

District I1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720**District II**811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720**District III**1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170**District IV**1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

Form C-101

August 1, 2011

Permit 294196

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

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

1. Operator Name and Address Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024		2. OGRID Number 328947
		3. API Number 30-015-48122
4. Property Code 330331	5. Property Name SHORTY 2 STATE COM	6. Well No. 010H

7. Surface Location

UL - Lot E	Section 2	Township 17S	Range 30E	Lot Idn E	Feet From 1978	N/S Line N	Feet From 205	E/W Line W	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot H	Section 2	Township 17S	Range 30E	Lot Idn H	Feet From 1425	N/S Line N	Feet From 50	E/W Line E	County Eddy
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9. Pool Information

LOCO HILLS; GLORIETA-YESO	96718
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3752
16. Multiple N	17. Proposed Depth 9500	18. Formation Yeso	19. Contractor	20. Spud Date 5/1/2021
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	17.5	13.375	54.5	450	346	0
Int1	12.25	9.625	36	3075	806	0
Prod	8.75	7	32	5050	1847	0
Prod	8.75	5.5	20	9500	1847	0

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5	70	Control Technology Inc.

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.	OIL CONSERVATION DIVISION	
Signature:		
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: 3/31/2021	Expiration Date: 3/31/2023
Date: 3/29/2021	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 30-015-PENDING	² Pool Code 96718	³ Pool Name LOCO HILLS; GLORIETA-YESO
⁴ Property Code	⁵ Property Name SHORTY 2 STATE COM	⁶ Well Number 10H
⁷ OGRID NO. 328947	⁸ Operator Name SPUR ENERGY PARTNERS LLC.	⁹ Elevation 3752'

¹⁰ Surface Location

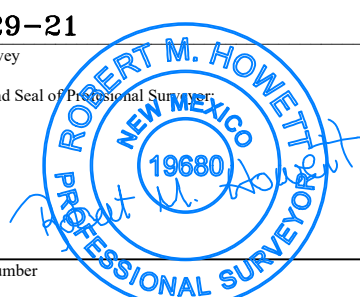
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
E	2	17S	30E		1978	NORTH	205	WEST	EDDY

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	2	17S	30E		1425	NORTH	50	EAST	EDDY

¹² Dedicated Acres 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

LOT 4 LOT 3 LOT 2 LOT 1 1978' FTP S.L. 205' GEODETIC DATA NAD 83 GRID - NM EAST N: 678753.2 - E: 658884.0 LAT: 32.8653287° N LONG: 103.9504986° W FIRST TAKE POINT (FTP) 1425' FNL 100' FWL SEC. 2 N: 679305.5 - E: 658777.7 LAT: 32.8668477° N LON: 103.9508383° W LAST TAKE POINT (LTP) 1425' FNL 100' FEL SEC. 2 N: 679322.5 - E: 663857.5 LAT: 32.8668428° N LON: 103.9342939° W BOTTOM HOLE LOCATION N: 679322.7 - E: 663907.5 LAT: 32.8668428° N LONG: 103.9341311° W CORNER DATA NAD 83 GRID - NM EAST A: FOUND BRASS CAP "1916" N: 675454.6 - E: 658689.2 B: FOUND BRASS CAP "1916" N: 678091.2 - E: 658681.2 C: FOUND BRASS CAP "1916" N: 680729.8 - E: 658673.7 D: FOUND BRASS CAP "1916" N: 680738.2 - E: 661314.5 E: FOUND BRASS CAP "1916" N: 680747.5 - E: 663952.3 F: FOUND BRASS CAP "1916" N: 678115.0 - E: 663961.8 G: FOUND 1/2" PIPE N: 675482.0 - E: 663970.7 H: FOUND BRASS CAP "1916" N: 675465.0 - E: 661330.4	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. <i>Sarah Chapman</i> 03/17/2021 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. 01-29-21 Date of Survey Signature and Seal of Professional Surveyor  19680 Certificate Number REV. S.L. MOVE - 3/10/21
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Job No.:

LS21010059

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Oil Conservation Division
1220 S. St Francis Dr.
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GAS CAPTURE PLAN

Date: 3/31/2021

☒ Original

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

☐ Amended - Reason for
Amendment: _____

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

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

Well(s)/Production Facility – Name of facility

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

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
SHORTY 2 STATE COM #010H	30-015-48122	E-2-17S-30E	1978N 0205W	600	Flared	Will flare until gathering line complete.

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to FRONTIER FIELD SERVICES, LLC and will be connected to FRONTIER FIELD SERVICES, LLC Low Pressure gathering system located in Eddy County, New Mexico. It will require 5600' of pipeline to connect the facility to Low Pressure gathering system. Spur Energy Partners LLC provides (periodically) to FRONTIER FIELD SERVICES, LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Spur Energy Partners LLC and FRONTIER FIELD SERVICES, LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at FRONTIER FIELD SERVICES, LLC Processing Plant located in Sec. 21, Twn. 17S, Rng. 32E, Eddy County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

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

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

Alternatives to Reduce Flaring

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

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

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Form APD Comments

Permit 294196

PERMIT COMMENTS

Operator Name and Address: Spur Energy Partners LLC [328947] 9655 Katy Freeway Houston, TX 77024		API Number: 30-015-48122
		Well: SHORTY 2 STATE COM #010H
Created By	Comment	Comment Date

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Form APD Conditions

Permit 294196

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: Spur Energy Partners LLC [328947] 9655 Katy Freeway Houston, TX 77024	API Number: 30-015-48122
	Well: SHORTY 2 STATE COM #010H

OCD Reviewer	Condition
kpickford	Notify OCD 24 hours prior to casing & cement
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing
kpickford	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
kpickford	1)- The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud 2)- Drilling Sundries Form C-103 (Casing and Cement test are to be submitted within 10 days 3)- Completion Reports & Logs are to be submitted within 45 days
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
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Spur Energy Partners, LLC

Eddy County, NM (NAD 83 - NME)

SHORTY 2 STATE COM (10-20-70)

#10H

Wellbore #1

Plan: Plan #1

Standard Planning Report

19 March, 2021





Planning Report



Database:	WBDS_SQL_2	Local Co-ordinate Reference:	Well #10H
Company:	Spur Energy Partners, LLC	TVD Reference:	RKB = 20' @ 3772.00usft (Akita 57)
Project:	Eddy County, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3772.00usft (Akita 57)
Site:	SHORTY 2 STATE COM (10-20-70)	North Reference:	Grid
Well:	#10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project	Eddy County, NM (NAD 83 - NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		SHORTY 2 STATE COM (10-20-70)			
Site Position:		Northing:	678,753.20 usft	Latitude:	32.8653287
From:	Map	Easting:	658,884.00 usft	Longitude:	-103.9504986
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.208

Well	#10H					
Well Position	+N/-S	0.00 usft	Northing:	678,753.20 usft	Latitude:	32.8653287
	+E/-W	0.00 usft	Easting:	658,884.00 usft	Longitude:	-103.9504986
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,752.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	3/19/2021	6.800	60.434	47,856.20000729

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	89.81

Plan Survey Tool Program	Date	3/19/2021		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	9,499.99	Plan #1 (Wellbore #1)	MWD+IGRF
				OWSG MWD + IGRF or WM

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.000	
723.65	8.47	347.51	722.10	30.53	-6.76	2.00	2.00	0.00	347.506	
3,776.37	8.47	347.51	3,741.51	469.67	-104.07	0.00	0.00	0.00	0.000	
4,811.99	60.00	89.81	4,598.24	554.09	375.84	6.00	4.98	9.88	106.846	
5,011.99	60.00	89.81	4,698.24	554.66	549.05	0.00	0.00	0.00	0.000	
5,311.99	90.00	89.81	4,775.00	555.61	835.52	10.00	10.00	0.00	0.000	
9,499.99	90.00	89.81	4,775.00	569.50	5,023.50	0.00	0.00	0.00	0.000	PLAT #10H PBHL:



Planning Report



Database:	WBDS_SQL_2	Local Co-ordinate Reference:	Well #10H
Company:	Spur Energy Partners, LLC	TVD Reference:	RKB = 20' @ 3772.00usft (Akita 57)
Project:	Eddy County, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3772.00usft (Akita 57)
Site:	SHORTY 2 STATE COM (10-20-70)	North Reference:	Grid
Well:	#10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLAT #10H FTP: 1425' FNL & 100' FWL - PLAT #10H SHL: 1978' FNL & 205' FWL									
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	347.51	399.98	1.70	-0.38	-0.37	2.00	2.00	0.00
500.00	4.00	347.51	499.84	6.81	-1.51	-1.49	2.00	2.00	0.00
600.00	6.00	347.51	599.45	15.32	-3.40	-3.34	2.00	2.00	0.00
700.00	8.00	347.51	698.70	27.22	-6.03	-5.94	2.00	2.00	0.00
723.65	8.47	347.51	722.10	30.53	-6.76	-6.66	2.00	2.00	0.00
800.00	8.47	347.51	797.62	41.51	-9.20	-9.06	0.00	0.00	0.00
900.00	8.47	347.51	896.53	55.90	-12.39	-12.20	0.00	0.00	0.00
1,000.00	8.47	347.51	995.44	70.28	-15.57	-15.34	0.00	0.00	0.00
1,100.00	8.47	347.51	1,094.35	84.67	-18.76	-18.48	0.00	0.00	0.00
1,200.00	8.47	347.51	1,193.26	99.05	-21.95	-21.62	0.00	0.00	0.00
1,300.00	8.47	347.51	1,292.17	113.44	-25.14	-24.76	0.00	0.00	0.00
1,400.00	8.47	347.51	1,391.08	127.82	-28.32	-27.90	0.00	0.00	0.00
1,500.00	8.47	347.51	1,489.98	142.21	-31.51	-31.04	0.00	0.00	0.00
1,600.00	8.47	347.51	1,588.89	156.59	-34.70	-34.18	0.00	0.00	0.00
1,700.00	8.47	347.51	1,687.80	170.98	-37.89	-37.32	0.00	0.00	0.00
1,800.00	8.47	347.51	1,786.71	185.36	-41.07	-40.46	0.00	0.00	0.00
1,900.00	8.47	347.51	1,885.62	199.75	-44.26	-43.60	0.00	0.00	0.00
2,000.00	8.47	347.51	1,984.53	214.13	-47.45	-46.74	0.00	0.00	0.00
2,100.00	8.47	347.51	2,083.44	228.52	-50.64	-49.88	0.00	0.00	0.00
2,200.00	8.47	347.51	2,182.34	242.91	-53.83	-53.02	0.00	0.00	0.00
2,300.00	8.47	347.51	2,281.25	257.29	-57.01	-56.16	0.00	0.00	0.00
2,400.00	8.47	347.51	2,380.16	271.68	-60.20	-59.30	0.00	0.00	0.00
2,500.00	8.47	347.51	2,479.07	286.06	-63.39	-62.44	0.00	0.00	0.00
2,600.00	8.47	347.51	2,577.98	300.45	-66.58	-65.58	0.00	0.00	0.00
2,700.00	8.47	347.51	2,676.89	314.83	-69.76	-68.72	0.00	0.00	0.00
2,800.00	8.47	347.51	2,775.80	329.22	-72.95	-71.86	0.00	0.00	0.00
2,900.00	8.47	347.51	2,874.70	343.60	-76.14	-75.00	0.00	0.00	0.00
3,000.00	8.47	347.51	2,973.61	357.99	-79.33	-78.14	0.00	0.00	0.00
3,100.00	8.47	347.51	3,072.52	372.37	-82.51	-81.28	0.00	0.00	0.00
3,200.00	8.47	347.51	3,171.43	386.76	-85.70	-84.42	0.00	0.00	0.00
3,300.00	8.47	347.51	3,270.34	401.14	-88.89	-87.56	0.00	0.00	0.00
3,400.00	8.47	347.51	3,369.25	415.53	-92.08	-90.70	0.00	0.00	0.00
3,500.00	8.47	347.51	3,468.16	429.91	-95.26	-93.84	0.00	0.00	0.00
3,600.00	8.47	347.51	3,567.06	444.30	-98.45	-96.98	0.00	0.00	0.00
3,700.00	8.47	347.51	3,665.97	458.68	-101.64	-100.12	0.00	0.00	0.00
3,776.37	8.47	347.51	3,741.51	469.67	-104.07	-102.52	0.00	0.00	0.00
PLAN #10H KOP @ 3776.37' MD									
3,800.00	8.17	357.09	3,764.89	473.05	-104.54	-102.97	6.00	-1.26	40.57
3,850.00	8.34	18.07	3,814.38	480.05	-103.59	-102.00	6.00	0.32	41.96
3,900.00	9.49	36.06	3,863.79	486.82	-100.04	-98.43	6.00	2.30	35.98
3,950.00	11.33	49.23	3,912.97	493.36	-93.89	-92.26	6.00	3.69	26.34
4,000.00	13.59	58.43	3,961.79	499.65	-85.16	-83.51	6.00	4.52	18.39
4,050.00	16.09	64.94	4,010.13	505.66	-73.88	-72.20	6.00	5.00	13.01
4,100.00	18.73	69.69	4,057.83	511.39	-60.07	-58.37	6.00	5.29	9.51
4,150.00	21.47	73.29	4,104.79	516.80	-43.77	-42.06	6.00	5.47	7.20
4,200.00	24.26	76.10	4,150.85	521.90	-25.03	-23.30	6.00	5.59	5.63
4,250.00	27.10	78.36	4,195.91	526.67	-3.90	-2.16	6.00	5.67	4.52
4,300.00	29.96	80.22	4,239.83	531.09	19.56	21.32	6.00	5.73	3.72



Planning Report



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Project:	Eddy County, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3772.00usft (Akita 57)
Site:	SHORTY 2 STATE COM (10-20-70)	North Reference:	Grid
Well:	#10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

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)
4,350.00	32.85	81.78	4,282.50	535.15	45.30	47.07	6.00	5.78	3.12
4,400.00	35.76	83.12	4,323.80	538.84	73.23	75.02	6.00	5.81	2.67
4,450.00	38.67	84.28	4,363.62	542.14	103.28	105.08	6.00	5.83	2.32
4,500.00	41.60	85.30	4,401.84	545.06	135.38	137.19	6.00	5.85	2.04
4,550.00	44.54	86.20	4,438.36	547.59	169.42	171.24	6.00	5.87	1.82
4,600.00	47.48	87.02	4,473.09	549.71	205.33	207.15	6.00	5.88	1.64
4,650.00	50.43	87.77	4,505.92	551.42	242.99	244.82	6.00	5.89	1.49
4,700.00	53.38	88.45	4,536.76	552.71	282.32	284.15	6.00	5.90	1.37
4,750.00	56.33	89.08	4,565.54	553.59	323.19	325.02	6.00	5.91	1.27
4,800.00	59.29	89.67	4,592.18	554.04	365.49	367.33	6.00	5.92	1.18
4,811.99	60.00	89.81	4,598.24	554.09	375.84	377.68	6.00	5.92	1.14
4,900.00	60.00	89.81	4,642.24	554.34	452.06	453.89	0.00	0.00	0.00
5,000.00	60.00	89.81	4,692.24	554.63	538.66	540.50	0.00	0.00	0.00
5,011.99	60.00	89.81	4,698.24	554.66	549.05	550.88	0.00	0.00	0.00
5,050.00	63.80	89.81	4,716.14	554.77	582.57	584.40	10.00	10.00	0.00
5,100.00	68.80	89.81	4,736.23	554.93	628.34	630.17	10.00	10.00	0.00
5,150.00	73.80	89.81	4,752.25	555.08	675.68	677.52	10.00	10.00	0.00
5,200.00	78.80	89.81	4,764.09	555.24	724.24	726.08	10.00	10.00	0.00
5,250.00	83.80	89.81	4,771.65	555.41	773.65	775.49	10.00	10.00	0.00
5,300.00	88.80	89.81	4,774.87	555.57	823.53	825.37	10.00	10.00	0.00
5,311.99	90.00	89.81	4,775.00	555.61	835.52	837.36	10.00	10.00	0.00
PLAN #10H LP									
5,400.00	90.00	89.81	4,775.00	555.90	923.53	925.37	0.00	0.00	0.00
5,500.00	90.00	89.81	4,775.00	556.24	1,023.53	1,025.37	0.00	0.00	0.00
5,600.00	90.00	89.81	4,775.00	556.57	1,123.53	1,125.37	0.00	0.00	0.00
5,700.00	90.00	89.81	4,775.00	556.90	1,223.53	1,225.37	0.00	0.00	0.00
5,800.00	90.00	89.81	4,775.00	557.23	1,323.53	1,325.37	0.00	0.00	0.00
5,900.00	90.00	89.81	4,775.00	557.56	1,423.53	1,425.37	0.00	0.00	0.00
6,000.00	90.00	89.81	4,775.00	557.89	1,523.53	1,525.37	0.00	0.00	0.00
6,100.00	90.00	89.81	4,775.00	558.23	1,623.53	1,625.37	0.00	0.00	0.00
6,200.00	90.00	89.81	4,775.00	558.56	1,723.53	1,725.37	0.00	0.00	0.00
6,300.00	90.00	89.81	4,775.00	558.89	1,823.52	1,825.37	0.00	0.00	0.00
6,400.00	90.00	89.81	4,775.00	559.22	1,923.52	1,925.37	0.00	0.00	0.00
6,500.00	90.00	89.81	4,775.00	559.55	2,023.52	2,025.37	0.00	0.00	0.00
6,600.00	90.00	89.81	4,775.00	559.88	2,123.52	2,125.37	0.00	0.00	0.00
6,700.00	90.00	89.81	4,775.00	560.21	2,223.52	2,225.37	0.00	0.00	0.00
6,800.00	90.00	89.81	4,775.00	560.55	2,323.52	2,325.37	0.00	0.00	0.00
6,900.00	90.00	89.81	4,775.00	560.88	2,423.52	2,425.37	0.00	0.00	0.00
7,000.00	90.00	89.81	4,775.00	561.21	2,523.52	2,525.37	0.00	0.00	0.00
7,100.00	90.00	89.81	4,775.00	561.54	2,623.52	2,625.37	0.00	0.00	0.00
7,200.00	90.00	89.81	4,775.00	561.87	2,723.52	2,725.37	0.00	0.00	0.00
7,300.00	90.00	89.81	4,775.00	562.20	2,823.52	2,825.37	0.00	0.00	0.00
7,400.00	90.00	89.81	4,775.00	562.54	2,923.52	2,925.37	0.00	0.00	0.00
7,500.00	90.00	89.81	4,775.00	562.87	3,023.52	3,025.37	0.00	0.00	0.00
7,600.00	90.00	89.81	4,775.00	563.20	3,123.52	3,125.37	0.00	0.00	0.00
7,700.00	90.00	89.81	4,775.00	563.53	3,223.52	3,225.37	0.00	0.00	0.00
7,800.00	90.00	89.81	4,775.00	563.86	3,323.52	3,325.37	0.00	0.00	0.00
7,900.00	90.00	89.81	4,775.00	564.19	3,423.52	3,425.37	0.00	0.00	0.00
8,000.00	90.00	89.81	4,775.00	564.53	3,523.52	3,525.37	0.00	0.00	0.00
8,100.00	90.00	89.81	4,775.00	564.86	3,623.51	3,625.37	0.00	0.00	0.00
8,200.00	90.00	89.81	4,775.00	565.19	3,723.51	3,725.37	0.00	0.00	0.00
8,300.00	90.00	89.81	4,775.00	565.52	3,823.51	3,825.37	0.00	0.00	0.00
8,400.00	90.00	89.81	4,775.00	565.85	3,923.51	3,925.37	0.00	0.00	0.00
8,500.00	90.00	89.81	4,775.00	566.18	4,023.51	4,025.37	0.00	0.00	0.00



Planning Report



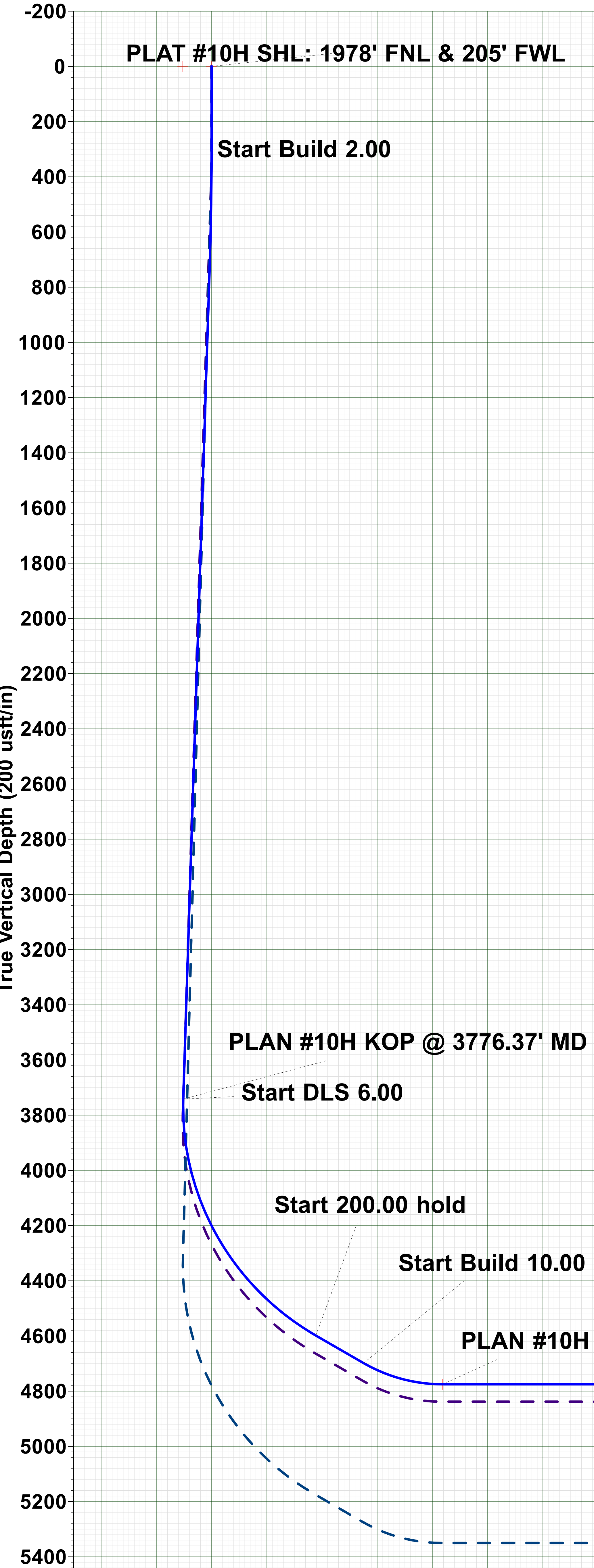
Database:	WBDS_SQL_2	Local Co-ordinate Reference:	Well #10H
Company:	Spur Energy Partners, LLC	TVD Reference:	RKB = 20' @ 3772.00usft (Akita 57)
Project:	Eddy County, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3772.00usft (Akita 57)
Site:	SHORTY 2 STATE COM (10-20-70)	North Reference:	Grid
Well:	#10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
8,600.00	90.00	89.81	4,775.00	566.52	4,123.51	4,125.37	0.00	0.00	0.00	
8,700.00	90.00	89.81	4,775.00	566.85	4,223.51	4,225.37	0.00	0.00	0.00	
8,800.00	90.00	89.81	4,775.00	567.18	4,323.51	4,325.37	0.00	0.00	0.00	
8,900.00	90.00	89.81	4,775.00	567.51	4,423.51	4,425.37	0.00	0.00	0.00	
9,000.00	90.00	89.81	4,775.00	567.84	4,523.51	4,525.37	0.00	0.00	0.00	
9,100.00	90.00	89.81	4,775.00	568.17	4,623.51	4,625.37	0.00	0.00	0.00	
9,200.00	90.00	89.81	4,775.00	568.51	4,723.51	4,725.37	0.00	0.00	0.00	
9,300.00	90.00	89.81	4,775.00	568.84	4,823.51	4,825.37	0.00	0.00	0.00	
9,400.00	90.00	89.81	4,775.00	569.17	4,923.51	4,925.37	0.00	0.00	0.00	
PLAT #10H LTP: 1425' FNL & 100' FEL										
9,499.99	90.00	89.81	4,775.00	569.50	5,023.50	5,025.36	0.00	0.00	0.00	
PLAT #10H PBHL: 1425' FNL & 50' FEL										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
PLAT #10H FTP: 1425' FNL & 100' FEL	0.00	0.00	0.00	552.30	-106.30	679,305.50	658,777.70	32.8668478	-103.9508383	
- plan misses target center by 562.44usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)										
- Point										
PLAT #10H SHL: 1975' FNL & 50' FEL	0.00	0.00	0.00	0.00	0.00	678,753.20	658,884.00	32.8653287	-103.9504986	
- plan hits target center										
- Point										
PLAN #10H KOP @ 3	0.00	0.00	3,741.51	469.67	-104.07	679,222.87	658,779.93	32.8666207	-103.9508320	
- plan hits target center										
- Point										
PLAT #10H LTP: 1425' FNL & 100' FEL	0.00	0.00	4,775.00	569.30	4,973.50	679,322.50	663,857.50	32.8668429	-103.9342938	
- plan misses target center by 49.99usft at 9400.00usft MD (4775.00 TVD, 569.17 N, 4923.51 E)										
- Point										
PLAN #10H LP	0.00	0.00	4,775.00	555.61	835.52	679,308.81	659,719.53	32.8668475	-103.9477708	
- plan hits target center										
- Point										
PLAT #10H PBHL: 1425' FNL & 50' FEL	0.00	0.00	4,775.00	569.50	5,023.50	679,322.70	663,907.50	32.8668429	-103.9341310	
- plan hits target center										
- Point										



Company: Spur Energy Partners, LLC
Project: Eddy County, NM (NAD 83 - NME)
Site: SHORTY 2 STATE COM (10-20-70)
Well: #10H
Wellbore: Wellbore #1
Rig: Akita 57
Design: Plan #1 / 10:26, March 19 2021

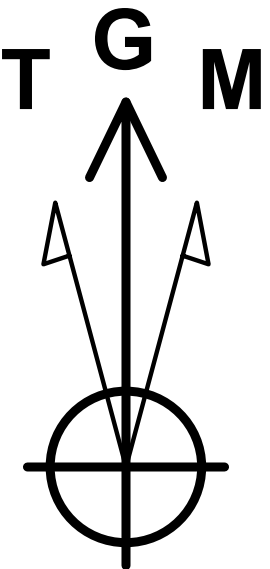


WELL DETAILS: #10H					
RKB = 20' @ 3772.00usft (Akita 57)					
		3752.00			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	678753.20	658884.00	32.8653287	-103.9504986

SECTION DETAILS								
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00
3	723.65	8.47	347.51	722.10	30.53	-6.76	2.00	-6.66
4	3776.37	8.47	347.51	3741.51	469.67	-104.07	0.00	-102.52
5	4811.99	60.00	89.81	4598.24	554.09	375.84	6.00	377.68
6	5011.99	60.00	89.81	4698.24	554.66	549.05	0.00	550.88
7	5311.99	90.00	89.81	4775.00	555.61	835.52	10.00	837.36
8	9499.99	90.00	89.81	4775.00	569.50	5023.50	0.00	5025.36

CORRECTION REFERENCE DATA:

To convert a Magnetic Direction to a Grid Direction, Add 6.593°
To convert a True Direction to a Grid Direction, Subtract 0.208°
To convert a Magnetic Direction to a True Direction, Add 6.800° East
Magnetic Declination: 6.800°
Grid Convergence: 0.208° West
Magnetic Dip Angle: 60.434°
Magnetic Field Strength: 47856.20000729nT

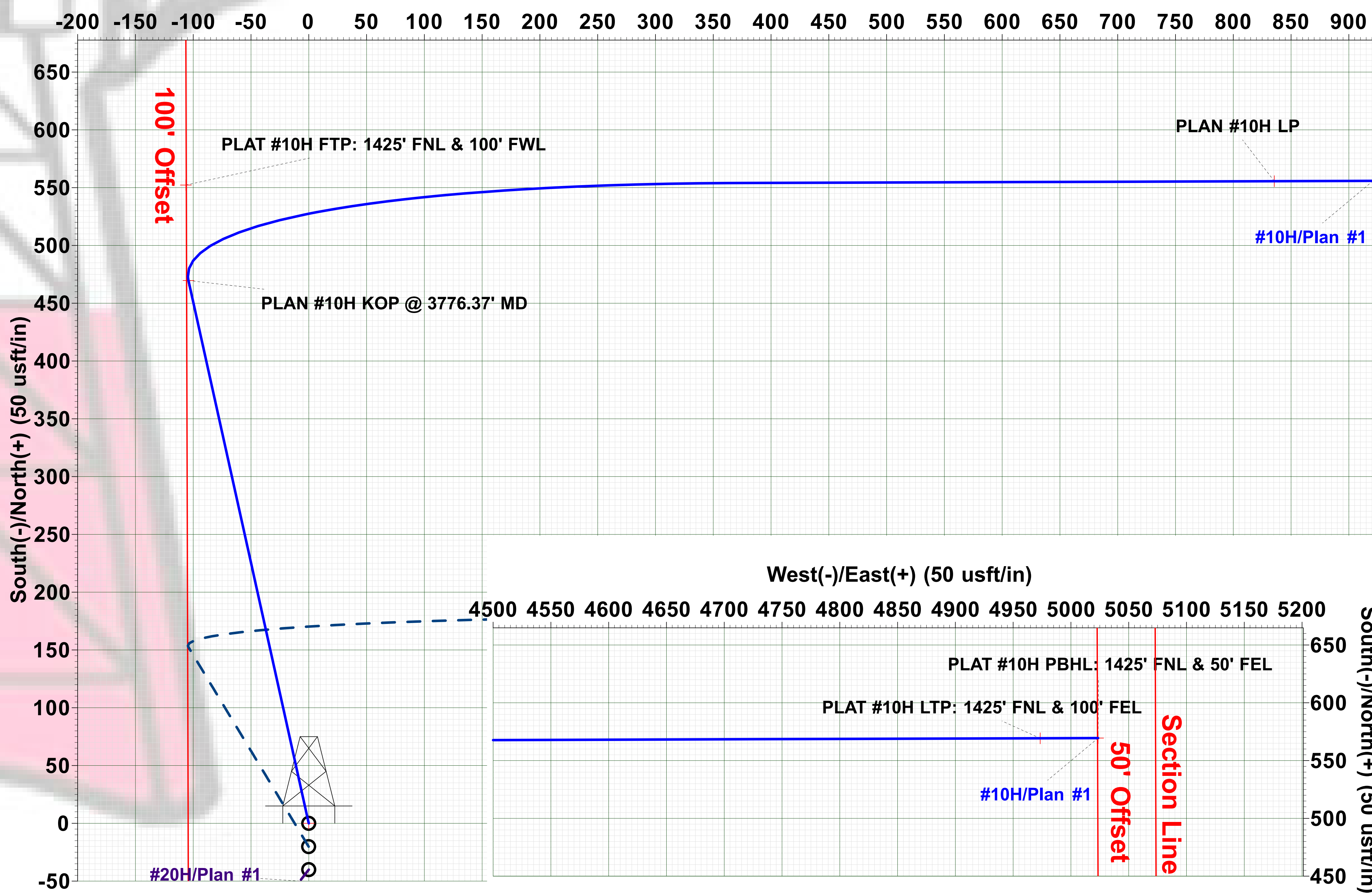
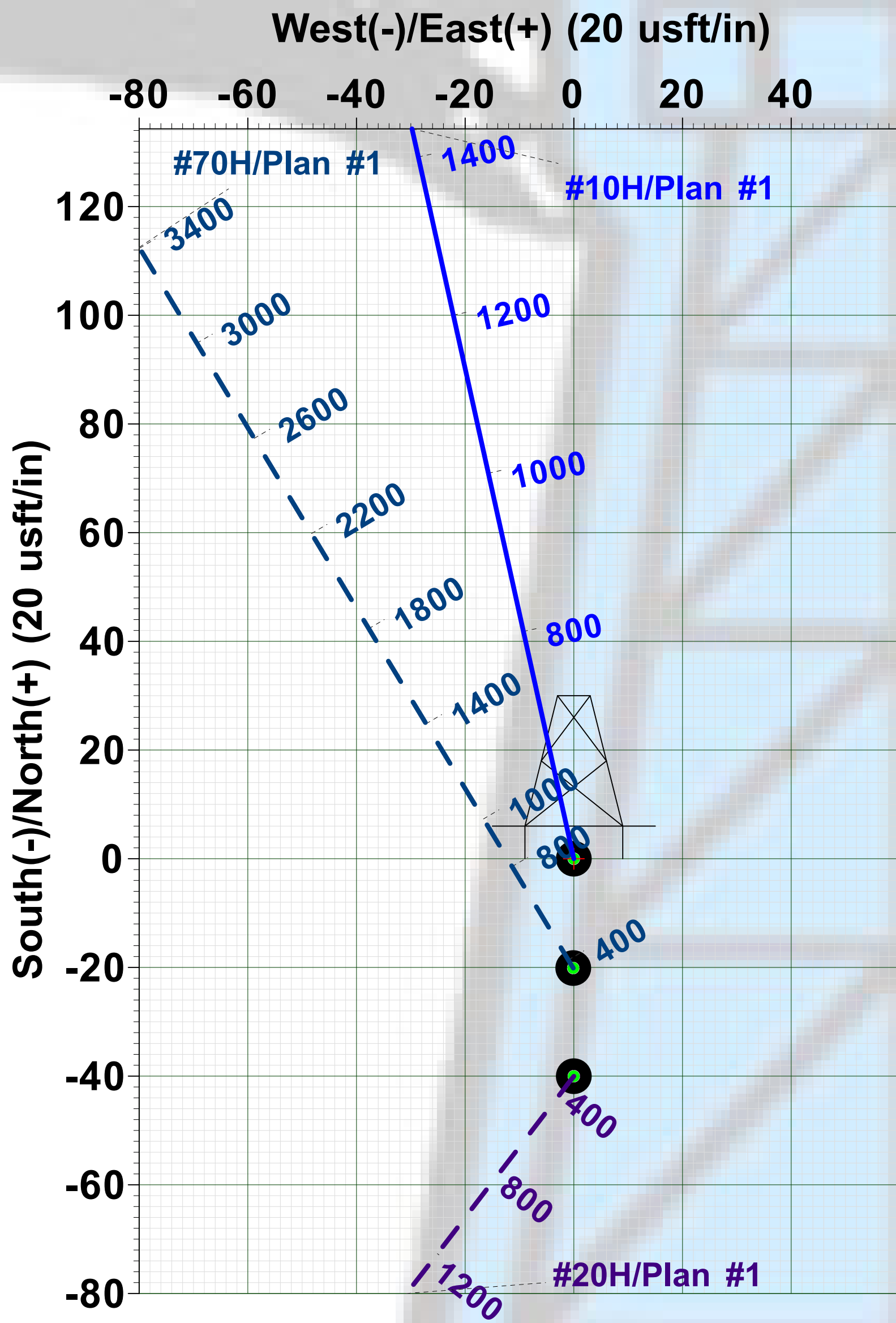
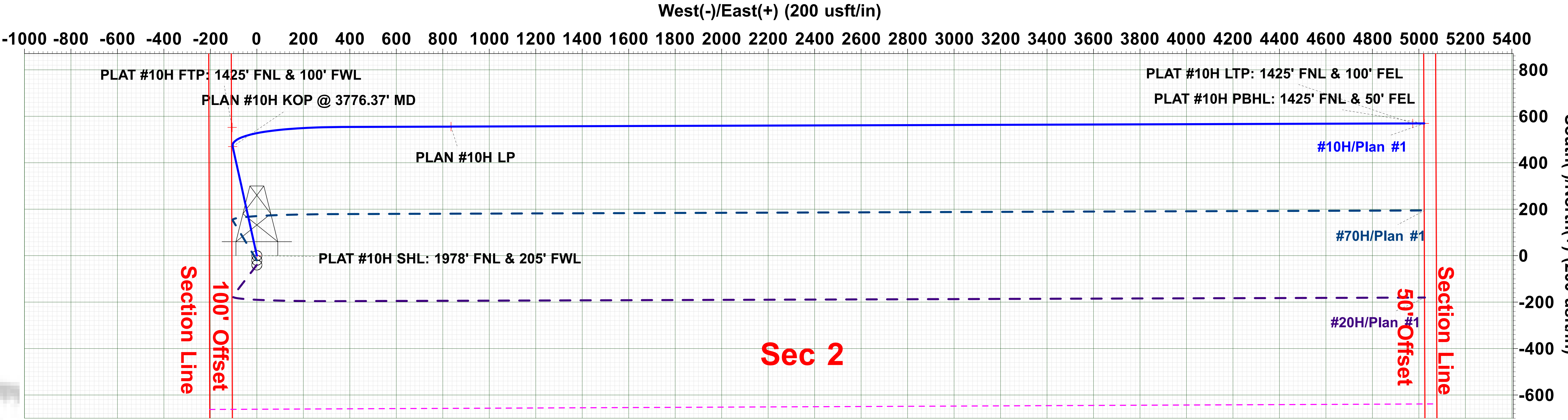


Azimuths to Grid North
True North: -0.21°
Magnetic North: 6.59°

Magnetic Field
Strength: 47856.2snT
Dip Angle: 60.43°
Date: 3/19/2021
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



DESIGN TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude
PLAT #10H FTP: 1425' FNL & 100' FWL	0.00	552.30	-106.30	679305.50	658777.70	32.8668478
PLAT #10H SHL: 1978' FNL & 205' FWL	0.00	0.00	0.00	678753.20	658884.00	32.8653287
PLAN #10H KOP @ 3776.37' MD	3741.51	469.67	-104.07	679222.87	658779.93	32.8666207
PLAN #10H LP	4775.00	555.61	835.52	679308.81	659719.52	32.8668475
PLAT #10H LTP: 1425' FNL & 100' FEL	4775.00	569.30	4973.50	679322.50	663857.50	32.8668429
PLAT #10H PBHL: 1425' FNL & 50' FEL	4775.00	569.50	5023.50	679322.70	663907.50	32.8668429



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



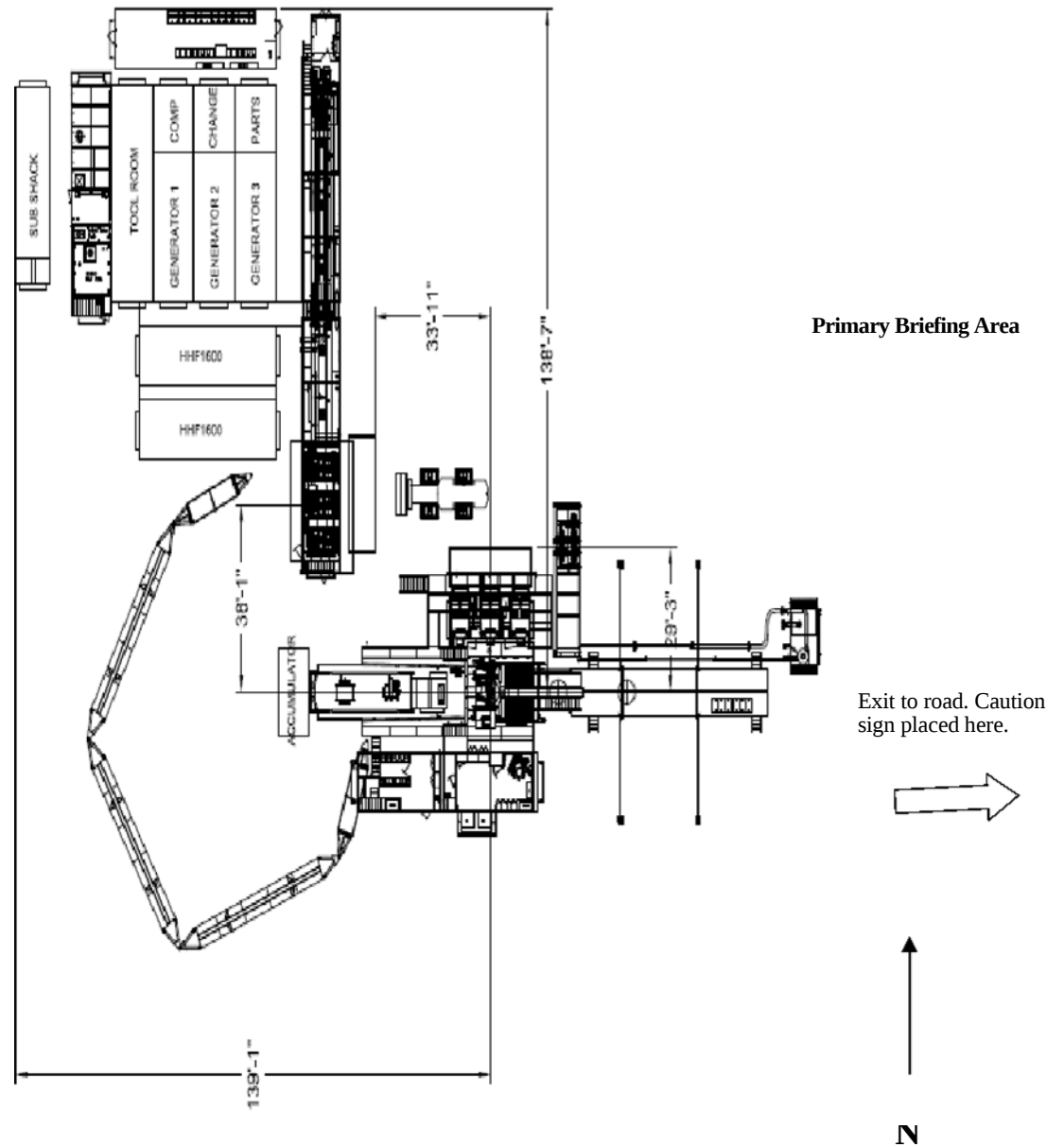
Permian Drilling Hydrogen Sulfide Drilling Operations Plan Shorty 2 State Com 10H

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



WIND: Prevailing winds are from the Southwest

Secondary Egress

Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

Spur Energy Partners LLC – Shorty 2 State Com 10H

1. Geologic Formations

Formation	TVD - RKB	Expected Fluids
Top Rustler	340'	N/A
Top Salt	525'	N/A
Base Salt	1245'	Oil/Gas
Top Tansill	1330'	Oil/Gas
Top Seven Rivers	1435'	Oil/Gas
Top Yates	1730'	Oil/Gas
Top Queen	2340'	Oil/Gas
Top Penrose	2515'	Oil/Gas
Top Grayburg	2755'	Oil/Gas
Top San Andres	3055'	Oil/Gas
Top Glorieta	4515'	Oil/Gas
Top Yeso	4580'	Oil/Gas
Top Tubb	5900'	Oil/Gas
Top Drinkard	6075'	Oil/Gas
Base Yeso	6550'	Oil/Gas

*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	SF Burst	Body SF	Joint SF
	From (ft)	To (ft)					Collapse		Tension	Tension
17.5	0	450	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
12.25	0	3075	9.625	36	J-55	BTC	1.125	1.2	1.4	1.4
8.75	0	5050	7	32	L-80	BK-HT	1.125	1.2	1.4	1.4
8.75	0	9500	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 – Shorty 2 State Com 10H

	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?	
(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 Tail	0	450	165%
Intermediate (Lead)	0	450	100%
Intermediate (Tail)	450	3075	100%
Production (Lead)	0	4050	0%
Production (Tail)	4050	9500	50%

Casing String	# Sks	Wt. (lb/gal)	Yld (ft3/sack)	H2O (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface Tail	346	13.2	2.32	9.92	6:59	Clas C Premium Plus Cement
Intermediate (Lead)	89	12.2	1.84	13.48	8:12	Clas C Premium Plus Cement
Intermediate (Tail)	717	13.2	2.32	9.92	6:59	Clas C Premium Plus Cement
Production (Lead)	786	11.8	2.54	15.29	N/A	Clas C Premium Plus Cement
Production (Tail)	1061	13.2	1.81	9.81	N/A	Clas C Premium Plus Cement

Spur Energy Partners LLC – Shorty 2 State Com 10H

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
12.25" Hole	11"	5M	Annular	✓	70% of working pressure
		5M	Blind Ram	✓	250 psi / 5000 psi
			Pipe Ram	✓	
			Double Ram		
			Other*		
8.75" Hole	11"	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	2260 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	119°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 attached schematics.

Spur Energy Partners LLC – Shorty 2 State Com 10H

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 3rd 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	450	Water-Based Mud	8.6-8.9	32-36	N/C
450	3075	Brine	9.0-10.0	32-36	N/C
3075	9500	Brine	9.0-10.0	32-36	N/C

What will be used to monitor the loss or gain of fluid?	PVT/MD PASON/Visual Monitoring
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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	ICP - TD
No	PEX	

8. Drilling Conditions

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

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

Total estimated cuttings volume: 957 bbls.

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	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

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

10. Company Personnel

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