

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Sundry Print Report 04/19/2022

Well Name: RED STRIPE 5 FEDERAL Well Location: T17S / R30E / SEC 6 / County or Parish/State:

COM SENE /

Well Number: 71H Type of Well: OIL WELL Allottee or Tribe Name:

Lease Number: NMNM083591 Unit or CA Name: Unit or CA Number:

US Well Number: 3001549232 Well Status: Approved Application for Operator: SPUR ENERGY

Permit to Drill PARTNERS LLC

Notice of Intent

Sundry ID: 2663659

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 03/24/2022 Time Sundry Submitted: 07:27

Date proposed operation will begin: 05/01/2022

Procedure Description: Due to a protested application of our Non-Standard Location, Spur respectfully requests to shift this development to align with our spacing. No new surface disturbance. Permitted: SHL: 1725' FNL 900' FEL FTP: 2070' FNL 100' FWL LTP: 2070' FNL 100' FEL BHL: 2070' FNL 50' FEL Proposed: SHL: 1725' FNL 900' FEL FTP: 2200' FNL 100' FWL LTP: 2200' FNL 100' FEL BHL: 2200' FNL 50' FEL Please find updated C-102, directional information and drill plan attached for your use.

NOI Attachments

Procedure Description

RedStripe5FdCom71H_UpdatedDirectPlot_20220324072702.pdf

RedStripe5FdCom71H_UpdatedDrillPlan_20220324072702.pdf

RedStripe5FdCom71H_UpdatedDirectPlan_20220324072702.pdf

RedStripe5FdCom71H_Updatedc_102_20220324072702.pdf

eceived by OCD; 4/19/2022 8:17:45 AM Well Name: RED STRIPE 5 FEDERAL

COM

L Well Location: T17S / R30E / SEC 6 /

SENE /

Well Number: 71H

Towns of Malls Oll MELL

County or Parish/State:

Allottee or Tribe Name:

Page 2 of

Type of Well: OIL WELL

Lease Number: NMNM083591

Unit or CA Name:

Permit to Drill

Unit or CA Number:

US Well Number: 3001549232

Well Status: Approved Application for

Operator: SPUR ENERGY

PARTNERS LLC

Conditions of Approval

Additional Reviews

Red_Stripe_5_Federal_Com_71H_COA_20220414173151.pdf

Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: SARAH CHAPMAN Signed on: MAR 24, 2022 07:27 AM

Name: SPUR ENERGY PARTNERS LLC

Title: Regulatory Directory

Street Address: 9655 KATY FREEWAY, SUITE 500

City: Houston State: TX

Phone: (832) 930-8613

Email address: SCHAPMAN@SPUREPLLC.COM

Field Representative

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Phone: 5752342234

Disposition: Approved **Signature:** Chris Walls

OTOTTIER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Email Address: cwalls@blm.gov

Disposition Date: 04/18/2022

Page 2 of 2

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

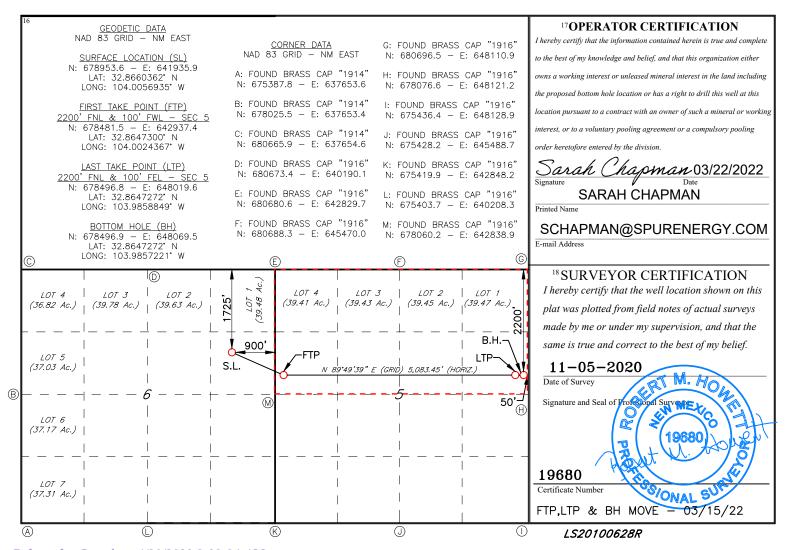
WELL LOCATION AND ACREAGE DEDICATION PLAT

_	WELL ECCATION AND ACKLAGE DEDICATION LEAT									
	¹ API Numbe	er	² Pool Code							
	30-015-4923	32	96718	LOCO HILLS; GLORIETA-YESO						
Γ	4Property Code		5 Pro	perty Name	6 Well Number					
	326670		RED STRIPE	5 FEDERAL COM	71H					
Γ	⁷ OGRID NO.		8 Op	erator Name	⁹ Elevation					
	328947		SPUR ENERGY	Y PARTNERS LLC.	3692'					

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
H	6	17S	30E		1725	NORTH	900	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
H	5	17S	30E		2200	NORTH	50	EAST	EDDY
12 Dedicated Acres	2 Dedicated Acres 13 Joint or Infill 14 Con		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.



1. Geologic Formations

TVD of Target	5,150'
MD at TD	10,655'

Formation Depth		Lithology	Expected Fluids
Quaternary 0'		Dolomite, other: Caliche	Useable Water
Rustler	365'	Dolomite, Shale, Anhydrite	Other: Brackish Water
Top Salt	530'	Anhydrite	Other: Salt
Tansill	1100'	Sandstone, Dolomite	None
Yates	1205'	Dolomite, Limestone, Shale, Siltstone	None
Seven Rivers	1495'	Dolomite, Limestone	Natural Gas, Oil
Queen	2105'	Sandstone w/ Interbedded Dolomite, Anhydrite	Natural Gas, Oil
Grayburg	2515'	Dolomite w/ Minor Sandstone, Anhydrite	Natural Gas, Oil
San Andres	2815'	Dolomitic Limestone	Natural Gas, Oil
Glorieta	4255'	Dolomite, Siltstone	Natural Gas, Oil
Paddock	4335'	Dolomitic Limestone	Natural Gas, Oil
Blinebry	4705'	Dolomitic Limestone	Natural Gas, Oil
Abo	6345'	Dolomitic Limestone	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

Csg Set Depth	Set Depth (ft) Hole Size (in)	Casing Interval		Csg. Size	Weight	Grade	Conn.	SF	SF Burst	Body SF	Joint SF
(ft)		From (ft)	To (ft)	(in)	(lbs)	Graue	Com.	Collapse	or buist	Tension	Tension
Rustler	17.5	0	450	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
Seven Rivers	12.25	0	1600	9.625	36	J-55	BTC	1.125	1.2	1.4	1.4
N/A	8.75	0	5300	7	32	L-80	BK-HT	1.125	1.2	1.4	1.4
Yeso	8.75	5300	10655	5.5	20	L-80	BK-HT	1.125	1.2	1.4	1.4
						_		SF Values will meet or Exceed			

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 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 strings cemented to surface?	

3. Cementing Program

Casing String	Top (ft)	Bottom (ft)	% Excess
Surface Tail	0	450	165%
Intermediate (Lead)	0	450	100%
Intermediate (Tail)	450	1600	100%
Production (Lead)	0	4300	100%
Production (Tail)	4300	10655	25%

Casing String	# Sks	Wt.	Yld	H20	500# Comp. Strength	Slurry Description
		(lb/gal)	(ft3/sack)	(gal/sk)	(hours)	
Surface Tail	429	13.2	1.87	9.92	6:59	Clas C Premium Plus Cement
Intermediate (Lead)	69	12	2.4	13.48	8:12	Clas C Premium Plus Cement
Intermediate (Tail)	395	13.2	1.87	9.92	6:59	Clas C Premium Plus Cement
Production (Lead)	733	11.4	2.42	15.29	N/A	Clas C Premium Plus Cement
Production (Tail)	1210	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	15-3/6	5M	Pipe Ram	✓	250 psi / 3000 psi
			Double Ram		230 psi / 3000 psi
			Other*		
	13-5/8"	5M	Annular	✓	70% of working pressure
8.75" Hole			Blind Ram	✓	
8./5 Hole		5M	Pipe Ram	✓	250: / 2000:
			Double Ram		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	2384 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	122°F

^{*}Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

Formation integrity test will be performed per Onshore Order #2.

On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.

Y	Are anchors required by manufacturer?						
A conventional wellhead system will be employed. The wellhead and connection to the							
BOPE will meet all API 6A requirements. The BOP will be tested per Onshore Order #2							
after installation on the surface casing which will cover testing requirements for a maximum							
of 30 days.							
See at	tached 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 (nn		Viagogitu	Weton Logg		
From (ft) To (ft)		Туре	Weight (ppg)	Viscosity	Water Loss	
0	450	Water-Based Mud	8.6-8.9	32-36	N/C	
450	1600	Brine	10.0-10.5	32-36	N/C	
1600	10655	Brine	10.0-10.5	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 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									
Addi	tional logs planned	Interval								
No	Resistivity									
No	Density									

ICP - TD

8. Drilling Conditions

Mud log

CBL

PEX

No

Yes

No

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

Hyd	Hydrogen 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 C	of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and						
form	formations will be provided to the BLM.						
N	H2S is present						
Y	H2S Plan attached						

Total estimated cuttings volume: 1054.9 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 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

West(-)/East(+) (200 usft/in) 200 400 600 800 1000 1200 1400 1600 1800 2000 2200 2400 2600 3800 3000 3800 4000 4200 4400 4600 4800 5000 5200 5400 5600 5800 6000 6200 6400 Company: Spur Energy Partners, LLC Sec 5 Project: Eddy County, NM (NAD 83 - NME) Sec 6 Site: Red Stripe 5 Fed Com Well: #71H Wellbore: Wellbore #1 Rig: AKITA 57 ENERGY RS5 #71H: SHL (1725' FNL & 900' FEL) Design: PLAN #2 16:22, March 22 2022 PARTNERS **OFFSET: FALCON FEDERAL** OFFSET: EVANS FEDERAL COM 1 WELL DETAILS: #71H RKB = 20' @ 3712.00usft (AKITA 57) 3692.00 RS5 #71H: KOP @ 4096.38' MD RS5 #71H: FTP (2161' FNL & 100' FWL) STAY SLIGHTLY NORTH OF PLAN Longitude -104.0056936 OFFSET: RED BLUFF FEDERAL 1 **Easting** 641935.90 32.8660363 Start Build 2.00 WHILE PASSING OFFSET WELL OFFSET: TWELVE-PACK FEDERAL COM LBB 4H/Wellbore #1 SECTION DETAILS VSect 0.00 0.00 1000 West(-)/East(+) (20 usft/in) 5960 5980 6000 6020 6040 6060 6080 6100 6120 6140 6160 6180 6200 6082.31 10605.45 88.88 89.83 5149.02 -380 10655.36 88.88 89.83 5150.00 6133.48 0.00 6132.21 1400-RS5 #71H: LTP (2161' FNL & 100' FEL) **CORRECTION REFERENCE DATA:** -420 #71H/PLAN #2 To convert a Magnetic Direction to a Grid Direction, Add 6.681° RS5 #71H: PBHL (2161' FNL & 50' FEL) To convert a True Direction to a Grid Direction, Subtract 0.178° To convert a Magnetic Direction to a True Direction, Add 6.859° East **Magnetic Declination: 6.859° Grid Convergence: 0.178° West** Magnetic Dip Angle: 60.436° Magnetic Field Strength: 47880.95141139nT <u>⊆</u> 2400-Azimuths to Grid North True North: -0.18° PROJECT DETAILS: Eddy County, NM (NAD 83 - NME) Magnetic North: 6.68° Geodetic System: US State Plane 1983 Magnetic Field -540 Datum: North American Datum 1983 Strength: 47881.0snT **3000** Ellipsoid: GRS 1980 Dip Angle: 60.44° Zone: New Mexico Eastern Zone Date: 12/05/2020 System Datum: Mean Sea Level Model: IGRF2020

DESIGN TARGET DETAILS

0.00

RS5 #71H: KOP @ 4096.38' MD 642046.96 32.8649907 -104.0053358 RS5 #71H: FTP (2161' FNL & 100' FWL) -104.0023158 32.8648370 5050.00 -433.10 1038.50 678520.50 642974.40 RS5 #71H: LTP (2161' FNL & 100' FEL) -103.9858848 5149.02 -417.86 6083.58 678535.74 648019.48 32.8648343 -103.9857222 RS5 #71H: PBHL (2161' FNL & 50' FEL) 5150.00 6133.48 678535.89 648069.38 32.8648343 RS5 #71H: LTP (2161' FNL & 100' FEL) #71H TD at 10655.36 RS5 #71H: FTP (2161' FNL & 100' FWL)

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

DIRECTIONAL SERVICES LLG

RS5 #71H: PBHL (2161' FNL & 50' FEL)

32.8660363

Longitude -104.0056936

Plan: PLAN #2 (#71H/Wellbore #1) AKITA 57

#71H/PLAN #2

STAY SLIGHTLY EAST OF PLAN

WHILE PASSING OFFSET WELL

#50H/PLAN #1

#21H/PLAN #1

#71H/PLAN #2

120 140 160 180 200 220

RS5 #71H: LTP (2161' FNL & 100' FEL)

RS5 #71H: PBHL (2161' FNL & 50' FEL)

West(-)/East(+) (20 usft/in)

RS5 #71H: SHL (1725' FNL & 900' FEL)

#50H/PLAN #1

√1500

94600

OFFSET: EVANS FEDERAL COM 1

-200

-100 ഗ

-220

-280

-320

200 400 600 800 1000 1200 1400 1600 1800 2000 2200 2400 2600 3800 3000 3200 3400 3600 4800 4600 4800 5000 5200 5400 5600 5800 6000 6200 6400

RS5 #71H: SHL (1725' FNL & 900' FEL)

3600

3800

4000

4200

4400

4600

4800

5000

5200

5400

RS5 #71H: KOP @ 4096.38' MD

Start 200.00 hold

Start Build 10.00

Start DLS 6.00



Spur Energy Partners, LLC

Eddy County, NM (NAD 83 - NME) Red Stripe 5 Fed Com #71H

Wellbore #1

Plan: PLAN #2

Standard Planning Report

22 March, 2022







Database: WBDS_SQL_2

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

Site: Red Stripe 5 Fed Com Well: #71H

Well: #71H
Wellbore: Wellbore #1
Design: PLAN #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well#71H

RKB = 20' @ 3712.00usft (AKITA 57) RKB = 20' @ 3712.00usft (AKITA 57)

Grid

Minimum Curvature

Project Eddy County, NM (NAD 83 - NME)

Map System: US State Plane 1983
Geo Datum: North American Datum 1983
Map Zone: New Mexico Eastern Zone

System Datum:

Mean Sea Level

Site Red Stripe 5 Fed Com

Northing: 678,973.60 usft 32.8660913 Site Position: Latitude: -104.0056934 From: Мар Easting: 641,935.90 usft Longitude: **Position Uncertainty:** 0.00 usft Slot Radius: 13.200 in **Grid Convergence:** 0.178

Well #71H

 Well Position
 +N/-S
 -20.00 usft
 Northing:
 678,953.60 usft
 Latitude:
 32.8660363

 +E/-W
 0.00 usft
 Easting:
 641,935.90 usft
 Longitude:
 -104.0056936

Position Uncertainty 0.00 usft Wellhead Elevation: Ground Level: 3,692.00 usft

Wellbore #1

 Magnetics
 Model Name
 Sample Date (°)
 Declination (°)
 Dip Angle (°)
 Field Strength (nT)

 IGRF2020
 12/05/20
 6.859
 60.436
 47,880.95141138

Design PLAN #2

Audit Notes:

Version: Phase: PLAN Tie On Depth: 0.00

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

 0.00
 0.00
 0.00
 0.00
 89.83

Plan Survey Tool Program Date 03/22/22

Depth From Depth To

(usft) (usft) Survey (Wellbore)

rvey (Wellbore) Tool Name Remarks

1 0.00 10,655.36 PLAN #2 (Wellbore #1) MWD+IFR1+SAG+FDIR

OWSG MWD + IFR1 + Sag

Plan Sections Vertical Build Measured Dogleg Turn Depth Inclination **Azimuth** Depth +N/-S +E/-W Rate Rate Rate **TFO** (usft) (usft) (usft) (°/100ft) (°/100ft) (°/100ft) (°) (usft) (°) **Target** (°) 0.00 0.00 0.00 0.00 0.000 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 0.000 612.22 6.24 163.71 611.60 -16.31 4.77 2.00 2.00 0.00 163.711 4.096.38 6.24 163.71 4.075.09 -380.07 111.06 0.00 0.00 0.00 0.000 60.00 4,873.35 -434.45 590.06 6.00 5.52 -7.58 -77.491 5,070.62 89.83 5,270.62 0.00 0.00 60.00 89.83 4,973.35 -433.93 763.27 0.00 0.000 10.00 5,559.37 88.88 89.83 5,050.00 -433.10 1,038.50 10.00 0.00 0.000 RS5 #71H: FTP (21 10,605.45 88.88 89.83 5,149.02 -417.86 6,083.58 0.00 0.00 0.00 0.000 RS5 #71H: LTP (21 10,655.36 88.88 89.83 5,150.00 -417.71 6,133.48 0.00 0.00 0.00 0.000 RS5 #71H: PBHL (2





WBDS_SQL_2 Database:

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

Red Stripe 5 Fed Com Site:

Well: #71H Wellbore: Wellbore #1 Design: PLAN #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well#71H

RKB = 20' @ 3712.00usft (AKITA 57)

RKB = 20' @ 3712.00usft (AKITA 57)

Minimum Curvature

ed Survey									
ieu Sui vey									
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 PS5 #71H:	0.00 SHL (1725' FN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	2.00	163.71	399.98	-1.68	0.49	0.48	2.00	2.00	0.00
500.00	4.00	163.71	499.84	-6.70	1.96	1.94	2.00	2.00	0.00
600.00	6.00	163.71	599.45	-15.06	4.40	4.36	2.00	2.00	0.00
612.22	6.24	163.71	611.60	-16.31	4.77	4.72	2.00	2.00	0.00
700.00	6.24	163.71	698.86	-25.48	7.45	7.37	0.00	0.00	0.00
800.00	6.24	163.71	798.27	-35.92	10.50	10.39	0.00	0.00	0.00
900.00	6.24	163.71	897.67	-46.36	13.55	13.41	0.00	0.00	0.00
1,000.00	6.24	163.71	997.08	-56.80	16.60	16.43	0.00	0.00	0.00
1,100.00 1,200.00	6.24 6.24	163.71 163.71	1,096.49 1,195.90	-67.24 -77.68	19.65 22.70	19.45 22.47	0.00 0.00	0.00 0.00	0.00 0.00
1,200.00	6.24	163.71	1,195.90	-77.06 -88.12	25.75	25.49	0.00	0.00	0.00
1,400.00	6.24	163.71	•	-98.56	28.80	28.51	0.00	0.00	0.00
1,400.00	6.24	163.71	1,394.71 1,494.12	-96.56 -109.00	20.00 31.85	31.53	0.00	0.00	0.00
1,600.00	6.24	163.71	1,593.52	-119.44	34.90	34.55	0.00	0.00	0.00
1,700.00	6.24	163.71	1,692.93	-129.88	37.95	37.57	0.00	0.00	0.00
1,800.00	6.24	163.71	1,792.34	-140.32	41.00	40.59	0.00	0.00	0.00
1,900.00	6.24	163.71	1,891.74	-150.76	44.05	43.61	0.00	0.00	0.00
2,000.00	6.24	163.71	1,991.15	-161.20	47.11	46.63	0.00	0.00	0.00
2,100.00	6.24	163.71	2,090.56	-171.64	50.16	49.65	0.00	0.00	0.00
2,200.00	6.24	163.71	2,189.96	-182.08	53.21	52.67	0.00	0.00	0.00
2,300.00	6.24	163.71	2,289.37	-192.52	56.26	55.69	0.00	0.00	0.00
2,400.00	6.24	163.71	2,388.78	-202.96	59.31	58.71	0.00	0.00	0.00
2,500.00 2,600.00	6.24 6.24	163.71 163.71	2,488.18 2,587.59	-213.40 -223.84	62.36 65.41	61.73 64.75	0.00 0.00	0.00 0.00	0.00 0.00
2,700.00	6.24	163.71	2,567.59	-223.64 -234.29	68.46	67.77	0.00	0.00	0.00
2,800.00	6.24	163.71	2,786.40	-244.73	71.51	70.79	0.00	0.00	0.00
2,900.00	6.24	163.71	2,885.81	-255.17	74.56	73.80	0.00	0.00	0.00
3,000.00	6.24	163.71	2,985.22	-265.61	77.61	76.82	0.00	0.00	0.00
3,100.00	6.24	163.71	3,084.62	-276.05	80.66	79.84	0.00	0.00	0.00
3,200.00	6.24	163.71	3,184.03	-286.49	83.71	82.86	0.00	0.00	0.00
3,300.00	6.24	163.71	3,283.44	-296.93	86.77	85.88	0.00	0.00	0.00
3,400.00	6.24	163.71	3,382.84	-307.37	89.82	88.90	0.00	0.00	0.00
3,500.00	6.24	163.71	3,482.25	-317.81	92.87	91.92	0.00	0.00	0.00
3,600.00	6.24	163.71	3,581.66	-328.25	95.92	94.94	0.00	0.00	0.00
3,700.00 3,800.00	6.24 6.24	163.71 163.71	3,681.06 3,780.47	-338.69 -349.13	98.97 102.02	97.96 100.98	0.00 0.00	0.00 0.00	0.00 0.00
3,900.00	6.24	163.71	3,879.88	-359.57	105.07	104.00	0.00	0.00	0.00
4,000.00	6.24	163.71	3,979.28	-370.01	103.07	107.02	0.00	0.00	0.00
4,096.38	6.24	163.71	4,075.09	-380.07	111.06	109.93	0.00	0.00	0.00
	KOP @ 4096.								
4,100.00 4,150.00	6.29 7.62	161.78 139.29	4,078.69 4,128.33	-380.45 -385.57	111.18 114.20	110.05 113.05	5.99 6.00	1.40 2.64	-53.38 -44.97
4,200.00	9.71	124.90	4,177.76	-390.49	119.82	118.66	6.00	4.19	-28.79
4,250.00	12.19	115.92	4,226.85	-395.21	128.03	126.85	6.00	4.95	-17.95
4,300.00	14.86	110.03	4,275.46	-399.72	138.80	137.61	6.00	5.34	-11.78
4,350.00	17.63	105.93	4,323.46	-403.99	152.10	150.91	6.00	5.55	-8.21
4,400.00	20.47	102.92	4,370.72	-408.02	167.91	166.70	6.00	5.67	-6.02
4,450.00	23.34	100.62	4,417.11	-411.80	186.17	184.95	6.00	5.75	-4.60





WBDS_SQL_2 Database:

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

Red Stripe 5 Fed Com Site:

Well: #71H Wellbore: Wellbore #1 Design: PLAN #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well#71H

RKB = 20' @ 3712.00usft (AKITA 57) RKB = 20' @ 3712.00usft (AKITA 57)

Minimum Curvature

Design.	FLAIN #2								
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,500.00 4,550.00 4,600.00 4,650.00	26.24 29.16 32.10 35.04	98.80 97.32 96.09 95.05	4,462.50 4,506.76 4,549.78 4,591.44	-415.32 -418.57 -421.53 -424.21	206.83 229.85 255.15 282.66	205.60 228.60 253.89 281.40	6.00 6.00 6.00 6.00	5.80 5.84 5.87 5.89	-3.64 -2.96 -2.46 -2.09
4,700.00 4,750.00 4,800.00 4,850.00 4,900.00	37.99 40.95 43.91 46.88 49.85	94.15 93.36 92.66 92.03 91.46	4,631.62 4,670.21 4,707.11 4,742.21 4,775.43	-426.59 -428.66 -430.43 -431.88 -433.01	312.31 344.03 377.71 413.28 450.63	311.05 342.75 376.43 412.00 449.34	6.00 6.00 6.00 6.00 6.00	5.90 5.92 5.93 5.93 5.94	-1.80 -1.58 -1.40 -1.26 -1.14
4,950.00 5,000.00 5,050.00 5,070.62 5,100.00	52.82 55.80 58.77 60.00 60.00	90.94 90.45 90.00 89.83 89.83	4,806.66 4,835.83 4,862.85 4,873.35 4,888.04	-433.83 -434.32 -434.48 -434.45 -434.38	489.66 530.26 572.32 590.06 615.51	488.37 528.97 571.03 588.77 614.22	6.00 6.00 6.00 6.00 0.00	5.94 5.95 5.95 5.95 0.00	-1.05 -0.97 -0.90 -0.86 0.00
5,200.00 5,270.62 5,300.00 5,350.00 5,400.00	60.00 60.00 62.94 67.94 72.94	89.83 89.83 89.83 89.83	4,938.04 4,973.35 4,987.38 5,008.16 5,024.89	-434.12 -433.93 -433.85 -433.72 -433.57	702.11 763.27 789.08 834.54 881.64	700.82 761.98 787.79 833.25 880.35	0.00 0.00 10.00 10.00 10.00	0.00 0.00 10.00 10.00 10.00	0.00 0.00 0.00 0.00 0.00
5,450.00 5,500.00 5,550.00 5,559.37	77.94 82.94 87.94 88.88	89.83 89.83 89.83	5,037.46 5,045.76 5,049.74 5,050.00	-433.43 -433.28 -433.13 -433.10	930.02 979.31 1,029.13 1,038.50	928.73 978.02 1,027.84 1,037.21	10.00 10.00 10.00 10.00	10.00 10.00 10.00 10.00	0.00 0.00 0.00 0.00
5,600.00	FTP (2161' FN 88.88	NL & 100° FWL 89.83	5,050.80	-432.98	1,079.12	1,077.83	0.00	0.00	0.00
5,700.00 5,800.00 5,900.00 6,000.00 6,100.00	88.88 88.88 88.88 88.88 88.88	89.83 89.83 89.83 89.83 89.83	5,052.76 5,054.72 5,056.68 5,058.65 5,060.61	-432.68 -432.37 -432.07 -431.77 -431.47	1,179.10 1,279.08 1,379.06 1,479.04 1,579.02	1,177.81 1,277.79 1,377.77 1,477.75 1,577.73	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
6,200.00 6,300.00 6,400.00 6,500.00 6,600.00	88.88 88.88 88.88 88.88 88.88	89.83 89.83 89.83 89.83	5,062.57 5,064.53 5,066.50 5,068.46 5,070.42	-431.17 -430.86 -430.56 -430.26 -429.96	1,679.00 1,778.98 1,878.96 1,978.94 2,078.92	1,677.72 1,777.70 1,877.68 1,977.66 2,077.64	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
6,700.00 6,800.00 6,900.00 7,000.00 7,100.00	88.88 88.88 88.88 88.88 88.88	89.83 89.83 89.83 89.83	5,072.38 5,074.35 5,076.31 5,078.27 5,080.23	-429.66 -429.35 -429.05 -428.75 -428.45	2,178.90 2,278.88 2,378.86 2,478.84 2,578.82	2,177.62 2,277.60 2,377.58 2,477.56 2,577.54	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
7,200.00 7,300.00 7,400.00 7,500.00 7,600.00	88.88 88.88 88.88 88.88 88.88	89.83 89.83 89.83 89.83	5,082.19 5,084.16 5,086.12 5,088.08 5,090.04	-428.15 -427.84 -427.54 -427.24 -426.94	2,678.80 2,778.79 2,878.77 2,978.75 3,078.73	2,677.52 2,777.50 2,877.48 2,977.47 3,077.45	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
7,700.00 7,800.00 7,900.00 8,000.00 8,100.00	88.88 88.88 88.88 88.88 88.88	89.83 89.83 89.83 89.83	5,092.01 5,093.97 5,095.93 5,097.89 5,099.86	-426.64 -426.33 -426.03 -425.73 -425.43	3,178.71 3,278.69 3,378.67 3,478.65 3,578.63	3,177.43 3,277.41 3,377.39 3,477.37 3,577.35	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
8,200.00 8,300.00 8,400.00 8,500.00	88.88 88.88 88.88 88.88	89.83 89.83 89.83 89.83	5,101.82 5,103.78 5,105.74 5,107.70	-425.13 -424.82 -424.52 -424.22	3,678.61 3,778.59 3,878.57 3,978.55	3,677.33 3,777.31 3,877.29 3,977.27	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00

Pecos District

Application for Permit to Drill

Conditions of Approval

Geology Concerns

Potash	⊠ None	☐ Secretary	□ R-111-P
Cave/Karst	☐ Medium	□ High	☐ Critical
H2S	□ None	☐ Below 100 PPM	⊠ Above 100 PPM
Other	☐ 4 String Area	☐ Capitan Reef	□ SWD Well

Note: The geology of the area where the well is being drilled determines the COAs that apply, not the above table.

Additional Engineering Requirements

Surface casing must be set at: 450 feet

Intermediate casing must be set at: 1,150 feet

General Requirements

- 1. Changes to the approved APD casing program need prior approval.
- 2. The Bureau of Land Management (BLM) will be notified in advance to witness:
 - a. Well spudding (minimum 24 hours notice)
 - b. Setting and cementing of all casing strings (minimum 4 hours notice)
 - c. BOPE tests (minimum 4 hours notice)

Eddy County

620 East Greene Street, Carlsbad, NM 88220 (575) 361-2822

Lea County

414 West Taylor, Hobbs, NM 88240 (575) 393-3612

- 3. The initial wellhead installed on the well will remain on the well with spools used as needed.
- 4. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig:

- i. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
- b. When the operator proposes to set surface casing with a Spudder Rig:
 - i. Notify the BLM when moving in and removing the Spudder Rig.
 - ii. Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - iii. BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 5. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller, and will always be operational during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the doghouse or stairway area.
- 6. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

Pressure Control

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. 5M or higher system requires an HCR valve, remote kill line, and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE, and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

- d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.
- f. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
- g. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, no tests shall commence until the cement has had a minimum of 24 hours setup time.
- h. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- 4. If the operator has proposed using a 5,000 (5M) Annular on a 10M BOP:
 - a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 10,000 (10M) psi.
- 5. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.

- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
- e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 6. If a variance is approved for break testing the BOPE, the following requirements apply:
 - a. BOPE break testing is only approved for a BOP rated at 5M or less.
 - b. A full BOP test shall be performed every 21 days (at a minimum).
 - c. A full BOP test is required prior to drilling the first intermediate hole section (if applicable). If any subsequent intermediate hole interval is deeper than the first, a full BOP test shall be required.
 - d. A full BOP test is required prior to drilling the first production hole section. If any subsequent production hole interval is deeper than the first, a full BOP test shall be required.
 - e. While in transfer, the BOP shall be secured by the hydraulic carrier or cradle.
 - f. Pressure tests shall be performed on any BOPE components that have been disconnected. A low pressure (250-300 psi) and a high pressure (BOP max pressure rating) test are required.
 - g. If a testing plug is used, pressure shall be maintained for at least 10 minutes. If there is any bleed off in pressure, the test shall be considered to have failed.
 - h. If no testing plug is used, pressure shall be maintained for at least 30 minutes. If there is a decline in pressure of more than 10 percent, the test shall be considered to have failed.
 - i. The appropriate Bureau of Land Management (BLM) office shall be notified a minimum of 4 hours before testing occurs.
- 7. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply:
 - a. The flex line must meet the requirements of API 16C.
 - b. Check condition of flexible line from BOP to choke manifold (replace if exterior is damaged or if line fails test).
 - c. Line is to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements.
 - d. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating.
 - e. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

Casing and Cement

- 1. Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).
- 2. On any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. The formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 3. Provide compressive strengths (including hours to reach required 500 pounds compressive strength) prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 4. The surface casing shall be set at a minimum of 25 feet into the Rustler Anhydrite and 80 feet above the salt and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of 8 hours (or 24 hours in the Potash Area) or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 5. Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.
- 6. Intermediate casing must be cemented to surface. For medium/high cave/karst, potash, and Capitan Reef, wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
- 7. The production cement should tie-back at least 200 feet (500 feet in Secretary Potash, surface in R-111-P potash) into previous casing string. Operator shall provide method of verification.

- 8. Production liner cement should tie-back at least 100 feet into previous casing string. Operator shall provide verification of cement top.
- 9. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 10. No pea gravel permitted for remedial cement or fall back remedial cement without prior authorization from a BLM petroleum engineer.
- 11. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

12. DV tools:

- a. First stage to DV tool (The DV tool may be cancelled if cement circulates to surface on the first stage):
 - i. Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
 - i. For intermediate casing, cement to surface.
 - ii. For production casing, cement should tie-back at least 200 feet (500 feet in Secretary Potash, surface in R-111-P potash) into previous casing string. Operator shall provide method of verification.
 - iii. If cement does not circulate, contact the appropriate BLM office.

13. Wait on cement (WOC) for Potash Areas:

- a. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
- b. After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met:
 - i. Cement reaches a minimum compressive strength of 500 psi for all cement blends
 - ii. Until cement has been in place at least 24 hours.
- c. WOC time will be recorded in the driller's log.
- d. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

14. Wait on cement (WOC) for Water Basin:

a. After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met:

- i. Cement reaches a minimum compressive strength of 500 psi at the shoe
- ii. Until cement has been in place at least 8 hours.
- b. WOC time will be recorded in the driller's log.
- 15. Wait on cement (WOC) for Medium and High Cave/Karst Areas:
 - a. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
- 16. If cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

Drilling Mud

1. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

Waste Material and Fluids

- 1. All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.
- 2. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

Special Requirements

- 1. Communitization Agreement
 - a. The operator will submit a Communitization Agreement to the Carlsbad Field Office (620 E Greene St. Carlsbad, New Mexico 88220), at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division.
 - b. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
 - i. If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
 - c. In addition, the well sign shall include the surface and bottom hole lease numbers.
 - i. When the Communitization Agreement number is known, it shall also be on the sign.

2. Unit Wells

- a. The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers.
 - i. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

b. Commercial Well Determination

i. A commercial well determination shall be submitted after production has been established for at least six months (this is not necessary for secondary recovery unit wells).

3. Hydrogen Sulfide (H2S)

- a. If H2S is encountered, provide measured values and formations to the BLM.
- b. An H2S area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items.
- c. An H2S Drilling Plan shall be activated 500 feet prior to drilling into the any formation designated as having H2S.
- d. Hydrogen Sulfide monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items.

4. Capitan Reef

- a. If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following (Use this for 3 string wells in the Capitan Reef, if 4 string well ensure fresh water based mud used across the Capitan interval):
 - i. Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
 - ii. Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports.
 - iii. The daily drilling report should show mud volume per shift/tour.
 - iv. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval.
 - v. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

- 5. Salt Water Disposal Wells
 - a. The operator shall supply the BLM with a copy of a mudlog over the permitted disposal interval and estimated in situ water salinity based on open-hole logs.
 - b. If hydrocarbons are encountered while drilling, the operator shall notify the BLM.
 - c. The operator shall provide to the BLM a summary of formation depth picks based on mudlog and geophysical logs along with a copy of the mudlog and open-hole logs from total depth to top of Devonian.
 - d. An NOI sundry with the completion procedure for this well shall be submitted and approved prior to commencing completion work. The procedure will be reviewed to verify that the completion proposal will allow the operator to:
 - i. Properly evaluate the injection zone utilizing open-hole logs, swab testing and/or any other method to confirm that hydrocarbons cannot be produced in paying quantities. This evaluation shall be reviewed by the BLM prior to injection commencing.
 - ii. Restrict the injection fluid to the approved formation.
 - iii. If a step rate test will be run, an NOI sundry shall be submitted to the BLM for approval.
 - e. If off-lease water will be disposed in this well, the operator shall provide proof of right-of-way approval.





Page 24 of 25
WELLBENDERS

WBDS_SQL_2 Database: Company:

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

Project: Red Stripe 5 Fed Com Site:

Well: #71H Wellbore: Wellbore #1 Design: PLAN #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well#71H

RKB = 20' @ 3712.00usft (AKITA 57) RKB = 20' @ 3712.00usft (AKITA 57)

Minimum Curvature

sigii.	FLAIN #Z								
lanned 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)
8,600.00	88.88	89.83	5,109.67	-423.92	4,078.53	4,077.25	0.00	0.00	0.00
8,700.00 8,800.00 8,900.00 9,000.00 9,100.00	88.88 88.88 88.88 88.88	89.83 89.83 89.83 89.83 89.83	5,111.63 5,113.59 5,115.55 5,117.52 5,119.48	-423.62 -423.31 -423.01 -422.71 -422.41	4,178.51 4,278.49 4,378.47 4,478.45 4,578.43	4,177.23 4,277.21 4,377.20 4,477.18 4,577.16	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
9,200.00 9,300.00 9,400.00 9,500.00 9,600.00	88.88 88.88 88.88 88.88 88.88	89.83 89.83 89.83 89.83	5,121.44 5,123.40 5,125.37 5,127.33 5,129.29	-422.11 -421.80 -421.50 -421.20 -420.90	4,678.41 4,778.39 4,878.37 4,978.35 5,078.33	4,677.14 4,777.12 4,877.10 4,977.08 5,077.06	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
9,700.00 9,800.00 9,900.00 10,000.00 10,100.00	88.88 88.88 88.88 88.88 88.88	89.83 89.83 89.83 89.83	5,131.25 5,133.22 5,135.18 5,137.14 5,139.10	-420.60 -420.29 -419.99 -419.69 -419.39	5,178.31 5,278.29 5,378.27 5,478.25 5,578.23	5,177.04 5,277.02 5,377.00 5,476.98 5,576.96	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
10,200.00 10,300.00 10,400.00 10,500.00 10,605.45	88.88 88.88 88.88 88.88	89.83 89.83 89.83 89.83 89.83	5,141.06 5,143.03 5,144.99 5,146.95 5,149.02	-419.09 -418.78 -418.48 -418.18 -417.86	5,678.21 5,778.19 5,878.17 5,978.15 6,083.58	5,676.95 5,776.93 5,876.91 5,976.89 6,082.31	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
	LTP (2161' FN	•							
10,655.36 RS5 #71H:	88.88 PBHL (2161' F	89.83 FNL & 50' FE L	5,150.00)	-417.71	6,133.48	6,132.21	0.00	0.00	0.00

Design Targets									
	Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
RS5 #71H: SHL (172ξ - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	678,953.60	641,935.90	32.8660363	-104.0056936
RS5 #71H: KOP @ 4(- plan hits target center - Point	0.00 r	0.00	4,075.09	-380.07	111.06	678,573.53	642,046.96	32.8649907	-104.0053357
RS5 #71H: FTP (2161 - plan hits target center - Point	0.00 r	0.00	5,050.00	-433.10	1,038.50	678,520.50	642,974.40	32.8648370	-104.0023158
RS5 #71H: LTP (2161 - plan hits target center - Point	0.00 r	0.00	5,149.02	-417.86	6,083.58	678,535.74	648,019.48	32.8648343	-103.9858847
RS5 #71H: PBHL (216 - plan hits target center - Point	0.00 r	0.00	5,150.00	-417.71	6,133.48	678,535.89	648,069.38	32.8648343	-103.9857222

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

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**

CONDITIONS

Action 99655

CONDITIONS

Operator:	OGRID:
Spur Energy Partners LLC	328947
9655 Katy Freeway	Action Number:
Houston, TX 77024	99655
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created E	y Condition	Condition Date
kpickfo	Adhere to previous NMOCD Conditions of Approval	4/20/2022