR
N: 622636.0 – E: 519499.8




## 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.*

Sarah Chapman 06/11/2021
Signature Date

SARAH CHAPMAN
Printed Name

SCHAPMAN@SPUREPLLC.COM
E-mail Address

## 18 SURVEYOR CERTIFICATION

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

12-30-2020
Date of Survey

Signature and Seal of Professional Surveyor

ROBERT M. HOWETT NEW MEXICO 19680 PROFESSIONAL SURVEYOR

19680
Certificate Number

LS20120847

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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 | 3 Pool Name |
|---|---|---|
| 30-015- | 50270 | PENASCO DRAW; SA-YESO (ASSOC) |

| 4 Property Code | 5 Property Name | 6 Well Number |
|---|---|---|
| | NIRVANA | 1H |

| 7 OGRID NO. | 8 Operator Name | 9 Elevation |
|---|---|---|
| 328947 | SPUR ENERGY PARTNERS LLC. | 3417' |

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| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet From the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| O | 29 | 18S | 26E | | 890 | SOUTH | 2075 | EAST | EDDY |

## 11 Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| P | 28 | 18S | 26E | | 410 | SOUTH | 50 | EAST | EDDY |

| 12 Dedicated Acres | 13 Joint or Infill | 14 Consolidation Code | 15 Order No. |
|---|---|---|---|
| SE/4 SE/4 Sec 29 ~~200~~ 40 | | | |

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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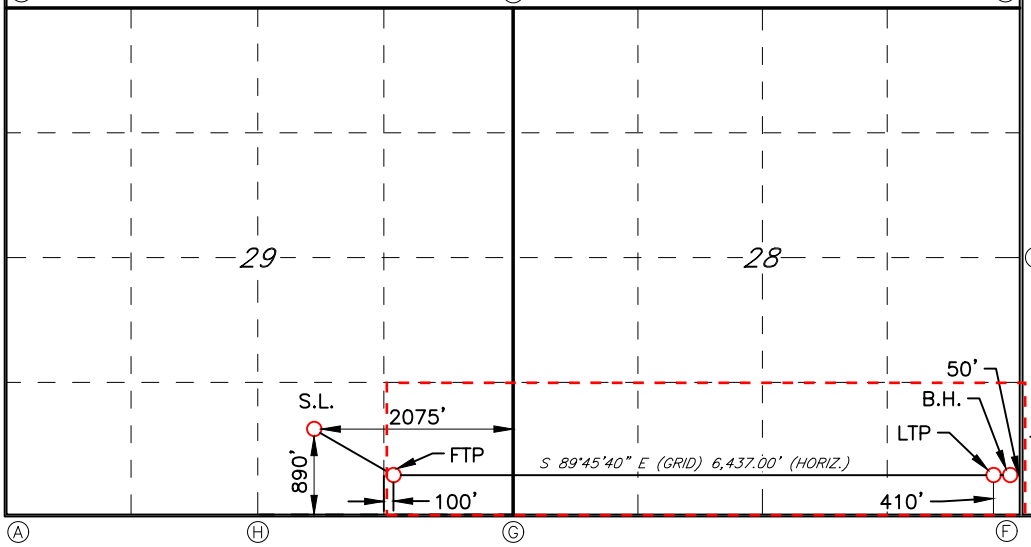


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Sarah Chapman 06/11/2021
Signature Date

SARAH CHAPMAN
Printed Name

SCHAPMAN@SPUREPLLC.COM
E-mail Address

## 18 SURVEYOR CERTIFICATION

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

12-30-2020
Date of Survey

Signature and Seal of Professional Surveyor

ROBERT M. HOWETT NEW MEXICO 19680 PROFESSIONAL SURVEYOR

19680
Certificate Number

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

Form APD Comments

Permit 297243

## PERMIT COMMENTS

| Operator Name and Address: | API Number: |
|---|---|
| Spur Energy Partners LLC [328947]<br>9655 Katy Freeway<br>Houston, TX 77024 | 30-015-48698 |
| | Well: NIRVANA #001H |

| Created By | Comment | Comment Date |
|---|---|---|
| schapman01 | Well is producing from two pools. C-102s attached for your use. | 6/14/2021 |

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

Form APD Conditions

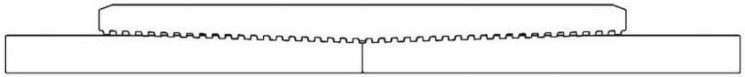
Permit 297243

## PERMIT CONDITIONS OF APPROVAL

| Operator Name and Address: | API Number: |
|---|---|
| Spur Energy Partners LLC [328947]<br>9655 Katy Freeway<br>Houston, TX 77024 | 30-015-48698 |
| | Well:<br>NIRVANA #001H |

| OCD Reviewer | Condition |
|---|---|
| ksimmons | Notify OCD 24 hours prior to casing & cement |
| ksimmons | Will require a File As Drilled C-102 and a Directional Survey with the C-104 |
| ksimmons | The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud |
| kpickford | Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string |
| kpickford | Cement is required to circulate on both surface and intermediate1 strings of casing |
| kpickford | Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system |

PRECISION
Keeping You Connected.



SEMI PREMIUMCONNECTIONS
FIELD TESTED. FIELD PROVEN.

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

### Pipe Body

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

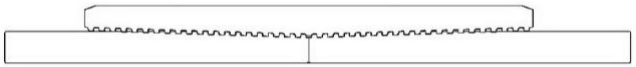
### Connection

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

v1.2 7/26/2018

PRECISION

*Keeping You Connected.*



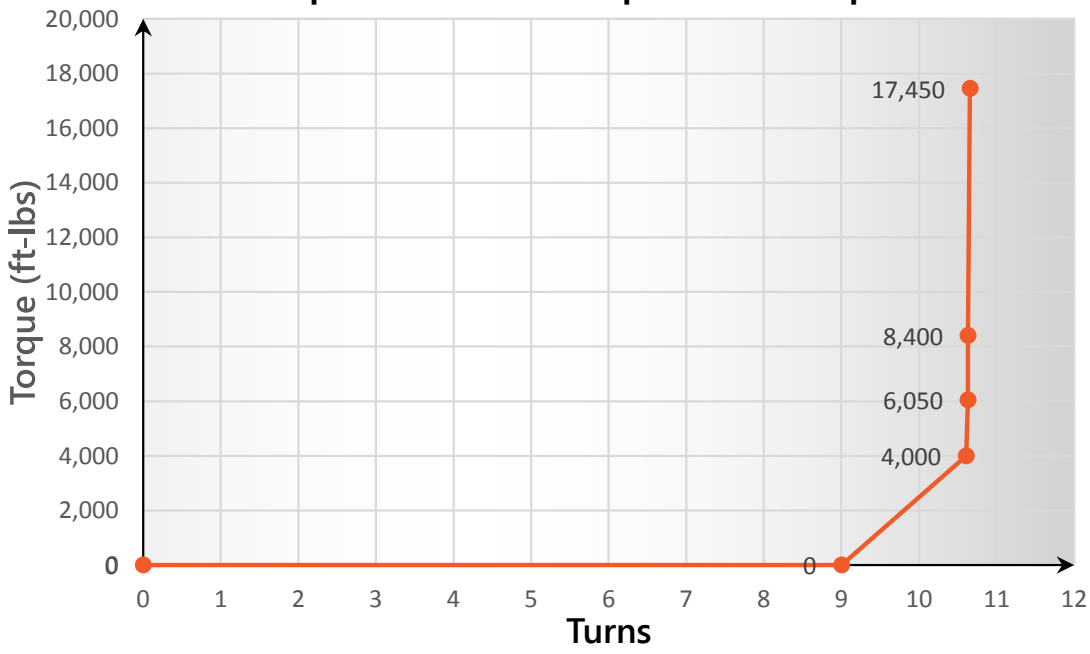
SEMI PREMIUMCONNECTIONS
FIELD TESTED. FIELD PROVEN.

# Torque Data Sheet - Precision Connections BK-HT

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

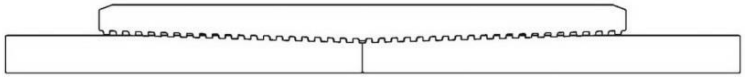
| | | | | | |
|---|---|---|---|---|---|
| Min Make Up Torque | 6,050 | ft-lbs | Max Operating Torque | 19,800 | ft-lbs |
| Max Make Up Torque | 17,450 | ft-lbs | Yield Torque | 23,250 | ft-lbs |
| Optimum Torque | 8,400 | ft-lbs | | | |

### Representative Torque Turn Graph




v1.2 7/26/2018

PRECISION
Keeping You Connected.



SEMI PREMIUMCONNECTIONS
FIELD TESTED. FIELD PROVEN.

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

### Pipe Body

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

### Connection

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

v1.2 7/26/2018

PRECISION

Keeping You Connected.

SEMI PREMIUMCONNECTIONS

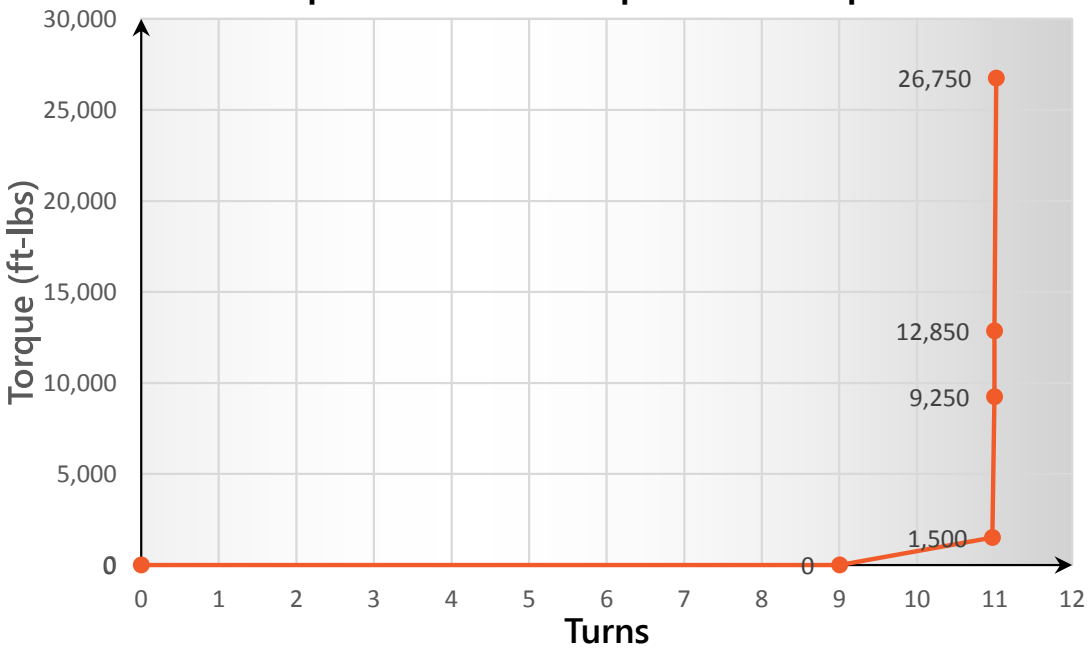
FIELD TESTED. FIELD PROVEN.

# Torque Data Sheet - Precision Connections BK-HT

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

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

### Representative Torque Turn Graph




v1.2 7/26/2018

# U. S. Steel Tubular Products

## 9.625 36/0.352 J55

8/19/2015 9:44:40 AM

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



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

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

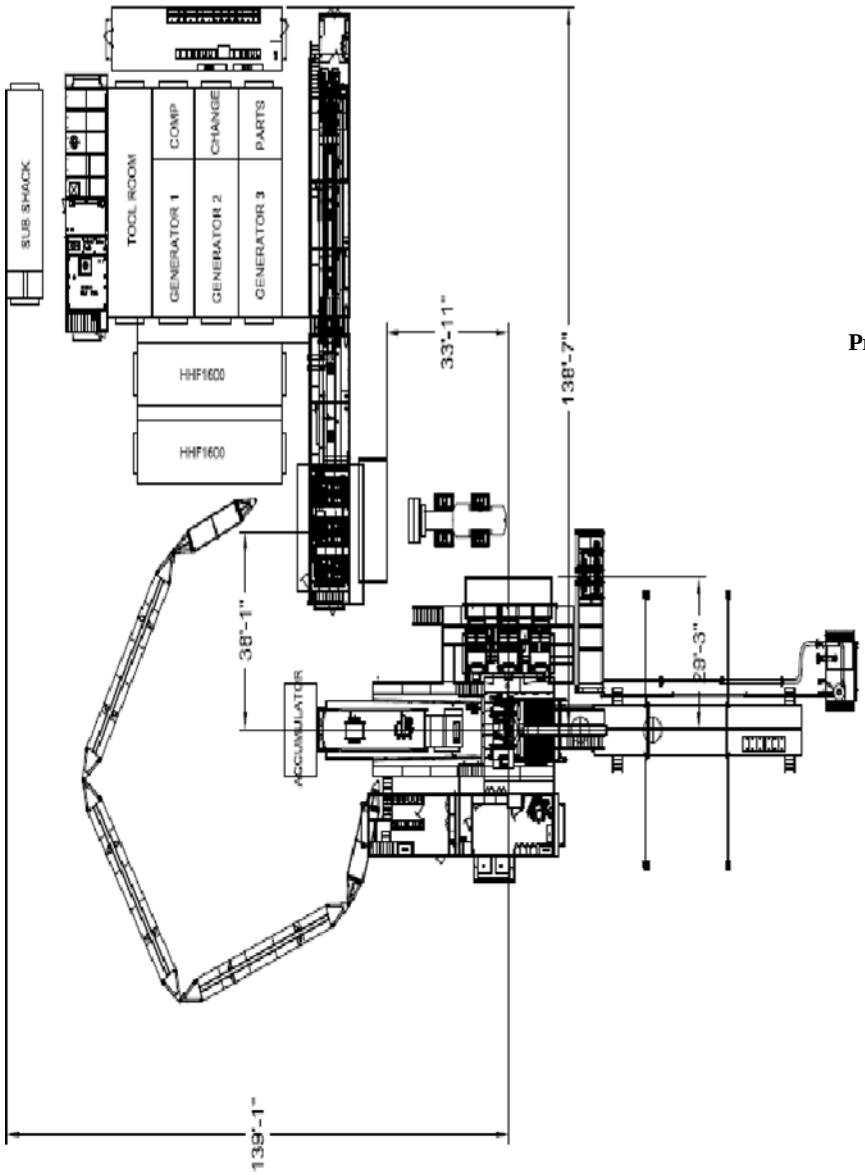
# Permian Drilling
# Hydrogen Sulfide Drilling Operations Plan
# NIRVANA 1H

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.

**Secondary Briefing Area**




**Primary Briefing Area**

Exit to road. Caution sign placed here.

N

Secondary Egress

**WIND:** Prevailing winds are from the Southwest

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

# NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

## Section 1 – Plan Description

**Effective May 25, 2021**

**I. Operator:** SPUR ENERGY PARTNERS LLC **OGRID:** 328947 **Date:** 06 / 15 / 2021

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

If Other, please describe: _____

**III. Well(s):** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

| Well Name | API | ULSTR | Footages | Anticipated Oil BBL/D | Anticipated Gas MCF/D | Anticipated Produced Water BBL/D |
|---|---|---|---|---|---|---|
| NIRVANA 1H | | O-29-18S-26E | 890' FSL 2075' FEL | 381 | 477 | 1716 |
| NIRVANA 2H | | O-29-18S-26E | 890' FSL 2095' FEL | 383 | 383 | 1225 |
| NIRVANA 3H | | O-29-18S-26E | 890' FSL 2115' FEL | 433 | 649 | 2163 |

**IV. Central Delivery Point Name:** NIRVANA CTB [See 19.15.27.9(D)(1) NMAC]

**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

| Well Name | API | Spud Date | TD Reached Date | Completion Commencement Date | Initial Flow Back Date | First Production Date |
|---|---|---|---|---|---|---|
| NIRVANA 1H | | 09/23/2021 | 10/01/2021 | 10/21/2021 | 10/31/2021 | 10/31/2021 |
| NIRVANA 2H | | 10/09/2021 | 10/16/2021 | 10/21/2021 | 10/31/2021 | 10/31/2021 |
| NIRVANA 3H | | 10/01/2021 | 10/08/2021 | 10/21/2021 | 10/31/2021 | 10/31/2021 |

**VI. Separation Equipment:** ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

**VII. Operational Practices:** ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

**VIII. Best Management Practices:** ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

## Section 2 – Enhanced Plan
**EFFECTIVE APRIL 1, 2022**

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

**IX. Anticipated Natural Gas Production:**

| Well | API | Anticipated Average Natural Gas Rate MCF/D | Anticipated Volume of Natural Gas for the First Year MCF |
|---|---|---|---|
| | | | |
| | | | |

**X. Natural Gas Gathering System (NGGS):**

| Operator | System | ULSTR of Tie-in | Anticipated Gathering Start Date | Available Maximum Daily Capacity of System Segment Tie-in |
|---|---|---|---|---|
| | | | | |
| | | | | |

**XI. Map.** ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

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

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

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

**XIV. Confidentiality:** ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

## Section 3 - Certifications

**Effective May 25, 2021**

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. ***If Operator checks this box, Operator will select one of the following:***

**Well Shut-In.** ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

**Venting and Flaring Plan.** ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- **(a)** power generation on lease;
- **(b)** power generation for grid;
- **(c)** compression on lease;
- **(d)** liquids removal on lease;
- **(e)** reinjection for underground storage;
- **(f)** reinjection for temporary storage;
- **(g)** reinjection for enhanced oil recovery;
- **(h)** fuel cell production; and
- **(i)** other alternative beneficial uses approved by the division.

## Section 4 - Notices

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

**(a)** Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

**(b)** Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

**I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.**

| | |
|---|---|
| Signature: | Sarah Chapman |
| Printed Name: | SARAH CHAPMAN |
| Title: | REGULATORY DIRECTOR |
| E-mail Address: | SCHAPMAN@SPUREPLLC.COM |
| Date: | 06/15/2021 |
| 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.

Company: Spur Energy Partners, LLC
Project: Eddy County, NM (NAD 83 - NME)
Site: Nirvana
Well: #1H
Wellbore: OH
Rig: Akita 57
Design: Plan #5 / 8:56, June 14 2021

## WELL DETAILS: #1H

RKB = 20' @ 3437.00usft (Akita 57)
3417.00

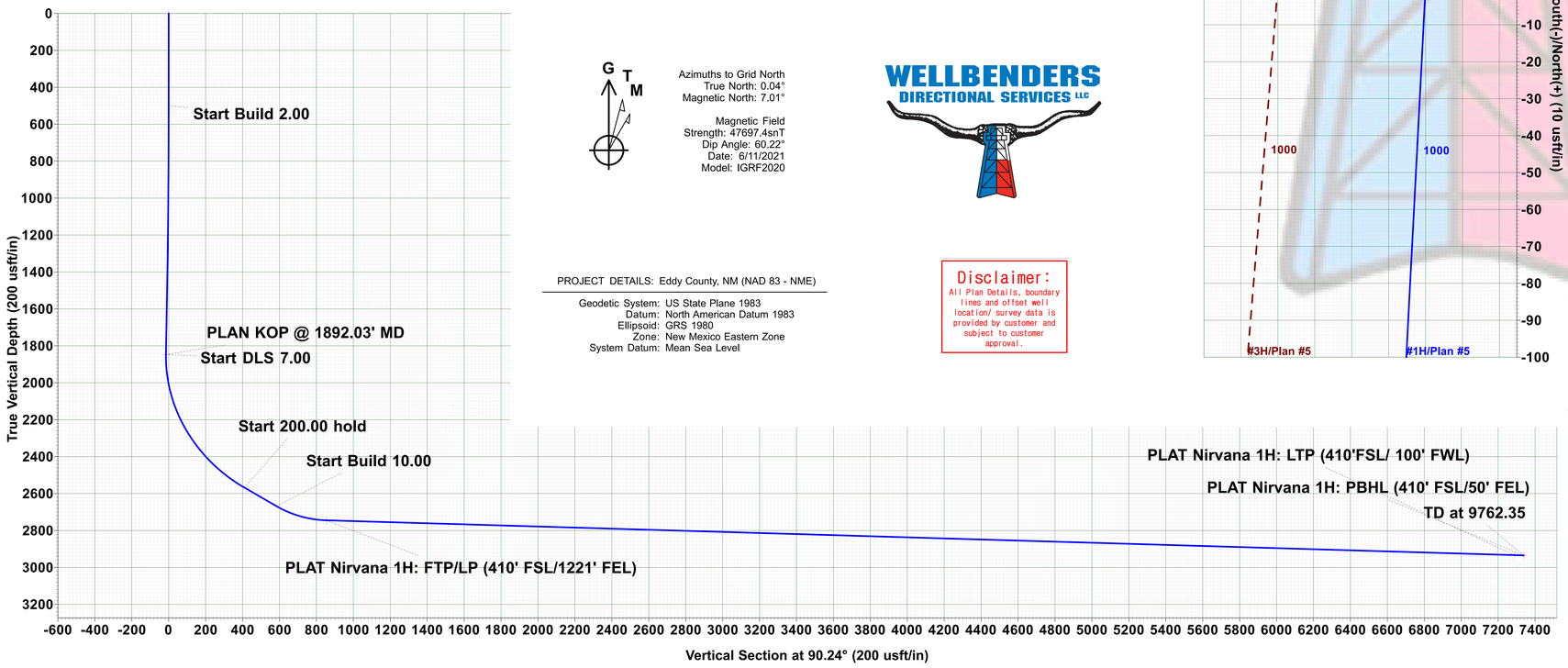
| +N/-S | +E/-W | Northing | Easting | Latittude | Longitude |
|---|---|---|---|---|---|
| 0.00 | 0.00 | 623523.40 | 520070.80 | 32.7140875 | -104.4024795 |

## SECTION DETAILS

| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | VSect | Target |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.00 | |
| 2 | 500.00 | 0.00 | 360.00 | 500.00 | 0.00 | 0.00 | 0.00 | 360.000 | 0.00 | |
| 3 | 1507.68 | 20.15 | 182.98 | 1487.03 | -175.17 | -9.11 | 2.00 | 182.978 | -8.38 | |
| 4 | 1892.03 | 20.15 | 182.98 | 1847.85 | -307.41 | -15.99 | 0.00 | 0.000 | -14.71 | |
| 5 | 2790.99 | 60.00 | 90.24 | 2568.48 | -481.56 | 408.80 | 7.00 | -103.716 | 410.81 | |
| 6 | 2990.99 | 60.00 | 90.24 | 2668.48 | -482.28 | 582.00 | 0.00 | 0.000 | 584.02 | |
| 7 | 3274.21 | 88.32 | 90.24 | 2745.00 | -483.40 | 851.70 | 10.00 | 0.000 | 853.72 | PLAT Nirvana 1H: FTP/LP (410' FSL/1221' FEL) |
| 8 | 9712.33 | 88.32 | 90.24 | 2933.54 | -510.19 | 7287.00 | 0.00 | 0.000 | 7289.07 | PLAT Nirvana 1H: LTP (410'FSL/ 100' FWL) |
| 9 | 9762.35 | 88.32 | 90.24 | 2935.00 | -510.40 | 7337.00 | 0.00 | 0.000 | 7339.07 | PLAT Nirvana 1H: PBHL (410' FSL/50' FEL) |

## DESIGN TARGET DETAILS

| Name | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
|---|---|---|---|---|---|---|---|
| PLAT Nirvana 1H: SHL (890' FSL/2075' FWL) | 0.00 | 0.00 | 0.00 | 623523.40 | 520070.80 | 32.7140875 | -104.4024795 |
| PLAN KOP @ 1892.03' MD | 1847.85 | -307.41 | -15.99 | 623215.99 | 520054.81 | 32.7132425 | -104.4025308 |
| PLAT Nirvana 1H: FTP/LP (410' FSL/1221' FEL) | 2745.00 | -483.40 | 851.70 | 623040.00 | 520922.50 | 32.7127603 | -104.3997093 |
| PLAT Nirvana 1H: LTP (410'FSL/ 100' FWL) | 2933.54 | -510.20 | 7287.00 | 623013.20 | 527357.80 | 32.7126960 | -104.3787860 |
| PLAT Nirvana 1H: PBHL (410' FSL/50' FEL) | 2935.00 | -510.40 | 7337.00 | 623013.00 | 527407.80 | 32.7126955 | -104.3786234 |







Azimuths to Grid North
True North: 0.04°
Magnetic North: 7.01°

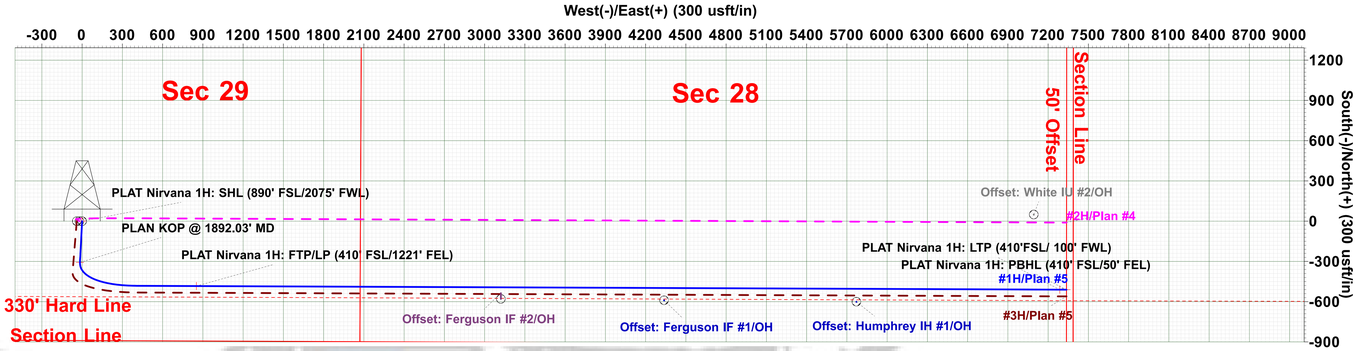
Magnetic Field
Strength: 47697.4snT
Dip Angle: 60.22°
Date: 6/11/2021
Model: IGRF2020

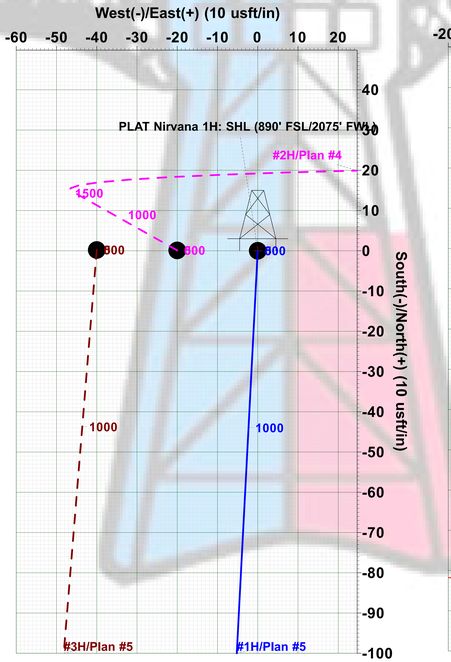
PROJECT DETAILS: Eddy County, NM (NAD 83 - NME)

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

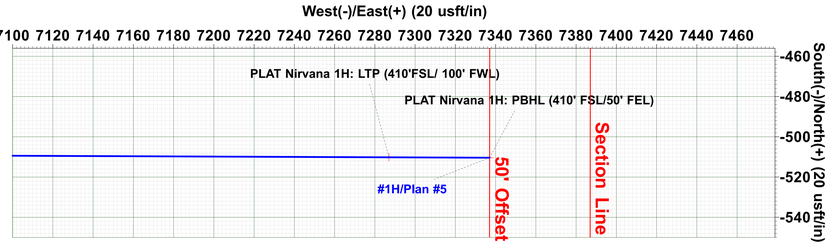
WELLBENDERS DIRECTIONAL SERVICES LLC

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








Plan: Plan #5 (#1H/OH) Akita 57

Created By: Matthew May Date: 8:56, June 14 2021

# Spur Energy Partners LLC – Nirvana 1H

## 1. Geologic Formations

| Formation | Depth | Lithology | Expected Fluids |
|---|---|---|---|
| Quaternary | 0' | Dolomite, other: Caliche | Useable Water |
| Queen | 125' | Sandstone, Dolomite | Natural Gas, Oil |
| Grayburg | 545' | Dolomite, Limestone | Natural Gas, Oil |
| San Andres | 865' | Dolomite, Limestone | Natural Gas, Oil |
| Glorieta | 2275' | Dolomite, Siltstone | Natural Gas, Oil |
| Drinkard | 3915' | Dolomite | Natural Gas, Oil |
| Base of Yeso | 4490' | Dolomite | Natural Gas, Oil |

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

## 2. Casing Program

***Primary Plan:***

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

| Hole Size (in) | Casing Interval | | Csg. Size (in) | Weight (lbs) | Grade | Conn. | SF Collapse | SF Burst | Body SF Tension | Joint SF Tension |
|---|---|---|---|---|---|---|---|---|---|---|
| | From (ft) | To (ft) | | | | | | | | |
| 12.25 | 0 | 1300 | 9.625 | 36 | J-55 | BTC | 1.125 | 1.2 | 1.4 | 1.4 |
| 8.75 | 0 | 3050 | 7 | 32 | L-80 | BK-HT | 1.125 | 1.2 | 1.4 | 1.4 |
| 8.75 | 3050 | 9762 | 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. | N |
| Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria). | Y |
| Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing? | Y |
| | |
| Is well located within Capitan Reef? | N |
| If yes, does production casing cement tie back a minimum of 50' above the Reef? | |
| Is well within the designated 4 string boundary. | |
| | |
| Is well located in SOPA but not in R-111-P? | N |
| If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing? | |
| | |
| Is well located in R-111-P and SOPA? | N |
| If yes, are the first three strings cemented to surface? | |
| Is 2nd string set 100' to 600' below the base of salt? | |
| | |
| Is well located in high Cave/Karst? | N |
| If yes, are there two strings cemented to surface? | |
| (For 2 string wells) If yes, is there a contingency casing if lost circulation occurs? | |
| | |
| Is well located in critical Cave/Karst? | N |
| If yes, are there three strings cemented to surface? | |

## 3. Cementing Program

***Primary Plan:***

| Casing String | Top (ft) | Bottom (ft) | % Excess |
|---|---|---|---|
| Surface (Lead) | 0 | 950 | 100% |
| Surface (Tail) | 950 | 1300 | 165% |
| Production (Lead) | 0 | 2050 | 0% |
| Production (Tail) | 2050 | 9762 | 50% |

| Casing String | # Sks | Wt. (lb/gal) | Yld (ft3/sack) | H20 (gal/sk) | 500# Comp. Strength (hours) | Slurry Description |
|---|---|---|---|---|---|---|
| Surface (Lead) | 270 | 12.2 | 2.31 | 13.48 | 8:12 | Clas C Premium Plus Cement |
| Surface (Tail) | 168 | 13.2 | 1.84 | 9.92 | 6:59 | Clas C Premium Plus Cement |
| Production (Lead) | 130 | 11.8 | 2.54 | 15.29 | N/A | Clas C Premium Plus Cement |
| Production (Tail) | 1533 | 13.2 | 1.81 | 9.81 | N/A | Clas C Premium Plus Cement |

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

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

| Condition | Specify what type and where? |
|---|---|
| BH Pressure at deepest TVD | 1359 psi |
| Abnormal Temperature | No |
| BH Temperature at deepest TVD | 104°F |

*Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.
Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

| | | |
|---|---|---|
| | Formation integrity test will be performed per Onshore Order #2.<br>On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i. | |
| | Y | Are anchors required by manufacturer? |
| | A conventional wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days.<br>See attached schematics. | |

## 5. BOP Break Testing Request

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

BOP break test under the following conditions:

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

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

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

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

1) The void between the wellhead and the pipe rams

## 6. Mud Program

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

| Depth | | Type | Weight (ppg) | Viscosity | Water Loss |
|---|---|---|---|---|---|
| From (ft) | To (ft) | | | | |
| 0 | 1300 | Water-Based Mud | 8.6-8.9 | 32-36 | N/C |
| 1300 | 9762 | Water-Based Mud | 8.6-8.9 | 32-36 | N/C |

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

**Spur Energy Partners LLC – Nirvana 1H**

## 7. Logging and Testing Procedures

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

| Additional logs planned | | Interval |
|---|---|---|
| No | Resistivity | |
| No | Density | |
| No | CBL | |
| Yes | Mud log | SCP - TD |
| No | PEX | |

## 8. Drilling Conditions

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

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

**Total estimated cuttings volume:** 915.6 bbls**.**

**Spur Energy Partners LLC – Nirvana 1H**

## 9. Other facets of operation

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

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

## 10. Company Personnel

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