

Well Name: WELCH B 28 FEDERAL	Well Location: T17S / R28E / SEC 27 / SWNW /	County or Parish/State:
Well Number: 90H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM048344	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001549237	Well Status: Approved Application for Permit to Drill	Operator: SPUR ENERGY PARTNERS LLC

Notice of Intent

Sundry ID: 2772859

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 02/01/2024	Time Sundry Submitted: 09:16
Date proposed operation will begin: 02/01/2024	

Procedure Description: Spur Energy Partners LLC respectfully requests to amend this APD. We would like to change the well number from the Welch B 28 Federal 90H to Welch B 28 Federal 70H. Existing Wellbore Information: SHL: 1766' FNL 758' FWL FTP: 1930' FNL 100' FEL LTP: 1930' FNL 100' FWL BHL: 1930' FNL 50' FWL New Wellbore Information: SHL: 1725 ' FNL 826' FWL FTP: 1505' FNL 100' FEL LTP: 1505'FNL 100' FWL BHL: 1505' FNL 50' FWL Attached are the revised C-102, directional information and drill plan data. Please let me know if you have any questions. Thank you.

NOI Attachments

- Procedure Description
- WelchB28Fd70H_DirectPlot_20240201091241.pdf
 - Welch_B_28_Federal_70H_New_C_102_20240201091241.pdf
 - WelchB28Fd70H_DrillPlan_20240201091241.pdf
 - WelchB28Fd70H_DirectPlan_20240201091241.pdf

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Operator

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

Operator Electronic Signature: SARAH CHAPMAN	Signed on: FEB 01, 2024 09:13 AM
Name: SPUR ENERGY PARTNERS LLC	
Title: Regulatory Director	
Street Address: 9655 KATY FREEWAY SUITE 500	
City: HOUSTON	State: TX
Phone: (281) 642-5503	
Email address: SCHAPMAN@SPURENERGY.COM	

Field

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: CODY LAYTON	BLM POC Title: Assistant Field Manager Lands & Minerals
BLM POC Phone: 5752345959	BLM POC Email Address: clayton@blm.gov
Disposition: Approved	Disposition Date: 02/08/2024
Signature: Cody R. Layton	

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

¹ API Number 30-015-49237	² Pool Code 96830	³ Pool Name ARTESIA; GLORIETA-YESO (O)
⁴ Property Code 332213	⁵ Property Name WELCH B 28 FED	⁶ Well Number 70H
⁷ OGRID NO. 328947	⁸ Operator Name SPUR ENERGY PARTNERS LLC.	⁹ Elevation 3659'

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	27	17S	28E		1725	NORTH	826	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
E	28	17S	28E		1505	NORTH	50	WEST	EDDY
¹² Dedicated Acres 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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 <u>GEODETIC DATA</u> NAD 83 GRID — NM EAST <u>SURFACE LOCATION (SL)</u> N: 657736.6 — E: 591603.6 LAT: 32.8080405° N LONG: 104.1697274° W <u>FIRST TAKE POINT (FTP)</u> 1505' FNL & 100' FEL — SEC 28 N: 657950.1 — E: 590680.1 LAT: 32.8086313° N LONG: 104.1727322° W <u>LAST TAKE POINT (LTP)</u> 1505' FNL & 100' FWL — SEC 28 N: 657796.3 — E: 585685.4 LAT: 32.8082283° N LONG: 104.1889896° W <u>BOTTOM HOLE (BH)</u> N: 657794.8 — E: 585635.5 LAT: 32.8082243° N LONG: 104.1891522° W <u>CORNER DATA</u> NAD 83 GRID — NM EAST A: FOUND BRASS CAP "1941" N: 654104.0 — E: 585547.5 B: FOUND BRASS CAP "1941" N: 656702.1 — E: 585573.1 C: FOUND BRASS CAP "1941" N: 659297.8 — E: 585602.6 D: FOUND BRASS CAP "1941" N: 659377.1 — E: 588198.9 E: FOUND BRASS CAP "1941" N: 659457.7 — E: 590794.9 F: FOUND BRASS CAP "1941" N: 659466.8 — E: 593406.4 G: FOUND BRASS CAP "1941" N: 659475.1 — E: 596017.9 H: FOUND BRASS CAP "1941" N: 656886.5 — E: 595997.7 I: FOUND BRASS CAP "1941" N: 654298.0 — E: 595977.3 J: FOUND BRASS CAP "1941" N: 654266.7 — E: 593360.1 K: FOUND BRASS CAP "1941" N: 654235.0 — E: 590741.9 L: FOUND BRASS CAP "1941" N: 654169.8 — E: 588139.7 M: FOUND BRASS CAP "1941" N: 656846.0 — E: 590769.0	¹⁷ OPERATOR CERTIFICATION <i>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> <i>Sarah Chapman</i> 02/01/2024 Signature Date SARAH CHAPMAN Printed Name SCHAPMAN@SPURENERGY.COM E-mail Address ¹⁸ SURVEYOR CERTIFICATION <i>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.</i> 10-28-2020 Date of Survey Signature and Seal of Professional Surveyor 19680 Certificate Number LS20100589
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Spur Energy Partners, LLC

Eddy County, NM (NAD 83 - NME)

Welch B 28 Fed

#70H

Wellbore #1

Plan: PERMIT

Standard Planning Report

21 November, 2020





Planning Report



Database:	WBDS_SQL_2	Local Co-ordinate Reference:	Well #70H
Company:	Spur Energy Partners, LLC	TVD Reference:	RKB = 20' @ 3679.00usft
Project:	Eddy County, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3679.00usft
Site:	Welch B 28 Fed	North Reference:	Grid
Well:	#70H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

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		Welch B 28 Fed			
Site Position:		Northing:	657,715.70 usft	Latitude:	32.8079833
From:	Map	Easting:	591,569.60 usft	Longitude:	-104.1698382
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.089 °

Well	#70H					
Well Position	+N/-S	20.90 usft	Northing:	657,736.60 usft	Latitude:	32.8080406
	+E/-W	34.00 usft	Easting:	591,603.60 usft	Longitude:	-104.1697274
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,659.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	11/19/20	6.935	60.360	47,834.10921841

Design	PERMIT			
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	268.24

Plan Survey Tool Program	Date	11/21/20		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	9,913.99	PERMIT (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	
500.53	4.01	7.38	500.36	6.96	0.90	2.00	2.00	0.00	7.378	
3,342.89	4.01	7.38	3,335.77	204.11	26.43	0.00	0.00	0.00	0.000	
4,354.81	60.00	268.24	4,173.35	227.99	-452.69	6.00	5.53	-9.80	-101.388	
4,554.81	60.00	268.24	4,273.35	222.66	-625.81	0.00	0.00	0.00	0.000	
4,866.16	91.14	268.24	4,350.00	213.50	-923.50	10.00	10.00	0.00	0.000	WELCH B 28 FED ;
9,864.21	91.14	268.24	4,250.99	59.74	-5,918.20	0.00	0.00	0.00	0.000	WELCH B 28 FED ;
9,914.14	91.14	268.24	4,250.00	58.20	-5,968.10	0.00	0.00	0.00	0.000	WELCH B 28 FED ;



Planning Report



Database:	WBDS_SQL_2	Local Co-ordinate Reference:	Well #70H
Company:	Spur Energy Partners, LLC	TVD Reference:	RKB = 20' @ 3679.00usft
Project:	Eddy County, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3679.00usft
Site:	Welch B 28 Fed	North Reference:	Grid
Well:	#70H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

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
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	7.38	399.98	1.73	0.22	-0.28	2.00	2.00	0.00
500.53	4.01	7.38	500.36	6.96	0.90	-1.11	2.00	2.00	0.00
600.00	4.01	7.38	599.59	13.86	1.79	-2.22	0.00	0.00	0.00
700.00	4.01	7.38	699.35	20.79	2.69	-3.33	0.00	0.00	0.00
800.00	4.01	7.38	799.10	27.73	3.59	-4.44	0.00	0.00	0.00
900.00	4.01	7.38	898.86	34.66	4.49	-5.55	0.00	0.00	0.00
1,000.00	4.01	7.38	998.61	41.60	5.39	-6.66	0.00	0.00	0.00
1,100.00	4.01	7.38	1,098.37	48.54	6.28	-7.77	0.00	0.00	0.00
1,200.00	4.01	7.38	1,198.12	55.47	7.18	-8.88	0.00	0.00	0.00
1,300.00	4.01	7.38	1,297.88	62.41	8.08	-9.99	0.00	0.00	0.00
1,400.00	4.01	7.38	1,397.63	69.35	8.98	-11.10	0.00	0.00	0.00
1,500.00	4.01	7.38	1,497.39	76.28	9.88	-12.22	0.00	0.00	0.00
1,600.00	4.01	7.38	1,597.14	83.22	10.78	-13.33	0.00	0.00	0.00
1,700.00	4.01	7.38	1,696.90	90.15	11.67	-14.44	0.00	0.00	0.00
1,800.00	4.01	7.38	1,796.65	97.09	12.57	-15.55	0.00	0.00	0.00
1,900.00	4.01	7.38	1,896.41	104.03	13.47	-16.66	0.00	0.00	0.00
2,000.00	4.01	7.38	1,996.16	110.96	14.37	-17.77	0.00	0.00	0.00
2,100.00	4.01	7.38	2,095.92	117.90	15.27	-18.88	0.00	0.00	0.00
2,200.00	4.01	7.38	2,195.67	124.83	16.16	-19.99	0.00	0.00	0.00
2,300.00	4.01	7.38	2,295.43	131.77	17.06	-21.10	0.00	0.00	0.00
2,400.00	4.01	7.38	2,395.18	138.71	17.96	-22.21	0.00	0.00	0.00
2,500.00	4.01	7.38	2,494.94	145.64	18.86	-23.32	0.00	0.00	0.00
2,600.00	4.01	7.38	2,594.70	152.58	19.76	-24.43	0.00	0.00	0.00
2,700.00	4.01	7.38	2,694.45	159.51	20.65	-25.54	0.00	0.00	0.00
2,800.00	4.01	7.38	2,794.21	166.45	21.55	-26.65	0.00	0.00	0.00
2,900.00	4.01	7.38	2,893.96	173.39	22.45	-27.76	0.00	0.00	0.00
3,000.00	4.01	7.38	2,993.72	180.32	23.35	-28.88	0.00	0.00	0.00
3,100.00	4.01	7.38	3,093.47	187.26	24.25	-29.99	0.00	0.00	0.00
3,200.00	4.01	7.38	3,193.23	194.19	25.14	-31.10	0.00	0.00	0.00
3,300.00	4.01	7.38	3,292.98	201.13	26.04	-32.21	0.00	0.00	0.00
3,342.89	4.01	7.38	3,335.77	204.11	26.43	-32.68	0.00	0.00	0.00
3,350.00	3.95	1.29	3,342.86	204.60	26.47	-32.74	6.00	-0.87	-85.58
3,400.00	4.73	322.11	3,392.73	207.95	25.24	-31.61	6.00	1.56	-78.37
3,450.00	6.87	300.77	3,442.47	211.10	21.40	-27.88	6.00	4.27	-42.69
3,500.00	9.48	290.27	3,491.96	214.06	14.97	-21.54	6.00	5.23	-21.00
3,550.00	12.27	284.38	3,541.06	216.80	5.96	-12.61	6.00	5.58	-11.77
3,600.00	15.14	280.68	3,589.63	219.33	-5.61	-1.13	6.00	5.74	-7.41
3,650.00	18.05	278.13	3,637.55	221.64	-19.70	12.88	6.00	5.82	-5.08
3,700.00	20.99	276.28	3,684.67	223.72	-36.27	29.38	6.00	5.87	-3.71
3,750.00	23.94	274.87	3,730.87	225.56	-55.28	48.33	6.00	5.90	-2.83
3,800.00	26.90	273.75	3,776.02	227.16	-76.68	69.67	6.00	5.92	-2.24
3,850.00	29.87	272.84	3,820.01	228.51	-100.41	93.35	6.00	5.94	-1.82
3,900.00	32.84	272.07	3,862.70	229.62	-126.40	119.29	6.00	5.95	-1.52
3,950.00	35.82	271.43	3,903.98	230.48	-154.59	147.44	6.00	5.96	-1.30
4,000.00	38.80	270.87	3,943.75	231.08	-184.88	177.70	6.00	5.96	-1.12
4,050.00	41.78	270.37	3,981.88	231.42	-217.21	210.00	6.00	5.97	-0.98
4,100.00	44.77	269.94	4,018.28	231.51	-251.49	244.26	6.00	5.97	-0.88
4,150.00	47.76	269.54	4,052.84	231.34	-287.61	280.37	6.00	5.97	-0.79
4,200.00	50.74	269.18	4,085.48	230.92	-325.48	318.23	6.00	5.98	-0.72
4,250.00	53.73	268.85	4,116.09	230.24	-365.00	357.75	6.00	5.98	-0.66



Planning Report



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Design:	PERMIT		

Planned Survey										
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4,300.00	56.72	268.55	4,144.60	229.31	-406.05	398.82	6.00	5.98	-0.61	
4,354.81	60.00	268.24	4,173.35	227.99	-452.69	445.47	6.00	5.98	-0.57	
4,400.00	60.00	268.24	4,195.95	226.79	-491.81	484.61	0.00	0.00	0.00	
4,500.00	60.00	268.24	4,245.95	224.12	-578.37	571.21	0.00	0.00	0.00	
4,554.81	60.00	268.24	4,273.35	222.66	-625.81	618.68	0.00	0.00	0.00	
4,600.00	64.52	268.24	4,294.38	221.43	-665.78	658.67	10.00	10.00	0.00	
4,650.00	69.52	268.24	4,313.90	220.02	-711.78	704.68	10.00	10.00	0.00	
4,700.00	74.52	268.24	4,329.33	218.56	-759.30	752.23	10.00	10.00	0.00	
4,750.00	79.52	268.24	4,340.55	217.06	-807.98	800.93	10.00	10.00	0.00	
4,800.00	84.52	268.24	4,347.49	215.53	-857.46	850.43	10.00	10.00	0.00	
4,850.00	89.52	268.24	4,350.09	214.00	-907.35	900.35	10.00	10.00	0.00	
4,866.16	91.14	268.24	4,350.00	213.50	-923.50	916.51	10.00	10.00	0.00	
4,900.00	91.14	268.24	4,349.33	212.46	-957.32	950.34	0.00	0.00	0.00	
5,000.00	91.14	268.24	4,347.35	209.38	-1,057.25	1,050.32	0.00	0.00	0.00	
5,100.00	91.14	268.24	4,345.37	206.31	-1,157.19	1,150.30	0.00	0.00	0.00	
5,200.00	91.14	268.24	4,343.39	203.23	-1,257.12	1,250.28	0.00	0.00	0.00	
5,300.00	91.14	268.24	4,341.41	200.15	-1,357.05	1,350.26	0.00	0.00	0.00	
5,400.00	91.14	268.24	4,339.42	197.08	-1,456.98	1,450.24	0.00	0.00	0.00	
5,500.00	91.14	268.24	4,337.44	194.00	-1,556.92	1,550.22	0.00	0.00	0.00	
5,600.00	91.14	268.24	4,335.46	190.92	-1,656.85	1,650.21	0.00	0.00	0.00	
5,700.00	91.14	268.24	4,333.48	187.85	-1,756.78	1,750.19	0.00	0.00	0.00	
5,800.00	91.14	268.24	4,331.50	184.77	-1,856.72	1,850.17	0.00	0.00	0.00	
5,900.00	91.14	268.24	4,329.52	181.69	-1,956.65	1,950.15	0.00	0.00	0.00	
6,000.00	91.14	268.24	4,327.54	178.62	-2,056.58	2,050.13	0.00	0.00	0.00	
6,100.00	91.14	268.24	4,325.56	175.54	-2,156.52	2,150.11	0.00	0.00	0.00	
6,200.00	91.14	268.24	4,323.58	172.46	-2,256.45	2,250.09	0.00	0.00	0.00	
6,300.00	91.14	268.24	4,321.60	169.39	-2,356.38	2,350.07	0.00	0.00	0.00	
6,400.00	91.14	268.24	4,319.61	166.31	-2,456.32	2,450.05	0.00	0.00	0.00	
6,500.00	91.14	268.24	4,317.63	163.24	-2,556.25	2,550.03	0.00	0.00	0.00	
6,600.00	91.14	268.24	4,315.65	160.16	-2,656.18	2,650.01	0.00	0.00	0.00	
6,700.00	91.14	268.24	4,313.67	157.08	-2,756.11	2,749.99	0.00	0.00	0.00	
6,800.00	91.14	268.24	4,311.69	154.01	-2,856.05	2,849.97	0.00	0.00	0.00	
6,900.00	91.14	268.24	4,309.71	150.93	-2,955.98	2,949.95	0.00	0.00	0.00	
7,000.00	91.14	268.24	4,307.73	147.85	-3,055.91	3,049.93	0.00	0.00	0.00	
7,100.00	91.14	268.24	4,305.75	144.78	-3,155.85	3,149.91	0.00	0.00	0.00	
7,200.00	91.14	268.24	4,303.77	141.70	-3,255.78	3,249.89	0.00	0.00	0.00	
7,300.00	91.14	268.24	4,301.79	138.62	-3,355.71	3,349.87	0.00	0.00	0.00	
7,400.00	91.14	268.24	4,299.80	135.55	-3,455.65	3,449.85	0.00	0.00	0.00	
7,500.00	91.14	268.24	4,297.82	132.47	-3,555.58	3,549.83	0.00	0.00	0.00	
7,600.00	91.14	268.24	4,295.84	129.39	-3,655.51	3,649.81	0.00	0.00	0.00	
7,700.00	91.14	268.24	4,293.86	126.32	-3,755.44	3,749.79	0.00	0.00	0.00	
7,800.00	91.14	268.24	4,291.88	123.24	-3,855.38	3,849.77	0.00	0.00	0.00	
7,900.00	91.14	268.24	4,289.90	120.16	-3,955.31	3,949.75	0.00	0.00	0.00	
8,000.00	91.14	268.24	4,287.92	117.09	-4,055.24	4,049.73	0.00	0.00	0.00	
8,100.00	91.14	268.24	4,285.94	114.01	-4,155.18	4,149.71	0.00	0.00	0.00	
8,200.00	91.14	268.24	4,283.96	110.94	-4,255.11	4,249.70	0.00	0.00	0.00	
8,300.00	91.14	268.24	4,281.98	107.86	-4,355.04	4,349.68	0.00	0.00	0.00	
8,400.00	91.14	268.24	4,280.00	104.78	-4,454.98	4,449.66	0.00	0.00	0.00	
8,500.00	91.14	268.24	4,278.01	101.71	-4,554.91	4,549.64	0.00	0.00	0.00	
8,600.00	91.14	268.24	4,276.03	98.63	-4,654.84	4,649.62	0.00	0.00	0.00	
8,700.00	91.14	268.24	4,274.05	95.55	-4,754.77	4,749.60	0.00	0.00	0.00	
8,800.00	91.14	268.24	4,272.07	92.48	-4,854.71	4,849.58	0.00	0.00	0.00	
8,900.00	91.14	268.24	4,270.09	89.40	-4,954.64	4,949.56	0.00	0.00	0.00	
9,000.00	91.14	268.24	4,268.11	86.32	-5,054.57	5,049.54	0.00	0.00	0.00	



Planning Report



Database:	WBDS_SQL_2	Local Co-ordinate Reference:	Well #70H
Company:	Spur Energy Partners, LLC	TVD Reference:	RKB = 20' @ 3679.00usft
Project:	Eddy County, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3679.00usft
Site:	Welch B 28 Fed	North Reference:	Grid
Well:	#70H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

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)	
9,100.00	91.14	268.24	4,266.13	83.25	-5,154.51	5,149.52	0.00	0.00	0.00	
9,200.00	91.14	268.24	4,264.15	80.17	-5,254.44	5,249.50	0.00	0.00	0.00	
9,300.00	91.14	268.24	4,262.17	77.09	-5,354.37	5,349.48	0.00	0.00	0.00	
9,400.00	91.14	268.24	4,260.19	74.02	-5,454.31	5,449.46	0.00	0.00	0.00	
9,500.00	91.14	268.24	4,258.20	70.94	-5,554.24	5,549.44	0.00	0.00	0.00	
9,600.00	91.14	268.24	4,256.22	67.86	-5,654.17	5,649.42	0.00	0.00	0.00	
9,700.00	91.14	268.24	4,254.24	64.79	-5,754.11	5,749.40	0.00	0.00	0.00	
9,800.00	91.14	268.24	4,252.26	61.71	-5,854.04	5,849.38	0.00	0.00	0.00	
9,864.21	91.14	268.24	4,250.99	59.74	-5,918.20	5,913.57	0.00	0.00	0.00	
9,900.00	91.14	268.24	4,250.28	58.63	-5,953.97	5,949.36	0.00	0.00	0.00	
9,914.14	91.14	268.24	4,250.00	58.20	-5,968.10	5,963.50	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
WELCH B 28 FED #7 - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	657,736.60	591,603.60	32.8080406	-104.1697274	
WELCH B 28 FED #7 - plan hits target center - Point	0.00	0.00	3,335.77	204.11	26.43	657,940.71	591,630.03	32.8086015	-104.1696403	
WELCH B 28 FED #7 - plan hits target center - Point	0.00	0.00	4,250.00	58.20	-5,968.10	657,794.80	585,635.50	32.8082244	-104.1891520	
WELCH B 28 FED #7 - plan misses target center by 0.04usft at 9864.21usft MD (4250.99 TVD, 59.74 N, -5918.20 E) - Point	0.00	0.00	4,250.99	59.70	-5,918.20	657,796.30	585,685.40	32.8082284	-104.1889896	
WELCH B 28 FED #7 - plan hits target center - Point	0.00	0.00	4,350.00	213.50	-923.50	657,950.10	590,680.10	32.8086313	-104.1727321	



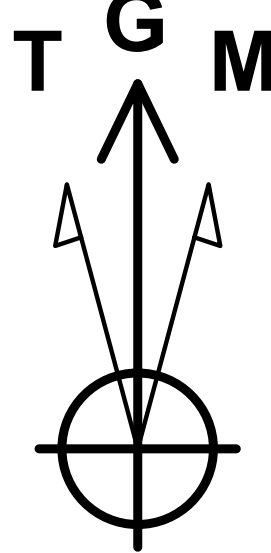
Company: Spur Energy Partners, LLC
Project: Eddy County, NM (NAD 83 - NME)
Site: Welch B 28 Fed
Well: #70H
Wellbore: Wellbore #1
Rig:
Design: PERMIT / 11:26, November 21 2020

WELL DETAILS: #70H					
RKB = 20' @ 3679.00usft					
			3659.00		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	657736.60	591603.60	32.8080406	-104.1697274

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	500.53	4.01	7.38	500.36	6.96	0.90	2.00	-1.11
4	3342.89	4.01	7.38	3335.77	204.11	26.43	0.00	-32.68
5	4354.81	60.00	268.24	4173.35	227.99	-452.69	6.00	445.47
6	4554.81	60.00	268.24	4273.35	222.66	-625.81	0.00	618.68
7	4866.16	91.14	268.24	4350.00	213.50	-923.50	10.00	916.51
8	9864.21	91.14	268.24	4250.99	59.74	-5918.20	0.00	5913.57
9	9914.14	91.14	268.24	4250.00	58.20	-5968.10	0.00	5963.50

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

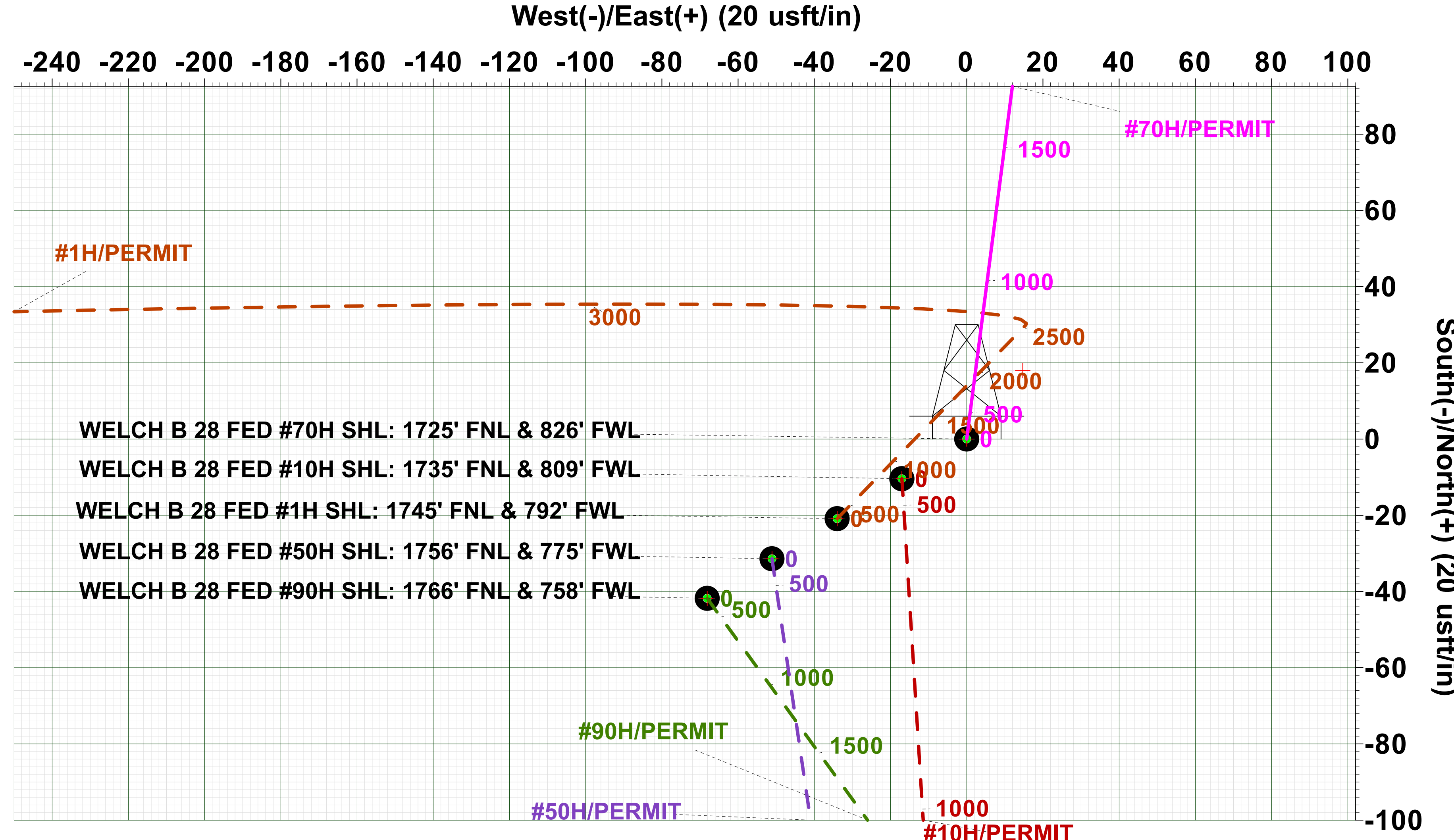
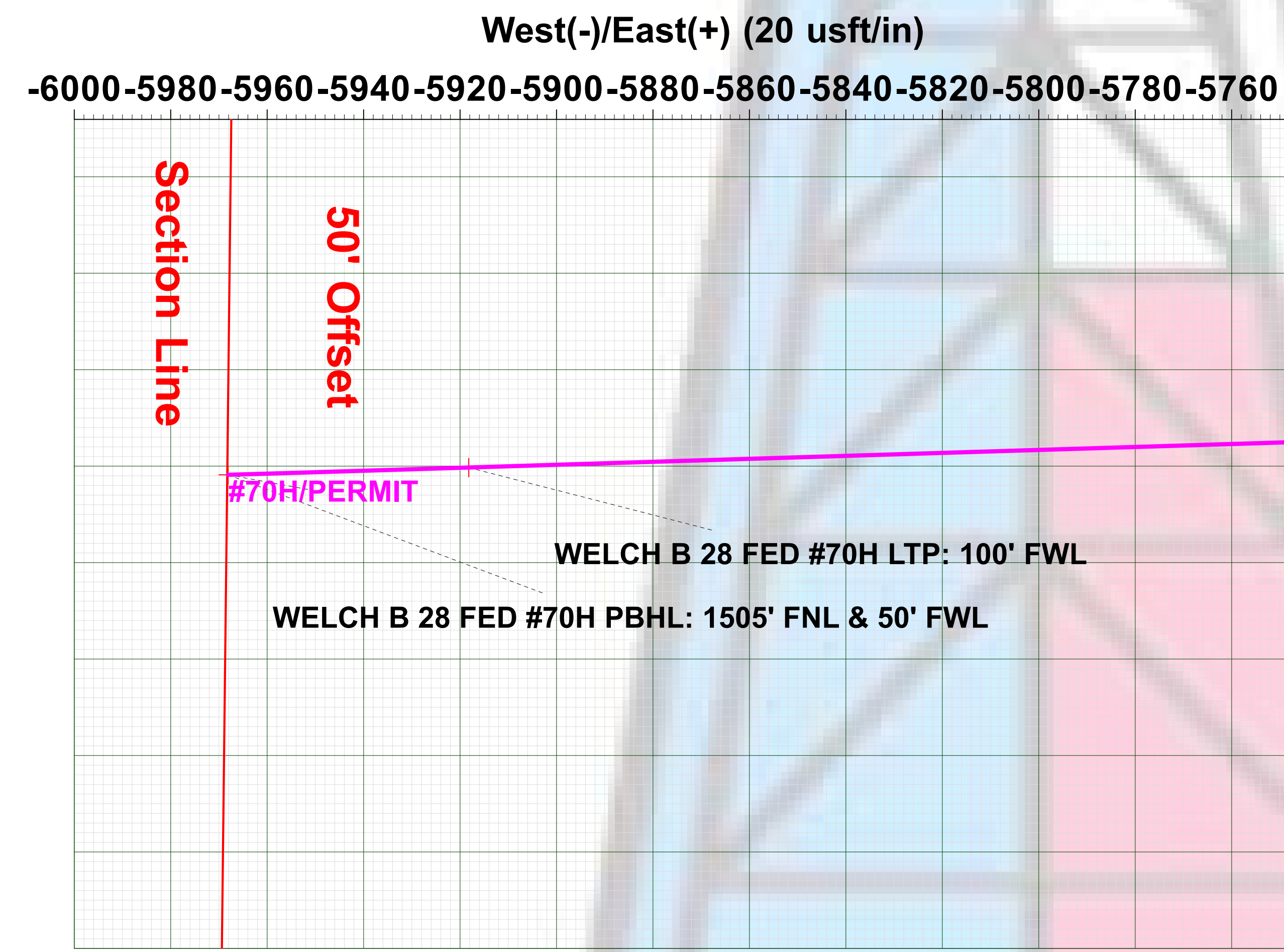
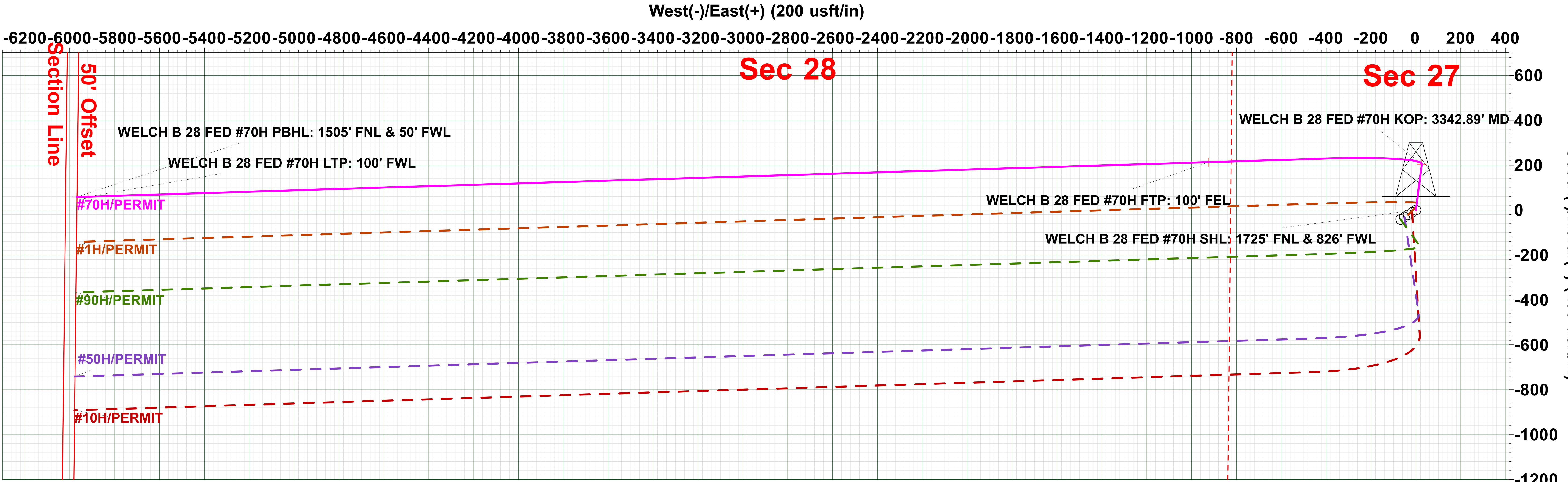
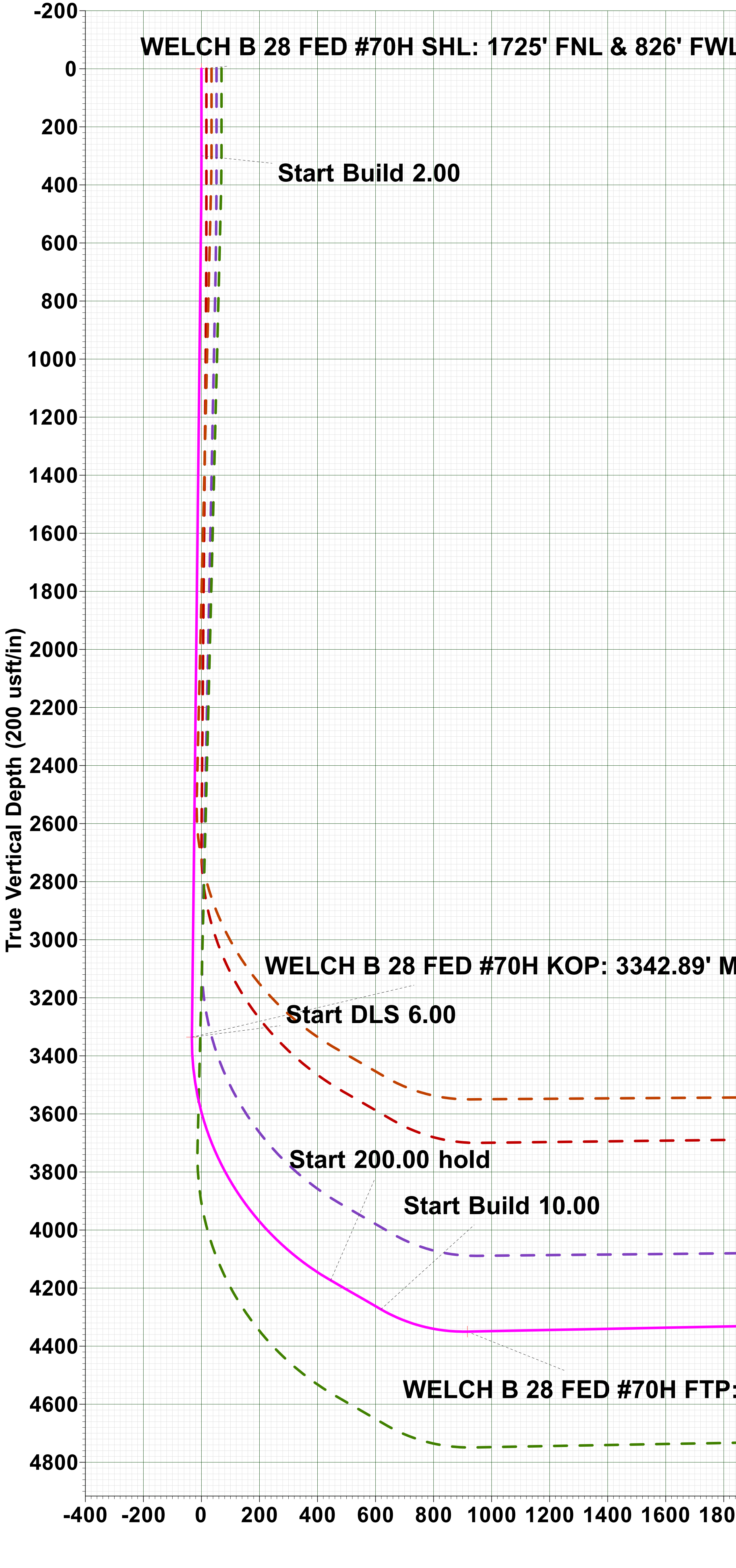


Azimuths to Grid North
True North: -0.09°
Magnetic North: 6.85°

Magnetic Field
Strength: 47834.1nT
Dip Angle: 60.36°
Date: 11/19/2020
Model: IGRF2020

CORRECTION REFERENCE DATA:

To convert a Magnetic Direction to a Grid Direction, Add 6.847°
To convert a True Direction to a Grid Direction, Subtract 0.089°
To convert a Magnetic Direction to a True Direction, Add 6.935° East
Magnetic Declination: 6.935°
Grid Convergence: 0.089° West
Magnetic Dip Angle: 60.360°
Magnetic Field Strength: 47834.10921841nT



DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
WELCH B 28 FED #70H SHL: 1725' FNL & 826' FWL	0.00	0.00	0.00	657736.60	591603.60	32.8080406	-104.1697274
WELCH B 28 FED #70H KOP: 3342.89' MD	3335.77	204.11	26.43	657940.71	591630.03	32.8086015	-104.1696404
WELCH B 28 FED #70H PBHL: 1505' FNL & 50' FWL	4250.00	58.20	-5968.10	657794.80	585635.50	32.8082244	-104.1891520
WELCH B 28 FED #70H LTP: 100' FWL	4250.99	59.70	-5918.20	657796.30	585685.40	32.8082283	-104.1889896
WELCH B 28 FED #70H FTP: 100' FEL	4350.00	213.50	-923.50	657950.10	590680.10	32.8086313	-104.1727321



Plan: PERMIT (#70H/Wellbore #1)

Created By: Matthew May Date: 11:26, November 21 2020

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

Spur Energy Partners LLC – Welch B 28 Fed #70H

1. Geologic Formations

Formation	TVD - RKB	Expected Fluids
Top San Andres	1975'	Water Flow
Top Lower San Andres	2875'	Oil/Gas
Top Glorieta	3425'	Oil/Gas
Top Yeso	3535'	Oil/Gas
Base Yeso	5525'	Oil/Gas

*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

Primary Plan:

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
12.25	0	1200	9.625	36	J-55	BTC	1.125	1.2	1.4	1.4
8.75	0	4600	7	32	L-80	BK-HT	1.125	1.2	1.4	1.4
8.75	4600	9914	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 – Welch B 28 Fed #70H

	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?	

Spur Energy Partners LLC – Welch B 28 Fed #70H

3. Cementing Program

Primary Plan:

Casing String	Top (ft)	Bottom (ft)	% Excess
Surface (Lead)	0	950	100%
Surface (Tail)	950	1200	165%
Production (Lead)	0	3600	0%
Production (Tail)	3600	9914	50%

Casing String	# Sks	Wt. (lb/gal)	Yld (ft3/sack)	H2O (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)	123	13.2	1.84	9.92	6:59	Clas C Premium Plus Cement
Production (Lead)	221	11.8	2.54	15.29	N/A	Clas C Premium Plus Cement
Production (Tail)	1240	13.2	1.81	9.81	N/A	Clas C Premium Plus Cement

Spur Energy Partners LLC – Welch B 28 Fed #70H

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
17.5" Hole	11"	3M	Annular	✓	70% of working pressure
		3M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram	✓	
			Double Ram		
			Other*		
8.75" Hole	11"	3M	Annular	✓	70% of working pressure
		3M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram	✓	
			Double Ram		
			Other*		

Condition	Specify what type and where?
BH Pressure at deepest TVD	2014 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	115°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 – Welch B 28 Fed #70H**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

5. 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	1200	Water-Based Mud	8.6-8.9	32-36	N/C
1200	9914	Water-Based Mud	8.6-8.9	32-36	N/C

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

Spur Energy Partners LLC – Welch B 28 Fed #70H

6. Logging and Testing Procedures

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

7. 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: 912 bbls.

Attachments

- ☒ Directional Plan
☒ H₂S Contingency Plan
☒ Akita 57 Attachments
☒ BOP Schematics

9. 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

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 312640

CONDITIONS

Operator: Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024	OGRID: 328947
	Action Number: 312640
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Prior to the submission of the C-104RT, there was a C-103 NOI submitted for approval. The C-103 NOI was not approved or rejected; however, the work requested in the C-103 NOI was performed and completed without NMOCD approval.	7/19/2024