

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

Form C-101
August 1, 2011

Permit 404042

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 30-015-57662
4. Property Code 338355	5. Property Name STALEY A STATE COM	6. Well No. 110H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
D	29	17S	28E		625	N	690	W	Eddy

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
D	30	17S	28E	1	865	N	50	W	Eddy

9. Pool Information

RED LAKE:QUEEN-GRAYBURG-SA	51300
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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 3585
16. Multiple N	17. Proposed Depth 8123	18. Formation San Andres	19. Contractor	20. Spud Date 5/6/2026
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

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

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	12.25	9.625	36	950	214	0
Prod	8.75	7	32	2700	1381	0
Prod	8.75	5.5	20	8123	1381	0

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5	5000	SHAFFER

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable. Signature:	OIL CONSERVATION DIVISION
Printed Name: Electronically filed by Sarah Chapman	Approved By: Jeffrey Harrison
Title: Regulatory Director	Title: Petroleum Specialist III
Email Address: schapman@spurenergy.com	Approved Date: 1/13/2026 Expiration Date: 1/13/2028
Date: 11/25/2025 Phone: 832-930-8613	Conditions of Approval Attached

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024	
		Submittal Type:	☒ Initial Submittal
			☐ Amended Report
			☐ As Drilled

WELL LOCATION INFORMATION

API Number 30-015-57662	Pool Code 51300	Pool Name RED LAKE; QUEEN-GRAYBURG-SA
Property Code 338355	Property Name STALEY A STATE COM	Well Number 110H
OGRID No. 328947	Operator Name SPUR ENERGY PARTNERS LLC.	Ground Level Elevation 3585'
Surface Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal		Mineral Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal

Surface Location

UL D	Section 29	Township 17S	Range 28E	Lot	Ft. from N/S 625 FNL	Ft. from E/W 690 FWL	Latitude 32.8106839°N	Longitude 104.2040580°W	County EDDY
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Bottom Hole Location

UL D	Section 30	Township 17S	Range 28E	Lot 1	Ft. from N/S 865 FNL	Ft. from E/W 50 FWL	Latitude 32.8099281°N	Longitude 104.2234994°W	County EDDY
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Dedicated Acres 83.14 123.14	Infill or Defining Well INFILL	Defining Well API	Overlapping Spacing Unit (Y/N) Y	Consolidation Code F & C
Order Numbers. PENDING			Well setbacks are under Common Ownership: ☒ Yes ☐ No	

Kick Off Point (KOP)

UL D	Section 29	Township 17S	Range 28E	Lot	Ft. from N/S 775 FNL	Ft. from E/W 768 FWL	Latitude 32.8102702°N	Longitude 104.2038074°W	County EDDY
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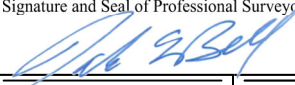
First Take Point (FTP)

UL A	Section 30	Township 17S	Range 28E	Lot	Ft. from N/S 865 FNL	Ft. from E/W 100 FEL	Latitude 32.8100287°N	Longitude 104.2066355°W	County EDDY
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Last Take Point (LTP)

UL D	Section 30	Township 17S	Range 28E	Lot 1	Ft. from N/S 865 FNL	Ft. from E/W 100 FWL	Latitude 32.8099290°N	Longitude 104.2233367°W	County EDDY
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Unitized Area or Area of Uniform Interest Y	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation: 3585' GL
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OPERATOR CERTIFICATIONS <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> <i>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</i> Sarah Chapman 11/25/2025		SURVEYOR CERTIFICATIONS <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me under my supervision, and that the same is true and correct to the best of my belief.</i> 	
Signature SARAH CHAPMAN		Signature and Seal of Professional Surveyor 	
Printed Name SCHAPMAN@SPURENERGY.COM		Certificate Number 14400	Date of Survey 10/22/2025
Email Address			

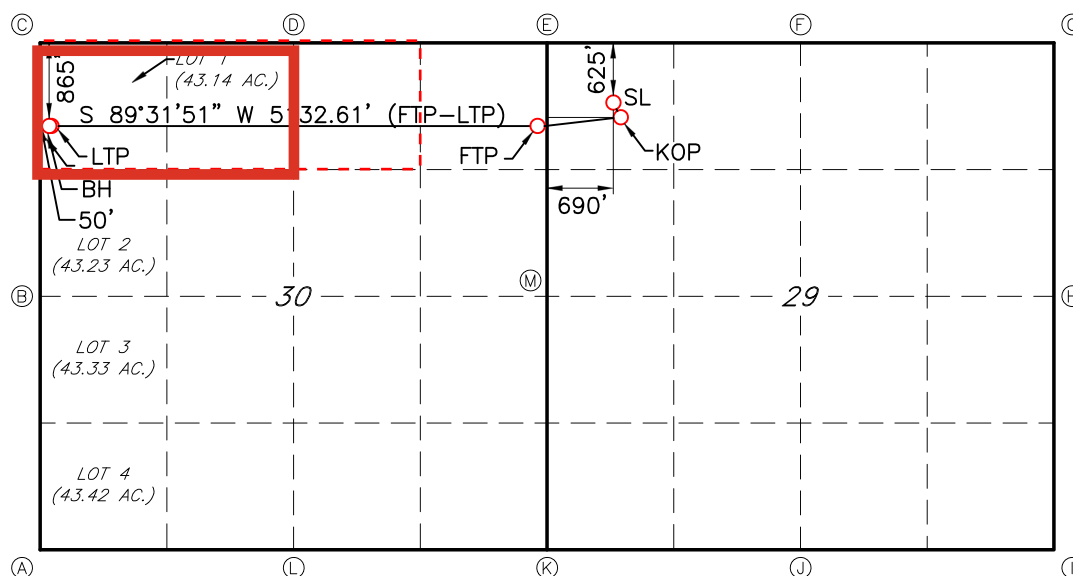
Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is a directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

STALEY A STATE COM #110H



GEODETIC DATA

GEODETTIC DATA
NAD 83 GRID - NM EAST

SURFACE LOCATION (SL)

SURFACE LOCATION (SL)
625' FNL & 690' FWL SEC.29
 N: 658683.7 - E:581054.7

LAT: 32.8106839° N
LONG: 104.2040580° W

KICK OFF POINT (KOP)

775' FNL & 768' FWL SEC 29
N: 658533.3 - E: 581131.9

N: 32.8102702° N
LONG: 104.2038074° W

FIRST TAKE POINT (FTP)

865' FNL & 100' FEL SEC 30
N: 658444.3 - E: 580263.1

LAT: 32.8100287° N
LONG: 104.2066355° W

LAST TAKE POINT (LTP)

865' FNL & 100' FWL SEC.30
N: 658402.3 - E: 575132.0

LAT: 32.8099290° N
LONG: 104.2233367° W

BOTTOM HOLE (BH)

865' FNL & 50' FWL SEC.30
N: 658401.9 - E: 575082.0

LAT: 32.8099281° N
LONG: 104.2234994° W

CORNER DATA

CORNER DATA
NAD 83 GRID - NM EAST

A: FOUND BRASS CAP "1941"
N: 653983.4 — E: 575058.5

B: FOUND BRASS CAP "1941"
N: 656625.0 - E: 575043.2

C: FOUND BRASS CAP "1941"
N: 659266.3 - E: 575026.6

D: FOUND BRASS CAP "1941"
N: 659287.7 - E: 577748.5

E: FOUND BRASS CAP "1941"
N: 659309.9 - E: 580369.6

F: FOUND BRASS CAP "1941"
N: 659304.4 - E: 582986.4

G: FOUND BRASS CAP "1941"
N: 659297.8 - E: 585602.6

H: FOUND BRASS CAP "1941"
N: 656702.1 - E: 585573.1

I: FOUND BRASS CAP "1941"
N: 654104.0 - F: 585547.5

J: FOUND BRASS CAP "1941"
N: 6540608 - F: 5829419

K: FOUND BRASS CAP "1941"
N: 654017.3 - F: 580331.9

L: FOUND BRASS CAP "1941"
N: 653999.6 - E: 577752.7

M: FOUND BRASS CAP "1941"
N: 656663.6 - F: 580349.6



JOB #: LS25060551D1

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	Submittal Type:	☒ Initial Submittal		
		☐ Amended Report		
		☐ As Drilled		

WELL LOCATION INFORMATION

API Number 30-01557662	Pool Code 97253	Pool Name RED LAKE; SAN ANDRES
Property Code 338355	Property Name STALEY A STATE COM	Well Number 110H
OGRID No. 328947	Operator Name SPUR ENERGY PARTNERS LLC.	Ground Level Elevation 3585'
Surface Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal		Mineral Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal

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Dedicated Acres 40 80	Infill or Defining Well INFILL	Defining Well API N/A	Overlapping Spacing Unit (Y/N) Y	Consolidation Code F & C
Order Numbers. PENDING			Well setbacks are under Common Ownership: ☒ Yes ☐ No	

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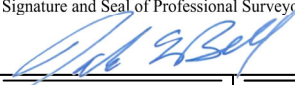
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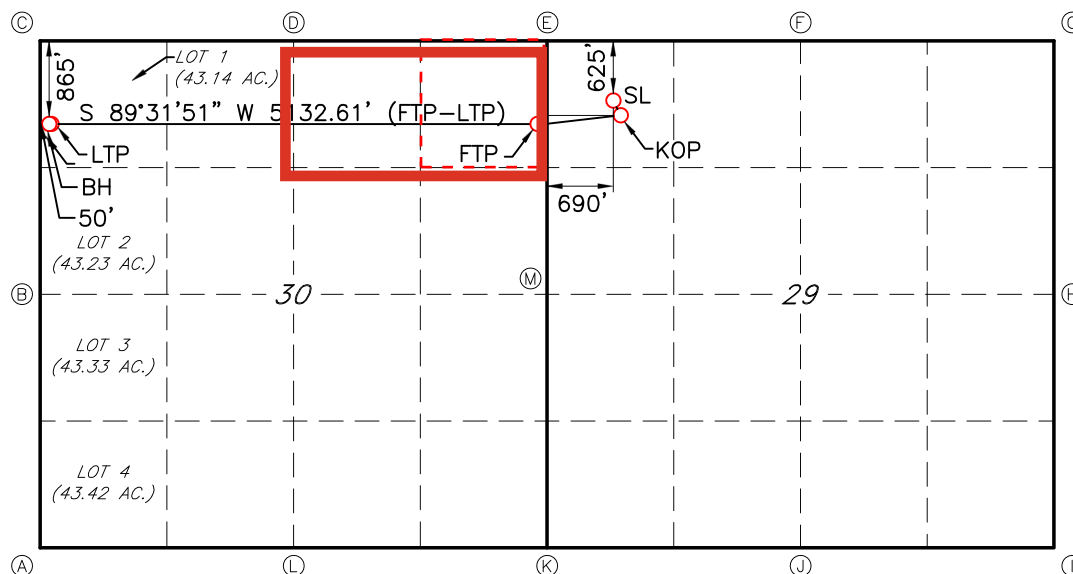
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STALEY A STATE COM #110H



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J: FOUND BRASS CAP "1941"
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K: FOUND BRASS CAP "1941"
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L: FOUND BRASS CAP "1941"
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JOB #: LS25060551D1

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Phone: (505) 476-3441

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

Form APD Conditions

Permit 404042

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: Spur Energy Partners LLC [328947] 9655 Katy Freeway Houston, TX 77024	API Number: 30-015-57662
	Well: STALEY A STATE COM #110H

OCD Reviewer	Condition
jeffrey.harrison	Cement is required to circulate on both surface and intermediate1 strings of casing.
jeffrey.harrison	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.
jeffrey.harrison	File As Drilled C-102 and a directional Survey with C-104 completion packet.
jeffrey.harrison	Notify the OCD 24 hours prior to casing & cement.
jeffrey.harrison	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.
jeffrey.harrison	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.
jeffrey.harrison	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.
jeffrey.harrison	No additives containing PFAS chemicals will be added to the drilling fluids or completion fluids used during drilling, completions, or recompletions operations.



SPUR ENERGY PARTNERS, LLC

**EDDY COUNTY, NM (NAD 83 - NME)
STALEY A STATE COM
110H**

**OH
PERMIT**

Anticollision Report

21 November, 2025



**PROTOTYPE
WELL PLANNING**
WELL PLANNED. WELL EXECUTED.



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Reference	PERMIT
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD Interval 50.00usft
Depth Range:	Unlimited
Results Limited by:	Maximum centre distance of 1,900.00usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program		Date	11/21/2025		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	8,122.75	PERMIT (OH)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
STALEY 30 STATE COM						
10H - OH - SURVEYS	1,777.47	1,767.18	175.85	162.49	13.162	CC, ES
10H - OH - SURVEYS	8,122.75	9,190.55	1,032.03	934.69	10.602	SF
20H - OH - SURVEYS	1,341.30	1,352.58	47.54	38.05	5.010	CC, ES, SF
70H - OH - SURVEYS	1,671.10	1,665.42	111.54	99.32	9.126	CC, ES, SF
OFFSET: ELVIS STATE COM 29A 001H - OH - OH	2,898.32	9,368.00	1,282.73	1,185.84	13.239	CC
OFFSET: ELVIS STATE COM 29A 001H - OH - OH	2,900.00	9,368.00	1,282.74	1,185.82	13.236	ES
OFFSET: ELVIS STATE COM 29A 001H - OH - OH	2,950.00	9,368.00	1,285.69	1,188.34	13.207	SF
OFFSET: ELVIS STATE COM 29A 002H - OH - OH	2,908.85	9,776.00	1,604.96	1,541.65	25.352	CC, ES
OFFSET: ELVIS STATE COM 29A 002H - OH - OH	2,950.00	9,776.00	1,606.99	1,543.46	25.294	SF
OFFSET: ELVIS STATE COM 29A 003H - OH - OH	2,899.61	9,385.00	1,168.71	1,110.03	19.916	CC
OFFSET: ELVIS STATE COM 29A 003H - OH - OH	2,900.00	9,385.00	1,168.71	1,110.03	19.915	ES, SF
OFFSET: MAPLE STATE 13 - OH - OH	7,885.63	2,395.82	110.11	37.28	1.512	CC, ES, SF
OFFSET: MAPLE STATE 4 - OH - OH	7,203.70	2,403.79	99.00	33.72	1.517	CC, ES, SF
OFFSET: STATE '30' COM 1 - OH - OH	3,678.70	2,411.99	202.17	132.23	2.890	CC, ES, SF
TAYLORCREST 25 FEDERAL						
10H - Wellbore #1 - SURVEYS	7,909.90	2,396.30	301.62	226.85	4.034	CC, ES, SF
20H - Wellbore #1 - SURVEYS	7,702.75	2,442.29	376.29	305.86	5.342	CC, ES, SF
70H - Wellbore #1 - SURVEYS	7,683.18	2,485.96	98.64	27.99	1.396	Level 3, CC, ES, SF

Offset Design: STALEY 30 STATE COM - 10H - OH - SURVEYS													
												Offset Site Error:	0.00 usft
												Offset Well Error:	0.00 usft
Survey Program:	7-MWD+IGRF, 1024-MWD+IFR1+MS												
Reference	Offset	Semi Major Axis	Rule Assigned:										
Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Offset Wellbore Centre	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning				
0.00	0.00	9.03	0.03	0.00	0.00	163.84	-320.30	92.80	333.47				
50.00	50.00	59.91	50.91	0.92	0.09	163.81	-320.17	92.98	333.40	332.39	1.01	330.126	
100.00	100.00	110.77	101.77	0.92	0.17	163.71	-319.82	93.47	333.20	332.11	1.09	305.065	
150.00	150.00	161.35	152.34	1.23	0.30	163.55	-319.25	94.26	332.88	331.36	1.53	218.187	
200.00	200.00	211.67	202.64	1.53	0.48	163.38	-318.61	95.09	332.51	330.50	2.01	165.621	
241.43	241.43	250.46	241.43	1.70	0.62	163.25	-318.21	95.77	332.31	329.98	2.32	143.029	
250.00	250.00	258.34	249.30	1.74	0.65	163.22	-318.17	95.92	332.32	329.93	2.39	139.159	
300.00	300.00	304.28	295.24	1.95	0.81	163.07	-318.27	96.90	332.73	329.96	2.77	120.310	
350.00	350.00	351.97	342.91	2.22	0.98	162.92	-318.87	98.08	333.26	330.06	3.20	104.153	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
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Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - 10H - OH - SURVEYS

Survey Program: Reference		7-MWD+IGRF		Offset		1024-MWD+IFR1+MS		Semi Major Axis		Rule Assigned:		Offset Well Error:		0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
400.00	399.98	402.11	393.02	2.51	1.16	162.78	-319.59	99.35	333.03	329.37	3.66	90.925		
450.00	449.93	452.48	443.37	2.75	1.34	162.67	-320.27	100.63	331.90	327.82	4.08	81.356		
500.00	499.84	502.00	492.88	2.99	1.52	162.60	-320.89	101.81	329.84	325.35	4.49	73.381		
550.00	549.68	550.68	541.54	3.22	1.69	162.54	-321.59	103.08	327.06	322.16	4.90	66.800		
600.00	599.45	598.72	589.54	3.45	1.87	162.47	-322.51	104.64	323.73	318.44	5.30	61.132		
650.00	649.13	647.59	638.37	3.67	2.05	162.39	-323.60	106.41	319.75	314.05	5.70	56.143		
700.00	698.70	696.95	687.68	3.90	2.23	162.33	-324.80	108.31	315.04	308.94	6.10	51.664		
750.00	748.15	746.87	737.54	4.15	2.41	162.28	-326.00	110.21	309.47	302.95	6.52	47.448		
800.00	797.47	796.45	787.07	4.39	2.59	162.27	-327.19	112.07	303.02	296.07	6.95	43.624		
850.00	846.69	845.89	836.46	4.57	2.77	162.28	-328.38	113.92	296.05	288.75	7.30	40.546		
900.00	895.91	895.47	886.00	4.74	2.95	162.30	-329.59	115.74	289.07	281.43	7.65	37.801		
950.00	945.13	945.13	935.61	4.92	3.13	162.33	-330.81	117.50	282.08	274.07	8.01	35.228		
1,000.00	994.35	994.91	985.34	5.10	3.26	162.35	-331.98	119.25	275.05	266.73	8.32	33.074		
1,050.00	1,043.57	1,044.88	1,035.27	5.29	3.35	162.40	-333.14	120.92	267.96	259.36	8.60	31.168		
1,100.00	1,092.79	1,095.02	1,085.38	5.47	3.43	162.47	-334.20	122.47	260.74	251.88	8.87	29.410		
1,150.00	1,142.01	1,144.62	1,134.95	5.67	3.58	162.56	-335.21	123.89	253.46	244.24	9.22	27.494		
1,200.00	1,191.23	1,194.21	1,184.51	5.86	3.74	162.69	-336.24	125.19	246.15	236.58	9.57	25.725		
1,250.00	1,240.45	1,243.82	1,234.10	6.06	3.90	162.86	-337.27	126.37	238.82	228.90	9.92	24.071		
1,300.00	1,289.67	1,293.45	1,283.71	6.26	4.06	163.05	-338.29	127.47	231.45	221.18	10.27	22.533		
1,350.00	1,338.89	1,343.07	1,333.31	6.46	4.23	163.27	-339.30	128.50	224.05	213.43	10.63	21.086		
1,400.00	1,388.11	1,392.77	1,382.99	6.67	4.39	163.52	-340.27	129.46	216.60	205.63	10.97	19.739		
1,450.00	1,437.33	1,442.45	1,432.65	6.87	4.55	163.81	-341.20	130.34	209.10	197.78	11.32	18.465		
1,500.00	1,486.55	1,492.00	1,482.18	7.08	4.70	164.14	-342.10	131.15	201.55	189.88	11.67	17.269		
1,550.00	1,535.83	1,541.49	1,531.66	7.25	4.86	164.28	-342.99	131.93	194.26	182.27	11.99	16.201		
1,600.00	1,585.25	1,591.06	1,581.22	7.43	5.02	163.59	-343.88	132.68	187.98	175.65	12.33	15.246		
1,650.00	1,634.63	1,641.46	1,631.61	7.61	5.16	162.01	-344.70	133.29	182.75	170.07	12.68	14.416		
1,700.00	1,683.79	1,691.61	1,681.75	7.75	5.31	159.52	-345.33	133.61	178.70	165.70	13.00	13.747		
1,750.00	1,732.54	1,740.76	1,730.90	7.84	5.44	156.11	-345.81	133.68	176.24	162.99	13.26	13.294		
1,777.47	1,759.09	1,767.18	1,757.32	7.87	5.51	153.85	-346.08	133.70	175.85	162.49	13.36	13.162	CC, ES	
1,800.00	1,780.70	1,788.69	1,778.83	7.90	5.57	151.81	-346.31	133.73	176.13	162.70	13.43	13.111		
1,850.00	1,828.10	1,835.86	1,825.99	7.95	5.69	146.80	-346.88	133.82	178.97	165.44	13.52	13.234		
1,900.00	1,874.55	1,882.37	1,872.50	7.98	5.82	141.36	-347.48	133.91	185.22	171.70	13.53	13.693		
1,950.00	1,919.89	1,927.83	1,917.95	8.01	5.94	135.80	-348.06	133.97	195.24	181.78	13.46	14.504		
2,000.00	1,963.94	1,971.91	1,962.03	8.04	6.06	130.42	-348.62	134.01	209.22	195.87	13.36	15.663		
2,050.00	2,006.54	2,013.36	2,003.48	8.07	6.17	125.41	-349.12	134.21	227.33	214.08	13.25	17.151		
2,100.00	2,047.53	2,052.85	2,042.96	8.12	6.28	120.91	-349.55	134.67	249.53	236.37	13.17	18.948		
2,150.00	2,086.76	2,090.19	2,080.29	8.17	6.39	116.98	-349.92	135.36	275.60	262.48	13.12	21.010		
2,200.00	2,124.08	2,126.85	2,116.94	8.24	6.49	113.64	-350.26	136.16	305.13	292.02	13.11	23.270		
2,250.00	2,159.36	2,161.64	2,151.72	8.33	6.58	110.84	-350.60	136.89	337.68	324.54	13.15	25.686		
2,300.00	2,192.45	2,194.25	2,184.33	8.44	6.67	108.51	-350.94	137.54	372.96	359.74	13.21	28.231		
2,350.00	2,223.24	2,224.34	2,214.41	8.57	6.76	106.58	-351.26	138.11	410.67	397.37	13.30	30.888		
2,400.00	2,251.61	2,250.62	2,240.68	8.72	6.83	104.97	-351.56	138.65	450.62	437.23	13.39	33.654		
2,450.00	2,277.50	2,274.27	2,264.33	8.90	6.90	103.64	-351.83	139.20	492.58	479.10	13.48	36.538		
2,500.00	2,302.50	2,296.87	2,286.91	9.10	6.96	102.53	-352.11	139.79	535.36	521.80	13.56	39.481		
2,550.00	2,327.50	2,319.25	2,309.29	9.34	7.02	101.57	-352.39	140.42	578.37	564.72	13.65	42.376		
2,600.00	2,352.50	2,341.44	2,331.46	9.58	7.09	100.75	-352.68	141.10	621.58	607.84	13.74	45.247		
2,650.00	2,377.44	2,364.86	2,354.87	9.83	7.14	100.04	-353.00	141.86	664.96	651.14	13.82	48.103		
2,700.00	2,399.86	2,386.09	2,376.09	10.11	7.18	99.40	-353.28	142.53	709.67	695.73	13.94	50.907		
2,750.00	2,418.30	2,403.27	2,393.26	10.41	7.21	98.80	-353.52	143.08	756.07	742.02	14.05	53.820		
2,800.00	2,432.62	2,417.42	2,407.39	10.73	7.24	98.26	-353.71	143.51	803.81	789.67	14.14	56.851		
2,850.00	2,442.71	2,427.66	2,417.63	11.08	7.26	97.77	-353.84	143.81	852.51	838.30	14.21	59.998		
2,900.00	2,448.50	2,432.94	2,422.90	11.45	7.27	97.32	-353.91	143.95	901.82	887.57	14.25	63.269		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - 10H - OH - SURVEYS

Survey Program: 7-MWD+IGRF, 1024-MWD+IFR1+MS											Offset Site Error:
Reference											0.00 usft
Offset											Offset Well Error:
Semi Major Axis											0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Minimum Separation (usft)	Warning
2,950.00	2,450.00	2,433.12	2,423.09	11.84	7.27	96.91	-353.91	143.96	951.37	14.27	66.655
3,000.00	2,450.00	2,431.47	2,421.44	12.23	7.27	96.54	-353.89	143.91	1,000.96	14.28	70.087
3,050.00	2,450.00	3,570.39	3,354.77	12.66	9.18	103.97	-367.81	-387.68	1,047.60	17.63	59.418
3,100.00	2,450.00	4,168.55	3,502.04	13.09	13.27	-178.12	-375.47	-954.53	1,060.65	19.98	53.084
3,150.00	2,450.00	4,218.19	3,501.69	13.53	13.73	-178.29	-376.61	-1,004.16	1,060.40	20.62	51.433
3,200.00	2,450.00	4,270.13	3,501.31	13.98	14.22	-177.49	-377.79	-1,056.09	1,060.12	21.26	49.857
3,250.00	2,450.00	4,323.14	3,500.84	14.44	14.73	-176.24	-378.51	-1,109.09	1,059.72	21.92	48.335
3,300.00	2,450.00	4,374.80	3,500.31	14.90	15.23	-175.54	-378.73	-1,160.75	1,059.18	22.59	46.885
3,350.00	2,450.00	4,423.10	3,499.85	15.38	15.70	-176.24	-378.80	-1,209.04	1,058.67	23.27	45.491
3,400.00	2,450.00	4,471.39	3,499.47	15.85	16.18	-176.95	-378.84	-1,257.33	1,058.23	23.95	44.180
3,450.00	2,450.00	4,521.66	3,499.14	16.34	16.68	-176.83	-378.83	-1,307.60	1,057.85	24.65	42.920
3,500.00	2,450.00	4,572.80	3,498.77	16.83	17.20	-176.33	-378.64	-1,358.73	1,057.41	25.34	41.721
3,550.00	2,450.00	4,623.79	3,498.37	17.32	17.71	-175.89	-378.29	-1,409.73	1,056.93	26.05	40.573
3,600.00	2,450.00	4,674.38	3,497.92	17.82	18.23	-175.62	-378.00	-1,460.31	1,056.41	26.76	39.477
3,650.00	2,450.00	4,724.96	3,497.43	18.32	18.75	-175.35	-377.89	-1,510.89	1,055.86	27.47	38.432
3,700.00	2,450.00	4,775.44	3,496.89	18.83	19.27	-175.13	-377.95	-1,561.37	1,055.28	28.19	37.434
3,750.00	2,450.00	4,825.89	3,496.30	19.34	19.80	-174.93	-378.23	-1,611.82	1,054.69	28.91	36.480
3,800.00	2,450.00	4,876.00	3,495.67	19.85	20.32	-174.89	-378.72	-1,661.92	1,054.07	29.63	35.572
3,850.00	2,450.00	4,925.07	3,495.05	20.36	20.84	-175.31	-379.40	-1,710.98	1,053.48	30.36	34.702
3,900.00	2,450.00	4,974.13	3,494.45	20.88	21.35	-175.73	-380.27	-1,760.03	1,052.93	31.08	33.874
3,950.00	2,450.00	5,024.22	3,493.85	21.40	21.88	-175.71	-381.27	-1,810.10	1,052.42	31.81	33.079
4,000.00	2,450.00	5,074.80	3,493.24	21.92	22.41	-175.49	-382.15	-1,860.68	1,051.88	32.55	32.317
4,050.00	2,450.00	5,125.50	3,492.61	22.44	22.95	-175.20	-382.91	-1,911.37	1,051.31	33.29	31.584
4,100.00	2,450.00	5,176.64	3,491.93	22.97	23.50	-174.74	-383.69	-1,962.50	1,050.69	34.03	30.878
4,150.00	2,450.00	5,227.78	3,491.18	23.50	24.04	-174.28	-384.56	-2,013.62	1,050.02	34.77	30.200
4,200.00	2,450.00	5,279.37	3,490.35	24.02	24.59	-173.65	-385.53	-2,065.20	1,049.29	35.51	29.546
4,250.00	2,450.00	5,331.13	3,489.42	24.55	25.15	-172.96	-386.56	-2,116.94	1,048.47	36.26	28.914
4,300.00	2,450.00	5,380.02	3,488.47	25.09	25.68	-173.45	-387.57	-2,165.80	1,047.59	37.01	28.307
4,350.00	2,450.00	5,421.81	3,487.95	25.62	26.14	-176.86	-388.00	-2,207.59	1,046.98	37.76	27.730
4,400.00	2,450.00	5,463.60	3,487.83	26.15	26.61	179.71	-387.83	-2,249.38	1,046.77	38.50	27.186
4,402.55	2,450.00	5,465.73	3,487.84	26.18	26.63	179.53	-387.81	-2,251.51	1,046.77	38.54	27.159
4,450.00	2,450.00	5,508.09	3,488.13	26.69	27.10	177.37	-387.04	-2,293.86	1,046.93	39.26	26.668
4,500.00	2,450.00	5,559.85	3,488.53	27.22	27.66	178.09	-385.97	-2,345.60	1,047.13	40.02	26.165
4,550.00	2,450.00	5,611.61	3,488.84	27.76	28.22	178.83	-384.96	-2,397.36	1,047.25	40.78	25.678
4,600.00	2,450.00	5,662.22	3,489.07	28.30	28.77	179.08	-384.04	-2,447.96	1,047.31	41.55	25.208
4,650.00	2,450.00	5,712.62	3,489.27	28.84	29.32	179.24	-383.19	-2,498.35	1,047.35	42.31	24.755
4,700.00	2,450.00	5,763.08	3,489.44	29.38	29.87	179.44	-382.40	-2,548.80	1,047.37	43.07	24.316
4,750.00	2,450.00	5,813.66	3,489.59	29.92	30.42	179.69	-381.62	-2,599.37	1,047.37	43.84	23.892
4,800.00	2,450.00	5,864.23	3,489.70	30.46	30.97	179.95	-380.84	-2,649.95	1,047.34	44.60	23.481
4,850.00	2,450.00	5,914.63	3,489.79	31.01	31.53	-179.88	-380.10	-2,700.33	1,047.28	45.37	23.083
4,900.00	2,450.00	5,964.99	3,489.84	31.55	32.08	-179.71	-379.47	-2,750.70	1,047.21	46.14	22.698
4,950.00	2,450.00	6,016.15	3,489.85	32.10	32.64	-179.17	-378.95	-2,801.85	1,047.12	46.91	22.324
5,000.00	2,450.00	6,068.56	3,489.76	32.64	33.21	-178.03	-378.47	-2,854.26	1,046.93	47.68	21.958
5,050.00	2,450.00	6,120.98	3,489.53	33.19	33.79	-176.88	-378.05	-2,906.68	1,046.62	48.45	21.602
5,100.00	2,450.00	6,172.97	3,489.20	33.73	34.36	-175.92	-377.66	-2,958.66	1,046.21	49.22	21.254
5,150.00	2,450.00	6,224.94	3,488.76	34.28	34.93	-174.95	-377.26	-3,010.63	1,045.70	50.00	20.915
5,200.00	2,450.00	6,275.50	3,488.25	34.82	35.49	-174.65	-376.92	-3,061.18	1,045.12	50.77	20.586
5,250.00	2,450.00	6,323.80	3,487.76	35.37	36.03	-175.46	-377.08	-3,109.48	1,044.58	51.54	20.269
5,300.00	2,450.00	6,372.10	3,487.27	35.92	36.56	-176.29	-377.85	-3,157.78	1,044.12	52.30	19.963
5,350.00	2,450.00	6,424.40	3,486.70	36.47	37.14	-175.23	-379.11	-3,210.05	1,043.67	53.07	19.664
5,400.00	2,450.00	6,477.86	3,485.95	37.02	37.73	-173.64	-380.31	-3,263.50	1,043.06	53.85	19.370
5,450.00	2,450.00	6,530.84	3,485.05	37.57	38.31	-172.30	-381.43	-3,316.46	1,042.29	54.62	19.081

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - 10H - OH - SURVEYS

Survey Program: Reference		7-MWD+IGRF, 1024-MWD+IFR1+MS				Rule Assigned:				Offset Site Error:		0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,500.00	2,450.00	6,583.19	3,484.03	38.12	38.89	-171.28	-382.55	-3,368.78	1,041.40	986.00	55.40	18.799	
5,550.00	2,450.00	6,635.53	3,482.88	38.67	39.46	-170.28	-383.72	-3,421.10	1,040.39	984.22	56.17	18.521	
5,600.00	2,450.00	6,687.18	3,481.66	39.22	40.03	-169.61	-384.86	-3,472.72	1,039.29	982.35	56.95	18.250	
5,650.00	2,450.00	6,738.85	3,480.35	39.77	40.60	-168.93	-385.90	-3,524.36	1,038.11	980.39	57.72	17.985	
5,700.00	2,450.00	6,790.02	3,478.99	40.32	41.17	-168.47	-386.89	-3,575.51	1,036.86	978.36	58.50	17.725	
5,750.00	2,450.00	6,840.84	3,477.58	40.87	41.73	-168.19	-388.01	-3,626.30	1,035.56	976.29	59.27	17.471	
5,800.00	2,450.00	6,886.00	3,476.27	41.42	42.23	-170.39	-389.14	-3,671.42	1,034.24	974.19	60.04	17.225	
5,850.00	2,450.00	6,927.93	3,475.30	41.98	42.69	-174.03	-390.31	-3,713.32	1,033.24	972.42	60.82	16.988	
5,900.00	2,450.00	6,965.67	3,474.89	42.53	43.11	-179.54	-391.47	-3,751.04	1,032.84	971.25	61.58	16.771	
5,908.40	2,450.00	6,972.01	3,474.87	42.62	43.18	-179.53	-391.67	-3,757.38	1,032.83	971.12	61.71	16.736	
5,950.00	2,450.00	7,012.00	3,474.99	43.08	43.62	-178.81	-393.03	-3,797.35	1,033.08	970.72	62.36	16.565	
6,000.00	2,450.00	7,051.41	3,475.34	43.64	44.06	-174.16	-394.41	-3,836.73	1,033.64	970.52	63.12	16.377	
6,050.00	2,450.00	7,102.43	3,475.76	44.19	44.62	-174.65	-396.13	-3,887.73	1,034.20	970.30	63.90	16.185	
6,100.00	2,450.00	7,153.84	3,476.13	44.74	45.19	-175.29	-397.80	-3,939.10	1,034.72	970.04	64.68	15.997	
6,150.00	2,450.00	7,206.02	3,476.43	45.30	45.77	-176.25	-399.38	-3,991.26	1,035.14	969.67	65.47	15.812	
6,200.00	2,450.00	7,258.22	3,476.63	45.85	46.35	-177.20	-400.83	-4,043.43	1,035.46	969.20	66.25	15.629	
6,250.00	2,450.00	7,307.55	3,476.78	46.40	46.90	-176.94	-402.17	-4,092.75	1,035.73	968.70	67.03	15.451	
6,300.00	2,450.00	7,356.66	3,476.96	46.96	47.44	-176.58	-403.59	-4,141.84	1,036.05	968.24	67.81	15.278	
6,350.00	2,450.00	7,406.57	3,477.17	47.51	47.99	-176.56	-405.11	-4,191.72	1,036.41	967.81	68.59	15.109	
6,400.00	2,450.00	7,457.88	3,477.35	48.07	48.57	-177.12	-406.59	-4,243.01	1,036.72	967.34	69.38	14.942	
6,450.00	2,450.00	7,509.20	3,477.48	48.62	49.14	-177.67	-407.94	-4,294.31	1,036.97	966.80	70.17	14.778	
6,500.00	2,450.00	7,559.33	3,477.58	49.18	49.69	-177.73	-409.18	-4,344.43	1,037.18	966.23	70.95	14.617	
6,550.00	2,450.00	7,609.12	3,477.69	49.73	50.25	-177.65	-410.42	-4,394.20	1,037.40	965.66	71.74	14.461	
6,600.00	2,450.00	7,659.11	3,477.80	50.29	50.80	-177.66	-411.70	-4,444.18	1,037.63	965.10	72.52	14.307	
6,650.00	2,450.00	7,709.86	3,477.89	50.85	51.37	-177.97	-413.01	-4,494.91	1,037.83	964.52	73.31	14.157	
6,700.00	2,450.00	7,760.61	3,477.93	51.40	51.93	-178.27	-414.34	-4,545.64	1,038.01	963.91	74.10	14.008	
6,750.00	2,450.00	7,812.12	3,477.92	51.96	52.50	-178.87	-415.72	-4,597.13	1,038.13	963.24	74.89	13.862	
6,800.00	2,450.00	7,863.90	3,477.81	52.51	53.08	-179.57	-417.21	-4,648.89	1,038.16	962.48	75.68	13.718	
6,850.00	2,450.00	7,914.91	3,477.61	53.07	53.65	-179.95	-418.76	-4,699.87	1,038.12	961.65	76.47	13.575	
6,900.00	2,450.00	7,964.13	3,477.40	53.63	54.20	-179.65	-420.37	-4,749.07	1,038.09	960.83	77.26	13.436	
6,918.70	2,450.00	7,982.54	3,477.33	53.84	54.40	-179.53	-421.00	-4,767.47	1,038.09	960.53	77.55	13.385	
6,950.00	2,450.00	8,013.35	3,477.22	54.18	54.74	-179.34	-422.09	-4,798.26	1,038.09	960.05	78.05	13.301	
7,000.00	2,450.00	8,061.77	3,477.03	54.74	55.29	-178.73	-424.12	-4,846.63	1,038.15	959.32	78.84	13.168	
7,050.00	2,450.00	8,109.86	3,476.81	55.30	55.83	-178.01	-426.99	-4,894.64	1,038.30	958.67	79.63	13.039	
7,100.00	2,450.00	8,158.16	3,476.54	55.86	56.38	-177.38	-430.75	-4,942.80	1,038.55	958.12	80.43	12.913	
7,150.00	2,450.00	8,208.65	3,476.23	56.41	56.94	-177.56	-434.99	-4,993.11	1,038.82	957.59	81.24	12.788	
7,200.00	2,450.00	8,259.15	3,475.89	56.97	57.49	-177.72	-439.16	-5,043.43	1,039.08	957.04	82.05	12.664	
7,250.00	2,450.00	8,308.76	3,475.55	57.53	58.04	-177.58	-443.23	-5,092.87	1,039.34	956.48	82.86	12.544	
7,300.00	2,450.00	8,357.82	3,475.23	58.09	58.59	-177.27	-447.36	-5,141.76	1,039.64	955.97	83.67	12.426	
7,350.00	2,450.00	8,407.42	3,474.93	58.64	59.13	-177.14	-451.63	-5,191.17	1,039.99	955.51	84.48	12.310	
7,400.00	2,450.00	8,465.83	3,474.34	59.20	59.78	-179.81	-456.52	-5,249.38	1,040.15	954.82	85.33	12.190	
7,450.00	2,450.00	8,524.29	3,473.33	59.76	60.43	-177.62	-461.06	-5,307.64	1,039.91	953.74	86.17	12.068	
7,500.00	2,450.00	8,577.25	3,472.14	60.32	61.02	-176.81	-464.95	-5,360.45	1,039.38	952.39	86.99	11.948	
7,550.00	2,450.00	8,629.62	3,470.84	60.87	61.60	-176.21	-468.75	-5,412.67	1,038.75	950.93	87.82	11.828	
7,600.00	2,450.00	8,681.46	3,469.45	61.43	62.17	-175.78	-472.46	-5,464.36	1,038.02	949.37	88.65	11.709	
7,650.00	2,450.00	8,732.77	3,467.99	61.99	62.74	-175.52	-476.13	-5,515.51	1,037.22	947.74	89.48	11.592	
7,700.00	2,450.00	8,784.08	3,466.45	62.55	63.31	-175.26	-479.81	-5,566.67	1,036.36	946.05	90.31	11.476	
7,750.00	2,450.00	8,836.17	3,464.82	63.11	63.89	-174.80	-483.46	-5,618.61	1,035.43	944.29	91.14	11.361	
7,800.00	2,450.00	8,888.28	3,463.10	63.67	64.47	-174.34	-486.96	-5,670.56	1,034.40	942.42	91.97	11.247	
7,850.00	2,450.00	8,934.56	3,461.57	64.23	64.98	-175.44	-489.99	-5,716.73	1,033.36	940.56	92.80	11.135	
7,900.00	2,450.00	8,977.31	3,460.41	64.78	65.45	-177.47	-492.90	-5,759.36	1,032.64	939.02	93.62	11.030	
7,950.00	2,450.00	9,020.05	3,459.52	65.34	65.93	-179.46	-495.93	-5,801.98	1,032.28	937.84	94.44	10.930	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - 10H - OH - SURVEYS

Survey Program: 7-MWD+IGRF, 1024-MWD+IFR1+MS												Offset Site Error:	0.00 usft
Reference												Offset Well Error:	0.00 usft
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Semi Major Axis	Offset	Azimuth	Offset Wellbore Centre		Distance		Minimum Separation	Separation Factor	Warning
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N-S	+E-W	Between Centres	Between Ellipses	(usft)		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
8,000.00	2,450.00	9,067.81	3,458.76	65.90	66.46	179.91	-499.47	-5,849.60	1,032.19	936.92	95.27	10.834	
8,050.00	2,450.00	9,117.98	3,457.93	66.46	67.01	179.91	-503.37	-5,899.61	1,032.12	936.01	96.12	10.738	
8,100.00	2,450.00	9,167.86	3,457.07	67.02	67.56	179.84	-507.35	-5,949.33	1,032.06	935.10	96.96	10.644	
8,122.75	2,450.00	9,190.55	3,456.67	67.27	67.81	179.81	-509.17	-5,971.94	1,032.03	934.69	97.35	10.602 SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - 20H - OH - SURVEYS

Survey Program: 7-MWD+IGRF, 1091-MWD+IFR1+MS												Offset Site Error:
Reference												0.00 usft
Offset												Offset Well Error:
Semi Major Axis												0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	8.01	0.01	0.00	0.00	161.67	-280.10	92.80	295.07			
50.00	50.00	58.46	50.46	0.92	0.09	161.69	-280.09	92.70	295.03	294.02	1.01	292.036
100.00	100.00	108.91	100.91	0.92	0.17	161.74	-280.06	92.42	294.92	293.82	1.09	269.429
150.00	150.00	159.36	151.35	1.23	0.26	161.82	-280.01	91.94	294.72	293.24	1.48	199.145
200.00	200.00	209.57	201.57	1.53	0.37	161.94	-279.95	91.29	294.46	292.57	1.90	155.241
250.00	250.00	259.33	251.32	1.74	0.55	162.07	-279.93	90.58	294.22	291.93	2.29	128.505
300.00	300.00	309.98	301.96	1.95	0.73	162.21	-279.92	89.82	293.98	291.30	2.68	109.490
350.00	350.00	361.66	353.63	2.22	0.92	162.33	-279.61	89.15	293.07	289.94	3.13	93.507
400.00	399.98	416.41	408.37	2.51	1.11	162.40	-278.63	88.67	290.80	287.19	3.61	80.471
450.00	449.93	472.04	463.96	2.75	1.31	162.37	-276.43	88.53	286.73	282.69	4.05	70.869
500.00	499.84	528.38	520.18	2.99	1.51	162.22	-272.80	88.67	280.70	276.22	4.48	62.648
550.00	549.68	583.14	574.72	3.22	1.71	161.98	-267.94	89.00	272.72	267.82	4.90	55.703
600.00	599.45	637.16	628.42	3.45	1.91	161.64	-262.05	89.50	263.00	257.69	5.31	49.536
650.00	649.13	691.54	682.32	3.67	2.12	161.16	-254.87	90.24	251.42	245.71	5.72	43.968
700.00	698.70	745.63	735.72	3.90	2.34	160.50	-246.35	91.19	237.92	231.80	6.12	38.847
750.00	748.15	799.00	788.16	4.15	2.57	159.64	-236.48	92.23	222.40	215.85	6.54	33.996
800.00	797.47	850.15	838.14	4.39	2.81	158.52	-225.70	93.45	205.01	198.05	6.96	29.465
850.00	846.69	899.16	885.77	4.57	3.04	157.04	-214.26	94.93	186.29	178.98	7.31	25.479
900.00	895.91	945.24	930.46	4.74	3.27	155.23	-203.15	96.54	167.46	159.79	7.67	21.836
950.00	945.13	991.01	974.83	4.92	3.49	152.93	-192.05	98.28	148.83	140.80	8.04	18.517
1,000.00	994.35	1,036.64	1,019.10	5.10	3.68	150.01	-181.11	100.03	130.63	122.22	8.40	15.542
1,050.00	1,043.57	1,082.41	1,063.53	5.29	3.88	146.22	-170.28	101.77	112.98	104.20	8.78	12.867
1,100.00	1,092.79	1,128.20	1,108.04	5.47	4.03	141.19	-159.64	103.45	96.15	87.02	9.13	10.530
1,150.00	1,142.01	1,174.21	1,152.84	5.67	4.17	134.38	-149.28	104.99	80.50	71.04	9.46	8.512
1,200.00	1,191.23	1,220.42	1,197.92	5.86	4.32	124.86	-139.20	106.37	66.62	56.91	9.71	6.861
1,250.00	1,240.45	1,266.47	1,243.00	6.06	4.45	111.87	-129.89	107.68	55.75	45.94	9.81	5.683
1,300.00	1,289.67	1,313.30	1,289.05	6.26	4.78	95.26	-121.48	109.00	49.20	39.57	9.63	5.111
1,341.30	1,330.32	1,352.58	1,327.81	6.43	5.08	80.07	-115.25	110.09	47.54	38.05	9.49	5.010 CC, ES, SF
1,350.00	1,338.89	1,360.93	1,336.07	6.46	5.12	76.86	-113.99	110.31	47.61	38.12	9.48	5.019
1,400.00	1,388.11	1,409.13	1,383.76	6.67	5.33	59.54	-107.13	111.39	50.48	40.76	9.72	5.193
1,450.00	1,437.33	1,457.67	1,431.88	6.87	5.53	45.37	-100.83	112.18	56.65	46.33	10.32	5.490
1,500.00	1,486.55	1,506.01	1,479.88	7.08	5.71	34.56	-95.05	112.73	64.96	53.96	11.00	5.905
1,550.00	1,535.83	1,554.38	1,527.91	7.25	5.87	26.96	-89.45	113.17	75.13	63.53	11.60	6.475
1,600.00	1,585.25	1,602.95	1,576.18	7.43	6.04	23.09	-84.01	113.53	87.00	74.91	12.09	7.199
1,650.00	1,634.63	1,651.49	1,624.43	7.61	6.21	21.87	-78.72	113.86	99.86	87.39	12.46	8.012
1,700.00	1,683.79	1,699.90	1,672.57	7.75	6.37	22.44	-73.60	114.17	113.45	100.67	12.78	8.877
1,750.00	1,732.54	1,746.59	1,718.99	7.84	6.57	24.24	-68.67	114.53	127.94	114.88	13.06	9.799
1,800.00	1,780.70	1,791.36	1,763.44	7.90	6.79	26.82	-63.35	115.11	144.16	130.87	13.29	10.849
1,850.00	1,828.10	1,834.92	1,806.61	7.95	7.01	29.85	-57.56	115.93	162.35	148.88	13.47	12.050
1,900.00	1,874.55	1,879.29	1,850.51	7.98	7.19	33.07	-51.24	116.95	182.46	168.84	13.62	13.396
1,950.00	1,919.89	1,923.30	1,894.08	8.01	7.35	36.38	-45.04	117.97	204.15	190.40	13.75	14.849
2,000.00	1,963.94	1,966.08	1,936.43	8.04	7.51	39.68	-39.12	118.96	227.56	213.69	13.86	16.414
2,050.00	2,006.54	2,007.39	1,977.34	8.07	7.67	42.91	-33.47	119.91	252.81	238.84	13.97	18.093
2,100.00	2,047.53	2,047.13	2,016.70	8.12	7.82	46.00	-28.09	120.81	279.99	265.92	14.08	19.890
2,150.00	2,086.76	2,085.16	2,054.38	8.17	7.96	48.94	-22.99	121.66	309.14	294.97	14.18	21.804
2,200.00	2,124.08	2,121.45	2,090.34	8.24	8.10	51.71	-18.17	122.45	340.26	325.98	14.28	23.833
2,250.00	2,159.36	2,155.82	2,124.40	8.33	8.23	54.30	-13.65	123.19	373.29	358.92	14.37	25.974
2,300.00	2,192.45	2,188.09	2,156.39	8.44	8.35	56.72	-9.46	123.85	408.18	393.72	14.46	28.223
2,350.00	2,223.24	2,218.13	2,186.18	8.57	8.47	58.97	-5.59	124.45	444.85	430.30	14.55	30.579
2,400.00	2,251.61	2,244.22	2,212.04	8.72	8.57	61.07	-2.21	124.97	483.23	468.61	14.61	33.067
2,450.00	2,277.50	2,267.50	2,235.11	8.90	8.66	63.02	0.91	125.44	523.24	508.57	14.66	35.680
2,500.00	2,302.50	2,289.88	2,257.27	9.10	8.75	64.73	4.02	125.92	564.16	549.45	14.71	38.345

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - 20H - OH - SURVEYS

Survey Program: Reference		7-MWD+IGRF		1091-MWD+IFR1+MS						Rule Assigned:				Offset Well Error:		0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset +N/-S (usft)	Wellbore +E/-W (usft)	Centre	Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning			
2,550.00	2,327.50	2,312.18	2,279.33	9.34	8.84	66.20	7.21	126.40		605.58	590.80	14.78	40.978				
2,600.00	2,352.50	2,334.39	2,301.29	9.58	8.93	67.47	10.50	126.90		647.38	632.54	14.85	43.599				
2,650.00	2,377.44	2,357.00	2,323.63	9.83	9.02	68.58	13.93	127.42		689.55	674.61	14.93	46.183				
2,700.00	2,399.86	2,378.35	2,344.72	10.11	9.11	69.61	17.19	127.91		733.00	717.97	15.04	48.747				
2,750.00	2,418.30	2,395.68	2,361.85	10.41	9.18	70.61	19.82	128.31		778.06	762.94	15.12	51.456				
2,800.00	2,432.62	2,408.86	2,374.87	10.73	9.23	71.56	21.81	128.61		824.40	809.23	15.17	54.329				
2,850.00	2,442.71	2,417.78	2,383.69	11.08	9.27	72.48	23.16	128.81		871.67	856.48	15.20	57.358				
2,900.00	2,448.50	2,422.37	2,388.23	11.45	9.29	73.35	23.85	128.92		919.53	904.34	15.19	60.534				
2,950.00	2,450.00	2,422.66	2,388.52	11.84	9.29	74.17	23.89	128.92		967.61	952.45	15.16	63.846				
3,000.00	2,450.00	2,421.45	2,387.31	12.23	9.28	74.93	23.71	128.90		1,015.82	1,000.70	15.11	67.207				
3,050.00	2,450.00	2,420.23	2,386.11	12.66	9.28	75.62	23.53	128.87		1,064.19	1,049.11	15.08	70.571				
3,100.00	2,450.00	2,419.01	2,384.91	13.09	9.27	76.25	23.34	128.84		1,112.70	1,097.65	15.05	73.930				
3,150.00	2,450.00	2,417.79	2,383.70	13.53	9.27	76.83	23.16	128.81		1,161.34	1,146.33	15.01	77.355				
3,200.00	2,450.00	2,416.57	2,382.49	13.98	9.26	77.35	22.98	128.79		1,210.09	1,195.09	15.00	80.663				
3,250.00	2,450.00	4,419.45	3,580.10	14.44	17.68	0.23	287.47	-1,098.03		1,247.95	1,223.97	23.98	52.039				
3,300.00	2,450.00	4,488.03	3,579.19	14.90	18.26	-1.78	288.48	-1,166.59		1,247.84	1,223.14	24.70	50.520				
3,350.00	2,450.00	4,544.84	3,578.07	15.38	18.74	-2.51	288.71	-1,223.39		1,247.21	1,221.78	25.43	49.046				
3,400.00	2,450.00	4,601.30	3,576.68	15.85	19.22	-3.20	288.84	-1,279.83		1,246.32	1,220.16	26.16	47.646				
3,450.00	2,450.00	4,645.20	3,575.56	16.34	19.61	-2.54	288.87	-1,323.71		1,245.36	1,218.46	26.90	46.293				
3,500.00	2,450.00	4,684.69	3,574.97	16.83	19.96	-1.41	288.75	-1,363.20		1,244.80	1,217.15	27.65	45.023				
3,541.60	2,450.00	4,717.55	3,574.81	17.24	20.25	-0.47	288.56	-1,396.06		1,244.65	1,216.38	28.27	44.028				
3,550.00	2,450.00	4,724.19	3,574.81	17.32	20.31	-0.28	288.51	-1,402.70		1,244.66	1,216.26	28.40	43.834				
3,600.00	2,450.00	4,772.43	3,575.03	17.82	20.74	-0.09	288.08	-1,450.94		1,244.84	1,215.70	29.15	42.707				
3,650.00	2,450.00	4,827.85	3,575.07	18.32	21.25	-0.67	287.61	-1,506.35		1,244.88	1,214.97	29.91	41.620				
3,700.00	2,450.00	4,882.92	3,574.84	18.83	21.76	-1.22	287.18	-1,561.42		1,244.69	1,214.02	30.68	40.576				
3,750.00	2,450.00	4,937.08	3,574.37	19.34	22.26	-1.66	286.81	-1,615.58		1,244.33	1,212.88	31.45	39.565				
3,800.00	2,450.00	4,991.24	3,573.68	19.85	22.77	-2.11	286.49	-1,669.74		1,243.80	1,211.57	32.22	38.598				
3,850.00	2,450.00	5,050.01	3,572.55	20.36	23.33	-3.05	286.23	-1,728.49		1,243.01	1,210.00	33.02	37.649				
3,900.00	2,450.00	5,109.00	3,570.90	20.88	23.90	-4.01	286.06	-1,787.46		1,241.87	1,208.06	33.81	36.734				
3,950.00	2,450.00	5,150.64	3,569.68	21.40	24.30	-3.11	285.90	-1,829.08		1,240.65	1,206.04	34.61	35.851				
4,000.00	2,450.00	5,188.76	3,569.09	21.92	24.67	-1.84	285.50	-1,867.19		1,239.89	1,204.49	35.40	35.024				
4,050.00	2,450.00	5,226.89	3,569.02	22.44	25.04	-0.56	284.84	-1,905.31		1,239.62	1,203.43	36.19	34.251				
4,053.65	2,450.00	5,229.67	3,569.04	22.48	25.07	-0.47	284.78	-1,908.10		1,239.62	1,203.37	36.25	34.197				
4,100.00	2,450.00	5,274.28	3,569.48	22.97	25.51	-0.28	283.75	-1,952.69		1,239.73	1,202.75	36.98	33.521				
4,150.00	2,450.00	5,331.00	3,569.78	23.50	26.07	-1.00	282.48	-2,009.40		1,239.67	1,201.88	37.78	32.811				
4,200.00	2,450.00	5,383.82	3,569.73	24.02	26.59	-1.31	281.39	-2,062.21		1,239.35	1,200.77	38.58	32.127				
4,250.00	2,450.00	5,426.47	3,569.71	24.55	27.02	-0.52	280.74	-2,104.86		1,239.19	1,199.82	39.36	31.481				
4,252.95	2,450.00	5,428.99	3,569.72	24.59	27.04	-0.47	280.71	-2,107.37		1,239.18	1,199.78	39.41	31.444				
4,300.00	2,450.00	5,469.12	3,569.85	25.09	27.44	0.28	280.37	-2,147.50		1,239.32	1,199.17	40.15	30.868				
4,350.00	2,450.00	5,514.41	3,570.14	25.62	27.90	0.79	280.26	-2,192.79		1,239.73	1,198.78	40.94	30.280				
4,400.00	2,450.00	5,565.21	3,570.51	26.15	28.41	0.70	280.13	-2,243.59		1,240.18	1,198.43	41.75	29.705				
4,450.00	2,450.00	5,616.02	3,570.89	26.69	28.93	0.61	279.91	-2,294.40		1,240.60	1,198.04	42.56	29.152				
4,500.00	2,450.00	5,666.27	3,571.27	27.22	29.44	0.58	279.63	-2,344.64		1,241.00	1,197.63	43.37	28.617				
4,550.00	2,450.00	5,716.41	3,571.62	27.76	29.96	0.57	279.41	-2,394.78		1,241.39	1,197.21	44.18	28.101				
4,600.00	2,450.00	5,767.08	3,571.94	28.30	30.48	0.50	279.22	-2,445.45		1,241.77	1,196.78	44.99	27.602				
4,650.00	2,450.00	5,818.72	3,572.20	28.84	31.01	0.32	279.04	-2,497.09		1,242.10	1,196.29	45.81	27.116				
4,700.00	2,450.00	5,870.36	3,572.39	29.38	31.54	0.14	278.85	-2,548.73		1,242.36	1,195.74	46.62	26.646				
4,750.00	2,450.00	5,923.56	3,572.42	29.92	32.09	-0.20	278.76	-2,601.93		1,242.53	1,195.08	47.45	26.185				
4,800.00	2,450.00	5,976.91	3,572.18	30.46	32.65	-0.56	278.92	-2,655.28		1,242.56	1,194.28	48.28	25.736				
4,850.00	2,450.00	6,030.98	3,571.66	31.01	33.21	-1.00	279.29	-2,709.34		1,242.45	1,193.33	49.12	25.296				
4,900.00	2,450.00	6,085.60	3,570.90	31.55	33.79	-1.49	279.70	-2,763.96		1,242.16	1,192.20	49.96	24.864				
4,950.00	2,450.00	6,139.48	3,569.93	32.10	34.35	-1.90	280.11	-2,817.83		1,241.69	1,190.89	50.80	24.444				

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - 20H - OH - SURVEYS

Survey Program: Reference		7-MWD+IGRF, 1091-MWD+IFR1+MS		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Offset Well Error:		0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
5,000.00	2,450.00	6,191.07	3,568.89	32.64	34.89	-2.06	280.49	-2,869.41	1,241.12	1,189.48	51.64	24.036			
5,050.00	2,450.00	6,242.66	3,567.79	33.19	35.44	-2.23	280.85	-2,920.98	1,240.48	1,188.01	52.48	23.639			
5,100.00	2,450.00	6,287.64	3,566.91	33.73	35.91	-1.69	281.07	-2,965.95	1,239.89	1,186.59	53.30	23.261			
5,150.00	2,450.00	6,331.17	3,566.41	34.28	36.37	-1.00	281.08	-3,009.48	1,239.56	1,185.44	54.12	22.902			
5,200.00	2,450.00	6,378.00	3,566.27	34.82	36.87	-0.67	280.85	-3,056.31	1,239.49	1,184.55	54.95	22.558			
5,202.25	2,450.00	6,378.00	3,566.27	34.85	36.87	-0.43	280.85	-3,056.31	1,239.49	1,184.51	54.98	22.545			
5,250.00	2,450.00	6,425.30	3,566.30	35.37	37.37	-0.38	280.53	-3,103.61	1,239.54	1,183.77	55.77	22.226			
5,300.00	2,450.00	6,476.48	3,566.26	35.92	37.91	-0.50	280.23	-3,154.78	1,239.56	1,182.95	56.60	21.899			
5,350.00	2,450.00	6,528.15	3,566.12	36.47	38.46	-0.68	279.99	-3,206.46	1,239.51	1,182.07	57.44	21.579			
5,400.00	2,450.00	6,580.42	3,565.88	37.02	39.02	-0.92	279.76	-3,258.72	1,239.39	1,181.11	58.28	21.266			
5,450.00	2,450.00	6,632.74	3,565.52	37.57	39.58	-1.17	279.56	-3,311.05	1,239.17	1,180.05	59.12	20.960			
5,500.00	2,450.00	6,686.18	3,565.00	38.12	40.15	-1.53	279.37	-3,364.48	1,238.83	1,178.87	59.97	20.659			
5,550.00	2,450.00	6,739.60	3,564.30	38.67	40.72	-1.90	279.21	-3,417.90	1,238.36	1,177.55	60.81	20.364			
5,600.00	2,450.00	6,790.82	3,563.60	39.22	41.28	-2.02	278.88	-3,469.11	1,237.78	1,176.12	61.65	20.076			
5,650.00	2,450.00	6,841.06	3,563.25	39.77	41.82	-2.05	277.80	-3,519.34	1,237.18	1,174.70	62.48	19.800			
5,700.00	2,450.00	6,891.67	3,563.27	40.32	42.37	-2.12	275.93	-3,569.91	1,236.57	1,173.27	63.30	19.534			
5,750.00	2,450.00	6,943.83	3,563.33	40.87	42.93	-2.35	273.78	-3,622.02	1,235.91	1,171.79	64.12	19.275			
5,800.00	2,450.00	6,995.99	3,563.26	41.42	43.49	-2.58	271.69	-3,674.14	1,235.15	1,170.21	64.94	19.021			
5,850.00	2,450.00	7,033.66	3,563.27	41.98	43.89	-1.26	270.28	-3,711.79	1,234.55	1,168.81	65.74	18.779			
5,874.10	2,450.00	7,050.36	3,563.41	42.24	44.07	-0.47	269.74	-3,728.48	1,234.48	1,168.35	66.12	18.669			
5,900.00	2,450.00	7,068.32	3,563.64	42.53	44.27	0.39	269.24	-3,746.43	1,234.56	1,168.03	66.53	18.556			
5,950.00	2,450.00	7,102.97	3,564.37	43.08	44.64	2.04	268.44	-3,781.06	1,235.19	1,167.88	67.32	18.349			
6,000.00	2,450.00	7,142.67	3,565.62	43.64	45.07	3.15	267.83	-3,820.74	1,236.43	1,168.32	68.11	18.154			
6,050.00	2,450.00	7,203.88	3,567.27	44.19	45.73	1.95	267.09	-3,881.92	1,237.56	1,168.59	68.97	17.943			
6,100.00	2,450.00	7,265.11	3,568.25	44.74	46.39	0.74	266.46	-3,943.14	1,238.24	1,168.41	69.83	17.732			
6,150.00	2,450.00	7,317.47	3,568.78	45.30	46.96	0.49	265.96	-3,995.49	1,238.67	1,168.00	70.67	17.527			
6,200.00	2,450.00	7,370.86	3,569.15	45.85	47.54	0.12	265.46	-4,048.88	1,238.96	1,167.45	71.51	17.325			
6,250.00	2,450.00	7,428.58	3,569.28	46.40	48.17	-0.71	264.95	-4,106.59	1,239.05	1,166.68	72.37	17.121			
6,300.00	2,450.00	7,487.56	3,568.90	46.96	48.81	-1.68	264.52	-4,165.57	1,238.78	1,165.55	73.23	16.916			
6,350.00	2,450.00	7,541.68	3,568.17	47.51	49.40	-2.12	264.17	-4,219.69	1,238.21	1,164.12	74.08	16.714			
6,400.00	2,450.00	7,593.24	3,567.40	48.07	49.96	-2.29	263.81	-4,271.24	1,237.56	1,162.63	74.93	16.516			
6,450.00	2,450.00	7,646.09	3,566.56	48.62	50.53	-2.59	263.39	-4,324.09	1,236.84	1,161.06	75.78	16.322			
6,500.00	2,450.00	7,704.48	3,565.33	49.18	51.17	-3.50	262.85	-4,382.46	1,235.87	1,159.23	76.64	16.126			
6,550.00	2,450.00	7,762.85	3,563.72	49.73	51.80	-4.39	262.22	-4,440.81	1,234.56	1,157.07	77.49	15.931			
6,600.00	2,450.00	7,800.97	3,562.73	50.29	52.22	-3.12	261.82	-4,478.91	1,233.34	1,155.01	78.33	15.745			
6,650.00	2,450.00	7,839.73	3,562.06	50.85	52.64	-1.90	261.51	-4,517.66	1,232.57	1,153.41	79.16	15.571			
6,700.00	2,450.00	7,887.00	3,561.73	51.40	53.16	-1.61	261.25	-4,564.93	1,232.30	1,152.29	80.00	15.403			
6,750.00	2,450.00	7,929.98	3,561.60	51.96	53.63	-0.85	261.04	-4,607.91	1,232.20	1,151.37	80.83	15.244			
6,800.00	2,450.00	7,985.03	3,561.24	52.51	54.23	-1.40	260.70	-4,662.96	1,231.95	1,150.26	81.69	15.081			
6,850.00	2,450.00	8,039.56	3,560.69	53.07	54.83	-1.88	260.29	-4,717.48	1,231.51	1,148.96	82.55	14.919			
6,900.00	2,450.00	8,093.55	3,559.97	53.63	55.42	-2.31	259.80	-4,771.47	1,230.89	1,147.49	83.40	14.759			
6,950.00	2,450.00	8,147.27	3,559.10	54.18	56.01	-2.71	259.26	-4,825.17	1,230.12	1,145.86	84.25	14.600			
7,000.00	2,450.00	8,199.52	3,558.11	54.74	56.58	-2.96	258.73	-4,877.42	1,229.22	1,144.12	85.10	14.444			
7,050.00	2,450.00	8,251.77	3,557.00	55.30	57.16	-3.20	258.23	-4,929.65	1,228.24	1,142.28	85.96	14.289			
7,100.00	2,450.00	8,305.41	3,555.71	55.86	57.74	-3.59	257.76	-4,983.27	1,227.14	1,140.32	86.82	14.135			
7,150.00	2,450.00	8,359.50	3,554.19	56.41	58.34	-4.02	257.33	-5,037.34	1,225.88	1,138.20	87.68	13.982			
7,200.00	2,450.00	8,406.73	3,552.73	56.97	58.86	-3.72	256.99	-5,084.55	1,224.51	1,135.97	88.53	13.831			
7,250.00	2,450.00	8,444.42	3,551.83	57.53	59.27	-2.40	256.84	-5,122.22	1,223.52	1,134.15	89.38	13.690			
7,300.00	2,450.00	8,482.11	3,551.29	58.09	59.69	-1.07	256.83	-5,159.91	1,223.04	1,132.84	90.21	13.558			
7,322.70	2,450.00	8,499.23	3,551.15	58.34	59.87	-0.47	256.87	-5,177.03	1,222.99	1,132.41	90.59	13.501			
7,350.00	2,450.00	8,521.08	3,551.09	58.64	60.11	0.12	256.96	-5,198.88	1,223.07	1,132.03	91.04	13.435			
7,400.00	2,450.00	8,575.82	3,550.88	59.20	60.72	-0.39	257.27	-5,253.61	1,223.19	1,131.28	91.91	13.308			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - 20H - OH - SURVEYS													Offset Site Error:	0.00 usft
Survey Program: 7-MWD+IGRF, 1091-MWD+IFR1+MS													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
7,450.00	2,450.00	8,630.54	3,550.40	59.76	61.32	-0.90	257.64	-5,308.34	1,223.13	1,130.33	92.79	13.181		
7,500.00	2,450.00	8,685.90	3,549.65	60.32	61.93	-1.47	258.04	-5,363.69	1,222.86	1,129.18	93.67	13.054		
7,550.00	2,450.00	8,741.44	3,548.68	60.87	62.55	-2.06	258.33	-5,419.21	1,222.36	1,127.80	94.56	12.927		
7,600.00	2,450.00	8,790.35	3,547.69	61.43	63.09	-1.94	258.49	-5,468.11	1,221.71	1,126.28	95.42	12.803		
7,650.00	2,450.00	8,832.25	3,547.14	61.99	63.55	-1.07	258.52	-5,510.01	1,221.31	1,125.04	96.27	12.687		
7,684.97	2,450.00	8,861.56	3,546.96	62.38	63.87	-0.47	258.49	-5,539.33	1,221.23	1,124.37	96.85	12.609		
7,700.00	2,450.00	8,874.16	3,546.94	62.55	64.01	-0.21	258.46	-5,551.93	1,221.24	1,124.14	97.10	12.577		
7,750.00	2,450.00	8,923.04	3,547.05	63.11	64.55	-0.09	258.27	-5,600.80	1,221.44	1,123.48	97.95	12.470		
7,800.00	2,450.00	8,978.80	3,546.97	63.67	65.17	-0.70	258.04	-5,656.56	1,221.46	1,122.64	98.82	12.360		
7,850.00	2,450.00	9,034.11	3,546.62	64.23	65.78	-1.27	257.80	-5,711.87	1,221.26	1,121.57	99.69	12.251		
7,900.00	2,450.00	9,088.04	3,546.05	64.78	66.37	-1.69	257.56	-5,765.80	1,220.87	1,120.31	100.56	12.141		
7,950.00	2,450.00	9,141.96	3,545.29	65.34	66.97	-2.10	257.33	-5,819.71	1,220.32	1,118.90	101.42	12.032		
8,000.00	2,450.00	9,194.68	3,544.35	65.90	67.55	-2.39	257.17	-5,872.42	1,219.63	1,117.34	102.29	11.923		
8,050.00	2,450.00	9,246.46	3,543.23	66.46	68.12	-2.58	257.16	-5,924.19	1,218.84	1,115.68	103.16	11.815		
8,100.00	2,450.00	9,296.45	3,542.11	67.02	68.67	-2.57	257.20	-5,974.17	1,218.03	1,114.00	104.03	11.709		
8,120.36	2,450.00	9,297.00	3,542.09	67.24	68.68	-0.47	257.20	-5,974.72	1,217.86	1,113.53	104.33	11.673		
8,122.75	2,450.00	9,297.00	3,542.09	67.27	68.68	-0.21	257.20	-5,974.72	1,217.86	1,113.50	104.37	11.669		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - 70H - OH - SURVEYS

Survey Program: 7-MWD+IGRF 1028-MWD+IFR1+MS										Rule Assigned:		Offset Site Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	7.00	-1.00	0.00	0.00	162.83	-300.30	92.80	314.31				
50.00	50.00	57.32	49.32	0.92	0.08	162.82	-300.34	92.85	314.37	313.36	1.01	311.810	
100.00	100.00	106.65	98.65	0.92	0.17	162.80	-300.47	92.98	314.53	313.44	1.09	288.430	
150.00	150.00	155.99	147.99	1.23	0.25	162.78	-300.67	93.21	314.79	313.32	1.47	213.601	
200.00	200.00	205.46	197.46	1.53	0.36	162.74	-300.96	93.52	315.16	313.28	1.88	167.536	
250.00	250.00	255.37	247.36	1.74	0.53	162.70	-301.29	93.84	315.58	313.30	2.27	138.776	
300.00	300.00	305.20	297.19	1.95	0.71	162.67	-301.64	94.14	316.00	313.34	2.67	118.512	
350.00	350.00	354.92	346.91	2.22	0.89	162.65	-302.03	94.46	316.04	312.93	3.11	101.649	
400.00	399.98	406.18	398.17	2.51	1.07	162.61	-302.32	94.98	315.18	311.60	3.58	88.113	
450.00	449.93	458.16	450.13	2.75	1.26	162.45	-302.07	96.22	313.16	309.16	4.00	78.320	
500.00	499.84	511.50	503.42	2.99	1.45	162.15	-301.11	98.17	309.84	305.41	4.43	69.998	
550.00	549.68	564.48	556.32	3.22	1.64	161.72	-299.36	100.67	305.13	300.29	4.84	63.026	
600.00	599.45	617.02	608.72	3.45	1.83	161.20	-296.95	103.50	299.08	293.82	5.26	56.888	
650.00	649.13	666.70	658.25	3.67	2.00	160.67	-294.29	106.32	291.88	286.22	5.66	51.554	
700.00	698.70	715.53	706.95	3.90	2.18	160.18	-291.80	108.94	283.92	277.86	6.06	46.815	
750.00	748.15	764.61	755.90	4.15	2.36	159.71	-289.39	111.46	275.18	268.69	6.49	42.407	
800.00	797.47	813.50	804.67	4.39	2.54	159.26	-287.03	113.90	265.62	258.70	6.91	38.420	
850.00	846.69	862.20	853.27	4.57	2.72	158.82	-284.77	116.21	255.58	248.31	7.27	35.153	
900.00	895.91	911.02	901.99	4.74	2.90	158.37	-282.60	118.40	245.59	237.98	7.62	32.239	
950.00	945.13	959.92	950.80	4.92	3.07	157.90	-280.45	120.53	235.64	227.66	7.97	29.554	
1,000.00	994.35	1,008.70	999.49	5.10	3.19	157.42	-278.39	122.56	225.72	217.45	8.27	27.287	
1,050.00	1,043.57	1,057.79	1,048.49	5.29	3.33	156.90	-276.33	124.59	215.84	207.24	8.60	25.086	
1,100.00	1,092.79	1,107.00	1,097.58	5.47	3.53	156.17	-273.99	127.14	205.93	196.97	8.97	22.964	
1,150.00	1,142.01	1,156.08	1,146.49	5.67	3.76	155.18	-271.35	130.23	196.01	186.71	9.30	21.067	
1,200.00	1,191.23	1,204.62	1,194.85	5.86	3.84	154.03	-268.67	133.49	186.18	176.62	9.56	19.476	
1,250.00	1,240.45	1,253.37	1,243.44	6.06	3.99	152.82	-266.13	136.60	176.50	166.62	9.88	17.868	
1,300.00	1,289.67	1,302.25	1,292.17	6.26	4.17	151.59	-263.77	139.42	166.92	156.70	10.21	16.341	
1,350.00	1,338.89	1,351.19	1,341.00	6.46	4.34	150.34	-261.59	141.93	157.43	146.88	10.55	14.921	
1,400.00	1,388.11	1,400.17	1,389.87	6.67	4.51	148.91	-259.38	144.47	148.03	137.15	10.88	13.608	
1,450.00	1,437.33	1,449.12	1,438.68	6.87	4.69	147.20	-257.05	147.21	138.73	127.53	11.20	12.385	
1,500.00	1,486.55	1,497.99	1,487.42	7.08	4.86	145.17	-254.64	150.08	129.58	118.07	11.51	11.254	
1,550.00	1,535.83	1,546.91	1,536.20	7.25	5.04	142.66	-252.37	152.80	121.17	109.38	11.78	10.285	
1,600.00	1,585.25	1,595.89	1,585.07	7.43	5.21	138.85	-250.26	155.33	115.09	103.06	12.03	9.570	
1,650.00	1,634.63	1,644.90	1,633.96	7.61	5.39	133.57	-248.03	157.91	111.88	99.68	12.20	9.173	
1,671.10	1,655.41	1,665.42	1,654.42	7.67	5.47	130.92	-246.98	159.07	111.54	99.32	12.22	9.126 CC, ES, SF	
1,700.00	1,683.79	1,693.31	1,682.23	7.75	5.57	126.98	-245.44	160.71	112.21	99.98	12.24	9.170	
1,750.00	1,732.54	1,741.00	1,729.74	7.84	5.74	119.73	-242.57	163.69	116.78	104.62	12.16	9.603	
1,800.00	1,780.70	1,788.08	1,776.64	7.90	5.92	112.76	-239.75	166.55	125.88	113.83	12.05	10.447	
1,850.00	1,828.10	1,834.34	1,822.74	7.95	6.09	106.66	-237.06	169.25	139.37	127.39	11.97	11.639	
1,900.00	1,874.55	1,879.34	1,867.60	7.98	6.25	101.67	-234.52	171.80	156.94	144.97	11.97	13.109	
1,950.00	1,919.89	1,923.00	1,911.12	8.01	6.41	97.74	-232.07	174.29	178.26	166.22	12.04	14.802	
2,000.00	1,963.94	1,965.24	1,953.22	8.04	6.57	94.74	-229.72	176.71	202.95	190.78	12.17	16.674	
2,050.00	2,006.54	2,006.21	1,994.07	8.07	6.72	92.51	-227.47	179.05	230.66	218.32	12.34	18.692	
2,100.00	2,047.53	2,045.61	2,033.35	8.12	6.87	90.87	-225.37	181.25	261.05	248.52	12.53	20.834	
2,150.00	2,086.76	2,083.22	2,070.85	8.17	7.00	89.71	-223.41	183.29	293.90	281.17	12.73	23.085	
2,200.00	2,124.08	2,118.71	2,106.24	8.24	7.13	88.89	-221.62	185.19	329.03	316.10	12.93	25.439	
2,250.00	2,159.36	2,151.96	2,139.41	8.33	7.26	88.35	-220.01	186.96	366.28	353.15	13.13	27.893	
2,300.00	2,192.45	2,182.97	2,170.35	8.44	7.37	88.02	-218.57	188.60	405.49	392.17	13.32	30.442	
2,350.00	2,223.24	2,211.63	2,198.93	8.57	7.47	87.84	-217.29	190.11	446.49	433.00	13.50	33.080	
2,400.00	2,251.61	2,237.94	2,225.18	8.72	7.57	87.77	-216.16	191.50	489.13	475.47	13.66	35.805	
2,450.00	2,277.50	2,261.82	2,249.01	8.90	7.66	87.79	-215.14	192.74	533.21	519.41	13.80	38.631	
2,500.00	2,302.50	2,284.85	2,271.99	9.10	7.74	87.83	-214.16	193.93	577.76	563.84	13.92	41.495	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - 70H - OH - SURVEYS

Survey Program: Reference		7-MWD+IGRF, 1028-MWD+IFR1+MS						Rule Assigned:				Offset Site Error: 0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,550.00	2,327.50	2,307.92	2,295.01	9.34	7.82	87.86	-213.18	195.10	622.30	608.25	14.05	44.299	
2,600.00	2,352.50	2,331.05	2,318.09	9.58	7.91	87.89	-212.21	196.27	666.82	652.65	14.17	47.052	
2,650.00	2,377.44	2,350.00	2,337.00	9.83	7.97	87.93	-211.41	197.21	711.37	697.09	14.28	49.828	
2,700.00	2,399.86	2,372.67	2,359.61	10.11	8.06	87.95	-210.44	198.36	757.13	742.69	14.44	52.431	
2,750.00	2,418.30	2,387.55	2,374.46	10.41	8.11	88.00	-209.77	199.13	804.49	789.93	14.56	55.251	
2,800.00	2,432.62	2,398.43	2,385.32	10.73	8.15	88.05	-209.26	199.71	853.08	838.43	14.65	58.235	
2,850.00	2,442.71	2,405.28	2,392.15	11.08	8.18	88.11	-208.94	200.08	902.51	887.80	14.71	61.370	
2,900.00	2,448.50	2,408.08	2,394.94	11.45	8.19	88.18	-208.81	200.24	952.39	937.65	14.73	64.642	
2,950.00	2,450.00	2,406.93	2,393.80	11.84	8.18	88.25	-208.86	200.17	1,002.34	987.61	14.73	68.033	
3,000.00	2,450.00	2,404.43	2,391.30	12.23	8.17	88.31	-208.98	200.04	1,052.25	1,037.53	14.72	71.465	
3,050.00	2,450.00	2,401.94	2,388.82	12.66	8.17	88.38	-209.10	199.90	1,102.16	1,087.45	14.72	74.893	
3,100.00	2,450.00	2,399.47	2,386.35	13.09	8.16	88.43	-209.21	199.77	1,152.08	1,137.37	14.71	78.321	
3,150.00	2,450.00	2,397.03	2,383.91	13.53	8.15	88.48	-209.33	199.64	1,201.99	1,187.29	14.70	81.752	
3,200.00	2,450.00	2,394.60	2,381.49	13.98	8.14	88.53	-209.44	199.51	1,251.91	1,237.21	14.70	85.168	
3,250.00	2,450.00	2,392.19	2,379.09	14.44	8.13	88.57	-209.55	199.38	1,301.83	1,287.13	14.70	88.581	
3,300.00	2,450.00	2,389.80	2,376.71	14.90	8.12	88.61	-209.66	199.25	1,351.75	1,337.06	14.69	92.003	
3,350.00	2,450.00	2,387.43	2,374.34	15.38	8.11	88.65	-209.77	199.13	1,401.67	1,386.98	14.69	95.412	
3,400.00	2,450.00	2,385.08	2,371.99	15.85	8.10	88.68	-209.88	199.00	1,451.59	1,436.90	14.69	98.824	
3,450.00	2,450.00	2,382.74	2,369.67	16.34	8.09	88.72	-209.99	198.88	1,501.51	1,486.82	14.69	102.224	
3,500.00	2,450.00	2,380.43	2,367.36	16.83	8.09	88.75	-210.09	198.76	1,551.44	1,536.75	14.69	105.626	
3,550.00	2,450.00	2,378.13	2,365.06	17.32	8.08	88.78	-210.19	198.64	1,601.36	1,586.67	14.69	109.016	
3,600.00	2,450.00	2,375.85	2,362.79	17.82	8.07	88.80	-210.30	198.52	1,651.29	1,636.60	14.69	112.407	
3,650.00	2,450.00	5,414.86	4,107.59	18.32	20.53	-18.61	-165.53	-1,526.93	1,659.72	1,630.06	29.65	55.969	
3,700.00	2,450.00	5,455.15	4,107.06	18.83	20.93	-12.12	-165.95	-1,567.20	1,659.06	1,628.74	30.32	54.715	
3,750.00	2,450.00	5,493.96	4,106.80	19.34	21.32	-4.23	-166.03	-1,606.02	1,658.74	1,627.75	30.99	53.530	
3,773.50	2,450.00	5,512.20	4,106.76	19.58	21.51	-0.47	-165.93	-1,624.25	1,658.70	1,627.40	31.30	52.995	
3,800.00	2,450.00	5,532.76	4,106.77	19.85	21.72	3.74	-165.73	-1,644.82	1,658.75	1,627.10	31.65	52.407	
3,850.00	2,450.00	5,573.35	4,107.00	20.36	22.13	10.18	-165.02	-1,685.40	1,659.09	1,626.76	32.33	51.323	
3,900.00	2,450.00	5,618.70	4,107.40	20.88	22.61	13.03	-163.57	-1,730.72	1,659.62	1,626.59	33.03	50.249	
3,950.00	2,450.00	5,663.97	4,107.88	21.40	23.09	15.64	-161.39	-1,775.94	1,660.30	1,626.57	33.73	49.222	
4,000.00	2,450.00	5,714.97	4,108.47	21.92	23.64	14.49	-158.03	-1,826.83	1,661.07	1,626.61	34.47	48.194	
4,050.00	2,450.00	5,771.32	4,108.88	22.44	24.24	10.18	-153.15	-1,882.96	1,661.70	1,626.47	35.23	47.162	
4,100.00	2,450.00	5,828.91	4,108.99	22.97	24.86	5.53	-146.88	-1,940.21	1,662.15	1,626.14	36.01	46.156	
4,150.00	2,450.00	5,890.24	4,108.67	23.50	25.49	-0.51	-139.30	-2,001.06	1,662.31	1,625.50	36.81	45.154	
4,200.00	2,450.00	5,951.33	4,107.86	24.02	26.12	-5.53	-130.97	-2,061.58	1,662.15	1,624.53	37.62	44.187	
4,250.00	2,450.00	5,996.50	4,107.21	24.55	26.59	-2.84	-124.70	-2,106.30	1,661.96	1,623.62	38.34	43.344	
4,300.00	2,450.00	6,044.52	4,106.55	25.09	27.09	-1.64	-118.06	-2,153.86	1,661.85	1,622.76	39.08	42.519	
4,350.00	2,450.00	6,100.01	4,105.78	25.62	27.68	-3.58	-110.65	-2,208.84	1,661.74	1,621.87	39.87	41.680	
4,400.00	2,450.00	6,160.84	4,104.67	26.15	28.34	-7.41	-103.70	-2,269.27	1,661.35	1,620.67	40.68	40.839	
4,450.00	2,450.00	6,215.24	4,103.46	26.69	28.93	-8.67	-98.62	-2,323.42	1,660.70	1,619.24	41.46	40.056	
4,500.00	2,450.00	6,264.08	4,102.46	27.22	29.47	-7.99	-95.06	-2,372.11	1,660.06	1,617.85	42.21	39.328	
4,550.00	2,450.00	6,313.05	4,101.58	27.76	30.01	-7.45	-92.46	-2,421.01	1,659.45	1,616.49	42.96	38.627	
4,600.00	2,450.00	6,352.92	4,101.04	28.30	30.44	-3.81	-90.99	-2,460.84	1,659.01	1,615.34	43.67	37.993	
4,645.01	2,450.00	6,388.50	4,100.82	28.79	30.82	-0.47	-90.07	-2,496.41	1,658.88	1,614.58	44.30	37.448	
4,650.00	2,450.00	6,392.45	4,100.81	28.84	30.87	-0.10	-90.00	-2,500.36	1,658.88	1,614.51	44.37	37.389	
4,700.00	2,450.00	6,441.00	4,100.94	29.38	31.39	0.40	-89.43	-2,548.91	1,659.10	1,613.98	45.12	36.774	
4,750.00	2,450.00	6,476.34	4,101.23	29.92	31.77	5.48	-89.29	-2,584.24	1,659.52	1,613.73	45.79	36.240	
4,800.00	2,450.00	6,522.08	4,101.71	30.46	32.25	6.92	-89.14	-2,629.99	1,660.10	1,613.57	46.53	35.682	
4,850.00	2,450.00	6,567.00	4,102.30	31.01	32.73	8.62	-89.03	-2,674.90	1,660.81	1,613.56	47.25	35.147	
4,900.00	2,450.00	6,616.48	4,103.03	31.55	33.26	8.77	-88.88	-2,724.37	1,661.60	1,613.59	48.01	34.610	
4,950.00	2,450.00	6,665.07	4,103.78	32.10	33.78	9.20	-88.62	-2,772.96	1,662.44	1,613.68	48.76	34.094	
5,000.00	2,450.00	6,730.40	4,104.65	32.64	34.47	4.01	-88.17	-2,838.28	1,663.20	1,613.59	49.61	33.522	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - 70H - OH - SURVEYS

Survey Program: Reference		7-MWD+IGRF		1028-MWD+IFR1+MS						Rule Assigned:				Offset Well Error:		0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis (usft)	Offset	Azimuth from North (°)	Offset +N/-S (usft)	Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning			
5,050.00	2,450.00	6,816.56	4,104.29	33.19	35.40	-8.22	-87.92	-2,924.44	1,663.05	1,612.47	50.58	32.878					
5,100.00	2,450.00	6,864.53	4,103.60	33.73	35.91	-7.53	-87.91	-2,972.40	1,662.38	1,611.04	51.34	32.383					
5,150.00	2,450.00	6,911.38	4,103.00	34.28	36.42	-6.46	-87.86	-3,019.25	1,661.79	1,609.71	52.08	31.907					
5,200.00	2,450.00	6,959.33	4,102.48	34.82	36.93	-5.76	-87.78	-3,067.20	1,661.30	1,608.46	52.84	31.443					
5,250.00	2,450.00	7,009.80	4,101.93	35.37	37.48	-5.89	-87.59	-3,117.66	1,660.82	1,607.21	53.60	30.983					
5,300.00	2,450.00	7,060.26	4,101.35	35.92	38.02	-6.02	-87.26	-3,168.12	1,660.32	1,605.95	54.37	30.536					
5,350.00	2,450.00	7,109.08	4,100.78	36.47	38.55	-5.60	-86.85	-3,216.93	1,659.83	1,604.70	55.13	30.106					
5,400.00	2,450.00	7,157.51	4,100.27	37.02	39.07	-5.06	-86.45	-3,265.35	1,659.39	1,603.50	55.89	29.689					
5,450.00	2,450.00	7,209.79	4,099.75	37.57	39.64	-5.78	-86.04	-3,317.64	1,658.98	1,602.31	56.67	29.273					
5,500.00	2,450.00	7,273.88	4,098.79	38.12	40.34	-10.30	-86.01	-3,381.71	1,658.28	1,600.77	57.51	28.832					
5,550.00	2,450.00	7,333.13	4,097.49	38.67	40.98	-13.22	-86.55	-3,440.95	1,657.18	1,598.85	58.33	28.411					
5,600.00	2,450.00	7,379.99	4,096.43	39.22	41.49	-12.24	-87.08	-3,487.79	1,656.03	1,596.95	59.08	28.030					
5,650.00	2,450.00	7,426.85	4,095.45	39.77	42.00	-11.25	-87.58	-3,534.64	1,654.98	1,595.15	59.83	27.660					
5,700.00	2,450.00	7,476.27	4,094.49	40.32	42.53	-11.07	-88.10	-3,584.05	1,654.01	1,593.41	60.60	27.294					
5,750.00	2,450.00	7,527.46	4,093.48	40.87	43.09	-11.46	-88.77	-3,635.23	1,653.00	1,591.63	61.38	26.933					
5,800.00	2,450.00	7,578.41	4,092.46	41.42	43.65	-11.78	-89.58	-3,686.16	1,651.96	1,589.82	62.15	26.581					
5,850.00	2,450.00	7,627.97	4,091.46	41.98	44.19	-11.66	-90.40	-3,735.70	1,650.92	1,588.00	62.92	26.240					
5,900.00	2,450.00	7,677.53	4,090.48	42.53	44.73	-11.54	-91.20	-3,785.24	1,649.89	1,586.20	63.68	25.907					
5,950.00	2,450.00	7,726.22	4,089.52	43.08	45.26	-11.14	-91.91	-3,833.92	1,648.88	1,584.43	64.45	25.585					
6,000.00	2,450.00	7,774.29	4,088.60	43.64	45.78	-10.52	-92.38	-3,881.98	1,647.92	1,582.71	65.21	25.271					
6,050.00	2,450.00	7,824.00	4,087.69	44.19	46.33	-10.41	-92.58	-3,931.68	1,647.03	1,581.04	65.98	24.962					
6,100.00	2,450.00	7,870.81	4,086.87	44.74	46.84	-9.37	-92.72	-3,978.48	1,646.18	1,579.44	66.74	24.666					
6,150.00	2,450.00	7,919.26	4,086.08	45.30	47.37	-8.86	-93.01	-4,026.93	1,645.38	1,577.88	67.50	24.375					
6,200.00	2,450.00	7,967.96	4,085.34	45.85	47.90	-8.44	-93.46	-4,075.62	1,644.63	1,576.36	68.27	24.090					
6,250.00	2,450.00	8,017.10	4,084.65	46.40	48.44	-8.16	-94.02	-4,124.75	1,643.91	1,574.87	69.04	23.811					
6,300.00	2,450.00	8,066.24	4,083.99	46.96	48.98	-7.89	-94.69	-4,173.88	1,643.21	1,573.40	69.81	23.539					
6,350.00	2,450.00	8,113.18	4,083.42	47.51	49.50	-6.90	-95.43	-4,220.81	1,642.57	1,572.00	70.56	23.278					
6,400.00	2,450.00	8,159.63	4,082.96	48.07	50.01	-5.74	-96.25	-4,267.26	1,642.03	1,570.71	71.32	23.024					
6,450.00	2,450.00	8,202.00	4,082.64	48.62	50.47	-3.21	-97.07	-4,309.61	1,641.61	1,569.56	72.05	22.785					
6,500.00	2,450.00	8,252.37	4,082.39	49.18	51.03	-3.35	-98.16	-4,359.97	1,641.28	1,568.46	72.82	22.538					
6,550.00	2,450.00	8,298.66	4,082.27	49.73	51.54	-2.11	-99.26	-4,406.25	1,641.08	1,567.50	73.58	22.305					
6,600.00	2,450.00	8,348.17	4,082.25	50.29	52.08	-1.95	-100.52	-4,455.74	1,640.97	1,566.62	74.34	22.072					
6,650.00	2,450.00	8,403.23	4,082.09	50.85	52.69	-3.67	-101.64	-4,510.79	1,640.76	1,565.61	75.15	21.834					
6,700.00	2,450.00	8,458.39	4,081.72	51.40	53.29	-5.43	-102.39	-4,565.94	1,640.40	1,564.45	75.95	21.598					
6,750.00	2,450.00	8,514.66	4,081.13	51.96	53.91	-7.55	-103.09	-4,622.21	1,639.86	1,563.10	76.76	21.363					
6,800.00	2,450.00	8,570.92	4,080.35	52.51	54.53	-9.67	-103.98	-4,678.45	1,639.12	1,561.56	77.57	21.132					
6,850.00	2,450.00	8,621.43	4,079.54	53.07	55.09	-9.87	-104.95	-4,728.95	1,638.28	1,559.93	78.34	20.911					
6,900.00	2,450.00	8,670.83	4,078.79	53.63	55.64	-9.71	-106.10	-4,778.33	1,637.44	1,558.33	79.12	20.697					
6,950.00	2,450.00	8,706.00	4,078.28	54.18	56.02	-4.67	-107.02	-4,813.48	1,636.69	1,556.88	79.81	20.507					
7,000.00	2,450.00	8,757.81	4,077.71	54.74	56.60	-5.31	-108.21	-4,865.27	1,636.07	1,555.47	80.60	20.300					
7,050.00	2,450.00	8,798.04	4,077.51	55.30	57.04	-1.92	-108.80	-4,905.50	1,635.79	1,554.47	81.32	20.116					
7,071.35	2,450.00	8,815.22	4,077.49	55.54	57.23	-0.47	-108.96	-4,922.68	1,635.76	1,554.14	81.62	20.040					
7,100.00	2,450.00	8,845.41	4,077.52	55.86	57.56	-1.01	-109.12	-4,952.87	1,635.80	1,553.72	82.08	19.929					
7,150.00	2,450.00	8,940.12	4,076.10	56.41	58.61	-16.16	-109.59	-5,047.56	1,635.07	1,551.96	83.11	19.674					
7,200.00	2,450.00	8,995.04	4,074.33	56.97	59.22	-17.71	-109.94	-5,102.46	1,633.46	1,549.55	83.91	19.467					
7,250.00	2,450.00	9,040.72	4,072.95	57.53	59.72	-16.32	-110.32	-5,148.11	1,631.96	1,547.29	84.67	19.275					
7,300.00	2,450.00	9,084.00	4,071.77	58.09	60.20	-14.14	-110.76	-5,191.37	1,630.60	1,545.18	85.41	19.090					
7,350.00	2,450.00	9,130.87	4,070.64	58.64	60.72	-13.12	-111.35	-5,238.23	1,629.38	1,543.20	86.18	18.907					
7,400.00	2,450.00	9,175.41	4,069.73	59.20	61.21	-11.31	-112.04	-5,282.75	1,628.33	1,541.40	86.93	18.732					
7,450.00	2,450.00	9,219.77	4,068.99	59.76	61.71	-9.42	-112.84	-5,327.10	1,627.45	1,539.77	87.68	18.562					
7,500.00	2,450.00	9,263.52	4,068.43	60.32	62.19	-7.29	-113.73	-5,370.83	1,626.75	1,538.33	88.42	18.398					
7,550.00	2,450.00	9,307.26	4,068.05	60.87	62.67	-5.14	-114.70	-5,414.57	1,626.25	1,537.09	89.16	18.239					

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - 70H - OH - SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 7-MWD+IGRF 1028-MWD+IFR1+MS												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Semi Major Axis Offset	Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation	Separation Factor	Warning
				(usft)	(usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	(usft)		
7,600.00	2,450.00	9,351.41	4,067.84	61.43	63.17	-3.09	-115.74	-5,458.70	1,625.93	1,536.03	89.90	18.085	
7,650.00	2,450.00	9,396.34	4,067.73	61.99	63.67	-1.30	-116.38	-5,503.62	1,625.78	1,535.13	90.65	17.934	
7,673.05	2,450.00	9,417.05	4,067.71	62.25	63.90	-0.47	-116.49	-5,524.34	1,625.77	1,534.77	91.00	17.866	
7,700.00	2,450.00	9,441.27	4,067.71	62.55	64.17	0.50	-116.47	-5,548.55	1,625.79	1,534.39	91.40	17.787	
7,750.00	2,450.00	9,487.53	4,067.78	63.11	64.68	1.81	-116.09	-5,594.82	1,625.94	1,533.78	92.16	17.642	
7,800.00	2,450.00	9,535.07	4,067.92	63.67	65.21	2.67	-115.68	-5,642.35	1,626.18	1,533.25	92.93	17.499	
7,850.00	2,450.00	9,582.61	4,068.15	64.23	65.74	3.51	-115.34	-5,689.89	1,626.49	1,532.80	93.70	17.359	
7,900.00	2,450.00	9,631.33	4,068.45	64.78	66.28	3.94	-115.08	-5,738.61	1,626.87	1,532.39	94.47	17.221	
7,950.00	2,450.00	9,680.20	4,068.79	65.34	66.83	4.31	-114.94	-5,787.48	1,627.27	1,532.03	95.25	17.085	
8,000.00	2,450.00	9,730.65	4,069.19	65.90	67.39	4.15	-114.92	-5,837.92	1,627.71	1,531.68	96.03	16.950	
8,050.00	2,450.00	9,784.05	4,069.52	66.46	67.98	2.97	-114.89	-5,891.33	1,628.06	1,531.23	96.83	16.814	
8,100.00	2,450.00	9,834.05	4,069.78	67.02	68.53	2.96	-114.85	-5,941.32	1,628.37	1,530.76	97.61	16.683	
8,122.75	2,450.00	9,856.80	4,069.90	67.27	68.79	2.96	-114.83	-5,964.07	1,628.51	1,530.54	97.96	16.624	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - OFFSET: ELVIS STATE COM 29A 001H - OH - OH

Survey Program: 130-MWD		Rule Assigned:								Offset Site Error: 0.00 usft			
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance		Offset Well Error: 0.00 usft			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,800.00	1,780.70	8,704.34	3,539.78	7.90	128.90	-5.30	449.89	-8.87	1,873.16	1,809.82	63.34	29.575	
1,850.00	1,828.10	8,726.75	3,539.11	7.95	129.45	-5.93	449.49	-31.28	1,830.35	1,765.76	64.59	28.339	
1,900.00	1,874.55	8,727.09	3,539.08	7.98	129.46	-4.37	449.49	-31.61	1,788.47	1,722.77	65.69	27.225	
1,950.00	1,919.89	8,751.14	3,538.37	8.01	130.05	-4.66	449.09	-55.65	1,747.64	1,680.57	67.06	26.061	
2,000.00	1,963.94	8,765.74	3,538.01	8.04	130.40	-3.89	448.86	-70.24	1,708.14	1,639.75	68.39	24.977	
2,050.00	2,006.54	8,782.37	3,537.69	8.07	130.81	-3.08	448.62	-86.87	1,670.11	1,600.34	69.77	23.936	
2,100.00	2,047.53	8,801.02	3,537.42	8.12	131.27	-2.23	448.36	-105.52	1,633.71	1,562.50	71.21	22.942	
2,150.00	2,086.76	8,818.00	3,537.26	8.17	131.68	-1.05	448.14	-122.49	1,599.10	1,526.44	72.66	22.008	
2,200.00	2,124.08	8,846.50	3,537.17	8.24	132.38	-0.65	447.81	-150.99	1,566.38	1,492.15	74.23	21.101	
2,250.00	2,159.36	8,872.97	3,537.25	8.33	133.03	0.10	447.52	-177.46	1,535.68	1,459.89	75.79	20.262	
2,300.00	2,192.45	8,906.00	3,537.57	8.44	133.83	0.47	447.19	-210.49	1,507.14	1,429.73	77.41	19.471	
2,350.00	2,223.24	8,951.14	3,537.97	8.57	134.94	-0.02	446.80	-255.62	1,480.60	1,401.47	79.13	18.712	
2,400.00	2,251.61	9,006.95	3,537.88	8.72	136.30	-1.25	446.35	-311.43	1,455.74	1,374.80	80.93	17.987	
2,450.00	2,277.50	9,066.10	3,537.07	8.90	137.75	-2.63	445.85	-370.58	1,432.49	1,349.76	82.73	17.315	
2,500.00	2,302.50	9,119.56	3,535.72	9.10	139.06	-3.48	445.43	-424.01	1,409.60	1,325.11	84.49	16.683	
2,550.00	2,327.50	9,170.81	3,533.91	9.34	140.31	-4.14	445.25	-475.23	1,386.55	1,300.22	86.33	16.061	
2,600.00	2,352.50	9,197.58	3,533.06	9.58	140.97	-2.75	445.20	-501.99	1,363.77	1,275.78	87.98	15.500	
2,650.00	2,377.44	9,226.50	3,532.47	9.83	141.68	-1.54	445.13	-530.90	1,341.59	1,251.92	89.68	14.960	
2,700.00	2,399.86	9,257.57	3,532.22	10.11	142.44	-0.40	445.04	-561.97	1,322.16	1,230.75	91.41	14.464	
2,750.00	2,418.30	9,315.98	3,531.61	10.41	143.87	-1.40	444.98	-620.37	1,306.15	1,212.83	93.32	13.997	
2,800.00	2,432.62	9,363.65	3,530.90	10.73	145.04	-1.38	444.98	-668.04	1,293.56	1,198.53	95.03	13.613	
2,850.00	2,442.71	9,368.00	3,530.83	11.08	145.14	2.36	444.98	-672.39	1,285.36	1,189.23	96.13	13.371	
2,898.32	2,448.38	9,368.00	3,530.83	11.44	145.14	6.35	444.98	-672.39	1,282.73	1,185.84	96.89	13.239	CC
2,900.00	2,448.50	9,368.00	3,530.83	11.45	145.14	6.49	444.98	-672.39	1,282.74	1,185.82	96.91	13.236	ES
2,950.00	2,450.00	9,368.00	3,530.83	11.84	145.14	10.57	444.98	-672.39	1,285.69	1,188.34	97.35	13.207	SF
3,000.00	2,450.00	9,368.00	3,530.83	12.23	145.14	14.55	444.98	-672.39	1,291.83	1,194.27	97.56	13.241	
3,050.00	2,450.00	9,368.00	3,530.83	12.66	145.14	18.38	444.98	-672.39	1,299.87	1,202.22	97.65	13.312	
3,100.00	2,450.00	9,368.00	3,530.83	13.09	145.14	22.05	444.98	-672.39	1,309.77	1,212.17	97.60	13.419	
3,150.00	2,450.00	9,368.00	3,530.83	13.53	145.14	25.53	444.98	-672.39	1,321.49	1,224.05	97.43	13.563	
3,200.00	2,450.00	9,368.00	3,530.83	13.98	145.14	28.82	444.98	-672.39	1,334.97	1,237.83	97.15	13.742	
3,250.00	2,450.00	9,368.00	3,530.83	14.44	145.14	31.91	444.98	-672.39	1,350.18	1,253.42	96.76	13.954	
3,300.00	2,450.00	9,368.00	3,530.83	14.90	145.14	34.80	444.98	-672.39	1,367.05	1,270.79	96.26	14.202	
3,350.00	2,450.00	9,368.00	3,530.83	15.38	145.14	37.50	444.98	-672.39	1,385.52	1,289.84	95.67	14.482	
3,400.00	2,450.00	9,368.00	3,530.83	15.85	145.14	40.01	444.98	-672.39	1,405.52	1,310.52	95.00	14.794	
3,450.00	2,450.00	9,368.00	3,530.83	16.34	145.14	42.35	444.98	-672.39	1,427.00	1,332.73	94.27	15.138	
3,500.00	2,450.00	9,368.00	3,530.83	16.83	145.14	44.53	444.98	-672.39	1,449.88	1,356.42	93.46	15.513	
3,550.00	2,450.00	9,368.00	3,530.83	17.32	145.14	46.55	444.98	-672.39	1,474.11	1,381.50	92.61	15.918	
3,600.00	2,450.00	9,368.00	3,530.83	17.82	145.14	48.43	444.98	-672.39	1,499.61	1,407.90	91.71	16.352	
3,650.00	2,450.00	9,368.00	3,530.83	18.32	145.14	50.18	444.98	-672.39	1,526.32	1,435.55	90.77	16.815	
3,700.00	2,450.00	9,368.00	3,530.83	18.83	145.14	51.80	444.98	-672.39	1,554.18	1,464.38	89.80	17.306	
3,750.00	2,450.00	9,368.00	3,530.83	19.34	145.14	53.32	444.98	-672.39	1,583.14	1,494.32	88.82	17.825	
3,800.00	2,450.00	9,368.00	3,530.83	19.85	145.14	54.73	444.98	-672.39	1,613.12	1,525.31	87.81	18.370	
3,850.00	2,450.00	9,368.00	3,530.83	20.36	145.14	56.05	444.98	-672.39	1,644.08	1,557.28	86.80	18.941	
3,900.00	2,450.00	9,368.00	3,530.83	20.88	145.14	57.29	444.98	-672.39	1,675.95	1,590.18	85.78	19.538	
3,950.00	2,450.00	9,368.00	3,530.83	21.40	145.14	58.44	444.98	-672.39	1,708.70	1,623.94	84.76	20.160	
4,000.00	2,450.00	9,368.00	3,530.83	21.92	145.14	59.52	444.98	-672.39	1,742.26	1,658.52	83.74	20.806	
4,050.00	2,450.00	9,368.00	3,530.83	22.44	145.14	60.54	444.98	-672.39	1,776.60	1,693.87	82.73	21.475	
4,100.00	2,450.00	9,368.00	3,530.83	22.97	145.14	61.50	444.98	-672.39	1,811.67	1,729.94	81.73	22.167	
4,150.00	2,450.00	9,368.00	3,530.83	23.50	145.14	62.39	444.98	-672.39	1,847.43	1,766.69	80.74	22.882	
4,200.00	2,450.00	9,368.00	3,530.83	24.02	145.14	63.24	444.98	-672.39	1,883.83	1,804.07	79.76	23.619	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - OFFSET: ELVIS STATE COM 29A 002H - OH - OH

Survey Program: 222-MWD													Offset Site Error:	0.00 usft
Rule Assigned:													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
2,250.00	2,159.36	9,289.71	4,030.99	8.33	132.43	-0.51	48.84	-181.13	1,892.37	1,839.03	53.34	35.478		
2,300.00	2,192.45	9,337.76	4,030.99	8.44	133.61	-2.68	47.99	-229.18	1,859.87	1,805.73	54.14	34.354		
2,350.00	2,223.24	9,407.67	4,029.98	8.57	135.33	-8.82	47.43	-299.07	1,829.07	1,773.91	55.15	33.163		
2,400.00	2,251.61	9,449.24	4,029.02	8.72	136.35	-8.87	47.25	-340.63	1,800.25	1,744.33	55.92	32.195		
2,450.00	2,277.50	9,486.00	4,028.11	8.90	137.25	-7.67	47.05	-377.38	1,773.71	1,717.10	56.61	31.333		
2,500.00	2,302.50	9,520.78	4,027.37	9.10	138.11	-5.96	46.95	-412.15	1,748.18	1,690.90	57.28	30.520		
2,550.00	2,327.50	9,549.97	4,026.97	9.34	138.82	-3.12	47.05	-441.34	1,723.01	1,665.07	57.94	29.738		
2,600.00	2,352.50	9,583.76	4,026.74	9.58	139.65	-1.19	47.37	-475.12	1,698.19	1,639.53	58.66	28.952		
2,650.00	2,377.44	9,628.56	4,026.49	9.83	140.75	-1.48	47.79	-519.92	1,673.49	1,614.01	59.48	28.137		
2,700.00	2,399.86	9,675.59	4,026.19	10.11	141.91	-1.95	48.15	-566.95	1,651.25	1,590.82	60.43	27.325		
2,750.00	2,418.30	9,724.37	4,025.81	10.41	143.11	-2.41	48.34	-615.73	1,632.83	1,571.45	61.38	26.601		
2,800.00	2,432.62	9,772.14	4,025.43	10.73	144.28	-2.38	48.48	-663.49	1,618.45	1,556.13	62.32	25.970		
2,850.00	2,442.71	9,776.00	4,025.40	11.08	144.38	6.59	48.49	-667.36	1,608.86	1,546.03	62.84	25.604		
2,900.00	2,448.50	9,776.00	4,025.40	11.45	144.38	16.06	48.49	-667.36	1,605.04	1,541.79	63.25	25.376		
2,908.85	2,449.08	9,776.00	4,025.40	11.52	144.38	17.67	48.49	-667.36	1,604.96	1,541.65	63.31	25.352 CC, ES		
2,950.00	2,450.00	9,776.00	4,025.40	11.84	144.38	24.75	48.49	-667.36	1,606.99	1,543.46	63.53	25.294 SF		
3,000.00	2,450.00	9,776.00	4,025.40	12.23	144.38	32.37	48.49	-667.36	1,611.97	1,548.26	63.70	25.305		
3,050.00	2,450.00	9,776.00	4,025.40	12.66	144.38	38.87	48.49	-667.36	1,618.47	1,554.64	63.83	25.356		
3,100.00	2,450.00	9,776.00	4,025.40	13.09	144.38	44.36	48.49	-667.36	1,626.49	1,562.58	63.90	25.453		
3,150.00	2,450.00	9,776.00	4,025.40	13.53	144.38	48.97	48.49	-667.36	1,635.99	1,572.06	63.93	25.592		
3,200.00	2,450.00	9,776.00	4,025.40	13.98	144.38	52.85	48.49	-667.36	1,646.96	1,583.06	63.90	25.773		
3,250.00	2,450.00	9,776.00	4,025.40	14.44	144.38	56.14	48.49	-667.36	1,659.37	1,595.53	63.83	25.995		
3,300.00	2,450.00	9,776.00	4,025.40	14.90	144.38	58.93	48.49	-667.36	1,673.17	1,609.46	63.72	26.260		
3,350.00	2,450.00	9,776.00	4,025.40	15.38	144.38	61.34	48.49	-667.36	1,688.35	1,624.79	63.56	26.564		
3,400.00	2,450.00	9,776.00	4,025.40	15.85	144.38	63.41	48.49	-667.36	1,704.85	1,641.50	63.36	26.908		
3,450.00	2,450.00	9,776.00	4,025.40	16.34	144.38	65.22	48.49	-667.36	1,722.66	1,659.53	63.12	27.290		
3,500.00	2,450.00	9,776.00	4,025.40	16.83	144.38	66.81	48.49	-667.36	1,741.71	1,678.86	62.85	27.711		
3,550.00	2,450.00	9,776.00	4,025.40	17.32	144.38	68.21	48.49	-667.36	1,761.98	1,699.43	62.55	28.169		
3,600.00	2,450.00	9,776.00	4,025.40	17.82	144.38	69.46	48.49	-667.36	1,783.42	1,721.20	62.22	28.663		
3,650.00	2,450.00	9,776.00	4,025.40	18.32	144.38	70.57	48.49	-667.36	1,805.99	1,744.12	61.86	29.193		
3,700.00	2,450.00	9,776.00	4,025.40	18.83	144.38	71.57	48.49	-667.36	1,829.64	1,768.16	61.48	29.758		
3,750.00	2,450.00	9,776.00	4,025.40	19.34	144.38	72.48	48.49	-667.36	1,854.35	1,793.26	61.09	30.356		
3,800.00	2,450.00	9,776.00	4,025.40	19.85	144.38	73.30	48.49	-667.36	1,880.06	1,819.39	60.67	30.988		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - OFFSET: ELVIS STATE COM 29A 003H - OH - OH

Survey Program: 222-MWD											Offset Site Error:
Reference											0.00 usft
Offset											Offset Well Error:
Semi Major Axis											0.00 usft
Reference											
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Minimum Separation (usft)	Warning
1,750.00	1,732.54	8,646.00	3,614.93	7.84	126.31	175.34	-339.13	74.90	1,888.76	1,840.88	47.88
1,800.00	1,780.70	8,663.29	3,614.98	7.90	126.74	177.26	-339.06	57.61	1,840.25	1,792.22	48.03
1,850.00	1,828.10	8,674.64	3,615.03	7.95	127.01	175.80	-339.04	46.25	1,792.59	1,744.46	48.13
1,900.00	1,874.55	8,688.35	3,615.13	7.98	127.35	174.01	-339.02	32.55	1,745.96	1,697.70	48.26
1,950.00	1,919.89	8,704.40	3,615.29	8.01	127.75	171.90	-339.01	16.50	1,700.54	1,652.13	48.42
2,000.00	1,963.94	8,722.76	3,615.52	8.04	128.20	169.48	-339.04	-1.86	1,656.54	1,607.93	48.61
2,050.00	2,006.54	8,745.95	3,615.87	8.07	128.77	167.94	-339.11	-25.05	1,614.13	1,565.26	48.87
2,100.00	2,047.53	8,774.23	3,616.33	8.12	129.46	167.52	-339.18	-53.32	1,573.43	1,524.23	49.20
2,150.00	2,086.76	8,804.90	3,616.84	8.17	130.21	167.10	-339.25	-83.98	1,534.57	1,485.00	49.57
2,200.00	2,124.08	8,846.43	3,617.49	8.24	131.24	170.93	-339.29	-125.52	1,497.66	1,447.59	50.07
2,250.00	2,159.36	8,899.61	3,617.82	8.33	132.54	-179.97	-339.13	-178.69	1,462.50	1,411.80	50.70
2,300.00	2,192.45	8,943.96	3,617.70	8.44	133.63	-176.24	-338.92	-223.04	1,429.23	1,377.96	51.26
2,350.00	2,223.24	8,987.71	3,617.42	8.57	134.71	-173.80	-338.87	-266.79	1,398.15	1,346.31	51.85
2,400.00	2,251.61	9,032.60	3,616.98	8.72	135.81	-171.70	-338.91	-311.68	1,369.39	1,316.92	52.47
2,450.00	2,277.50	9,078.98	3,616.40	8.90	136.95	-169.71	-338.89	-358.05	1,343.00	1,289.92	53.08
2,500.00	2,302.50	9,119.63	3,615.85	9.10	137.95	-171.11	-338.93	-398.70	1,317.48	1,263.83	53.65
2,550.00	2,327.50	9,159.79	3,615.39	9.34	138.94	-172.82	-339.18	-438.85	1,292.05	1,237.79	54.25
2,600.00	2,352.50	9,213.25	3,614.64	9.58	140.25	-167.37	-339.81	-492.30	1,266.55	1,211.57	54.98
2,650.00	2,377.44	9,271.11	3,613.16	9.83	141.67	-160.05	-340.72	-550.14	1,240.62	1,184.88	55.73
2,700.00	2,399.86	9,317.14	3,611.67	10.11	142.80	-159.53	-341.73	-596.13	1,216.90	1,160.37	56.54
2,750.00	2,418.30	9,362.93	3,610.10	10.41	143.92	-160.00	-342.86	-641.89	1,197.03	1,139.69	57.34
2,800.00	2,432.62	9,385.00	3,609.35	10.73	144.46	-173.29	-343.40	-663.93	1,181.48	1,123.51	57.97
2,850.00	2,442.71	9,385.00	3,609.35	11.08	144.46	160.75	-343.40	-663.93	1,171.90	1,113.53	58.37
2,899.61	2,448.47	9,385.00	3,609.35	11.45	144.46	140.56	-343.40	-663.93	1,168.71	1,110.03	58.68
2,900.00	2,448.50	9,385.00	3,609.35	11.45	144.46	140.43	-343.40	-663.93	1,168.71	1,110.03	58.68
2,950.00	2,450.00	9,385.00	3,609.35	11.84	144.46	127.35	-343.40	-663.93	1,171.94	1,113.10	58.84
3,000.00	2,450.00	9,385.00	3,609.35	12.23	144.46	119.07	-343.40	-663.93	1,178.76	1,119.91	58.85
3,050.00	2,450.00	9,385.00	3,609.35	12.66	144.46	113.58	-343.40	-663.93	1,187.65	1,128.86	58.78
3,100.00	2,450.00	9,385.00	3,609.35	13.09	144.46	109.74	-343.40	-663.93	1,198.56	1,139.92	58.63
3,150.00	2,450.00	9,385.00	3,609.35	13.53	144.46	106.92	-343.40	-663.93	1,211.43	1,153.03	58.41
3,200.00	2,450.00	9,385.00	3,609.35	13.98	144.46	104.78	-343.40	-663.93	1,226.21	1,168.11	58.11
3,250.00	2,450.00	9,385.00	3,609.35	14.44	144.46	103.10	-343.40	-663.93	1,242.83	1,185.09	57.75
3,300.00	2,450.00	9,385.00	3,609.35	14.90	144.46	101.74	-343.40	-663.93	1,261.22	1,203.89	57.33
3,350.00	2,450.00	9,385.00	3,609.35	15.38	144.46	100.63	-343.40	-663.93	1,281.29	1,224.43	56.86
3,400.00	2,450.00	9,385.00	3,609.35	15.85	144.46	99.70	-343.40	-663.93	1,302.97	1,246.63	56.34
3,450.00	2,450.00	9,385.00	3,609.35	16.34	144.46	98.92	-343.40	-663.93	1,326.19	1,270.40	55.79
3,500.00	2,450.00	9,385.00	3,609.35	16.83	144.46	98.24	-343.40	-663.93	1,350.85	1,295.64	55.21
3,550.00	2,450.00	9,385.00	3,609.35	17.32	144.46	97.66	-343.40	-663.93	1,376.89	1,322.29	54.60
3,600.00	2,450.00	9,385.00	3,609.35	17.82	144.46	97.15	-343.40	-663.93	1,404.23	1,350.25	53.98
3,650.00	2,450.00	9,385.00	3,609.35	18.32	144.46	96.70	-343.40	-663.93	1,432.79	1,379.45	53.34
3,700.00	2,450.00	9,385.00	3,609.35	18.83	144.46	96.30	-343.40	-663.93	1,462.51	1,409.81	52.70
3,750.00	2,450.00	9,385.00	3,609.35	19.34	144.46	95.94	-343.40	-663.93	1,493.31	1,441.26	52.05
3,800.00	2,450.00	9,385.00	3,609.35	19.85	144.46	95.62	-343.40	-663.93	1,525.12	1,473.72	51.40
3,850.00	2,450.00	9,385.00	3,609.35	20.36	144.46	95.32	-343.40	-663.93	1,557.89	1,507.14	50.76
3,900.00	2,450.00	9,385.00	3,609.35	20.88	144.46	95.06	-343.40	-663.93	1,591.56	1,541.44	50.12
3,950.00	2,450.00	9,385.00	3,609.35	21.40	144.46	94.82	-343.40	-663.93	1,626.07	1,576.58	49.49
4,000.00	2,450.00	9,385.00	3,609.35	21.92	144.46	94.60	-343.40	-663.93	1,661.37	1,612.50	48.87
4,050.00	2,450.00	9,385.00	3,609.35	22.44	144.46	94.39	-343.40	-663.93	1,697.40	1,649.14	48.26
4,100.00	2,450.00	9,385.00	3,609.35	22.97	144.46	94.20	-343.40	-663.93	1,734.13	1,686.47	47.66
4,150.00	2,450.00	9,385.00	3,609.35	23.50	144.46	94.03	-343.40	-663.93	1,771.51	1,724.43	47.08
4,200.00	2,450.00	9,385.00	3,609.35	24.02	144.46	93.87	-343.40	-663.93	1,809.49	1,762.98	46.51
4,250.00	2,450.00	9,385.00	3,609.35	24.55	144.46	93.72	-343.40	-663.93	1,848.05	1,802.09	45.96

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - OFFSET: ELVIS STATE COM 29A 003H - OH - OH

Survey Program:		222-MWD						Rule Assigned:				Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
4,300.00	2,450.00	9,385.00	3,609.35	25.09	144.46	93.58	-343.40	-663.93	1,887.15	1,841.72	45.43	41.543		



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - OFFSET: MAPLE STATE 13 - OH - OH													Offset Site Error:
Survey Program: 100-GYRO-NS													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,000.00	2,450.00	2,381.46	2,434.36	43.64	8.12	-93.81	-389.80	-5,734.56	1,888.77	1,871.75	17.02	110.969	
6,050.00	2,450.00	2,381.82	2,434.73	44.19	8.13	-93.90	-389.80	-5,734.56	1,838.86	1,821.79	17.07	107.703	
6,100.00	2,450.00	2,382.19	2,435.10	44.74	8.13	-93.99	-389.80	-5,734.57	1,788.95	1,771.82	17.13	104.443	
6,150.00	2,450.00	2,382.56	2,435.47	45.30	8.13	-94.09	-389.81	-5,734.57	1,739.05	1,721.87	17.19	101.188	
6,200.00	2,450.00	2,382.93	2,435.84	45.85	8.13	-94.20	-389.81	-5,734.57	1,689.16	1,671.91	17.25	97.939	
6,250.00	2,450.00	2,383.30	2,436.21	46.40	8.13	-94.32	-389.82	-5,734.57	1,639.27	1,621.96	17.31	94.693	
6,300.00	2,450.00	2,383.67	2,436.58	46.96	8.13	-94.44	-389.82	-5,734.58	1,589.39	1,572.01	17.38	91.454	
6,350.00	2,450.00	2,384.04	2,436.95	47.51	8.13	-94.57	-389.82	-5,734.58	1,539.51	1,522.06	17.45	88.217	
6,400.00	2,450.00	2,384.42	2,437.32	48.07	8.13	-94.70	-389.83	-5,734.58	1,489.64	1,472.12	17.53	84.985	
6,450.00	2,450.00	2,384.79	2,437.70	48.62	8.14	-94.85	-389.83	-5,734.59	1,439.79	1,422.18	17.61	81.756	
6,500.00	2,450.00	2,385.16	2,438.07	49.18	8.14	-95.01	-389.84	-5,734.59	1,389.94	1,372.24	17.70	78.531	
6,550.00	2,450.00	2,385.54	2,438.44	49.73	8.14	-95.18	-389.84	-5,734.59	1,340.11	1,322.31	17.80	75.307	
6,600.00	2,450.00	2,385.91	2,438.82	50.29	8.14	-95.36	-389.84	-5,734.59	1,290.28	1,272.38	17.90	72.087	
6,650.00	2,450.00	2,386.29	2,439.20	50.85	8.14	-95.56	-389.85	-5,734.60	1,240.47	1,222.46	18.01	68.867	
6,700.00	2,450.00	2,386.67	2,439.57	51.40	8.14	-95.77	-389.85	-5,734.60	1,190.68	1,172.54	18.14	65.650	
6,750.00	2,450.00	2,387.04	2,439.95	51.96	8.14	-96.00	-389.86	-5,734.60	1,140.91	1,122.63	18.27	62.432	
6,800.00	2,450.00	2,387.42	2,440.33	52.51	8.14	-96.26	-389.86	-5,734.61	1,091.15	1,072.72	18.43	59.216	
6,850.00	2,450.00	2,387.80	2,440.71	53.07	8.15	-96.53	-389.87	-5,734.61	1,041.42	1,022.82	18.60	55.999	
6,900.00	2,450.00	2,388.18	2,441.09	53.63	8.15	-96.84	-389.87	-5,734.61	991.72	972.93	18.79	52.783	
6,950.00	2,450.00	2,388.56	2,441.47	54.18	8.15	-97.18	-389.87	-5,734.61	942.04	923.04	19.01	49.566	
7,000.00	2,450.00	2,388.94	2,441.85	54.74	8.15	-97.55	-389.88	-5,734.62	892.41	873.15	19.25	46.350	
7,050.00	2,450.00	2,389.32	2,442.23	55.30	8.15	-97.97	-389.88	-5,734.62	842.81	823.27	19.54	43.135	
7,100.00	2,450.00	2,389.71	2,442.61	55.86	8.15	-98.44	-389.89	-5,734.62	793.27	773.40	19.87	39.924	
7,150.00	2,450.00	2,390.09	2,443.00	56.41	8.15	-98.98	-389.89	-5,734.63	743.79	723.53	20.26	36.718	
7,200.00	2,450.00	2,390.47	2,443.38	56.97	8.16	-99.59	-389.90	-5,734.63	694.38	673.66	20.71	33.522	
7,250.00	2,450.00	2,390.86	2,443.77	57.53	8.16	-100.29	-389.90	-5,734.63	645.06	623.80	21.26	30.341	
7,300.00	2,450.00	2,391.24	2,444.15	58.09	8.16	-101.11	-389.90	-5,734.64	595.86	573.94	21.92	27.183	
7,350.00	2,450.00	2,391.63	2,444.54	58.64	8.16	-102.08	-389.91	-5,734.64	546.80	524.07	22.73	24.061	
7,400.00	2,450.00	2,392.02	2,444.92	59.20	8.16	-103.24	-389.91	-5,734.64	497.93	474.20	23.72	20.989	
7,450.00	2,450.00	2,392.41	2,445.31	59.76	8.16	-104.65	-389.92	-5,734.64	449.30	424.33	24.98	17.989	
7,500.00	2,450.00	2,392.80	2,445.70	60.32	8.16	-106.40	-389.92	-5,734.65	401.02	374.44	26.58	15.088	
7,550.00	2,450.00	2,393.18	2,446.09	60.87	8.16	-108.63	-389.93	-5,734.65	353.21	324.54	28.67	12.321	
7,600.00	2,450.00	2,393.58	2,446.48	61.43	8.17	-111.55	-389.93	-5,734.65	306.10	274.65	31.45	9.733	
7,650.00	2,450.00	2,393.97	2,446.87	61.99	8.17	-115.51	-389.94	-5,734.66	260.07	224.81	35.25	7.377	
7,700.00	2,450.00	2,394.36	2,447.26	62.55	8.17	-121.14	-389.94	-5,734.66	215.81	175.23	40.58	5.318	
7,750.00	2,450.00	2,394.75	2,447.66	63.11	8.17	-129.54	-389.94	-5,734.66	174.68	126.56	48.12	3.630	
7,800.00	2,450.00	2,395.14	2,448.05	63.67	8.17	-142.60	-389.95	-5,734.67	139.48	81.12	58.36	2.390	
7,850.00	2,450.00	2,395.54	2,448.44	64.23	8.17	-162.54	-389.95	-5,734.67	115.73	46.58	69.15	1.674	
7,885.63	2,450.00	2,395.82	2,448.73	64.62	8.17	-179.52	-389.96	-5,734.67	110.11	37.28	72.83	1.512 CC, ES, SF	
7,900.00	2,450.00	2,395.93	2,448.84	64.78	8.17	-172.09	-389.96	-5,734.67	111.04	38.49	72.56	1.530	
7,950.00	2,450.00	2,396.33	2,449.23	65.34	8.18	-149.22	-389.96	-5,734.68	127.55	62.32	65.23	1.955	
8,000.00	2,450.00	2,396.73	2,449.63	65.90	8.18	-133.44	-389.97	-5,734.68	158.77	103.73	55.04	2.885	
8,050.00	2,450.00	2,397.12	2,450.03	66.46	8.18	-123.35	-389.97	-5,734.68	197.85	151.07	46.78	4.230	
8,100.00	2,450.00	2,397.52	2,450.43	67.02	8.18	-116.72	-389.98	-5,734.68	241.00	200.19	40.81	5.905	
8,122.75	2,450.00	2,397.70	2,450.61	67.27	8.18	-114.44	-389.98	-5,734.69	261.45	222.75	38.70	6.756	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - OFFSET: MAPLE STATE 4 - OH - OH													Offset Site Error:
Survey Program: 50-GYRO-NS-CT													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,350.00	2,450.00	2,401.39	2,448.32	36.47	8.30	-93.53	-373.29	-5,052.84	1,856.32	1,839.66	16.66	111.410	
5,400.00	2,450.00	2,401.45	2,448.38	37.02	8.30	-93.61	-373.29	-5,052.84	1,806.39	1,789.69	16.70	108.164	
5,450.00	2,450.00	2,401.51	2,448.44	37.57	8.30	-93.70	-373.29	-5,052.84	1,756.47	1,739.73	16.74	104.921	
5,500.00	2,450.00	2,401.57	2,448.50	38.12	8.30	-93.79	-373.29	-5,052.84	1,706.55	1,689.77	16.78	101.683	
5,550.00	2,450.00	2,401.63	2,448.56	38.67	8.30	-93.90	-373.29	-5,052.85	1,656.64	1,639.81	16.83	98.448	
5,600.00	2,450.00	2,401.69	2,448.62	39.22	8.30	-94.00	-373.29	-5,052.85	1,606.73	1,589.86	16.87	95.218	
5,650.00	2,450.00	2,401.76	2,448.68	39.77	8.30	-94.12	-373.28	-5,052.85	1,556.83	1,539.90	16.92	91.990	
5,700.00	2,450.00	2,401.82	2,448.74	40.32	8.31	-94.24	-373.28	-5,052.85	1,506.93	1,489.96	16.98	88.768	
5,750.00	2,450.00	2,401.88	2,448.81	40.87	8.31	-94.37	-373.28	-5,052.85	1,457.04	1,440.01	17.03	85.546	
5,800.00	2,450.00	2,401.94	2,448.87	41.42	8.31	-94.50	-373.28	-5,052.85	1,407.16	1,390.07	17.09	82.328	
5,850.00	2,450.00	2,402.00	2,448.93	41.98	8.31	-94.65	-373.28	-5,052.85	1,357.29	1,340.14	17.16	79.112	
5,900.00	2,450.00	2,402.06	2,448.99	42.53	8.31	-94.81	-373.28	-5,052.85	1,307.43	1,290.20	17.23	75.898	
5,950.00	2,450.00	2,402.13	2,449.05	43.08	8.31	-94.98	-373.28	-5,052.85	1,257.58	1,240.28	17.30	72.684	
6,000.00	2,450.00	2,402.19	2,449.12	43.64	8.31	-95.17	-373.28	-5,052.85	1,207.74	1,190.36	17.38	69.472	
6,050.00	2,450.00	2,402.25	2,449.18	44.19	8.31	-95.37	-373.28	-5,052.85	1,157.92	1,140.44	17.48	66.259	
6,100.00	2,450.00	2,402.32	2,449.24	44.74	8.31	-95.59	-373.28	-5,052.85	1,108.11	1,090.53	17.58	63.047	
6,150.00	2,450.00	2,402.38	2,449.31	45.30	8.31	-95.84	-373.28	-5,052.85	1,058.32	1,040.63	17.69	59.832	
6,200.00	2,450.00	2,402.44	2,449.37	45.85	8.31	-96.10	-373.28	-5,052.85	1,008.55	990.73	17.81	56.616	
6,250.00	2,450.00	2,402.51	2,449.44	46.40	8.31	-96.40	-373.28	-5,052.85	958.80	940.85	17.96	53.396	
6,300.00	2,450.00	2,402.57	2,449.50	46.96	8.31	-96.72	-373.28	-5,052.85	909.08	890.96	18.12	50.174	
6,350.00	2,450.00	2,402.64	2,449.57	47.51	8.31	-97.08	-373.28	-5,052.85	859.40	841.09	18.31	46.946	
6,400.00	2,450.00	2,402.70	2,449.63	48.07	8.31	-97.49	-373.28	-5,052.85	809.75	791.23	18.52	43.716	
6,450.00	2,450.00	2,402.77	2,449.70	48.62	8.31	-97.95	-373.28	-5,052.85	760.15	741.37	18.78	40.481	
6,500.00	2,450.00	2,402.83	2,449.76	49.18	8.31	-98.48	-373.28	-5,052.85	710.61	691.53	19.08	37.243	
6,550.00	2,450.00	2,402.90	2,449.83	49.73	8.31	-99.08	-373.28	-5,052.85	661.13	641.69	19.44	34.004	
6,600.00	2,450.00	2,402.97	2,449.89	50.29	8.31	-99.78	-373.28	-5,052.85	611.74	591.86	19.88	30.769	
6,650.00	2,450.00	2,403.03	2,449.96	50.85	8.31	-100.61	-373.28	-5,052.85	562.46	542.04	20.42	27.541	
6,700.00	2,450.00	2,403.10	2,450.03	51.40	8.31	-101.59	-373.28	-5,052.85	513.31	492.22	21.10	24.332	
6,750.00	2,450.00	2,403.17	2,450.10	51.96	8.31	-102.78	-373.27	-5,052.85	464.35	442.40	21.95	21.155	
6,800.00	2,450.00	2,403.23	2,450.16	52.51	8.31	-104.25	-373.27	-5,052.85	415.64	392.59	23.05	18.032	
6,850.00	2,450.00	2,403.30	2,450.23	53.07	8.31	-106.11	-373.27	-5,052.85	367.27	342.77	24.50	14.993	
6,900.00	2,450.00	2,403.37	2,450.30	53.63	8.31	-108.52	-373.27	-5,052.85	319.41	292.96	26.44	12.079	
6,950.00	2,450.00	2,403.44	2,450.37	54.18	8.31	-111.79	-373.27	-5,052.85	272.31	243.17	29.14	9.346	
7,000.00	2,450.00	2,403.51	2,450.44	54.74	8.31	-116.39	-373.27	-5,052.85	226.46	193.49	32.98	6.868	
7,050.00	2,450.00	2,403.58	2,450.51	55.30	8.31	-123.26	-373.27	-5,052.85	182.80	144.20	38.60	4.736	
7,100.00	2,450.00	2,403.65	2,450.58	55.86	8.31	-134.15	-373.27	-5,052.85	143.35	96.47	46.88	3.058	
7,150.00	2,450.00	2,403.72	2,450.65	56.41	8.31	-152.00	-373.27	-5,052.85	112.61	54.93	57.68	1.952	
7,200.00	2,450.00	2,403.79	2,450.72	56.97	8.31	-178.34	-373.27	-5,052.85	99.07	33.90	65.16	1.520	
7,203.70	2,450.00	2,403.79	2,450.72	57.01	8.31	-179.52	-373.27	-5,052.85	99.00	33.72	65.27	1.517	CC, ES, SF
7,250.00	2,450.00	2,403.86	2,450.79	57.53	8.31	154.45	-373.27	-5,052.85	109.30	48.43	60.87	1.796	
7,300.00	2,450.00	2,403.93	2,450.86	58.09	8.31	135.31	-373.27	-5,052.85	138.12	87.12	51.00	2.708	
7,350.00	2,450.00	2,404.00	2,450.93	58.64	8.31	123.61	-373.27	-5,052.85	176.66	133.91	42.75	4.132	
7,400.00	2,450.00	2,404.07	2,451.00	59.20	8.31	116.29	-373.27	-5,052.85	219.87	182.87	37.00	5.943	
7,450.00	2,450.00	2,404.14	2,451.07	59.76	8.31	111.43	-373.27	-5,052.85	265.47	232.44	33.03	8.037	
7,500.00	2,450.00	2,404.22	2,451.15	60.32	8.31	108.00	-373.27	-5,052.85	312.42	282.20	30.22	10.338	
7,550.00	2,450.00	2,404.29	2,451.22	60.87	8.31	105.48	-373.27	-5,052.85	360.19	332.02	28.18	12.784	
7,600.00	2,450.00	2,404.36	2,451.29	61.43	8.31	103.56	-373.27	-5,052.85	408.50	381.86	26.64	15.332	
7,650.00	2,450.00	2,404.44	2,451.36	61.99	8.31	102.04	-373.27	-5,052.85	457.17	431.70	25.47	17.950	
7,700.00	2,450.00	2,404.51	2,451.44	62.55	8.31	100.81	-373.26	-5,052.85	506.10	481.55	24.55	20.614	
7,750.00	2,450.00	2,404.58	2,451.51	63.11	8.31	99.80	-373.26	-5,052.85	555.22	531.40	23.82	23.307	
7,800.00	2,450.00	2,404.66	2,451.59	63.67	8.31	98.96	-373.26	-5,052.85	604.48	581.25	23.23	26.016	
7,850.00	2,450.00	2,404.73	2,451.66	64.23	8.32	98.24	-373.26	-5,052.85	653.86	631.10	22.76	28.733	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - OFFSET: MAPLE STATE 4 - OH - OH

		50-GYRO-NS-CT								Rule Assigned:				Offset Site Error: 0.00 usft	
Survey Program:		Reference Offset		Semi Major Axis		Offset Wellbore Centre			Distance				Offset Well Error: 0.00 usft		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
7,900.00	2,450.00	2,404.81	2,451.74	64.78	8.32	97.62	-373.26	-5,052.85	703.32	680.96	22.36	31.451			
7,950.00	2,450.00	2,404.88	2,451.81	65.34	8.32	97.09	-373.26	-5,052.85	752.86	730.82	22.04	34.166			
8,000.00	2,450.00	2,404.96	2,451.89	65.90	8.32	96.62	-373.26	-5,052.85	802.45	780.69	21.76	36.873			
8,050.00	2,450.00	2,405.04	2,451.97	66.46	8.32	96.20	-373.26	-5,052.85	852.09	830.56	21.53	39.572			
8,100.00	2,450.00	2,405.11	2,452.04	67.02	8.32	95.83	-373.26	-5,052.85	901.77	880.43	21.34	42.259			
8,122.75	2,450.00	2,405.15	2,452.08	67.27	8.32	95.68	-373.26	-5,052.85	924.39	903.13	21.26	43.477			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - OFFSET: STATE '30' COM 1 - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 490-INC-ONLY													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	40.00	0.00	0.00	-91.64	-43.85	-1,530.45	1,531.60				
50.00	50.00	10.00	50.00	0.92	0.19	-91.64	-43.85	-1,530.45	1,531.08	1,529.96	1.12	1,371.476	
100.00	100.00	60.00	100.00	0.92	1.15	-91.64	-43.85	-1,530.45	1,531.08	1,529.00	2.08	737.077	
150.00	150.00	110.00	150.00	1.23	2.11	-91.64	-43.85	-1,530.45	1,531.08	1,527.74	3.34	458.527	
200.00	200.00	160.00	200.00	1.53	3.07	-91.64	-43.85	-1,530.45	1,531.08	1,526.48	4.60	332.769	
250.00	250.00	210.00	250.00	1.74	4.04	-91.64	-43.85	-1,530.45	1,531.08	1,525.30	5.78	265.087	
300.00	300.00	260.00	300.00	1.95	5.00	-91.64	-43.85	-1,530.45	1,531.08	1,524.13	6.95	220.284	
350.00	350.00	310.00	350.00	2.22	5.96	-91.63	-43.85	-1,530.45	1,531.27	1,523.16	8.10	188.940	
400.00	399.98	359.98	399.98	2.51	6.92	-91.58	-43.85	-1,530.45	1,531.83	1,522.57	9.26	165.494	
450.00	449.93	409.93	449.93	2.75	7.88	-91.51	-43.85	-1,530.45	1,532.77	1,522.39	10.38	147.638	
500.00	499.84	459.84	499.84	2.99	8.84	-91.41	-43.85	-1,530.45	1,534.10	1,522.59	11.51	133.317	
550.00	549.68	509.70	549.68	3.22	9.82	-91.27	-43.85	-1,530.45	1,535.81	1,523.16	12.64	121.468	
600.00	599.45	559.47	599.45	3.45	10.84	-91.11	-43.85	-1,530.45	1,537.90	1,524.09	13.82	111.318	
650.00	649.13	609.14	649.13	3.67	11.85	-90.92	-43.85	-1,530.45	1,540.40	1,525.42	14.98	102.836	
700.00	698.70	658.72	698.70	3.90	12.86	-90.71	-43.85	-1,530.45	1,543.29	1,527.15	16.14	95.610	
750.00	748.15	708.17	748.15	4.15	13.87	-90.46	-43.85	-1,530.45	1,546.60	1,529.29	17.31	89.339	
800.00	797.47	757.48	797.46	4.39	14.88	-90.16	-43.05	-1,530.45	1,550.32	1,531.84	18.48	83.889	
850.00	846.69	806.71	846.69	4.57	15.89	-89.87	-43.11	-1,530.45	1,554.33	1,534.72	19.62	79.238	
900.00	895.91	855.97	895.95	4.74	16.89	-89.59	-43.23	-1,530.45	1,558.38	1,537.64	20.75	75.113	
950.00	945.13	905.25	945.22	4.92	17.90	-89.31	-43.42	-1,530.45	1,562.47	1,540.58	21.89	71.384	
1,000.00	994.35	954.54	994.52	5.10	18.91	-89.04	-43.67	-1,530.45	1,566.60	1,543.57	23.03	68.023	
1,050.00	1,043.57	1,003.64	1,043.57	5.29	19.92	-88.76	-43.85	-1,530.45	1,570.76	1,546.57	24.18	64.948	
1,100.00	1,092.79	1,052.86	1,092.79	5.47	20.97	-88.48	-43.85	-1,530.45	1,574.96	1,549.59	25.37	62.089	
1,150.00	1,142.01	1,102.08	1,142.01	5.67	22.01	-88.20	-43.85	-1,530.45	1,579.20	1,552.65	26.55	59.484	
1,200.00	1,191.23	1,151.30	1,191.23	5.86	23.06	-87.92	-43.85	-1,530.45	1,583.48	1,555.75	27.73	57.101	
1,250.00	1,240.45	1,200.62	1,240.54	6.06	24.10	-87.61	-43.06	-1,530.45	1,587.82	1,558.91	28.92	54.908	
1,300.00	1,289.67	1,250.03	1,289.95	6.26	25.15	-87.34	-43.19	-1,530.45	1,592.17	1,562.07	30.11	52.884	
1,350.00	1,338.89	1,299.48	1,339.40	6.46	26.20	-87.08	-43.43	-1,530.45	1,596.55	1,565.26	31.30	51.012	
1,400.00	1,388.11	1,348.97	1,388.88	6.67	27.25	-86.82	-43.79	-1,530.45	1,600.96	1,568.47	32.49	49.275	
1,450.00	1,437.33	1,397.46	1,437.33	6.87	28.28	-86.55	-43.85	-1,530.45	1,605.42	1,571.75	33.66	47.690	
1,500.00	1,486.55	1,446.68	1,486.55	7.08	29.33	-86.28	-43.85	-1,530.45	1,609.91	1,575.06	34.85	46.190	
1,550.00	1,535.83	1,496.09	1,535.96	7.25	30.38	-85.99	-43.32	-1,530.45	1,613.69	1,577.67	36.02	44.804	
1,600.00	1,585.25	1,545.95	1,585.81	7.43	31.44	-85.73	-43.46	-1,530.45	1,614.53	1,577.30	37.22	43.373	
1,650.00	1,634.63	1,595.82	1,635.68	7.61	32.50	-85.48	-43.78	-1,530.45	1,612.33	1,573.94	38.38	42.005	
1,700.00	1,683.79	1,643.95	1,683.79	7.75	33.55	-85.21	-43.85	-1,530.45	1,607.14	1,567.65	39.49	40.698	
1,750.00	1,732.54	1,692.70	1,732.54	7.84	34.63	-84.95	-43.85	-1,530.45	1,598.96	1,558.37	40.59	39.389	
1,800.00	1,780.70	1,740.87	1,780.70	7.90	35.69	-84.68	-43.85	-1,530.45	1,587.83	1,546.14	41.68	38.094	
1,850.00	1,828.10	1,788.30	1,828.13	7.95	36.74	-84.38	-43.07	-1,530.45	1,573.85	1,531.09	42.76	36.807	
1,900.00	1,874.55	1,835.12	1,874.95	7.98	37.77	-84.11	-43.13	-1,530.45	1,556.92	1,513.09	43.83	35.523	
1,950.00	1,919.89	1,880.85	1,920.67	8.01	38.78	-83.85	-43.29	-1,530.45	1,537.18	1,492.30	44.88	34.250	
2,000.00	1,963.94	1,925.30	1,965.12	8.04	39.76	-83.58	-43.55	-1,530.45	1,514.69	1,468.78	45.91	32.991	
2,050.00	2,006.54	1,966.78	2,006.54	8.07	40.68	-83.31	-43.85	-1,530.45	1,489.55	1,442.66	46.89	31.768	
2,100.00	2,047.53	2,007.77	2,047.53	8.12	41.66	-83.02	-43.85	-1,530.45	1,461.89	1,413.96	47.93	30.501	
2,150.00	2,086.76	2,047.00	2,086.76	8.17	42.60	-82.73	-43.85	-1,530.45	1,431.77	1,382.84	48.93	29.259	
2,200.00	2,124.08	2,084.32	2,124.08	8.24	43.49	-82.44	-43.85	-1,530.45	1,399.32	1,349.42	49.90	28.044	
2,250.00	2,159.36	2,119.59	2,159.36	8.33	44.33	-82.14	-43.85	-1,530.45	1,364.65	1,313.83	50.82	26.854	
2,300.00	2,192.45	2,152.69	2,192.45	8.44	45.12	-81.83	-43.85	-1,530.45	1,327.88	1,276.20	51.69	25.691	
2,350.00	2,223.24	2,183.48	2,223.24	8.57	45.85	-81.51	-43.85	-1,530.45	1,289.17	1,236.67	52.50	24.555	
2,400.00	2,251.61	2,211.85	2,251.61	8.72	46.53	-81.19	-43.85	-1,530.45	1,248.65	1,195.39	53.26	23.445	
2,450.00	2,277.50	2,237.91	2,277.65	8.90	47.15	-80.79	-42.47	-1,530.45	1,206.71	1,152.76	53.95	22.366	
2,500.00	2,302.50	2,263.12	2,302.87	9.10	47.75	-80.43	-42.51	-1,530.45	1,164.04	1,109.43	54.61	21.316	
2,550.00	2,327.50	2,288.34	2,328.08	9.34	48.36	-80.05	-42.57	-1,530.45	1,121.42	1,066.15	55.27	20.290	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - OFFSET: STATE '30' COM 1 - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 490-INC-ONLY												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
2,600.00	2,352.50	2,313.56	2,353.30	9.58	48.96	-79.64	-42.66	-1,530.45	1,078.84	1,022.91	55.93	19.288	
2,650.00	2,377.44	2,338.72	2,378.46	9.83	49.56	-79.19	-42.78	-1,530.45	1,036.29	979.69	56.60	18.309	
2,700.00	2,399.86	2,361.34	2,401.08	10.11	50.10	-78.69	-42.91	-1,530.45	992.49	935.24	57.25	17.336	
2,750.00	2,418.30	2,379.94	2,419.68	10.41	50.54	-78.13	-43.03	-1,530.45	947.04	889.23	57.81	16.383	
2,800.00	2,432.62	2,394.39	2,434.13	10.73	50.89	-77.48	-43.13	-1,530.45	900.29	842.03	58.26	15.454	
2,850.00	2,442.71	2,404.58	2,444.31	11.08	51.13	-76.75	-43.21	-1,530.45	852.64	794.04	58.60	14.550	
2,900.00	2,448.50	2,410.42	2,450.15	11.45	51.27	-75.91	-43.26	-1,530.45	804.48	745.64	58.84	13.672	
2,950.00	2,450.00	2,411.94	2,451.67	11.84	51.30	-74.96	-43.27	-1,530.45	756.22	697.24	58.99	12.820	
3,000.00	2,450.00	2,411.94	2,451.67	12.23	51.30	-73.88	-43.27	-1,530.45	708.17	649.06	59.11	11.980	
3,050.00	2,450.00	2,411.94	2,451.68	12.66	51.30	-72.64	-43.27	-1,530.45	660.40	601.13	59.27	11.142	
3,100.00	2,450.00	2,411.95	2,451.68	13.09	51.30	-71.21	-43.27	-1,530.45	613.00	553.53	59.46	10.309	
3,150.00	2,450.00	2,411.95	2,451.68	13.53	51.30	-69.54	-43.27	-1,530.45	566.03	506.31	59.73	9.477	
3,200.00	2,450.00	2,411.95	2,451.69	13.98	51.30	-67.57	-43.27	-1,530.45	519.64	459.61	60.03	8.657	
3,250.00	2,450.00	2,411.96	2,451.69	14.44	51.30	-65.22	-43.27	-1,530.45	473.98	413.56	60.42	7.845	
3,300.00	2,450.00	2,411.96	2,451.69	14.90	51.30	-62.37	-43.27	-1,530.45	429.29	368.34	60.95	7.044	
3,350.00	2,450.00	2,411.96	2,451.70	15.38	51.30	-58.88	-43.27	-1,530.45	385.90	324.28	61.61	6.263	
3,400.00	2,450.00	2,411.97	2,451.70	15.85	51.31	-54.51	-43.27	-1,530.45	344.31	281.83	62.48	5.511	
3,450.00	2,450.00	2,411.97	2,451.70	16.34	51.31	-48.99	-43.27	-1,530.45	305.25	241.66	63.59	4.800	
3,500.00	2,450.00	2,411.97	2,451.71	16.83	51.31	-41.94	-43.27	-1,530.45	269.83	204.86	64.96	4.153	
3,550.00	2,450.00	2,411.98	2,451.71	17.32	51.31	-32.95	-43.27	-1,530.45	239.66	173.08	66.58	3.600	
3,600.00	2,450.00	2,411.98	2,451.71	17.82	51.31	-21.74	-43.27	-1,530.45	216.95	148.72	68.23	3.180	
3,650.00	2,450.00	2,411.99	2,451.72	18.32	51.31	-8.55	-43.27	-1,530.45	204.20	134.66	69.54	2.937	
3,678.70	2,450.00	2,411.99	2,451.72	18.61	51.31	-0.47	-43.27	-1,530.45	202.17	132.23	69.95	2.890 CC, ES, SF	
3,700.00	2,450.00	2,411.99	2,451.72	18.83	51.31	5.55	-43.27	-1,530.45	203.29	133.24	70.05	2.902	
3,750.00	2,450.00	2,411.99	2,451.72	19.34	51.31	18.96	-43.27	-1,530.45	214.38	144.72	69.66	3.078	
3,800.00	2,450.00	2,412.00	2,451.73	19.85	51.31	30.50	-43.27	-1,530.45	235.77	167.12	68.65	3.434	
3,850.00	2,450.00	2,412.00	2,451.73	20.36	51.31	39.81	-43.27	-1,530.45	264.99	197.55	67.44	3.929	
3,900.00	2,450.00	2,412.00	2,451.73	20.88	51.31	47.12	-43.27	-1,530.45	299.75	233.47	66.27	4.523	
3,950.00	2,450.00	2,412.01	2,451.74	21.40	51.31	52.84	-43.27	-1,530.45	338.35	273.09	65.26	5.185	
4,000.00	2,450.00	2,412.01	2,451.74	21.92	51.31	57.35	-43.27	-1,530.45	379.62	315.20	64.41	5.893	
4,050.00	2,450.00	2,412.01	2,451.74	22.44	51.31	60.96	-43.27	-1,530.45	422.78	359.05	63.72	6.635	
4,100.00	2,450.00	2,412.02	2,451.75	22.97	51.31	63.90	-43.27	-1,530.45	467.30	404.15	63.15	7.399	
4,150.00	2,450.00	2,412.02	2,451.75	23.50	51.31	66.31	-43.27	-1,530.45	512.84	450.14	62.69	8.180	
4,200.00	2,450.00	2,412.02	2,451.76	24.02	51.31	68.33	-43.27	-1,530.45	559.13	496.82	62.31	8.974	
4,250.00	2,450.00	2,412.03	2,451.76	24.55	51.31	70.04	-43.27	-1,530.45	606.02	544.03	61.99	9.775	
4,300.00	2,450.00	2,412.03	2,451.76	25.09	51.31	71.51	-43.27	-1,530.45	653.37	591.64	61.73	10.584	
4,350.00	2,450.00	2,412.03	2,451.77	25.62	51.31	72.77	-43.27	-1,530.45	701.09	639.58	61.51	11.398	
4,400.00	2,450.00	2,412.04	2,451.77	26.15	51.31	73.87	-43.27	-1,530.45	749.10	687.78	61.32	12.215	
4,450.00	2,450.00	2,412.04	2,451.77	26.69	51.31	74.84	-43.27	-1,530.45	797.36	736.19	61.17	13.036	
4,500.00	2,450.00	2,412.04	2,451.78	27.22	51.31	75.70	-43.27	-1,530.45	845.82	784.79	61.03	13.858	
4,550.00	2,450.00	2,412.05	2,451.78	27.76	51.31	76.47	-43.27	-1,530.45	894.45	833.53	60.92	14.683	
4,600.00	2,450.00	2,412.05	2,451.78	28.30	51.31	77.15	-43.27	-1,530.45	943.22	882.40	60.82	15.508	
4,650.00	2,450.00	2,412.05	2,451.79	28.84	51.31	77.77	-43.27	-1,530.45	992.12	931.38	60.74	16.335	
4,700.00	2,450.00	2,412.06	2,451.79	29.38	51.31	78.33	-43.27	-1,530.45	1,041.12	980.46	60.67	17.162	
4,750.00	2,450.00	2,412.06	2,451.79	29.92	51.31	78.84	-43.27	-1,530.45	1,090.21	1,029.61	60.60	17.989	
4,800.00	2,450.00	2,412.06	2,451.80	30.46	51.31	79.31	-43.27	-1,530.45	1,139.38	1,078.83	60.55	18.817	
4,850.00	2,450.00	2,412.07	2,451.80	31.01	51.31	79.74	-43.27	-1,530.45	1,188.62	1,128.12	60.51	19.645	
4,900.00	2,450.00	2,412.07	2,451.80	31.55	51.31	80.13	-43.27	-1,530.45	1,237.92	1,177.46	60.47	20.472	
4,950.00	2,450.00	2,412.07	2,451.81	32.10	51.31	80.50	-43.27	-1,530.45	1,287.28	1,226.84	60.44	21.300	
5,000.00	2,450.00	2,412.08	2,451.81	32.64	51.31	80.83	-43.27	-1,530.45	1,336.68	1,276.27	60.41	22.127	
5,050.00	2,450.00	2,412.08	2,451.81	33.19	51.31	81.14	-43.27	-1,530.45	1,386.13	1,325.74	60.39	22.954	
5,100.00	2,450.00	2,412.09	2,451.82	33.73	51.31	81.44	-43.27	-1,530.45	1,435.61	1,375.24	60.37	23.781	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: STALEY 30 STATE COM - OFFSET: STATE '30' COM 1 - OH - OH

Survey Program: Reference		490-INC-ONLY						Rule Assigned:				Offset Site Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre		Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,150.00	2,450.00	2,412.09	2,451.82	34.28	51.31	81.71	-43.27	-1,530.45	1,485.13	1,424.77	60.35	24.607	
5,200.00	2,450.00	2,412.09	2,451.82	34.82	51.31	81.96	-43.27	-1,530.45	1,534.68	1,474.34	60.34	25.433	
5,250.00	2,450.00	2,412.10	2,451.83	35.37	51.31	82.20	-43.27	-1,530.45	1,584.26	1,523.92	60.33	26.258	
5,300.00	2,450.00	2,412.10	2,451.83	35.92	51.31	82.42	-43.27	-1,530.45	1,633.86	1,573.53	60.33	27.082	
5,350.00	2,450.00	2,412.10	2,451.83	36.47	51.31	82.63	-43.27	-1,530.45	1,683.49	1,623.16	60.33	27.906	
5,400.00	2,450.00	2,412.11	2,451.84	37.02	51.31	82.83	-43.27	-1,530.45	1,733.13	1,672.81	60.33	28.729	
5,450.00	2,450.00	2,412.11	2,451.84	37.57	51.31	83.02	-43.27	-1,530.45	1,782.80	1,722.47	60.33	29.551	
5,500.00	2,450.00	2,412.11	2,451.84	38.12	51.31	83.20	-43.27	-1,530.45	1,832.49	1,772.16	60.33	30.373	
5,550.00	2,450.00	2,412.12	2,451.85	38.67	51.31	83.37	-43.27	-1,530.45	1,882.19	1,821.85	60.34	31.194	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: TAYLORCREST 25 FEDERAL - 10H - Wellbore #1 - SURVEYS

Survey Program: Reference		7-MWD+IGRF, 901-MWD+IFR1+MS						Rule Assigned:				Offset Well Error:		0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
6,050.00	2,450.00	2,601.00	2,561.76	44.19	11.67	-101.18	-624.31	-5,718.57	1,857.11	1,836.84	20.27	91.613		
6,100.00	2,450.00	2,601.00	2,561.76	44.74	11.67	-101.48	-624.31	-5,718.57	1,808.09	1,787.61	20.49	88.259		
6,150.00	2,450.00	2,601.00	2,561.76	45.30	11.67	-101.79	-624.31	-5,718.57	1,759.14	1,738.42	20.72	84.909		
6,200.00	2,450.00	2,601.00	2,561.76	45.85	11.67	-102.12	-624.31	-5,718.57	1,710.24	1,689.27	20.97	81.570		
6,250.00	2,450.00	2,601.00	2,561.76	46.40	11.67	-102.47	-624.31	-5,718.57	1,661.41	1,640.17	21.24	78.239		
6,300.00	2,450.00	2,601.00	2,561.76	46.96	11.67	-102.84	-624.31	-5,718.57	1,612.65	1,591.12	21.52	74.922		
6,350.00	2,450.00	2,601.00	2,561.76	47.51	11.67	-103.23	-624.31	-5,718.57	1,563.97	1,542.13	21.84	71.619		
6,400.00	2,450.00	2,601.00	2,561.76	48.07	11.67	-103.65	-624.31	-5,718.57	1,515.37	1,493.19	22.18	68.337		
6,450.00	2,450.00	2,601.00	2,561.76	48.62	11.67	-104.10	-624.31	-5,718.57	1,466.87	1,444.33	22.54	65.074		
6,500.00	2,450.00	2,601.00	2,561.76	49.18	11.67	-104.57	-624.31	-5,718.57	1,418.47	1,395.53	22.94	61.839		
6,550.00	2,450.00	2,601.00	2,561.76	49.73	11.67	-105.08	-624.31	-5,718.57	1,370.19	1,346.82	23.37	58.631		
6,600.00	2,450.00	2,579.47	2,541.20	50.29	11.57	-105.36	-618.51	-5,721.30	1,321.52	1,297.92	23.61	55.983		
6,650.00	2,450.00	2,576.99	2,538.84	50.85	11.56	-105.90	-617.84	-5,721.65	1,273.38	1,249.30	24.08	52.888		
6,700.00	2,450.00	2,574.39	2,536.36	51.40	11.55	-106.49	-617.14	-5,722.04	1,225.37	1,200.78	24.59	49.834		
6,750.00	2,450.00	2,571.64	2,533.75	51.96	11.54	-107.12	-616.41	-5,722.45	1,177.51	1,152.36	25.15	46.824		
6,800.00	2,450.00	2,568.74	2,530.99	52.51	11.52	-107.81	-615.64	-5,722.90	1,129.82	1,104.06	25.76	43.863		
6,850.00	2,450.00	2,565.68	2,528.08	53.07	11.51	-108.55	-614.82	-5,723.39	1,082.31	1,055.88	26.43	40.956		
6,900.00	2,450.00	2,562.44	2,525.00	53.63	11.50	-109.36	-613.95	-5,723.92	1,035.01	1,007.85	27.16	38.109		
6,950.00	2,450.00	2,559.00	2,521.74	54.18	11.48	-110.24	-613.04	-5,724.51	987.95	959.99	27.97	35.327		
7,000.00	2,450.00	2,538.00	2,501.87	54.74	11.38	-110.87	-607.49	-5,728.43	941.53	912.95	28.59	32.934		
7,050.00	2,450.00	2,538.00	2,501.87	55.30	11.38	-111.99	-607.49	-5,728.43	894.91	865.29	29.62	30.212		
7,100.00	2,450.00	2,538.00	2,501.87	55.86	11.38	-113.23	-607.49	-5,728.43	848.68	817.91	30.77	27.579		
7,150.00	2,450.00	2,538.00	2,501.87	56.41	11.38	-114.61	-607.49	-5,728.43	802.90	770.83	32.06	25.042		
7,200.00	2,450.00	2,538.00	2,501.87	56.97	11.38	-116.16	-607.49	-5,728.43	757.65	724.14	33.51	22.611		
7,250.00	2,450.00	2,528.80	2,493.19	57.53	11.34	-117.66	-605.07	-5,730.29	712.97	678.00	34.97	20.389		
7,300.00	2,450.00	2,519.26	2,484.20	58.09	11.30	-119.36	-602.57	-5,732.22	668.90	632.29	36.62	18.268		
7,350.00	2,450.00	2,509.67	2,475.15	58.64	11.26	-121.28	-600.05	-5,734.17	625.57	587.09	38.49	16.255		
7,400.00	2,450.00	2,500.03	2,466.04	59.20	11.22	-123.49	-597.53	-5,736.13	583.15	542.53	40.62	14.357		
7,450.00	2,450.00	2,490.32	2,456.89	59.76	11.18	-126.03	-594.99	-5,738.12	541.84	498.79	43.05	12.587		
7,500.00	2,450.00	2,480.55	2,447.68	60.32	11.14	-128.98	-592.44	-5,740.12	501.91	456.08	45.83	10.952		
7,550.00	2,450.00	2,470.55	2,438.24	60.87	11.10	-132.42	-589.84	-5,742.18	463.73	414.74	48.98	9.467		
7,600.00	2,450.00	2,460.29	2,428.56	61.43	11.05	-136.45	-587.16	-5,744.29	427.74	375.20	52.54	8.142		
7,650.00	2,450.00	2,450.01	2,418.87	61.99	11.00	-141.20	-584.48	-5,746.41	394.55	338.06	56.49	6.985		
7,700.00	2,450.00	2,439.71	2,409.16	62.55	10.96	-146.80	-581.78	-5,748.53	364.93	304.17	60.76	6.006		
7,750.00	2,450.00	2,429.40	2,399.43	63.11	10.91	-153.35	-579.08	-5,750.66	339.80	274.67	65.13	5.217		
7,800.00	2,450.00	2,419.07	2,389.70	63.67	10.86	-160.92	-576.37	-5,752.79	320.22	250.98	69.24	4.625		
7,850.00	2,450.00	2,408.72	2,379.95	64.23	10.81	-169.41	-573.65	-5,754.93	307.27	234.70	72.57	4.234		
7,900.00	2,450.00	2,398.36	2,370.18	64.78	10.76	-178.60	-570.92	-5,757.07	301.78	227.21	74.57	4.047		
7,909.90	2,450.00	2,396.30	2,368.25	64.89	10.75	179.53	-570.38	-5,757.50	301.62	226.85	74.77	4.034	CC, ES, SF	
7,950.00	2,450.00	2,387.98	2,360.40	65.34	10.71	171.94	-568.18	-5,759.22	304.16	229.26	74.90	4.061		
8,000.00	2,450.00	2,377.58	2,350.61	65.90	10.67	162.71	-565.43	-5,761.37	314.24	240.64	73.59	4.270		
8,050.00	2,450.00	2,367.17	2,340.80	66.46	10.62	154.14	-562.68	-5,763.53	331.30	260.30	71.01	4.666		
8,100.00	2,450.00	2,356.74	2,330.98	67.02	10.57	146.49	-559.91	-5,765.69	354.35	286.71	67.65	5.238		
8,122.75	2,450.00	2,351.99	2,326.51	67.27	10.55	143.35	-558.65	-5,766.68	366.53	300.53	65.99	5.554		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: TAYLORCREST 25 FEDERAL - 20H - Wellbore #1 - SURVEYS

Survey Program: 7-MWD+IGRF, 963-MWD+IFR1+MS													Offset Site Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Rule Assigned: Distance				Offset Well Error: 0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,850.00	2,450.00	2,633.96	2,590.60	41.98	11.15	-78.14	117.80	-5,513.66	1,858.54	1,835.34	23.20	80.103		
5,900.00	2,450.00	2,632.41	2,589.07	42.53	11.14	-77.80	117.61	-5,513.82	1,809.87	1,786.39	23.48	77.072		
5,950.00	2,450.00	2,630.80	2,587.48	43.08	11.14	-77.45	117.41	-5,513.99	1,761.27	1,737.48	23.78	74.060		
6,000.00	2,450.00	2,629.13	2,585.83	43.64	11.13	-77.08	117.21	-5,514.17	1,712.74	1,688.64	24.10	71.070		
6,050.00	2,450.00	2,627.39	2,584.11	44.19	11.12	-76.69	116.99	-5,514.36	1,664.29	1,639.85	24.44	68.104		
6,100.00	2,450.00	2,625.57	2,582.31	44.74	11.12	-76.28	116.77	-5,514.56	1,615.93	1,591.13	24.80	65.164		
6,150.00	2,450.00	2,623.68	2,580.45	45.30	11.11	-75.84	116.54	-5,514.78	1,567.67	1,542.49	25.18	62.252		
6,200.00	2,450.00	2,621.70	2,578.50	45.85	11.10	-75.37	116.30	-5,515.01	1,519.51	1,493.92	25.59	59.371		
6,250.00	2,450.00	2,600.00	2,557.15	46.40	11.01	-74.99	113.72	-5,517.87	1,471.85	1,446.00	25.85	56.937		
6,300.00	2,450.00	2,600.00	2,557.15	46.96	11.01	-74.45	113.72	-5,517.87	1,423.86	1,397.52	26.33	54.068		
6,350.00	2,450.00	2,600.00	2,557.15	47.51	11.01	-73.87	113.72	-5,517.87	1,376.01	1,349.15	26.86	51.237		
6,400.00	2,450.00	2,600.00	2,557.15	48.07	11.01	-73.26	113.72	-5,517.87	1,328.32	1,300.90	27.42	48.448		
6,450.00	2,450.00	2,600.00	2,557.15	48.62	11.01	-72.59	113.72	-5,517.87	1,280.80	1,252.78	28.02	45.704		
6,500.00	2,450.00	2,600.00	2,557.15	49.18	11.01	-71.88	113.72	-5,517.87	1,233.49	1,204.81	28.68	43.009		
6,550.00	2,450.00	2,600.00	2,557.15	49.73	11.01	-71.10	113.72	-5,517.87	1,186.39	1,157.00	29.39	40.367		
6,600.00	2,450.00	2,600.00	2,557.15	50.29	11.01	-70.27	113.72	-5,517.87	1,139.54	1,109.38	30.16	37.782		
6,650.00	2,450.00	2,600.00	2,557.15	50.85	11.01	-69.36	113.72	-5,517.87	1,092.97	1,061.97	31.00	35.259		
6,700.00	2,450.00	2,600.00	2,557.15	51.40	11.01	-68.37	113.72	-5,517.87	1,046.72	1,014.80	31.91	32.800		
6,750.00	2,450.00	2,600.00	2,557.15	51.96	11.01	-67.28	113.72	-5,517.87	1,000.82	967.91	32.91	30.413		
6,800.00	2,450.00	2,600.00	2,557.15	52.51	11.01	-66.09	113.72	-5,517.87	955.34	921.34	34.00	28.100		
6,850.00	2,450.00	2,600.00	2,557.15	53.07	11.01	-64.79	113.72	-5,517.87	910.33	875.14	35.19	25.868		
6,900.00	2,450.00	2,581.37	2,538.88	53.63	10.91	-63.56	111.52	-5,520.82	865.45	829.27	36.18	23.919		
6,950.00	2,450.00	2,577.08	2,534.69	54.18	10.89	-62.03	111.01	-5,521.57	821.41	783.87	37.53	21.885		
7,000.00	2,450.00	2,572.49	2,530.20	54.74	10.86	-60.33	110.47	-5,522.40	778.03	739.01	39.01	19.942		
7,050.00	2,450.00	2,567.56	2,525.40	55.30	10.83	-58.44	109.89	-5,523.32	735.43	694.78	40.64	18.095		
7,100.00	2,450.00	2,562.25	2,520.23	55.86	10.81	-56.33	109.26	-5,524.35	693.75	651.31	42.43	16.349		
7,150.00	2,450.00	2,556.53	2,514.67	56.41	10.77	-53.96	108.59	-5,525.51	653.15	608.75	44.40	14.710		
7,200.00	2,450.00	2,538.00	2,496.72	56.97	10.67	-51.56	106.40	-5,529.55	614.05	567.77	46.28	13.267		
7,250.00	2,450.00	2,538.00	2,496.72	57.53	10.67	-48.43	106.40	-5,529.55	576.12	527.34	48.78	11.810		
7,300.00	2,450.00	2,538.00	2,496.72	58.09	10.67	-44.86	106.40	-5,529.55	540.16	488.65	51.51	10.487		
7,350.00	2,450.00	2,527.59	2,486.68	58.64	10.62	-41.10	105.17	-5,532.01	506.44	452.25	54.18	9.347		
7,400.00	2,450.00	2,518.36	2,477.80	59.20	10.57	-36.81	104.08	-5,534.28	475.37	418.32	57.05	8.332		
7,450.00	2,450.00	2,508.39	2,468.23	59.76	10.52	-31.99	102.91	-5,536.83	447.47	387.48	60.00	7.458		
7,500.00	2,450.00	2,497.58	2,457.89	60.32	10.46	-26.63	101.65	-5,539.71	423.34	360.43	62.91	6.730		
7,550.00	2,450.00	2,485.83	2,446.69	60.87	10.40	-20.75	100.29	-5,542.97	403.60	337.99	65.61	6.152		
7,600.00	2,450.00	2,472.82	2,434.32	61.43	10.33	-14.42	98.78	-5,546.75	388.87	320.97	67.90	5.727		
7,650.00	2,450.00	2,458.03	2,420.30	61.99	10.27	-7.77	97.08	-5,551.11	379.65	310.10	69.55	5.459		
7,700.00	2,450.00	2,443.11	2,406.15	62.55	10.21	-0.86	95.35	-5,555.54	376.30	305.89	70.41	5.344		
7,702.75	2,450.00	2,442.29	2,405.37	62.58	10.20	-0.47	95.26	-5,555.79	376.29	305.86	70.43	5.342 CC, ES, SF		
7,750.00	2,450.00	2,428.04	2,391.88	63.11	10.14	6.12	93.61	-5,560.04	378.98	308.58	70.39	5.384		
7,800.00	2,450.00	2,412.83	2,377.47	63.67	10.08	12.96	91.85	-5,564.60	387.55	318.04	69.51	5.575		
7,850.00	2,450.00	2,397.58	2,363.04	64.23	10.01	19.48	90.08	-5,569.19	401.63	333.72	67.90	5.915		
7,900.00	2,450.00	2,382.21	2,348.50	64.78	9.95	25.56	88.30	-5,573.83	420.65	354.89	65.77	6.396		
7,950.00	2,450.00	2,366.73	2,333.85	65.34	9.88	31.11	86.50	-5,578.53	443.99	380.68	63.31	7.013		
8,000.00	2,450.00	2,351.12	2,319.10	65.90	9.81	36.12	84.69	-5,583.28	470.99	410.26	60.73	7.756		
8,050.00	2,450.00	2,335.40	2,304.24	66.46	9.74	40.58	82.87	-5,588.09	501.06	442.92	58.14	8.619		
8,100.00	2,450.00	2,319.52	2,289.24	67.02	9.66	44.55	81.04	-5,592.98	533.66	478.02	55.64	9.592		
8,122.75	2,450.00	2,312.23	2,282.36	67.27	9.63	46.20	80.21	-5,595.23	549.22	494.67	54.55	10.068		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Offset Design: TAYLORCREST 25 FEDERAL - 70H - Wellbore #1 - SURVEYS

Survey Program: 7-MWD+IGRF 963-MWD+IFR1+MS										Offset Site Error: 0.00 usft	
Rule Assigned:										Offset Well Error: 0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Minimum Separation (usft)	Warning
5,700.00	2,450.00	3,073.00	3,008.29	40.32	13.59	-88.09	-202.25	-5,342.49	1,878.34	24.49	76.705
5,750.00	2,450.00	3,073.00	3,008.29	40.87	13.59	-88.02	-202.25	-5,342.49	1,830.70	24.74	74.001
5,800.00	2,450.00	3,073.00	3,008.29	41.42	13.59	-87.95	-202.25	-5,342.49	1,783.19	25.01	71.307
5,850.00	2,450.00	3,063.90	2,999.66	41.98	13.55	-87.87	-201.92	-5,345.36	1,735.80	25.16	68.995
5,900.00	2,450.00	3,049.14	2,985.66	42.53	13.48	-87.77	-201.38	-5,350.02	1,688.43	25.23	66.917
5,950.00	2,450.00	3,034.33	2,971.63	43.08	13.41	-87.67	-200.84	-5,354.70	1,641.07	25.31	64.844
6,000.00	2,450.00	3,019.47	2,957.54	43.64	13.35	-87.57	-200.28	-5,359.41	1,593.73	25.39	62.777
6,050.00	2,450.00	3,004.56	2,943.41	44.19	13.28	-87.45	-199.72	-5,364.14	1,546.40	25.47	60.713
6,100.00	2,450.00	2,989.60	2,929.24	44.74	13.21	-87.33	-199.15	-5,368.89	1,499.08	25.56	58.656
6,150.00	2,450.00	2,978.00	2,918.25	45.30	13.15	-87.21	-198.70	-5,372.59	1,451.79	25.71	56.465
6,200.00	2,450.00	2,960.16	2,901.36	45.85	13.07	-87.07	-198.00	-5,378.28	1,404.51	25.75	54.541
6,250.00	2,450.00	2,945.52	2,887.50	46.40	13.00	-86.92	-197.44	-5,382.97	1,357.26	25.86	52.488
6,300.00	2,450.00	2,930.79	2,873.57	46.96	12.92	-86.76	-196.87	-5,387.70	1,310.03	25.97	50.443
6,350.00	2,450.00	2,915.98	2,859.56	47.51	12.85	-86.59	-196.30	-5,392.47	1,262.83	26.09	48.405
6,400.00	2,450.00	2,901.08	2,845.47	48.07	12.78	-86.41	-195.74	-5,397.28	1,215.65	26.21	46.374
6,450.00	2,450.00	2,886.09	2,831.30	48.62	12.71	-86.21	-195.17	-5,402.14	1,168.50	26.35	44.350
6,500.00	2,450.00	2,871.01	2,817.05	49.18	12.63	-86.00	-194.60	-5,407.04	1,121.39	26.49	42.334
6,550.00	2,450.00	2,855.85	2,802.72	49.73	12.56	-85.77	-194.03	-5,411.98	1,074.30	26.64	40.325
6,600.00	2,450.00	2,840.69	2,788.41	50.29	12.49	-85.51	-193.46	-5,416.94	1,027.25	26.81	38.319
6,650.00	2,450.00	2,825.49	2,774.06	50.85	12.41	-85.23	-192.88	-5,421.92	980.24	26.99	36.319
6,700.00	2,450.00	2,810.19	2,759.62	51.40	12.34	-84.93	-192.29	-5,426.96	933.27	27.19	34.327
6,750.00	2,450.00	2,794.78	2,745.09	51.96	12.27	-84.58	-191.69	-5,432.04	886.34	27.41	32.342
6,800.00	2,450.00	2,779.28	2,730.48	52.51	12.19	-84.20	-191.08	-5,437.18	839.47	27.65	30.366
6,850.00	2,450.00	2,763.67	2,715.77	53.07	12.12	-83.78	-190.46	-5,442.37	792.66	27.91	28.397
6,900.00	2,450.00	2,747.96	2,700.97	53.63	12.04	-83.30	-189.83	-5,447.61	745.90	28.21	26.437
6,950.00	2,450.00	2,732.14	2,686.08	54.18	11.96	-82.75	-189.19	-5,452.90	699.23	28.56	24.485
7,000.00	2,450.00	2,716.14	2,671.02	54.74	11.89	-82.13	-188.54	-5,458.27	652.63	28.95	22.545
7,050.00	2,450.00	2,699.99	2,655.83	55.30	11.81	-81.41	-187.88	-5,463.71	606.13	29.40	20.615
7,100.00	2,450.00	2,683.74	2,640.55	55.86	11.73	-80.57	-187.22	-5,469.20	559.75	29.94	18.697
7,150.00	2,450.00	2,667.39	2,625.17	56.41	11.65	-79.58	-186.56	-5,474.74	513.52	30.58	16.791
7,200.00	2,450.00	2,650.93	2,609.71	56.97	11.57	-78.40	-185.90	-5,480.33	467.46	31.37	14.901
7,250.00	2,450.00	2,634.37	2,594.16	57.53	11.49	-76.96	-185.24	-5,485.98	421.63	32.35	13.032
7,300.00	2,450.00	2,617.71	2,578.52	58.09	11.41	-75.17	-184.58	-5,491.68	376.12	33.61	11.192
7,350.00	2,450.00	2,601.14	2,562.97	58.64	11.33	-72.89	-183.92	-5,497.36	331.03	35.26	9.389
7,400.00	2,450.00	2,581.26	2,544.28	59.20	11.20	-69.95	-183.15	-5,504.12	286.49	37.22	7.697
7,450.00	2,450.00	2,562.40	2,526.50	59.76	11.08	-65.96	-182.43	-5,510.36	242.74	40.10	6.054
7,500.00	2,450.00	2,544.49	2,509.56	60.32	10.96	-60.26	-181.76	-5,516.13	200.43	44.35	4.519
7,550.00	2,450.00	2,527.46	2,493.41	60.87	10.85	-51.69	-181.13	-5,521.48	160.82	50.63	3.176
7,600.00	2,450.00	2,511.25	2,477.99	61.43	10.74	-38.26	-180.54	-5,526.45	126.65	59.38	2.133
7,650.00	2,450.00	2,495.81	2,463.27	61.99	10.64	-17.62	-179.99	-5,531.08	103.62	68.39	1.515
7,683.18	2,450.00	2,485.96	2,453.86	62.36	10.58	-0.48	-179.64	-5,533.97	98.64	70.65	1.396 Level 3, CC, ES, SF
7,700.00	2,450.00	2,481.08	2,449.19	62.55	10.54	8.39	-179.47	-5,535.38	99.94	69.81	1.432 Level 3
7,750.00	2,450.00	2,466.77	2,435.49	63.11	10.47	31.22	-178.98	-5,539.49	117.57	61.60	1.908
7,800.00	2,450.00	2,452.30	2,421.64	63.67	10.40	46.56	-178.47	-5,543.65	149.14	51.92	2.872
7,850.00	2,450.00	2,437.68	2,407.66	64.23	10.33	56.25	-177.96	-5,547.88	187.74	44.63	4.206
7,900.00	2,450.00	2,422.92	2,393.54	64.78	10.26	62.60	-177.44	-5,552.17	229.83	39.63	5.800
7,950.00	2,450.00	2,408.00	2,379.29	65.34	10.19	66.97	-176.91	-5,556.52	273.80	36.20	7.563
8,000.00	2,450.00	2,392.94	2,364.89	65.90	10.12	70.13	-176.36	-5,560.94	318.87	33.81	9.431
8,050.00	2,450.00	2,377.72	2,350.36	66.46	10.04	72.51	-175.81	-5,565.44	364.60	32.11	11.355
8,100.00	2,450.00	2,362.34	2,335.69	67.02	9.97	74.36	-175.25	-5,569.99	410.79	30.87	13.306
8,122.75	2,450.00	2,355.29	2,328.96	67.27	9.94	75.07	-175.00	-5,572.09	431.91	30.42	14.196

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Reference Depths are relative to RKB = 20' @ 3605.00usft (AKITA 57) Coordinates are relative to: 110H

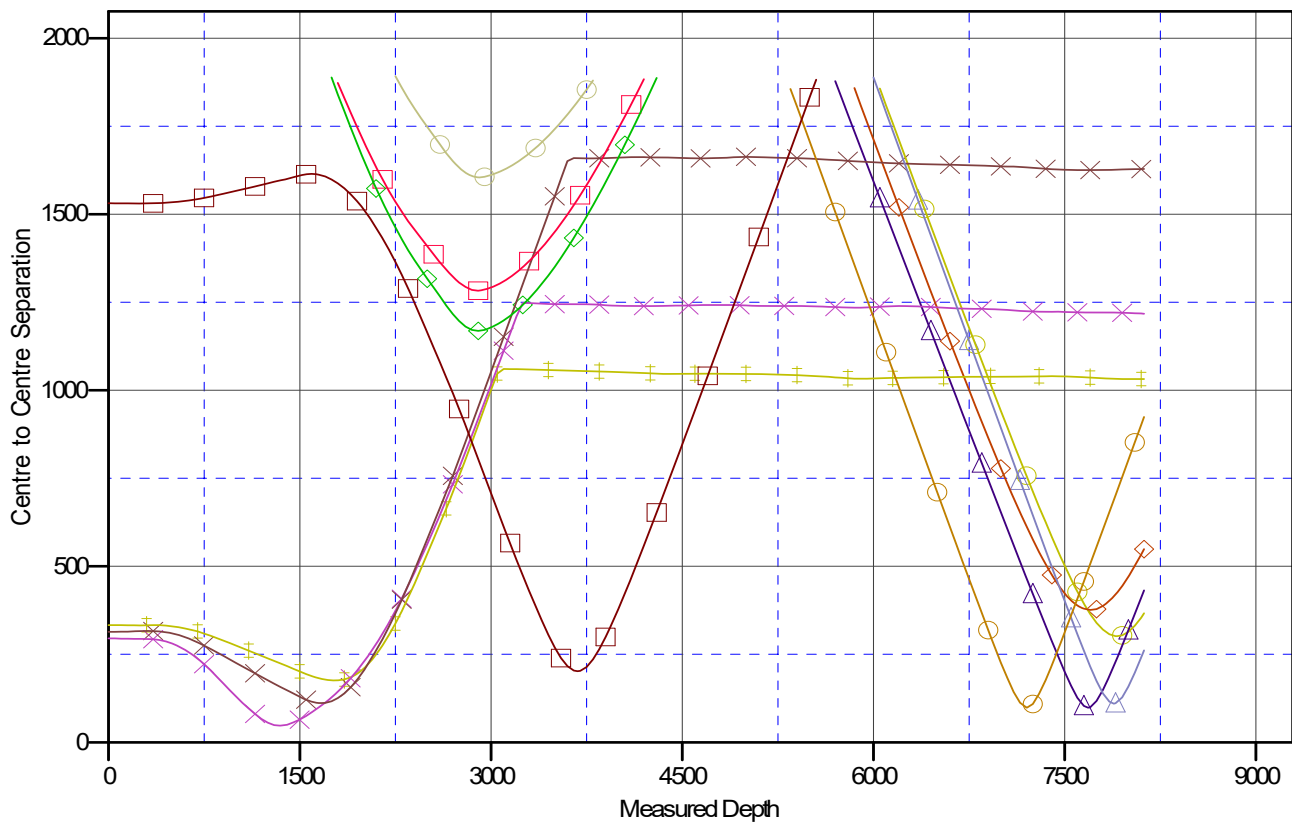
Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Central Meridian is -104.33334

Grid Convergence at Surface is: 0.07°

Ladder Plot



LEGEND

10H, Wellbore #1, SURVEYS V0
20H, Wellbore #1, SURVEYS V0
70H, Wellbore #1, SURVEYS V0
10H, OH, SURVEYS V0

20H, OH, SURVEYS V0
70H, OH, SURVEYS V0
OFFSET: ELVIS STATE COM 29A 001H, OH, OH V0
OFFSET: ELVIS STATE COM 29A 002H, OH, OH V0

OFFSET: ELVIS STATE COM 29A 003H, OH, OH V0
OFFSET: MAPLE STATE 13, OH, OH V0
OFFSET: MAPLE STATE 4, OH, OH V0
OFFSET: STAE '30' COM 1, OH, OH V0

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



PROTOTYPE

Anticollision Report



Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 110H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Reference Site:	STALEY A STATE COM	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Reference Datum

Reference Depths are relative to RKB = 20' @ 3605.00usft (AKITA 57) Coordinates are relative to: 110H

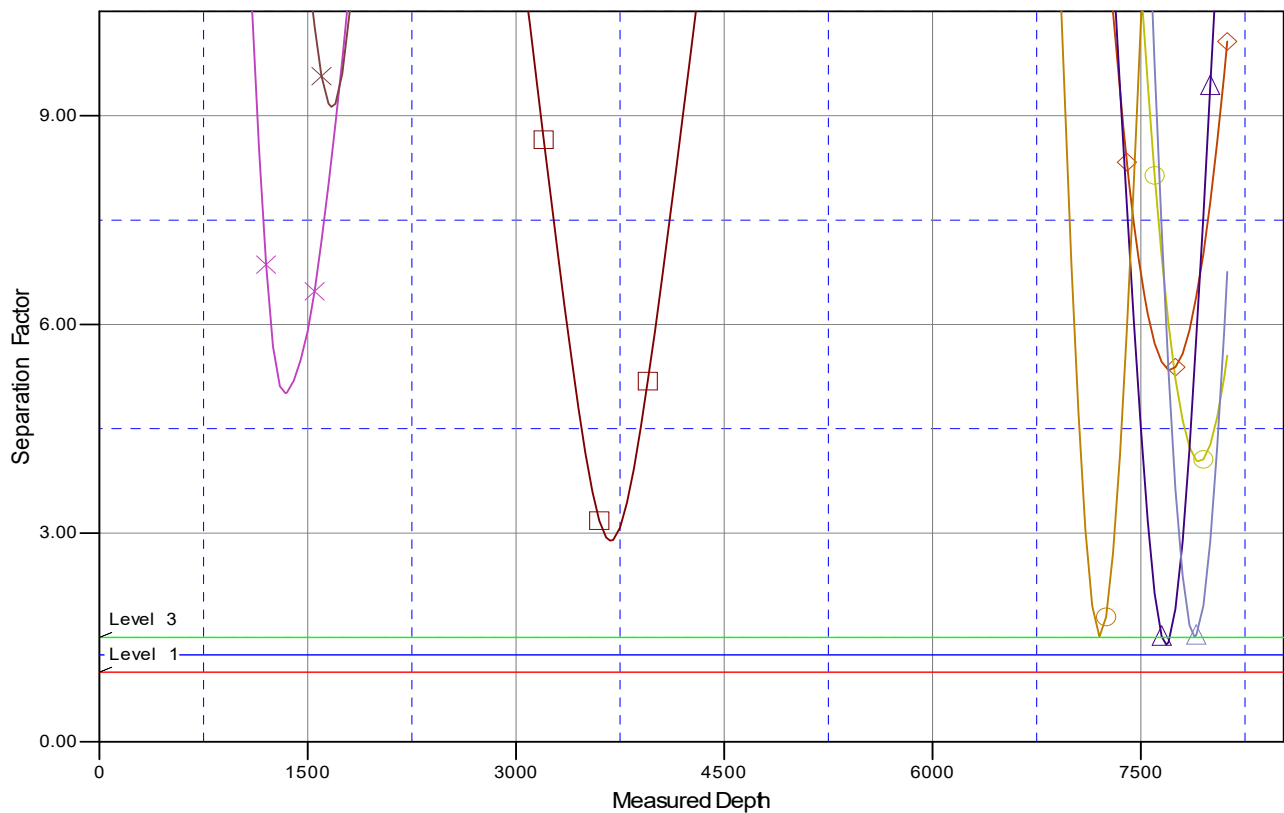
Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Central Meridian is -104.33334

Grid Convergence at Surface is: 0.07°

Separation Factor Plot



LEGEND

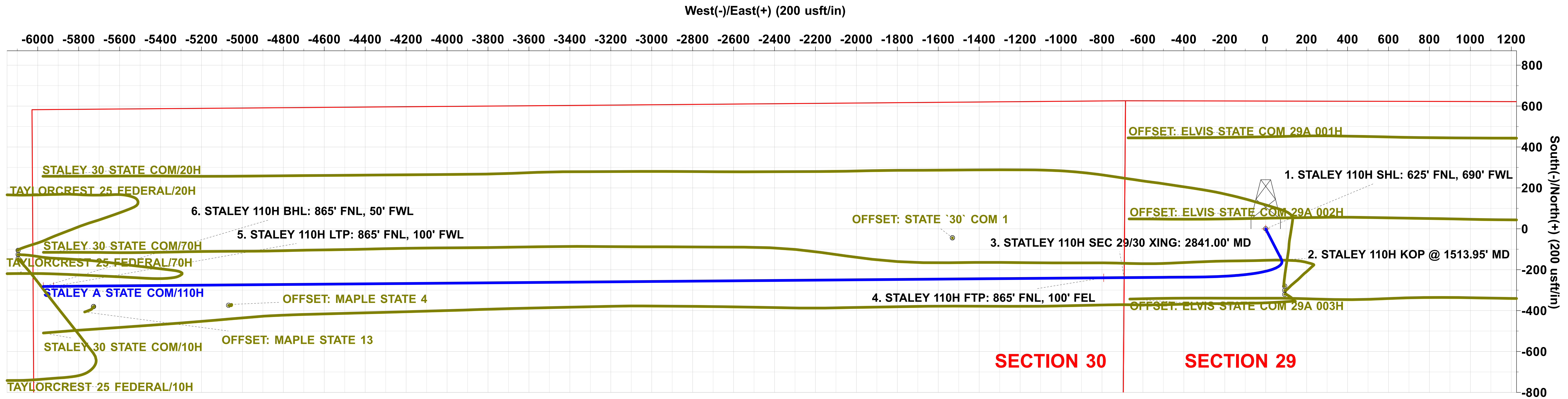
10H, Wellbore #1, SURVEYS V0
20H, Wellbore #1, SURVEYS V0
70H, Wellbore #1, SURVEYS V0
10H, OH, SURVEYS V0

20H, OH, SURVEYS V0
70H, OH, SURVEYS V0
OFFSET: ELVIS STATE COM 29A 001H, OH, OH V0
OFFSET: ELVIS STATE COM 29A 002H, OH, OH V0

OFFSET: ELVIS STATE COM 29A 003H, OH, OH V0
OFFSET: MAPLE STATE 13, OH, OH V0
OFFSET: MAPLE STATE 4, OH, OH V0
OFFSET: STAE '30' COM 1, OH, OH V0



Project: EDDY COUNTY, NM (NAD 83 - NME)
Site: STALEY A STATE COM
Well: 110H
Wellbore: OH
Design: PERMIT



WELL DETAILS: 110H

Rig Name:		AKITA 57		RKB = 20' @ 3605.00usft (AKITA 57)	
				3585.00	
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	658683.70	581054.70	32.81068	-104.20406

SECTION DETAILS

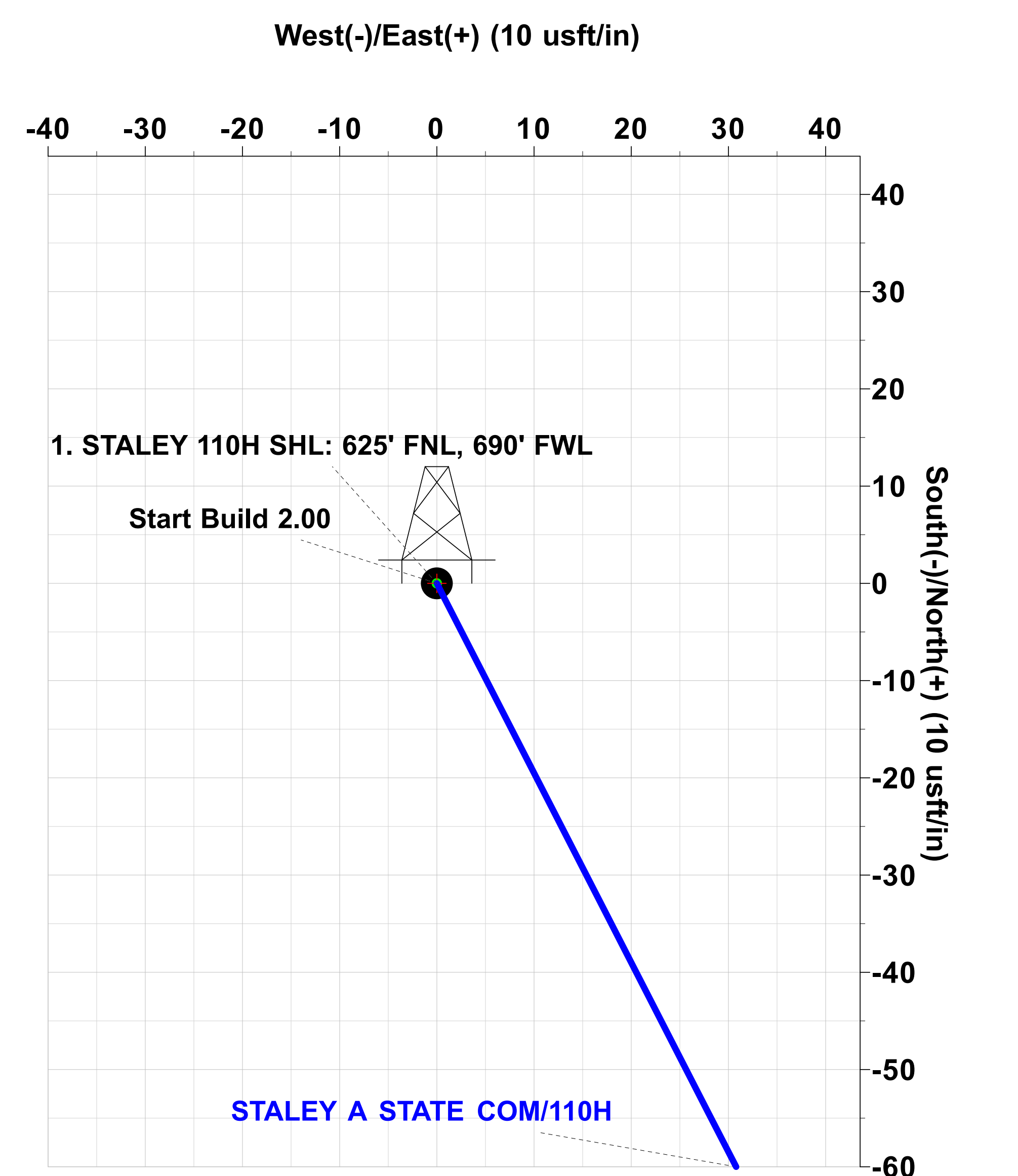
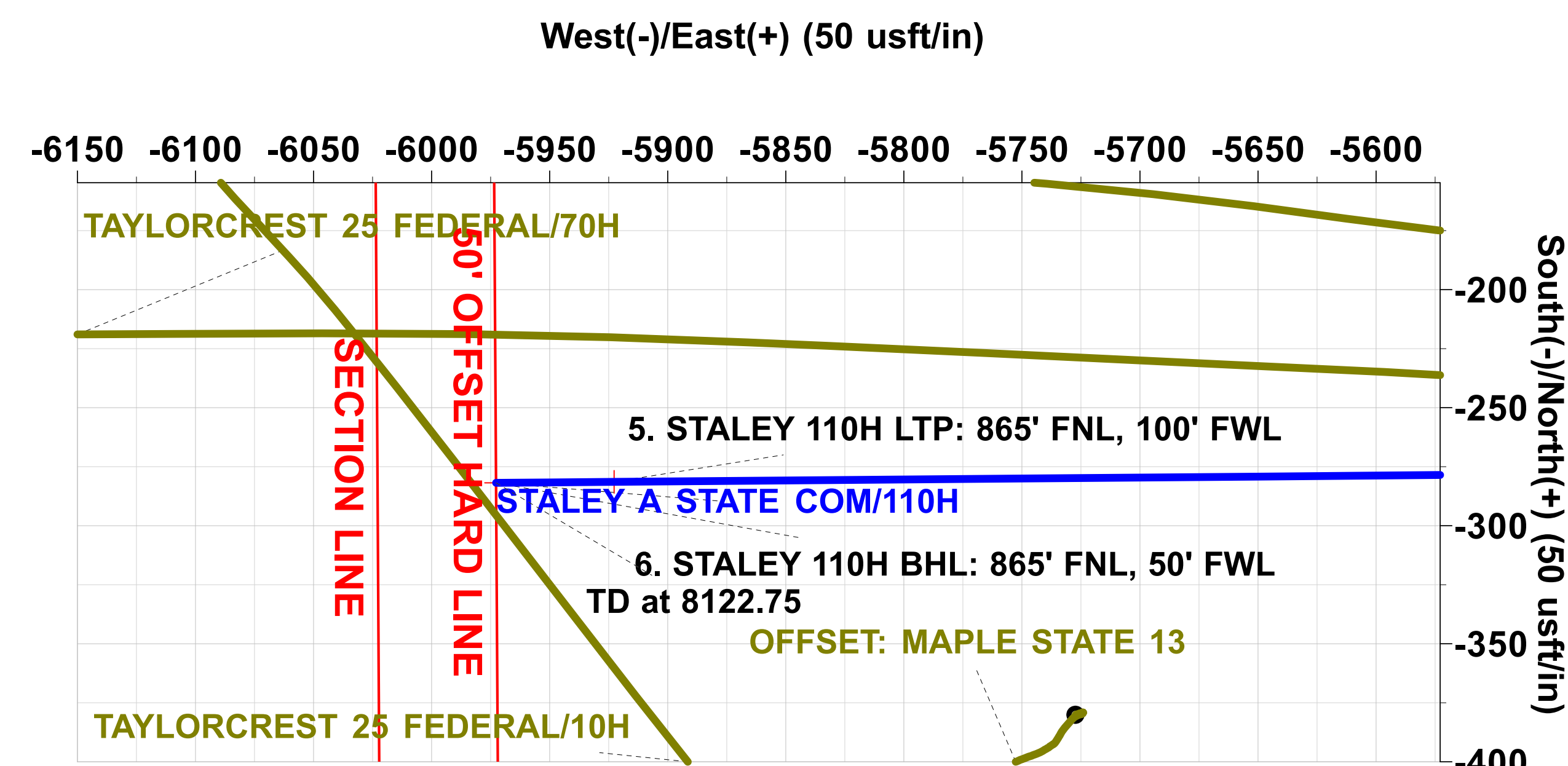
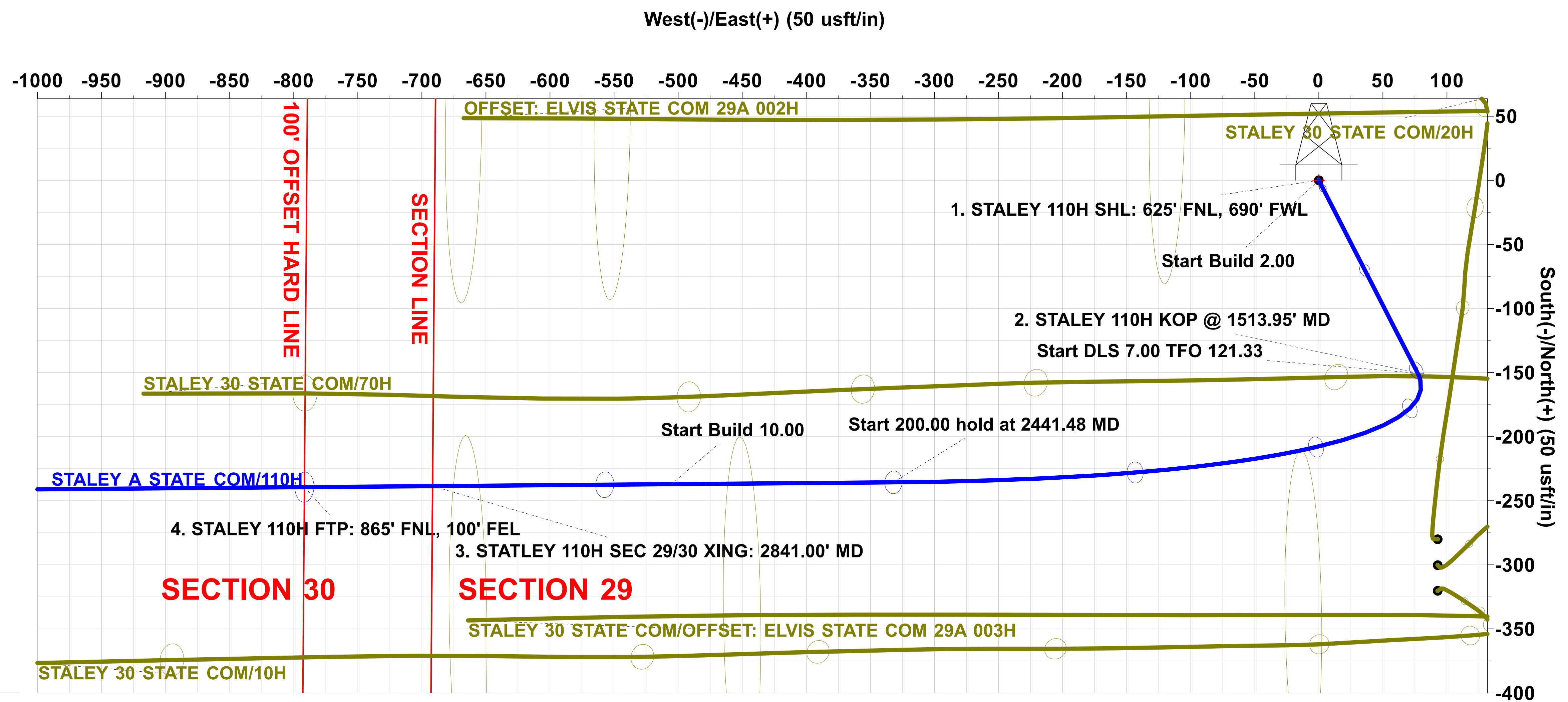
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00
3	806.56	10.13	152.84	803.92	-39.74	20.39	2.00	-20.06
4	1513.95	10.13	152.84	1500.29	-150.45	77.19	0.00	-75.96
5	2441.48	60.00	269.53	2273.24	-235.64	-331.93	7.00	333.85
6	2641.48	60.00	269.53	2373.24	-237.06	-505.13	0.00	507.06
7	2941.48	90.00	269.53	2450.00	-239.40	-791.60	10.00	793.54
8	8072.75	90.00	269.53	2450.00	-281.39	-5922.70	0.00	5924.81
9	8122.75	90.00	269.53	2450.00	-281.80	-5972.70	0.00	5974.81

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
1. STALEY 110H SHL: 625' FNL, 690' FWL	0.00	0.00	0.00	658683.70	581054.70	32.81068	-104.20406
2. STALEY 110H KOP @ 1513.95' MD	1500.29	-150.45	77.19	658533.25	581131.89	32.81027	-104.20381
3. STALEY 110H SEC 29/30 XING: 2841.00' MD	2441.21	-238.58	-691.64	658445.12	580363.06	32.81003	-104.20631
4. STALEY 110H FTP: 865' FNL, 100' FEL	2450.00	-239.40	-791.60	658444.30	580263.10	32.81003	-104.20664
5. STALEY 110H LTP: 865' FNL, 100' FWL	2450.00	-281.40	-5922.70	658402.30	575132.00	32.80993	-104.22334
6. STALEY 110H BHL: 865' FNL, 50' FWL	2450.00	-281.80	-5972.70	658401.90	575082.00	32.80993	-104.22350

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



Plan: PERMIT (110H/OH)

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SPUR ENERGY PARTNERS, LLC

EDDY COUNTY, NM (NAD 83 - NME)

STALEY A STATE COM

110H

OH

Plan: PERMIT

Standard Planning Report

21 November, 2025



**PROTOTYPE
WELL PLANNING**
WELL PLANNED. WELL EXECUTED.



PROTOTYPE

Planning Report



Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well 110H
Company:	SPUR ENERGY PARTNERS, LLC	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Project:	EDDY COUNTY, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site:	STALEY A STATE COM	North Reference:	Grid
Well:	110H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
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		

Well	110H			
Well Position	+N/-S	0.00 usft	Northing:	658,683.70 usft
	+E/-W	0.00 usft	Easting:	581,054.70 usft
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft
Grid Convergence:		0.07 °	Ground Level:	3,585.00 usft

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	269.53

Plan Survey Tool Program	Date	11/21/2025		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	8,122.75 PERMIT (OH)	MWD+IFR1+MS	
			OWSG MWD + IFR1 + Mult	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	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	
806.56	10.13	152.84	803.92	-39.74	20.39	2.00	2.00	0.00	152.84	
1,513.95	10.13	152.84	1,500.29	-150.45	77.19	0.00	0.00	0.00	0.00	
2,441.48	60.00	269.53	2,273.24	-235.64	-331.93	7.00	5.38	12.58	121.33	
2,641.48	60.00	269.53	2,373.24	-237.06	-505.13	0.00	0.00	0.00	0.00	
2,941.48	90.00	269.53	2,450.00	-239.40	-791.60	10.00	10.00	0.00	0.00	4. STALEY 110H F1
8,072.75	90.00	269.53	2,450.00	-281.39	-5,922.70	0.00	0.00	0.00	0.00	5. STALEY 110H LT
8,122.75	90.00	269.53	2,450.00	-281.80	-5,972.70	0.00	0.00	0.00	0.00	6. STALEY 110H BI



PROTOTYPE Planning Report



Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well 110H
Company:	SPUR ENERGY PARTNERS, LLC	TVD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Project:	EDDY COUNTY, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site:	STALEY A STATE COM	North Reference:	Grid
Well:	110H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1. STALEY 110H SHL: 625' FNL, 690' 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	152.84	399.98	-1.55	0.80	-0.78	2.00	2.00	0.00
500.00	4.00	152.84	499.84	-6.21	3.19	-3.13	2.00	2.00	0.00
600.00	6.00	152.84	599.45	-13.96	7.16	-7.05	2.00	2.00	0.00
700.00	8.00	152.84	698.70	-24.81	12.73	-12.52	2.00	2.00	0.00
806.56	10.13	152.84	803.92	-39.74	20.39	-20.06	2.00	2.00	0.00
900.00	10.13	152.84	895.91	-54.37	27.89	-27.45	0.00	0.00	0.00
1,000.00	10.13	152.84	994.35	-70.02	35.92	-35.35	0.00	0.00	0.00
1,100.00	10.13	152.84	1,092.79	-85.67	43.95	-43.25	0.00	0.00	0.00
1,200.00	10.13	152.84	1,191.23	-101.32	51.98	-51.15	0.00	0.00	0.00
1,300.00	10.13	152.84	1,289.67	-116.97	60.01	-59.05	0.00	0.00	0.00
1,400.00	10.13	152.84	1,388.11	-132.62	68.04	-66.95	0.00	0.00	0.00
1,500.00	10.13	152.84	1,486.55	-148.27	76.07	-74.85	0.00	0.00	0.00
1,513.95	10.13	152.84	1,500.29	-150.45	77.19	-75.96	0.00	0.00	0.00
2. STALEY 110H KOP @ 1513.95' MD									
1,550.00	9.08	166.63	1,535.83	-156.04	79.30	-78.02	7.00	-2.93	38.26
1,600.00	8.67	189.32	1,585.25	-163.60	79.60	-78.26	7.00	-0.81	45.37
1,650.00	9.61	210.70	1,634.63	-170.91	76.86	-75.45	7.00	1.87	42.76
1,700.00	11.57	226.61	1,683.79	-177.94	71.08	-69.62	7.00	3.91	31.82
1,750.00	14.13	237.41	1,732.54	-184.68	62.30	-60.78	7.00	5.12	21.61
1,800.00	17.02	244.79	1,780.70	-191.08	50.53	-48.97	7.00	5.78	14.76
1,850.00	20.10	250.02	1,828.10	-197.13	35.84	-34.22	7.00	6.16	10.47
1,900.00	23.29	253.89	1,874.55	-202.81	18.26	-16.59	7.00	6.39	7.74
1,950.00	26.56	256.87	1,919.89	-208.10	-2.13	3.84	7.00	6.54	5.95
2,000.00	29.88	259.23	1,963.94	-212.97	-25.27	27.01	7.00	6.64	4.72
2,050.00	33.23	261.15	2,006.54	-217.40	-51.05	52.83	7.00	6.70	3.85
2,100.00	36.61	262.76	2,047.53	-221.39	-79.39	81.20	7.00	6.75	3.22
2,150.00	40.01	264.13	2,086.76	-224.91	-110.17	112.01	7.00	6.79	2.74
2,200.00	43.42	265.32	2,124.08	-227.96	-143.30	145.16	7.00	6.82	2.38
2,250.00	46.84	266.37	2,159.36	-230.52	-178.63	180.52	7.00	6.84	2.10
2,300.00	50.27	267.31	2,192.45	-232.57	-216.04	217.95	7.00	6.86	1.87
2,350.00	53.70	268.16	2,223.24	-234.13	-255.40	257.31	7.00	6.87	1.70
2,400.00	57.14	268.93	2,251.61	-235.17	-296.55	298.47	7.00	6.88	1.55
2,441.48	60.00	269.53	2,273.24	-235.64	-331.93	333.85	7.00	6.89	1.45
2,500.00	60.00	269.53	2,302.50	-236.05	-382.61	384.54	0.00	0.00	0.00
2,600.00	60.00	269.53	2,352.50	-236.76	-469.21	471.14	0.00	0.00	0.00
2,641.48	60.00	269.53	2,373.24	-237.06	-505.13	507.06	0.00	0.00	0.00
2,650.00	60.85	269.53	2,377.44	-237.12	-512.54	514.47	10.00	10.00	0.00
2,700.00	65.85	269.53	2,399.86	-237.48	-557.22	559.15	10.00	10.00	0.00
2,750.00	70.85	269.53	2,418.30	-237.86	-603.67	605.60	10.00	10.00	0.00
2,800.00	75.85	269.53	2,432.62	-238.25	-651.56	653.49	10.00	10.00	0.00
2,841.00	79.95	269.53	2,441.21	-238.58	-691.64	693.58	10.00	10.00	0.00
3. STALEY 110H SEC 29/30 XING: 2841.00' MD									
2,850.00	80.85	269.53	2,442.71	-238.65	-700.51	702.45	10.00	10.00	0.00
2,900.00	85.85	269.53	2,448.50	-239.06	-750.16	752.10	10.00	10.00	0.00
2,941.48	90.00	269.53	2,450.00	-239.40	-791.60	793.54	10.00	10.00	0.00
4. STALEY 110H FTP: 865' FNL, 100' FEL									
3,000.00	90.00	269.53	2,450.00	-239.88	-850.12	852.06	0.00	0.00	0.00
3,100.00	90.00	269.53	2,450.00	-240.70	-950.12	952.06	0.00	0.00	0.00
3,200.00	90.00	269.53	2,450.00	-241.52	-1,050.11	1,052.06	0.00	0.00	0.00



PROTOTYPE Planning Report



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Project:	EDDY COUNTY, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site:	STALEY A STATE COM	North Reference:	Grid
Well:	110H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,300.00	90.00	269.53	2,450.00	-242.33	-1,150.11	1,152.06	0.00	0.00	0.00
3,400.00	90.00	269.53	2,450.00	-243.15	-1,250.11	1,252.06	0.00	0.00	0.00
3,500.00	90.00	269.53	2,450.00	-243.97	-1,350.10	1,352.06	0.00	0.00	0.00
3,600.00	90.00	269.53	2,450.00	-244.79	-1,450.10	1,452.06	0.00	0.00	0.00
3,700.00	90.00	269.53	2,450.00	-245.61	-1,550.10	1,552.06	0.00	0.00	0.00
3,800.00	90.00	269.53	2,450.00	-246.43	-1,650.09	1,652.06	0.00	0.00	0.00
3,900.00	90.00	269.53	2,450.00	-247.24	-1,750.09	1,752.06	0.00	0.00	0.00
4,000.00	90.00	269.53	2,450.00	-248.06	-1,850.09	1,852.06	0.00	0.00	0.00
4,100.00	90.00	269.53	2,450.00	-248.88	-1,950.08	1,952.06	0.00	0.00	0.00
4,200.00	90.00	269.53	2,450.00	-249.70	-2,050.08	2,052.06	0.00	0.00	0.00
4,300.00	90.00	269.53	2,450.00	-250.52	-2,150.08	2,152.06	0.00	0.00	0.00
4,400.00	90.00	269.53	2,450.00	-251.34	-2,250.07	2,252.06	0.00	0.00	0.00
4,500.00	90.00	269.53	2,450.00	-252.15	-2,350.07	2,352.06	0.00	0.00	0.00
4,600.00	90.00	269.53	2,450.00	-252.97	-2,450.07	2,452.06	0.00	0.00	0.00
4,700.00	90.00	269.53	2,450.00	-253.79	-2,550.06	2,552.06	0.00	0.00	0.00
4,800.00	90.00	269.53	2,450.00	-254.61	-2,650.06	2,652.06	0.00	0.00	0.00
4,900.00	90.00	269.53	2,450.00	-255.43	-2,750.06	2,752.06	0.00	0.00	0.00
5,000.00	90.00	269.53	2,450.00	-256.25	-2,850.05	2,852.06	0.00	0.00	0.00
5,100.00	90.00	269.53	2,450.00	-257.06	-2,950.05	2,952.06	0.00	0.00	0.00
5,200.00	90.00	269.53	2,450.00	-257.88	-3,050.05	3,052.06	0.00	0.00	0.00
5,300.00	90.00	269.53	2,450.00	-258.70	-3,150.04	3,152.06	0.00	0.00	0.00
5,400.00	90.00	269.53	2,450.00	-259.52	-3,250.04	3,252.06	0.00	0.00	0.00
5,500.00	90.00	269.53	2,450.00	-260.34	-3,350.04	3,352.06	0.00	0.00	0.00
5,600.00	90.00	269.53	2,450.00	-261.16	-3,450.03	3,452.06	0.00	0.00	0.00
5,700.00	90.00	269.53	2,450.00	-261.97	-3,550.03	3,552.06	0.00	0.00	0.00
5,800.00	90.00	269.53	2,450.00	-262.79	-3,650.03	3,652.06	0.00	0.00	0.00
5,900.00	90.00	269.53	2,450.00	-263.61	-3,750.02	3,752.06	0.00	0.00	0.00
6,000.00	90.00	269.53	2,450.00	-264.43	-3,850.02	3,852.06	0.00	0.00	0.00
6,100.00	90.00	269.53	2,450.00	-265.25	-3,950.02	3,952.06	0.00	0.00	0.00
6,200.00	90.00	269.53	2,450.00	-266.07	-4,050.01	4,052.06	0.00	0.00	0.00
6,300.00	90.00	269.53	2,450.00	-266.88	-4,150.01	4,152.06	0.00	0.00	0.00
6,400.00	90.00	269.53	2,450.00	-267.70	-4,250.01	4,252.06	0.00	0.00	0.00
6,500.00	90.00	269.53	2,450.00	-268.52	-4,350.00	4,352.06	0.00	0.00	0.00
6,600.00	90.00	269.53	2,450.00	-269.34	-4,450.00	4,452.06	0.00	0.00	0.00
6,700.00	90.00	269.53	2,450.00	-270.16	-4,550.00	4,552.06	0.00	0.00	0.00
6,800.00	90.00	269.53	2,450.00	-270.98	-4,649.99	4,652.06	0.00	0.00	0.00
6,900.00	90.00	269.53	2,450.00	-271.79	-4,749.99	4,752.06	0.00	0.00	0.00
7,000.00	90.00	269.53	2,450.00	-272.61	-4,849.99	4,852.06	0.00	0.00	0.00
7,100.00	90.00	269.53	2,450.00	-273.43	-4,949.98	4,952.06	0.00	0.00	0.00
7,200.00	90.00	269.53	2,450.00	-274.25	-5,049.98	5,052.06	0.00	0.00	0.00
7,300.00	90.00	269.53	2,450.00	-275.07	-5,149.98	5,152.06	0.00	0.00	0.00
7,400.00	90.00	269.53	2,450.00	-275.89	-5,249.97	5,252.06	0.00	0.00	0.00
7,500.00	90.00	269.53	2,450.00	-276.70	-5,349.97	5,352.06	0.00	0.00	0.00
7,600.00	90.00	269.53	2,450.00	-277.52	-5,449.97	5,452.06	0.00	0.00	0.00
7,700.00	90.00	269.53	2,450.00	-278.34	-5,549.96	5,552.06	0.00	0.00	0.00
7,800.00	90.00	269.53	2,450.00	-279.16	-5,649.96	5,652.06	0.00	0.00	0.00
7,900.00	90.00	269.53	2,450.00	-279.98	-5,749.96	5,752.06	0.00	0.00	0.00
8,000.00	90.00	269.53	2,450.00	-280.80	-5,849.95	5,852.06	0.00	0.00	0.00
8,072.75	90.00	269.53	2,450.00	-281.39	-5,922.70	5,924.81	0.00	0.00	0.00
5. STALEY 110H LTP: 865' FNL, 100' FWL									
8,100.00	90.00	269.53	2,450.00	-281.61	-5,949.95	5,952.06	0.00	0.00	0.00
8,122.75	90.00	269.53	2,450.00	-281.80	-5,972.70	5,974.81	0.00	0.00	0.00
6. STALEY 110H BHL: 865' FNL, 50' FWL									



PROTOTYPE

Planning Report



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Project:	EDDY COUNTY, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3605.00usft (AKITA 57)
Site:	STALEY A STATE COM	North Reference:	Grid
Well:	110H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
1. STALEY 110H SHL - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	658,683.70	581,054.70	32.81068	-104.20406
2. STALEY 110H KOF - plan hits target center - Point	0.00	0.00	1,500.29	-150.45	77.19	658,533.25	581,131.90	32.81027	-104.20381
3. STALEY 110H SE - plan hits target center - Point	0.00	0.00	2,441.21	-238.58	-691.64	658,445.12	580,363.06	32.81003	-104.20631
6. STALEY 110H BHL - plan hits target center - Point	0.00	0.00	2,450.00	-281.80	-5,972.70	658,401.90	575,082.00	32.80993	-104.22350
5. STALEY 110H LTP: - plan misses target center by 0.01usft at 8072.75usft MD (2450.00 TVD, -281.39 N, -5922.70 E) - Point	0.00	0.00	2,450.00	-281.40	-5,922.70	658,402.30	575,132.00	32.80993	-104.22334
4. STALEY 110H FTP - plan hits target center - Point	0.00	0.00	2,450.00	-239.40	-791.60	658,444.30	580,263.10	32.81003	-104.20664

Spur Energy Partners LLC – Staley A State Com 110H

1. Geologic Formations

TVD of Target	2,450'
MD at TD	8,123'

Formation	Depth	Lithology	Expected Fluids
Quaternary	0'	Other: Caliche	Water
Tansill	195'	Sandstone, Dolomite	None
Yates	295'	Dolomite, Limestone, Shale, Siltstone	None
Seven Rivers	530'	Dolomite, Limestone	Oil, gas
Queen	1085'	Sandstone, Dolomite, Anhydrite	Oil, gas
Grayburg	1525'	Dolomite, Sandstone, Anhydrite	Oil, gas
San Andres	1835'	Dolomite, Limestone	Oil, gas
Glorieta	3215'	Dolomite, Siltstone	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

Casing Formation Set Interval	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
Seven Rivers	12.25	0	950	9.625	36	J-55	BTC	1.125	1.2	1.4	1.4
N/A	8.75	0	2700	7	32	L-80	GBCD	1.125	1.2	1.4	1.4
San Andres	8.75	2700	8123	5.5	20	L-80	GBCD	1.125	1.2	1.4	1.4
SF Values will meet or Exceed											

Spur Energy Partners LLC – Staley A State Com 110H

	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?	Y
If yes, are there two strings cemented to surface?	Y
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Casing String	Top (ft)	Bottom (ft)	% Excess
Surface (Lead)	0	950	50%
Surface (Tail)	950	950	100%
Production (Lead)	0	1700	100%
Production (Tail)	1700	8123	25%

Casing String	# Sks	Wt. (lb/gal)	Yld (ft3/sack)	H2O (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface (Lead)	204	12	2.4	13.48	8:12	Clas C Premium Plus Cement
Surface (Tail)	10	13.2	1.87	9.92	6:59	Clas C Premium Plus Cement
Production (Lead)	159	11.4	2.42	15.29	N/A	Clas C Premium Plus Cement
Production (Tail)	1222	13.2	1.56	9.81	N/A	Clas C Premium Plus Cement

Spur Energy Partners LLC – Staley A State Com 110H

4. Pressure Control Equipment

Spur Energy Partners LLC variance for flex hose

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

Spur Energy Partners LLC will be utilizing a 5M BOP

Condition	Specify what type and where?
BH Pressure at deepest TVD	1134 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	100°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.
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Spur Energy Partners LLC – Staley A State Com 110H

	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.

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		Type	Weight (ppg)	Viscosity	Water Loss
From (ft)	To (ft)				
0	950	Water-Based Mud	8.6-8.9	32-36	N/C
950	8123	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
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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	SCP - TD
No	PEX	

8. Drilling Conditions

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

Hydrogen Sulfide (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: 742.6 bbls.

Spur Energy Partners LLC – Staley A State Com 110H**9. Other facets of operation**

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

Attachments

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

10. Company Personnel

Name	Title	Office Phone	Mobile Phone
Christopher Hollis	D&C Manager	832-930-8629	713-380-7754
Ryan Barber	Senior D&C Engineer	832-930-8502	832-544-9267
Johnny Nabors	EVP Operations	832-930-8502	281-904-8811



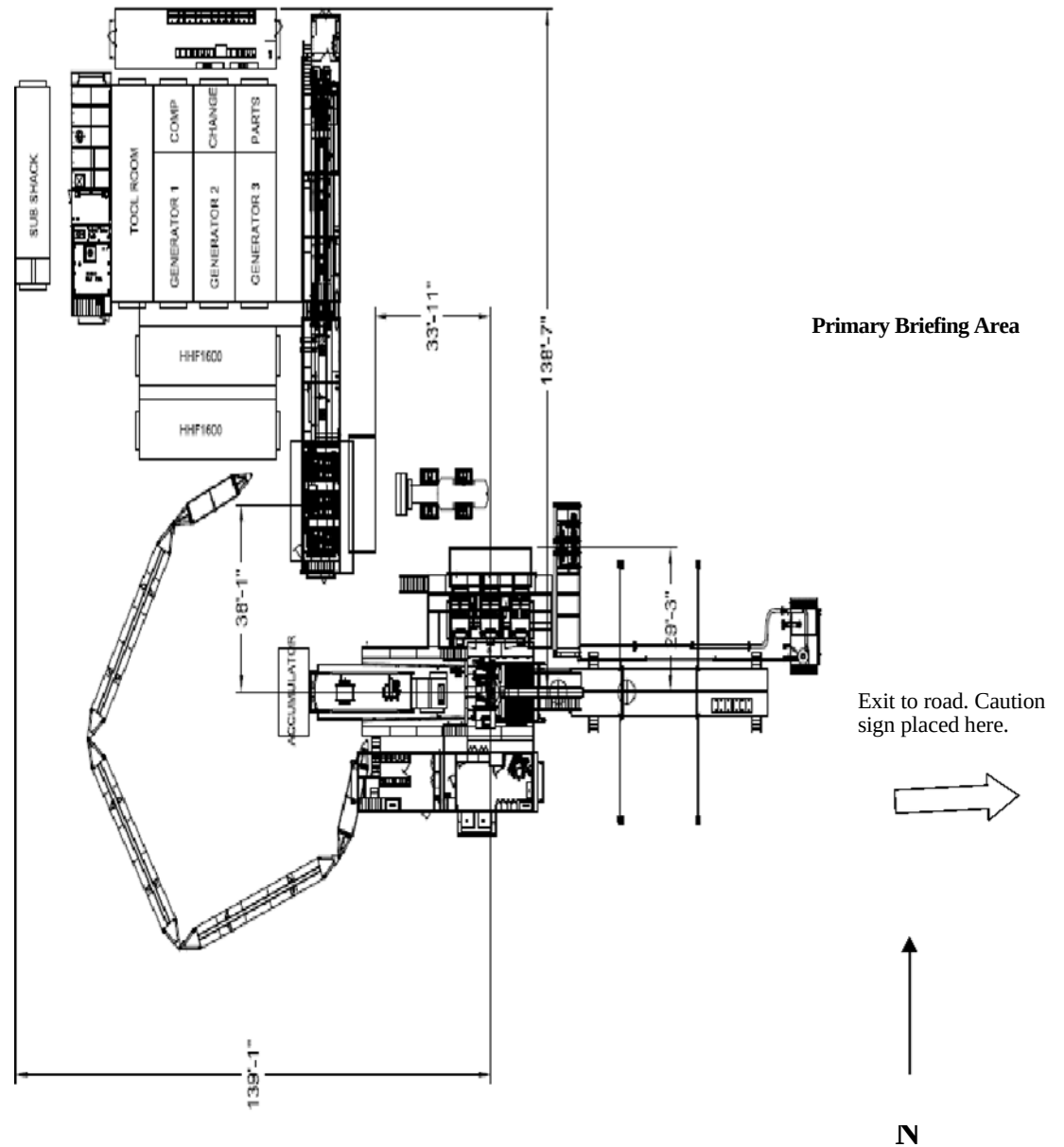
Permian Drilling Hydrogen Sulfide Drilling Operations Plan STALEY A STATE COM 110H DEVELOPMENT

Open drill site. No homes or buildings are near the proposed location.

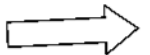
1. Escape

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



Exit to road. Caution sign placed here.



N

Secondary Egress



WIND: Prevailing winds are from the Southwest



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

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: SPUR ENERGY PARTNERS LLC **OGRID:** 328947 **Date:** 11 / 25 / 25

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

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
STALEY A STATE COM 110H	30-015-	D-29-17S-28E	625' FNL 690' FVL	343 BBL/D	594 MCF/D	2056 BBL/D

IV. Central Delivery Point Name: STALEY 30 STATE COM TANK BATTERY [See 19.15.27.9(D)(1) NMAC]

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

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
STALEY A STATE COM 110H	30-015-	05/09/2026	05/14/2026	06/02/2026	06/06/2026	06/20/2026

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

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

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

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

If Operator checks this box, Operator will select one of the following:

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature: <i>Sarah Chapman</i>
Printed Name: SARAH CHAPMAN
Title: REGULATORY DIRECTOR
E-mail Address: SCHAPMAN@SPUREENERGY.COM
Date: NOVEMBER 25, 2025
Phone: 832-930-8613
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval: