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

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

Form C-101
August 1, 2011

Permit 346975

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

1. Operator Name and Address	2. OGRID Number
Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024	328947
	3. API Number: 30-015-54077

4. Property Code	5. Property Name	6. Well No.
334602	AID NORTH 14 13 STATE COM	061H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
B	14	17S	28E		1248	N	2383	E	Eddy

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
H	13	17S	28E	H	1715	N	50	E	Eddy

9. Pool Information

EMPIRE; GLORIETA-YESO	96210

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	3600
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	11346	Blinebry		11/9/2023
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	1275	378	0
Prod	8.75	7	32	4450	1879	0
Prod	8.75	5.5	20	11346	1879	0

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5	5000	SHAFFER

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.** Signature:			**OIL CONSERVATION DIVISION**		
Printed Name:	Electronically filed by Sarah Chapman		Approved By:	Ward Rikala	
Title:	Regulatory Director		Title:		
Email Address:	schapman@spurenergy.com		Approved Date:	8/17/2023	Expiration Date: 8/17/2025
Date:	8/8/2023	Phone: 832-930-8613	Conditions of Approval Attached		

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-015-54077	96210	EMPIRE; GLORIETA-YESO

4 Property Code	5 Property Name	6 Well Number
334602	AID NORTH 14-13 STATE COM	61H

7 OGRID NO.	8 Operator Name	9 Elevation
328947	SPUR ENERGY PARTNERS LLC.	3600'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
B	14	17S	28E		1248	NORTH	2383	EAST	EDDY

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	13	17S	28E		1715	NORTH	50	EAST	EDDY

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
480			

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

16

GEODETIC DATA
NAD 83 GRID – NM EAST

SURFACE LOCATION (SL)
N: 669050.1 – E: 598768.1
LAT: 32.8391045° N
LONG: 104.1463434° W

FIRST TAKE POINT (FTP)
1709' FNL & 1404' FEL – SEC 14
N: 668682.1 – E: 599752.6
LAT: 32.8380883° N
LONG: 104.1431402° W

LAST TAKE POINT (LTP)
1717' FNL & 100' FEL – SEC 13
N: 668824.8 – E: 606336.9
LAT: 32.8384460° N
LONG: 104.1217014° W

BOTTOM HOLE (BH)
N: 668826.5 – E: 606386.9
LAT: 32.8384505° N
LONG: 104.1215388° W

CORNER DATA
NAD 83 GRID – NM EAST

A: FOUND BRASS CAP "1941"
N: 664715.7 – E: 596062.5

B: FOUND BRASS CAP "1941"
N: 667371.0 – E: 595986.7

C: FOUND BRASS CAP "1941"
N: 670028.0 – E: 595911.3

D: FOUND BRASS CAP "1941"
N: 670275.9 – E: 598509.8

E: FOUND BRASS CAP "1941"
N: 670523.4 – E: 601110.0

F: FOUND 1/2" REBAR
N: 670530.5 – E: 603773.2

G: FOUND BRASS CAP "1941"
N: 670541.3 – E: 606438.4

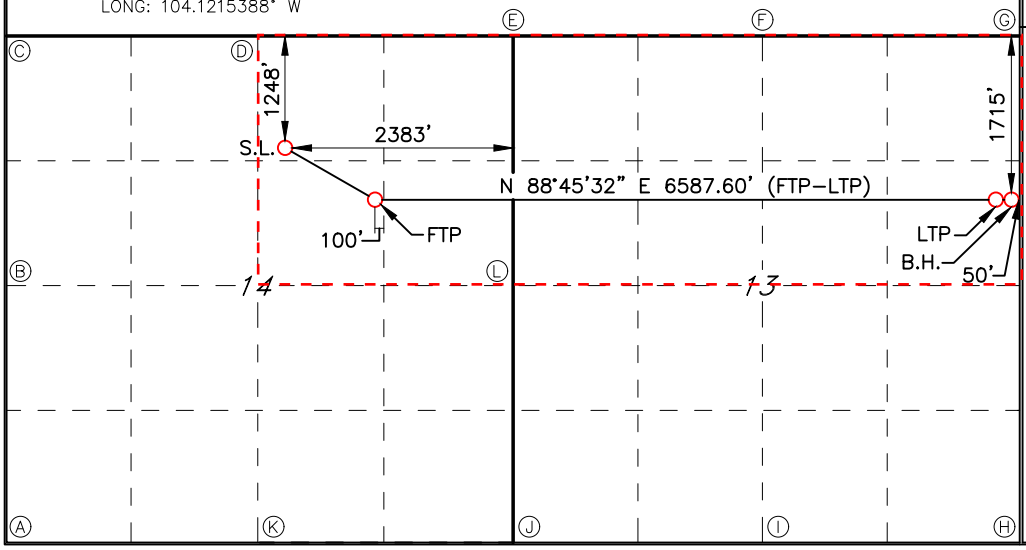
H: FOUND BRASS CAP "1941"
N: 665238.8 – E: 606433.6

I: FOUND BRASS CAP "1941"
N: 665220.7 – E: 603835.2

J: FOUND BRASS CAP "1941"
N: 665202.5 – E: 601236.8

K: FOUND BRASS CAP "1941"
N: 664959.0 – E: 598649.4

L: FOUND BRASS CAP "1941"
N: 667862.4 – E: 601172.4



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Sarah Chapman 08/07/2023
Signature Date

SARAH CHAPMAN
Printed Name

SCHAPMAN@SPURENERGY.COM
E-mail Address

18 SURVEYOR CERTIFICATION

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

06/14/2023
Date of Survey

Signature and Seal of Professional Surveyor:

DALE E. BELL
NEW MEXICO
14400
PROFESSIONAL SURVEYOR

14400 07/03/2023
Certificate Number

Job No: LS23060538

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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 346975

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
Spur Energy Partners LLC [328947] 9655 Katy Freeway Houston, TX 77024	30-015-54077
	Well: AID NORTH 14 13 STATE COM #061H

OCD Reviewer	Condition
ward.rikala	Notify OCD 24 hours prior to casing & cement
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104
ward.rikala	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
ward.rikala	Cement is required to circulate on both surface and production strings of casing
ward.rikala	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
ward.rikala	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud

SPUR ENERGY PARTNERS, LLC

EDDY COUNTY, NM (NAD 83 - NME)
AID NORTH 14-13 STATE COM
61H

Wellbore #1
PERMIT

Anticollision Report

01 August, 2023

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 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 + Stations Interval 50.00usft	**Error Model:**	ISCWSA
Depth Range:	0.00 to 11,345.67usft	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum separation factor of 55.00	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 08/01/23

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	11,345.67	PERMIT (Wellbore #1)	MWD+IFR1+SAG+FDIR	OWSG MWD + IFR1 + Sag + FDIR Correction

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
AID NORTH 14-13 STATE COM						
10H - Wellbore #1 - PERMIT	300.00	300.00	19.90	18.18	11.566	CC, ES
10H - Wellbore #1 - PERMIT	11,345.67	10,907.58	613.29	476.28	4.476	SF
20H - Wellbore #1 - PERMIT	300.00	300.00	59.90	58.18	34.813	CC, ES
20H - Wellbore #1 - PERMIT	11,345.67	11,154.50	1,408.64	1,241.67	8.437	SF
21H - Wellbore #1 - PERMIT	300.00	300.00	20.00	18.28	11.624	CC
21H - Wellbore #1 - PERMIT	650.00	647.57	20.17	15.99	4.822	ES
21H - Wellbore #1 - PERMIT	11,345.67	11,124.98	546.93	403.31	3.808	SF
60H - Wellbore #1 - PERMIT	300.00	300.00	39.90	38.18	23.190	CC, ES
60H - Wellbore #1 - PERMIT	11,345.67	11,359.82	904.57	733.73	5.295	SF
OFFSET: AID STATE #10 - Wellbore #1 - Wellbore #1	9,088.79	4,395.70	109.22	-37.85	0.743	Level 1, CC, ES, SF
OFFSET: AID STATE #6 - Wellbore #1 - Wellbore #1	11,054.06	4,414.61	588.51	425.02	3.599	CC, ES
OFFSET: AID STATE #6 - Wellbore #1 - Wellbore #1	11,100.00	4,415.47	590.30	426.28	3.599	SF
OFFSET: AID STATE #8 - Wellbore #1 - Wellbore #1	11,084.51	4,428.29	731.45	557.87	4.214	CC
OFFSET: AID STATE #8 - Wellbore #1 - Wellbore #1	11,100.00	4,428.58	731.62	557.86	4.210	ES, SF
OFFSET: AID STATE #9 - Wellbore #1 - Wellbore #1	9,119.22	4,384.17	1,429.14	1,291.17	10.359	CC
OFFSET: AID STATE #9 - Wellbore #1 - Wellbore #1	9,150.00	4,384.75	1,429.47	1,291.16	10.335	ES
OFFSET: AID STATE #9 - Wellbore #1 - Wellbore #1	9,300.00	4,387.58	1,440.52	1,300.52	10.289	SF
OFFSET: PUMA #1 - Wellbore #1 - Wellbore #1	700.00	687.78	756.28	742.04	53.107	CC, ES
OFFSET: PUMA #1 - Wellbore #1 - Wellbore #1	4,250.00	4,027.78	1,019.92	924.97	10.741	SF

Offset Design AID NORTH 14-13 STATE COM - 10H - Wellbore #1 - PERMIT

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
150.00	150.00	150.00	150.00	0.32	0.32	-0.576	19.90	-0.20	19.90	19.26	0.65	30.842	
200.00	200.00	200.00	200.00	0.50	0.50	-0.576	19.90	-0.20	19.90	18.90	1.00	19.827	
250.00	250.00	250.00	250.00	0.68	0.68	-0.576	19.90	-0.20	19.90	18.54	1.36	14.610	
300.00	300.00	300.00	300.00	0.86	0.86	-0.576	19.90	-0.20	19.90	18.18	1.72	11.566	CC, ES
350.00	350.00	349.75	349.75	1.03	1.04	-170.281	20.20	0.11	20.63	18.55	2.07	9.942	
400.00	399.98	399.55	399.53	1.20	1.22	-168.586	21.04	1.01	22.78	20.34	2.44	9.348	
450.00	449.93	449.45	449.41	1.38	1.39	-167.365	21.99	2.01	25.90	23.11	2.80	9.263	
500.00	499.84	499.29	499.23	1.55	1.57	-166.793	22.94	3.02	29.89	26.73	3.16	9.472	
550.00	549.68	549.05	548.98	1.72	1.75	-166.688	23.89	4.02	34.72	31.20	3.52	9.867	

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

SPUR ENERGY PARTNERS

Anticollision Report

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Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 10H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
600.00	599.45	598.73	598.63	1.90	1.93	-166.887	24.84	5.02	40.39	36.51	3.88	10.411	
641.99	641.18	640.37	640.26	2.05	2.07	-167.199	25.63	5.86	45.81	41.63	4.18	10.952	
650.00	649.13	648.30	648.19	2.08	2.10	-167.270	25.79	6.02	46.90	42.67	4.24	11.068	
700.00	698.78	697.83	697.70	2.25	2.28	-167.649	26.73	7.02	53.71	49.13	4.58	11.729	
750.00	748.42	747.37	747.22	2.42	2.46	-167.943	27.68	8.02	60.53	55.60	4.92	12.291	
800.00	798.06	796.90	796.73	2.60	2.63	-168.178	28.62	9.02	67.34	62.07	5.27	12.780	
850.00	847.71	846.43	846.24	2.79	2.81	-168.369	29.57	10.02	74.15	68.53	5.62	13.200	
900.00	897.35	895.97	895.76	2.97	2.99	-168.528	30.51	11.02	80.97	75.00	5.96	13.576	
950.00	947.00	945.50	945.27	3.15	3.17	-168.663	31.46	12.02	87.78	81.47	6.31	13.906	
1,000.00	996.64	995.03	994.79	3.33	3.34	-168.778	32.40	13.02	94.60	87.93	6.66	14.198	
1,050.00	1,046.28	1,044.57	1,044.30	3.52	3.52	-168.877	33.35	14.01	101.41	94.40	7.01	14.461	
1,100.00	1,095.93	1,094.10	1,093.81	3.70	3.70	-168.964	34.29	15.01	108.23	100.86	7.36	14.697	
1,150.00	1,145.57	1,143.63	1,143.33	3.88	3.87	-169.041	35.24	16.01	115.04	107.33	7.72	14.911	
1,200.00	1,195.22	1,193.16	1,192.84	4.07	4.05	-169.109	36.18	17.01	121.86	113.79	8.07	15.106	
1,250.00	1,244.86	1,242.70	1,242.36	4.25	4.23	-169.170	37.13	18.01	128.68	120.26	8.42	15.283	
1,300.00	1,294.51	1,292.23	1,291.87	4.43	4.41	-169.225	38.07	19.01	135.49	126.72	8.77	15.446	
1,350.00	1,344.15	1,341.76	1,341.38	4.62	4.58	-169.275	39.02	20.01	142.31	133.18	9.12	15.596	
1,400.00	1,393.79	1,391.30	1,390.90	4.80	4.76	-169.320	39.96	21.01	149.12	139.65	9.48	15.734	
1,450.00	1,443.44	1,440.83	1,440.41	4.99	4.94	-169.361	40.91	22.01	155.94	146.11	9.83	15.862	
1,500.00	1,493.08	1,490.36	1,489.92	5.17	5.12	-169.398	41.85	23.01	162.76	152.57	10.19	15.980	
1,550.00	1,542.73	1,539.90	1,539.44	5.36	5.29	-169.433	42.80	24.00	169.58	159.04	10.54	16.091	
1,600.00	1,592.37	1,589.43	1,588.95	5.54	5.47	-169.465	43.74	25.00	176.39	165.50	10.89	16.193	
1,650.00	1,642.01	1,638.96	1,638.47	5.73	5.65	-169.495	44.69	26.00	183.21	171.96	11.25	16.290	
1,700.00	1,691.66	1,688.50	1,687.98	5.91	5.83	-169.522	45.63	27.00	190.03	178.42	11.60	16.380	
1,750.00	1,741.30	1,738.03	1,737.49	6.10	6.00	-169.548	46.58	28.00	196.84	184.89	11.96	16.465	
1,800.00	1,790.95	1,787.56	1,787.01	6.28	6.18	-169.571	47.52	29.00	203.66	191.35	12.31	16.544	
1,850.00	1,840.59	1,837.09	1,836.52	6.47	6.36	-169.594	48.47	30.00	210.48	197.81	12.66	16.619	
1,900.00	1,890.23	1,886.63	1,886.04	6.65	6.54	-169.615	49.41	31.00	217.29	204.27	13.02	16.690	
1,950.00	1,939.88	1,936.16	1,935.55	6.84	6.72	-169.634	50.36	32.00	224.11	210.74	13.37	16.757	
2,000.00	1,989.52	1,985.69	1,985.06	7.02	6.89	-169.653	51.30	33.00	230.93	217.20	13.73	16.820	
2,050.00	2,039.17	2,035.23	2,034.58	7.21	7.07	-169.670	52.25	34.00	237.75	223.66	14.08	16.881	
2,100.00	2,088.81	2,084.76	2,084.09	7.40	7.25	-169.687	53.19	34.99	244.56	230.12	14.44	16.938	
2,150.00	2,138.46	2,134.29	2,133.61	7.58	7.43	-169.702	54.14	35.99	251.38	236.59	14.79	16.992	
2,200.00	2,188.10	2,183.83	2,183.12	7.77	7.60	-169.717	55.08	36.99	258.20	243.05	15.15	17.043	
2,250.00	2,237.74	2,233.36	2,232.63	7.95	7.78	-169.731	56.03	37.99	265.01	249.51	15.50	17.093	
2,300.00	2,287.39	2,282.89	2,282.15	8.14	7.96	-169.744	56.97	38.99	271.83	255.97	15.86	17.140	
2,350.00	2,337.03	2,332.42	2,331.66	8.32	8.14	-169.757	57.92	39.99	278.65	262.43	16.22	17.184	
2,400.00	2,386.68	2,381.96	2,381.18	8.51	8.31	-169.769	58.86	40.99	285.47	268.90	16.57	17.227	
2,450.00	2,436.32	2,431.49	2,430.69	8.69	8.49	-169.780	59.81	41.99	292.28	275.36	16.93	17.268	
2,500.00	2,485.96	2,481.02	2,480.20	8.88	8.67	-169.791	60.75	42.99	299.10	281.82	17.28	17.308	
2,550.00	2,535.61	2,530.56	2,529.72	9.07	8.85	-169.802	61.70	43.99	305.92	288.28	17.64	17.345	
2,600.00	2,585.25	2,580.09	2,579.23	9.25	9.02	-169.812	62.64	44.98	312.74	294.74	17.99	17.382	
2,650.00	2,634.90	2,629.62	2,628.75	9.44	9.20	-169.821	63.59	45.98	319.55	301.21	18.35	17.416	
2,700.00	2,684.54	2,679.16	2,678.26	9.62	9.38	-169.830	64.53	46.98	326.37	307.67	18.70	17.450	
2,750.00	2,734.19	2,728.69	2,727.77	9.81	9.56	-169.839	65.48	47.98	333.19	314.13	19.06	17.482	
2,800.00	2,783.83	2,778.22	2,777.29	9.99	9.73	-169.847	66.42	48.98	340.01	320.59	19.41	17.513	
2,850.00	2,833.47	2,827.50	2,826.52	10.18	9.91	-169.745	67.37	50.63	346.84	327.07	19.77	17.544	
2,900.00	2,883.12	2,876.48	2,875.33	10.36	10.09	-169.252	68.33	54.70	353.73	333.61	20.12	17.578	
2,950.00	2,932.76	2,925.02	2,923.41	10.55	10.26	-168.386	69.31	61.18	360.75	340.28	20.48	17.618	
3,000.00	2,982.41	2,972.87	2,970.43	10.74	10.43	-167.188	70.29	69.96	368.01	347.18	20.83	17.669	
3,050.00	3,032.05	3,019.81	3,016.08	10.92	10.60	-165.703	71.27	80.85	375.65	354.47	21.18	17.738	
3,100.00	3,081.69	3,065.65	3,060.08	11.11	10.76	-163.981	72.24	93.64	383.83	362.31	21.52	17.833	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 10H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
3,150.00	3,131.34	3,110.22	3,102.23	11.29	10.92	-162.071	73.19	108.08	392.74	370.88	21.87	17.961	
3,200.00	3,180.98	3,153.38	3,142.36	11.48	11.08	-160.023	74.12	123.93	402.57	380.37	22.21	18.129	
3,232.06	3,212.81	3,180.27	3,166.99	11.60	11.18	-158.660	74.70	134.72	409.44	387.02	22.42	18.261	
3,250.00	3,230.62	3,195.11	3,180.44	11.67	11.23	-148.892	75.03	140.96	413.44	390.89	22.55	18.334	
3,300.00	3,280.19	3,236.07	3,217.07	11.85	11.38	-125.524	75.91	159.28	424.87	401.96	22.91	18.545	
3,350.00	3,329.55	3,276.51	3,252.41	12.04	11.53	-108.987	76.79	178.89	436.58	413.32	23.26	18.767	
3,400.00	3,378.57	3,316.45	3,286.48	12.22	11.67	-97.546	77.66	199.72	448.47	424.87	23.60	19.003	
3,450.00	3,427.11	3,355.94	3,319.28	12.40	11.82	-89.276	78.52	221.69	460.43	436.51	23.92	19.251	
3,500.00	3,475.03	3,395.01	3,350.81	12.57	11.97	-82.979	79.37	244.74	472.37	448.16	24.21	19.513	
3,550.00	3,522.22	3,433.69	3,381.08	12.75	12.12	-77.970	80.20	268.82	484.20	459.73	24.47	19.788	
3,600.00	3,568.53	3,472.01	3,410.07	12.92	12.28	-73.849	81.02	293.86	495.85	471.16	24.70	20.079	
3,650.00	3,613.84	3,510.00	3,437.79	13.08	12.43	-70.372	81.82	319.81	507.24	482.36	24.88	20.384	
3,700.00	3,658.03	3,550.00	3,465.85	13.25	12.60	-67.325	82.66	348.30	518.33	493.28	25.04	20.698	
3,750.00	3,700.98	3,585.05	3,489.43	13.41	12.75	-64.779	83.38	374.22	529.02	503.87	25.15	21.036	
3,800.00	3,742.57	3,622.17	3,513.35	13.56	12.91	-62.486	84.14	402.59	539.30	514.08	25.22	21.382	
3,850.00	3,782.67	3,659.03	3,536.00	13.72	13.08	-60.451	84.89	431.67	549.11	523.85	25.26	21.740	
3,900.00	3,821.20	3,700.00	3,559.83	13.88	13.28	-58.552	85.70	464.97	558.42	533.15	25.27	22.098	
3,950.00	3,858.03	3,732.09	3,577.48	14.04	13.43	-57.007	86.32	491.76	567.15	541.92	25.23	22.481	
4,000.00	3,893.07	3,768.30	3,596.32	14.20	13.61	-55.545	87.01	522.68	575.31	550.15	25.17	22.860	
4,050.00	3,926.22	3,815.83	3,620.09	14.38	13.86	-54.129	87.91	563.83	582.44	557.32	25.12	23.184	
4,100.00	3,957.40	3,865.25	3,644.80	14.56	14.13	-53.020	88.84	606.62	587.81	562.72	25.10	23.422	
4,150.00	3,986.50	3,915.00	3,669.67	14.76	14.41	-52.223	89.77	649.69	591.36	566.26	25.10	23.564	
4,200.00	4,013.47	3,964.94	3,694.64	14.96	14.71	-51.727	90.71	692.93	593.03	567.89	25.14	23.587	
4,219.41	4,023.34	3,979.68	3,701.97	15.04	14.79	-51.609	90.99	705.72	593.22	568.07	25.15	23.587	
4,250.00	4,038.64	4,000.00	3,711.59	15.18	14.92	-51.562	91.38	723.61	593.78	568.40	25.38	23.396	
4,300.00	4,063.64	4,028.56	3,724.03	15.41	15.09	-51.405	91.94	749.31	596.00	570.28	25.72	23.176	
4,350.00	4,088.64	4,050.00	3,732.51	15.66	15.22	-51.218	92.37	768.99	599.99	573.97	26.03	23.054	
4,400.00	4,113.64	4,088.01	3,745.72	15.92	15.46	-50.743	93.14	804.62	605.47	579.10	26.36	22.968	
4,419.41	4,123.34	4,100.00	3,749.40	16.02	15.54	-50.557	93.39	816.03	608.08	581.61	26.48	22.966	
4,450.00	4,137.92	4,117.01	3,754.20	16.19	15.65	-49.978	93.74	832.34	612.22	585.97	26.24	23.327	
4,500.00	4,158.60	4,150.00	3,762.12	16.46	15.86	-49.110	94.44	864.36	618.12	592.23	25.89	23.877	
4,550.00	4,175.24	4,174.70	3,766.83	16.75	16.02	-48.511	94.97	888.60	622.83	597.28	25.55	24.373	
4,600.00	4,187.70	4,200.00	3,770.57	17.04	16.18	-48.056	95.51	913.61	626.40	601.11	25.29	24.768	
4,650.00	4,195.90	4,232.20	3,773.73	17.34	16.38	-47.727	96.21	945.64	628.71	603.56	25.15	24.998	
4,700.00	4,199.77	4,261.96	3,775.06	17.63	16.57	-47.583	96.85	975.36	629.80	604.67	25.13	25.061	
4,708.62	4,200.00	4,270.58	3,775.25	17.68	16.63	-47.580	97.04	983.98	629.82	604.66	25.16	25.031	
4,750.00	4,200.78	4,311.96	3,776.18	17.94	16.89	-47.590	97.94	1,025.34	629.72	604.12	25.60	24.601	
4,800.00	4,201.72	4,361.96	3,777.31	18.24	17.23	-47.602	99.03	1,075.31	629.59	603.46	26.13	24.091	
4,850.00	4,202.66	4,411.96	3,778.44	18.57	17.58	-47.615	100.11	1,125.29	629.46	602.77	26.69	23.580	
4,900.00	4,203.60	4,461.96	3,779.57	18.90	17.94	-47.627	101.20	1,175.26	629.34	602.07	27.27	23.079	
4,950.00	4,204.55	4,511.96	3,780.70	19.25	18.31	-47.640	102.29	1,225.24	629.21	601.35	27.86	22.581	
5,000.00	4,205.49	4,561.96	3,781.82	19.60	18.69	-47.652	103.37	1,275.21	629.09	600.61	28.47	22.095	
5,050.00	4,206.43	4,611.96	3,782.95	19.97	19.07	-47.665	104.46	1,325.19	628.96	599.86	29.10	21.615	
5,100.00	4,207.37	4,661.96	3,784.08	20.34	19.47	-47.677	105.55	1,375.16	628.83	599.10	29.74	21.148	
5,150.00	4,208.31	4,711.96	3,785.21	20.73	19.87	-47.689	106.63	1,425.14	628.71	598.32	30.39	20.689	
5,200.00	4,209.25	4,761.96	3,786.33	21.11	20.29	-47.702	107.72	1,475.11	628.58	597.53	31.05	20.243	
5,250.00	4,210.20	4,811.96	3,787.46	21.52	20.70	-47.714	108.81	1,525.09	628.45	596.72	31.73	19.807	
5,300.00	4,211.14	4,861.96	3,788.59	21.92	21.13	-47.727	109.89	1,575.06	628.33	595.91	32.41	19.384	
5,350.00	4,212.08	4,911.96	3,789.72	22.33	21.56	-47.739	110.98	1,625.04	628.20	595.09	33.11	18.971	
5,400.00	4,213.02	4,961.96	3,790.85	22.75	22.00	-47.752	112.06	1,675.01	628.08	594.26	33.82	18.572	
5,450.00	4,213.96	5,011.96	3,791.97	23.18	22.44	-47.764	113.15	1,724.99	627.95	593.41	34.54	18.182	
5,500.00	4,214.90	5,061.96	3,793.10	23.61	22.89	-47.777	114.24	1,774.97	627.82	592.56	35.26	17.806	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 10H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
5,550.00	4,215.85	5,111.96	3,794.23	24.05	23.34	-47.789	115.32	1,824.94	627.70	591.70	35.99	17.439	
5,600.00	4,216.79	5,161.96	3,795.36	24.48	23.80	-47.802	116.41	1,874.92	627.57	590.84	36.73	17.085	
5,650.00	4,217.73	5,211.96	3,796.49	24.93	24.27	-47.814	117.50	1,924.89	627.45	589.96	37.48	16.740	
5,700.00	4,218.67	5,261.96	3,797.61	25.38	24.73	-47.827	118.58	1,974.87	627.32	589.09	38.23	16.407	
5,750.00	4,219.61	5,311.96	3,798.74	25.84	25.20	-47.840	119.67	2,024.84	627.19	588.20	39.00	16.084	
5,800.00	4,220.55	5,361.96	3,799.87	26.30	25.68	-47.852	120.76	2,074.82	627.07	587.31	39.76	15.771	
5,850.00	4,221.50	5,411.95	3,801.00	26.76	26.16	-47.865	121.84	2,124.79	626.94	586.41	40.53	15.467	
5,900.00	4,222.44	5,461.95	3,802.12	27.23	26.64	-47.877	122.93	2,174.77	626.82	585.50	41.31	15.173	
5,950.00	4,223.38	5,511.95	3,803.25	27.70	27.12	-47.890	124.02	2,224.74	626.69	584.59	42.10	14.887	
6,000.00	4,224.32	5,561.95	3,804.38	28.17	27.61	-47.902	125.10	2,274.72	626.56	583.68	42.88	14.611	
6,050.00	4,225.26	5,611.95	3,805.51	28.65	28.10	-47.915	126.19	2,324.69	626.44	582.76	43.68	14.343	
6,100.00	4,226.20	5,661.95	3,806.64	29.13	28.59	-47.927	127.28	2,374.67	626.31	581.84	44.47	14.084	
6,150.00	4,227.15	5,711.95	3,807.76	29.62	29.09	-47.940	128.36	2,424.64	626.19	580.91	45.27	13.831	
6,200.00	4,228.09	5,761.95	3,808.89	30.10	29.59	-47.953	129.45	2,474.62	626.06	579.98	46.08	13.587	
6,250.00	4,229.03	5,811.95	3,810.02	30.59	30.09	-47.965	130.54	2,524.59	625.94	579.05	46.89	13.350	
6,300.00	4,229.97	5,861.95	3,811.15	31.08	30.59	-47.978	131.62	2,574.57	625.81	578.11	47.70	13.120	
6,350.00	4,230.91	5,911.95	3,812.28	31.58	31.09	-47.990	132.71	2,624.54	625.68	577.17	48.51	12.897	
6,400.00	4,231.86	5,961.95	3,813.40	32.07	31.60	-48.003	133.80	2,674.52	625.56	576.23	49.33	12.680	
6,450.00	4,232.80	6,011.95	3,814.53	32.57	32.11	-48.016	134.88	2,724.49	625.43	575.28	50.16	12.470	
6,500.00	4,233.74	6,061.95	3,815.66	33.07	32.62	-48.028	135.97	2,774.47	625.31	574.33	50.98	12.266	
6,550.00	4,234.68	6,111.95	3,816.79	33.58	33.13	-48.041	137.06	2,824.44	625.18	573.37	51.81	12.067	
6,600.00	4,235.62	6,161.95	3,817.92	34.08	33.64	-48.053	138.14	2,874.42	625.06	572.42	52.64	11.874	
6,650.00	4,236.56	6,211.95	3,819.04	34.59	34.16	-48.066	139.23	2,924.39	624.93	571.46	53.47	11.687	
6,700.00	4,237.51	6,261.95	3,820.17	35.09	34.68	-48.079	140.31	2,974.37	624.81	570.50	54.31	11.505	
6,750.00	4,238.45	6,311.95	3,821.30	35.60	35.19	-48.091	141.40	3,024.34	624.68	569.53	55.15	11.328	
6,800.00	4,239.39	6,361.95	3,822.43	36.11	35.71	-48.104	142.49	3,074.32	624.56	568.57	55.99	11.155	
6,850.00	4,240.33	6,411.95	3,823.55	36.63	36.23	-48.117	143.57	3,124.29	624.43	567.60	56.83	10.988	
6,900.00	4,241.27	6,461.95	3,824.68	37.14	36.75	-48.129	144.66	3,174.27	624.31	566.63	57.67	10.825	
6,950.00	4,242.21	6,511.95	3,825.81	37.66	37.28	-48.142	145.75	3,224.24	624.18	565.66	58.52	10.666	
7,000.00	4,243.16	6,561.95	3,826.94	38.17	37.80	-48.155	146.83	3,274.22	624.05	564.68	59.37	10.511	
7,050.00	4,244.10	6,611.95	3,828.07	38.69	38.33	-48.167	147.92	3,324.19	623.93	563.71	60.22	10.360	
7,100.00	4,245.04	6,661.95	3,829.19	39.21	38.85	-48.180	149.01	3,374.17	623.80	562.73	61.07	10.214	
7,150.00	4,245.98	6,711.95	3,830.32	39.73	39.38	-48.193	150.09	3,424.14	623.68	561.75	61.93	10.071	
7,200.00	4,246.92	6,761.95	3,831.45	40.25	39.91	-48.205	151.18	3,474.12	623.55	560.77	62.79	9.931	
7,250.00	4,247.86	6,811.95	3,832.58	40.78	40.44	-48.218	152.27	3,524.09	623.43	559.79	63.64	9.796	
7,300.00	4,248.81	6,861.94	3,833.71	41.30	40.97	-48.231	153.35	3,574.07	623.30	558.80	64.50	9.663	
7,350.00	4,249.75	6,911.94	3,834.83	41.82	41.50	-48.243	154.44	3,624.04	623.18	557.81	65.36	9.534	
7,400.00	4,250.69	6,961.94	3,835.96	42.35	42.03	-48.256	155.53	3,674.02	623.05	556.83	66.23	9.408	
7,450.00	4,251.63	7,011.94	3,837.09	42.88	42.56	-48.269	156.61	3,723.99	622.93	555.84	67.09	9.285	
7,500.00	4,252.57	7,061.94	3,838.22	43.40	43.10	-48.281	157.70	3,773.97	622.80	554.85	67.96	9.165	
7,550.00	4,253.51	7,111.94	3,839.35	43.93	43.63	-48.294	158.79	3,823.95	622.68	553.86	68.82	9.047	
7,600.00	4,254.46	7,161.94	3,840.47	44.46	44.17	-48.307	159.87	3,873.92	622.56	552.86	69.69	8.933	
7,650.00	4,255.40	7,211.94	3,841.60	44.99	44.70	-48.320	160.96	3,923.90	622.43	551.87	70.56	8.821	
7,700.00	4,256.34	7,261.94	3,842.73	45.52	45.24	-48.332	162.05	3,973.87	622.31	550.87	71.43	8.712	
7,750.00	4,257.28	7,311.94	3,843.86	46.06	45.78	-48.345	163.13	4,023.85	622.18	549.88	72.30	8.605	
7,800.00	4,258.22	7,361.94	3,844.98	46.59	46.31	-48.358	164.22	4,073.82	622.06	548.88	73.18	8.501	
7,850.00	4,259.16	7,411.94	3,846.11	47.12	46.85	-48.371	165.30	4,123.80	621.93	547.88	74.05	8.399	
7,900.00	4,260.11	7,461.94	3,847.24	47.65	47.39	-48.383	166.39	4,173.77	621.81	546.88	74.93	8.299	
7,950.00	4,261.05	7,511.94	3,848.37	48.19	47.93	-48.396	167.48	4,223.75	621.68	545.88	75.80	8.201	
8,000.00	4,261.99	7,561.94	3,849.50	48.72	48.47	-48.409	168.56	4,273.72	621.56	544.88	76.68	8.106	
8,050.00	4,262.93	7,611.94	3,850.62	49.26	49.01	-48.422	169.65	4,323.70	621.43	543.87	77.56	8.012	
8,100.00	4,263.87	7,661.94	3,851.75	49.80	49.55	-48.434	170.74	4,373.67	621.31	542.87	78.44	7.921	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 10H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
8,150.00	4,264.81	7,711.94	3,852.88	50.33	50.09	-48.447	171.82	4,423.65	621.18	541.86	79.32	7.831	
8,200.00	4,265.76	7,761.94	3,854.01	50.87	50.63	-48.460	172.91	4,473.62	621.06	540.86	80.20	7.744	
8,250.00	4,266.70	7,811.94	3,855.14	51.41	51.18	-48.473	174.00	4,523.60	620.94	539.85	81.08	7.658	
8,300.00	4,267.64	7,861.94	3,856.26	51.95	51.72	-48.486	175.08	4,573.57	620.81	538.84	81.97	7.574	
8,350.00	4,268.58	7,911.94	3,857.39	52.49	52.26	-48.498	176.17	4,623.55	620.69	537.83	82.85	7.492	
8,400.00	4,269.52	7,961.94	3,858.52	53.03	52.80	-48.511	177.26	4,673.52	620.56	536.83	83.74	7.411	
8,450.00	4,270.46	8,011.94	3,859.65	53.57	53.35	-48.524	178.34	4,723.50	620.44	535.81	84.62	7.332	
8,500.00	4,271.41	8,061.94	3,860.78	54.11	53.89	-48.537	179.43	4,773.47	620.31	534.80	85.51	7.254	
8,550.00	4,272.35	8,111.94	3,861.90	54.65	54.44	-48.550	180.52	4,823.45	620.19	533.79	86.40	7.178	
8,600.00	4,273.29	8,161.94	3,863.03	55.19	54.98	-48.562	181.60	4,873.42	620.07	532.78	87.29	7.104	
8,650.00	4,274.23	8,211.94	3,864.16	55.73	55.53	-48.575	182.69	4,923.40	619.94	531.77	88.18	7.031	
8,700.00	4,275.17	8,261.94	3,865.29	56.27	56.07	-48.588	183.78	4,973.37	619.82	530.75	89.07	6.959	
8,750.00	4,276.11	8,311.93	3,866.41	56.82	56.62	-48.601	184.86	5,023.35	619.69	529.74	89.96	6.889	
8,800.00	4,277.06	8,361.93	3,867.54	57.36	57.17	-48.614	185.95	5,073.32	619.57	528.72	90.85	6.820	
8,850.00	4,278.00	8,411.93	3,868.67	57.90	57.71	-48.627	187.04	5,123.30	619.45	527.70	91.74	6.752	
8,900.00	4,278.94	8,461.93	3,869.80	58.45	58.26	-48.640	188.12	5,173.27	619.32	526.69	92.63	6.686	
8,950.00	4,279.88	8,511.93	3,870.93	58.99	58.81	-48.652	189.21	5,223.25	619.20	525.67	93.53	6.620	
9,000.00	4,280.82	8,561.93	3,872.05	59.54	59.35	-48.665	190.30	5,273.22	619.07	524.65	94.42	6.556	
9,050.00	4,281.76	8,611.93	3,873.18	60.08	59.90	-48.678	191.38	5,323.20	618.95	523.63	95.32	6.494	
9,100.00	4,282.71	8,661.93	3,874.31	60.63	60.45	-48.691	192.47	5,373.17	618.83	522.61	96.21	6.432	
9,150.00	4,283.65	8,711.93	3,875.44	61.17	61.00	-48.704	193.55	5,423.15	618.70	521.59	97.11	6.371	
9,200.00	4,284.59	8,761.93	3,876.57	61.72	61.55	-48.717	194.64	5,473.12	618.58	520.57	98.01	6.312	
9,250.00	4,285.53	8,811.93	3,877.69	62.26	62.10	-48.730	195.73	5,523.10	618.45	519.55	98.91	6.253	
9,300.00	4,286.47	8,861.93	3,878.82	62.81	62.65	-48.743	196.81	5,573.07	618.33	518.53	99.80	6.195	
9,350.00	4,287.41	8,911.93	3,879.95	63.36	63.20	-48.755	197.90	5,623.05	618.21	517.50	100.70	6.139	
9,400.00	4,288.36	8,961.93	3,881.08	63.90	63.75	-48.768	198.99	5,673.02	618.08	516.48	101.60	6.083	
9,450.00	4,289.30	9,011.93	3,882.20	64.45	64.30	-48.781	200.07	5,723.00	617.96	515.46	102.50	6.029	
9,500.00	4,290.24	9,061.93	3,883.33	65.00	64.85	-48.794	201.16	5,772.97	617.84	514.43	103.40	5.975	
9,550.00	4,291.18	9,111.93	3,884.46	65.55	65.40	-48.807	202.25	5,822.95	617.71	513.41	104.30	5.922	
9,600.00	4,292.12	9,161.93	3,885.59	66.10	65.95	-48.820	203.33	5,872.93	617.59	512.38	105.21	5.870	
9,650.00	4,293.06	9,211.93	3,886.72	66.64	66.50	-48.833	204.42	5,922.90	617.46	511.36	106.11	5.819	
9,700.00	4,294.01	9,261.93	3,887.84	67.19	67.05	-48.846	205.51	5,972.88	617.34	510.33	107.01	5.769	
9,750.00	4,294.95	9,311.93	3,888.97	67.74	67.60	-48.859	206.59	6,022.85	617.22	509.30	107.92	5.719	
9,800.00	4,295.89	9,361.93	3,890.10	68.29	68.15	-48.872	207.68	6,072.83	617.09	508.27	108.82	5.671	
9,850.00	4,296.83	9,411.93	3,891.23	68.84	68.70	-48.885	208.77	6,122.80	616.97	507.25	109.73	5.623	
9,900.00	4,297.77	9,461.93	3,892.36	69.39	69.25	-48.898	209.85	6,172.78	616.85	506.22	110.63	5.576	
9,950.00	4,298.71	9,511.93	3,893.48	69.94	69.81	-48.911	210.94	6,222.75	616.72	505.19	111.54	5.529	
10,000.00	4,299.66	9,561.93	3,894.61	70.49	70.36	-48.924	212.03	6,272.73	616.60	504.16	112.44	5.484	
10,050.00	4,300.60	9,611.93	3,895.74	71.04	70.91	-48.937	213.11	6,322.70	616.48	503.13	113.35	5.439	
10,100.00	4,301.54	9,661.93	3,896.87	71.59	71.46	-48.950	214.20	6,372.68	616.35	502.10	114.26	5.394	
10,150.00	4,302.48	9,711.93	3,898.00	72.14	72.02	-48.963	215.29	6,422.65	616.23	501.07	115.16	5.351	
10,200.00	4,303.42	9,761.92	3,899.12	72.69	72.57	-48.976	216.37	6,472.63	616.11	500.03	116.07	5.308	
10,250.00	4,304.36	9,811.92	3,900.25	73.24	73.12	-48.989	217.46	6,522.60	615.99	499.00	116.98	5.266	
10,300.00	4,305.31	9,861.92	3,901.38	73.79	73.67	-49.002	218.54	6,572.58	615.86	497.97	117.89	5.224	
10,350.00	4,306.25	9,911.92	3,902.51	74.34	74.23	-49.015	219.63	6,622.55	615.74	496.94	118.80	5.183	
10,400.00	4,307.19	9,961.92	3,903.63	74.90	74.78	-49.028	220.72	6,672.53	615.62	495.90	119.71	5.142	
10,450.00	4,308.13	10,011.92	3,904.76	75.45	75.33	-49.041	221.80	6,722.50	615.49	494.87	120.62	5.103	
10,500.00	4,309.07	10,061.92	3,905.89	76.00	75.89	-49.054	222.89	6,772.48	615.37	493.84	121.53	5.063	
10,550.00	4,310.01	10,111.92	3,907.02	76.55	76.44	-49.067	223.98	6,822.45	615.25	492.80	122.45	5.025	
10,600.00	4,310.96	10,161.92	3,908.15	77.10	77.00	-49.080	225.06	6,872.43	615.12	491.77	123.36	4.987	
10,650.00	4,311.90	10,211.92	3,909.27	77.66	77.55	-49.093	226.15	6,922.40	615.00	490.73	124.27	4.949	
10,700.00	4,312.84	10,261.92	3,910.40	78.21	78.10	-49.106	227.24	6,972.38	614.88	489.69	125.18	4.912	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 10H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
10,750.00	4,313.78	10,311.92	3,911.53	78.76	78.66	-49.119	228.32	7,022.35	614.76	488.66	126.10	4.875	
10,800.00	4,314.72	10,361.92	3,912.66	79.31	79.21	-49.132	229.41	7,072.33	614.63	487.62	127.01	4.839	
10,850.00	4,315.66	10,411.92	3,913.79	79.87	79.77	-49.145	230.50	7,122.30	614.51	486.58	127.93	4.804	
10,900.00	4,316.61	10,461.92	3,914.91	80.42	80.32	-49.158	231.58	7,172.28	614.39	485.55	128.84	4.769	
10,950.00	4,317.55	10,511.92	3,916.04	80.97	80.88	-49.171	232.67	7,222.25	614.26	484.51	129.76	4.734	
11,000.00	4,318.49	10,561.92	3,917.17	81.52	81.43	-49.184	233.76	7,272.23	614.14	483.47	130.67	4.700	
11,050.00	4,319.43	10,611.92	3,918.30	82.08	81.99	-49.197	234.84	7,322.20	614.02	482.43	131.59	4.666	
11,100.00	4,320.37	10,661.92	3,919.43	82.63	82.54	-49.210	235.93	7,372.18	613.90	481.39	132.50	4.633	
11,150.00	4,321.32	10,711.92	3,920.55	83.19	83.10	-49.223	237.02	7,422.15	613.77	480.35	133.42	4.600	
11,200.00	4,322.26	10,761.92	3,921.68	83.74	83.65	-49.236	238.10	7,472.13	613.65	479.31	134.34	4.568	
11,250.00	4,323.20	10,811.92	3,922.81	84.29	84.21	-49.250	239.19	7,522.10	613.53	478.27	135.26	4.536	
11,295.63	4,324.06	10,857.55	3,923.84	84.80	84.71	-49.262	240.18	7,567.71	613.42	477.32	136.09	4.507	
11,300.00	4,324.14	10,861.92	3,923.94	84.85	84.76	-49.263	240.28	7,572.08	613.41	477.23	136.17	4.505	
11,345.67	4,325.00	10,907.58	3,924.97	85.35	85.27	-49.275	241.27	7,617.72	613.29	476.28	137.01	4.476	SF

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 20H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
250.00	250.00	250.00	250.00	0.68	0.68	-0.478	59.90	-0.50	59.90	58.54	1.36	43.975	
300.00	300.00	300.00	300.00	0.86	0.86	-0.478	59.90	-0.50	59.90	58.18	1.72	34.813	CC, ES
350.00	350.00	348.96	348.96	1.03	1.04	-170.930	60.32	-0.49	60.76	58.69	2.07	29.301	
400.00	399.98	397.84	397.82	1.20	1.21	-171.080	61.57	-0.48	63.33	60.90	2.43	26.034	
450.00	449.93	446.54	446.48	1.38	1.39	-171.305	63.65	-0.45	67.62	64.82	2.80	24.190	
500.00	499.84	494.99	494.83	1.55	1.57	-171.573	66.53	-0.42	73.60	70.44	3.16	23.311	
550.00	549.68	543.09	542.80	1.72	1.74	-171.859	70.21	-0.37	81.28	77.76	3.52	23.077	
600.00	599.45	590.78	590.28	1.90	1.91	-172.139	74.64	-0.32	90.63	86.75	3.88	23.337	
641.99	641.18	630.45	629.71	2.05	2.06	-172.361	78.94	-0.27	99.77	95.58	4.18	23.841	
650.00	649.13	637.97	637.18	2.08	2.08	-172.405	79.81	-0.26	101.63	97.39	4.24	23.979	
700.00	698.78	684.73	683.57	2.25	2.25	-172.637	85.69	-0.18	113.73	109.16	4.57	24.872	
750.00	748.42	731.09	729.47	2.42	2.42	-172.805	92.27	-0.10	126.61	121.70	4.91	25.802	
800.00	798.06	777.05	774.85	2.60	2.59	-172.923	99.53	-0.01	140.27	135.03	5.24	26.773	
850.00	847.71	822.59	819.70	2.79	2.75	-173.003	107.43	0.08	154.70	149.13	5.57	27.761	
900.00	897.35	867.68	863.97	2.97	2.92	-173.054	115.96	0.19	169.88	163.98	5.90	28.786	
950.00	947.00	912.31	907.66	3.15	3.08	-173.082	125.08	0.30	185.80	179.57	6.23	29.823	
1,000.00	996.64	956.47	950.74	3.33	3.23	-173.093	134.78	0.42	202.45	195.90	6.56	30.865	
1,050.00	1,046.28	1,000.00	993.06	3.52	3.39	-173.091	144.99	0.54	219.83	212.94	6.88	31.933	
1,100.00	1,095.93	1,043.32	1,035.01	3.70	3.55	-173.079	155.79	0.68	237.91	230.70	7.21	33.005	
1,150.00	1,145.57	1,085.98	1,076.16	3.88	3.71	-173.059	167.04	0.81	256.68	249.15	7.53	34.089	
1,200.00	1,195.22	1,128.13	1,116.64	4.07	3.87	-173.033	178.75	0.96	276.14	268.29	7.85	35.182	
1,250.00	1,244.86	1,169.75	1,156.45	4.25	4.02	-173.003	190.91	1.11	296.27	288.11	8.17	36.281	
1,300.00	1,294.51	1,210.83	1,195.57	4.43	4.18	-172.969	203.47	1.26	317.06	308.58	8.48	37.381	
1,350.00	1,344.15	1,251.38	1,233.99	4.62	4.34	-172.933	216.41	1.42	338.49	329.69	8.80	38.479	
1,400.00	1,393.79	1,295.38	1,275.55	4.80	4.50	-172.895	230.87	1.60	360.35	351.23	9.12	39.516	
1,450.00	1,443.44	1,340.34	1,318.01	4.99	4.68	-172.859	245.64	1.78	382.23	372.79	9.44	40.489	
1,500.00	1,493.08	1,385.30	1,360.47	5.17	4.85	-172.828	260.42	1.96	404.10	394.34	9.76	41.401	
1,550.00	1,542.73	1,430.26	1,402.93	5.36	5.03	-172.800	275.20	2.14	425.98	415.90	10.08	42.251	
1,600.00	1,592.37	1,475.22	1,445.39	5.54	5.21	-172.774	289.98	2.32	447.86	437.45	10.40	43.046	
1,650.00	1,642.01	1,520.18	1,487.85	5.73	5.38	-172.751	304.75	2.50	469.73	459.01	10.73	43.790	
1,700.00	1,691.66	1,565.14	1,530.31	5.91	5.56	-172.730	319.53	2.68	491.61	480.56	11.05	44.489	
1,750.00	1,741.30	1,610.10	1,572.78	6.10	5.74	-172.711	334.31	2.86	513.49	502.11	11.37	45.147	
1,800.00	1,790.95	1,655.06	1,615.24	6.28	5.92	-172.693	349.09	3.05	535.37	523.67	11.70	45.765	
1,850.00	1,840.59	1,700.02	1,657.70	6.47	6.10	-172.677	363.86	3.23	557.24	545.22	12.02	46.350	
1,900.00	1,890.23	1,744.98	1,700.16	6.65	6.28	-172.662	378.64	3.41	579.12	566.77	12.35	46.901	
1,950.00	1,939.88	1,789.94	1,742.62	6.84	6.46	-172.648	393.42	3.59	601.00	588.32	12.67	47.424	
2,000.00	1,989.52	1,834.89	1,785.08	7.02	6.64	-172.635	408.20	3.77	622.87	609.87	13.00	47.918	
2,050.00	2,039.17	1,879.85	1,827.54	7.21	6.82	-172.622	422.97	3.95	644.75	631.43	13.32	48.387	
2,100.00	2,088.81	1,924.81	1,870.01	7.40	7.00	-172.611	437.75	4.13	666.63	652.98	13.65	48.833	
2,150.00	2,138.46	1,969.77	1,912.47	7.58	7.18	-172.601	452.53	4.31	688.50	674.53	13.98	49.257	
2,200.00	2,188.10	2,014.73	1,954.93	7.77	7.36	-172.591	467.30	4.49	710.38	696.08	14.30	49.661	
2,250.00	2,237.74	2,059.69	1,997.39	7.95	7.54	-172.581	482.08	4.68	732.26	717.63	14.63	50.046	
2,300.00	2,287.39	2,104.65	2,039.85	8.14	7.72	-172.572	496.86	4.86	754.14	739.18	14.96	50.414	
2,350.00	2,337.03	2,149.61	2,082.31	8.32	7.90	-172.564	511.64	5.04	776.01	760.73	15.29	50.765	
2,400.00	2,386.68	2,194.57	2,124.77	8.51	8.08	-172.556	526.41	5.22	797.89	782.28	15.61	51.101	
2,450.00	2,436.32	2,239.53	2,167.24	8.69	8.26	-172.549	541.19	5.40	819.77	803.83	15.94	51.422	
2,500.00	2,485.96	2,284.49	2,209.70	8.88	8.44	-172.542	555.97	5.58	841.64	825.37	16.27	51.729	
2,550.00	2,535.61	2,329.45	2,252.16	9.07	8.63	-172.535	570.75	5.76	863.52	846.92	16.60	52.024	
2,600.00	2,585.25	2,374.41	2,294.62	9.25	8.81	-172.529	585.52	5.94	885.40	868.47	16.93	52.308	
2,650.00	2,634.90	2,419.37	2,337.08	9.44	8.99	-172.523	600.30	6.13	907.28	890.02	17.26	52.579	
2,700.00	2,684.54	2,464.33	2,379.54	9.62	9.17	-172.517	615.08	6.31	929.15	911.57	17.58	52.841	
2,750.00	2,734.19	2,509.29	2,422.00	9.81	9.35	-172.511	629.86	6.49	951.03	933.12	17.91	53.092	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 20H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
2,800.00	2,783.83	2,554.25	2,464.47	9.99	9.54	-172.506	644.63	6.67	972.91	954.67	18.24	53.334	
2,850.00	2,833.47	2,599.21	2,506.93	10.18	9.72	-172.501	659.41	6.85	994.79	976.22	18.57	53.567	
2,900.00	2,883.12	2,644.17	2,549.39	10.36	9.90	-172.496	674.19	7.03	1,016.66	997.76	18.90	53.792	
2,950.00	2,932.76	2,689.13	2,591.85	10.55	10.08	-172.492	688.97	7.21	1,038.54	1,019.31	19.23	54.008	
3,000.00	2,982.41	2,734.09	2,634.31	10.74	10.27	-172.487	703.74	7.39	1,060.42	1,040.86	19.56	54.217	
3,050.00	3,032.05	2,779.05	2,676.77	10.92	10.45	-172.483	718.52	7.57	1,082.30	1,062.41	19.89	54.419	
3,100.00	3,081.69	2,824.01	2,719.23	11.11	10.63	-172.479	733.30	7.76	1,104.17	1,083.95	20.22	54.614	
3,150.00	3,131.34	2,868.97	2,761.70	11.29	10.81	-172.475	748.08	7.94	1,126.05	1,105.50	20.55	54.802	
3,200.00	3,180.98	2,913.93	2,804.16	11.48	11.00	-172.471	762.85	8.12	1,147.93	1,127.05	20.88	54.985	
3,450.00	3,427.11	3,194.13	3,068.51	12.40	12.12	-108.530	851.27	29.21	1,252.29	1,229.46	22.84	54.839	
3,500.00	3,475.03	3,259.12	3,128.90	12.57	12.37	-103.234	869.54	44.71	1,270.60	1,247.33	23.27	54.598	
3,550.00	3,522.22	3,325.21	3,189.38	12.75	12.62	-99.131	887.03	64.78	1,287.81	1,264.10	23.71	54.312	
3,600.00	3,568.53	3,392.32	3,249.53	12.92	12.86	-95.828	903.57	89.49	1,303.86	1,279.71	24.15	53.983	
3,650.00	3,613.84	3,460.35	3,308.90	13.08	13.10	-93.084	919.00	118.87	1,318.69	1,294.09	24.60	53.613	
3,700.00	3,658.03	3,529.16	3,367.00	13.25	13.33	-90.750	933.15	152.88	1,332.23	1,307.19	25.04	53.202	
3,750.00	3,700.98	3,598.58	3,423.33	13.41	13.55	-88.724	945.88	191.38	1,344.44	1,318.96	25.49	52.749	
3,800.00	3,742.57	3,668.42	3,477.37	13.56	13.77	-86.941	957.05	234.16	1,355.27	1,329.34	25.94	52.249	
3,850.00	3,782.67	3,738.47	3,528.65	13.72	13.99	-85.351	966.53	280.91	1,364.69	1,338.29	26.39	51.703	
3,900.00	3,821.20	3,808.52	3,576.72	13.88	14.20	-83.922	974.25	331.26	1,372.66	1,345.81	26.86	51.106	
3,950.00	3,858.03	3,878.34	3,621.17	14.04	14.42	-82.628	980.14	384.75	1,379.18	1,351.85	27.33	50.455	
4,000.00	3,893.07	3,947.70	3,661.69	14.20	14.66	-81.450	984.18	440.88	1,384.23	1,356.41	27.82	49.756	
4,050.00	3,926.22	4,016.40	3,698.02	14.38	14.91	-80.377	986.39	499.12	1,387.81	1,359.49	28.32	49.005	
4,100.00	3,957.40	4,065.98	3,722.81	14.56	15.10	-79.582	987.32	542.05	1,390.26	1,361.50	28.75	48.351	
4,150.00	3,986.50	4,115.73	3,747.69	14.76	15.31	-78.985	988.26	585.13	1,391.88	1,362.68	29.20	47.663	
4,200.00	4,013.47	4,165.67	3,772.66	14.96	15.55	-78.580	989.20	628.37	1,392.65	1,362.97	29.68	46.927	
4,219.41	4,023.34	4,185.07	3,782.36	15.04	15.64	-78.474	989.56	645.17	1,392.71	1,362.85	29.86	46.635	
4,250.00	4,038.64	4,215.67	3,797.66	15.18	15.79	-78.474	990.14	671.66	1,392.71	1,362.53	30.18	46.145	
4,251.34	4,039.31	4,216.96	3,798.30	15.19	15.80	-78.474	990.16	672.77	1,392.71	1,362.52	30.19	46.124	
4,300.00	4,063.64	4,250.00	3,813.99	15.41	15.97	-78.435	990.80	701.84	1,392.99	1,362.37	30.62	45.497	
4,350.00	4,088.64	4,283.10	3,828.00	15.66	16.16	-78.320	991.45	731.82	1,393.86	1,362.79	31.07	44.864	
4,400.00	4,113.64	4,316.05	3,840.20	15.92	16.34	-78.130	992.11	762.42	1,395.34	1,363.82	31.52	44.273	
4,419.41	4,123.34	4,328.68	3,844.41	16.02	16.41	-78.037	992.37	774.32	1,396.08	1,364.39	31.69	44.051	
4,450.00	4,137.92	4,350.00	3,850.91	16.19	16.54	-77.762	992.81	794.62	1,397.29	1,365.32	31.96	43.714	
4,500.00	4,158.60	4,380.70	3,858.94	16.46	16.72	-77.396	993.45	824.24	1,399.02	1,366.63	32.39	43.188	
4,550.00	4,175.24	4,412.81	3,865.62	16.75	16.91	-77.091	994.14	855.63	1,400.46	1,367.62	32.84	42.644	
4,600.00	4,187.70	4,450.00	3,871.16	17.04	17.14	-76.839	994.94	892.40	1,401.58	1,368.26	33.33	42.057	
4,650.00	4,195.90	4,476.78	3,873.66	17.34	17.30	-76.698	995.51	919.05	1,402.33	1,368.57	33.76	41.539	
4,700.00	4,199.77	4,508.89	3,875.01	17.63	17.49	-76.614	996.21	951.11	1,402.74	1,368.50	34.23	40.977	
4,708.62	4,200.00	4,517.50	3,875.14	17.68	17.55	-76.608	996.40	959.73	1,402.76	1,368.42	34.34	40.855	
4,750.00	4,200.78	4,558.88	3,875.76	17.94	17.81	-76.602	997.30	1,001.10	1,402.79	1,367.95	34.85	40.257	
4,800.00	4,201.72	4,608.88	3,876.51	18.24	18.13	-76.594	998.38	1,051.08	1,402.84	1,367.37	35.47	39.553	
4,850.00	4,202.66	4,658.88	3,877.26	18.57	18.47	-76.586	999.47	1,101.06	1,402.88	1,366.75	36.13	38.830	
4,900.00	4,203.60	4,708.88	3,878.01	18.90	18.81	-76.579	1,000.55	1,151.04	1,402.92	1,366.13	36.79	38.129	
4,950.00	4,204.55	4,758.88	3,878.75	19.25	19.17	-76.571	1,001.64	1,201.03	1,402.96	1,365.47	37.50	37.416	
5,000.00	4,205.49	4,808.88	3,879.50	19.60	19.53	-76.563	1,002.73	1,251.01	1,403.01	1,364.81	38.20	36.726	
5,050.00	4,206.43	4,858.88	3,880.25	19.97	19.91	-76.556	1,003.81	1,300.99	1,403.05	1,364.11	38.94	36.030	
5,100.00	4,207.37	4,908.88	3,881.00	20.34	20.29	-76.548	1,004.90	1,350.97	1,403.09	1,363.41	39.68	35.358	
5,150.00	4,208.31	4,958.88	3,881.75	20.73	20.68	-76.540	1,005.98	1,400.95	1,403.14	1,362.68	40.45	34.685	
5,200.00	4,209.25	5,008.88	3,882.50	21.11	21.08	-76.533	1,007.07	1,450.94	1,403.18	1,361.95	41.23	34.035	
5,250.00	4,210.20	5,058.88	3,883.25	21.52	21.49	-76.525	1,008.16	1,500.92	1,403.22	1,361.19	42.03	33.388	
5,300.00	4,211.14	5,108.88	3,884.00	21.92	21.90	-76.517	1,009.24	1,550.90	1,403.26	1,360.43	42.83	32.763	
5,350.00	4,212.08	5,158.88	3,884.75	22.33	22.32	-76.510	1,010.33	1,600.88	1,403.31	1,359.65	43.66	32.144	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 20H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
5,400.00	4,213.02	5,208.88	3,885.50	22.75	22.74	-76.502	1,011.41	1,650.87	1,403.35	1,358.87	44.48	31.547	
5,450.00	4,213.96	5,258.88	3,886.25	23.18	23.18	-76.494	1,012.50	1,700.85	1,403.39	1,358.06	45.33	30.957	
5,500.00	4,214.90	5,308.88	3,887.00	23.61	23.61	-76.487	1,013.59	1,750.83	1,403.44	1,357.25	46.18	30.388	
5,550.00	4,215.85	5,358.88	3,887.75	24.05	24.06	-76.479	1,014.67	1,800.81	1,403.48	1,356.43	47.05	29.827	
5,600.00	4,216.79	5,408.88	3,888.50	24.48	24.50	-76.471	1,015.76	1,850.79	1,403.52	1,355.60	47.92	29.286	
5,650.00	4,217.73	5,458.88	3,889.25	24.93	24.96	-76.464	1,016.84	1,900.78	1,403.57	1,354.75	48.81	28.754	
5,700.00	4,218.67	5,508.88	3,890.00	25.38	25.41	-76.456	1,017.93	1,950.76	1,403.61	1,353.91	49.70	28.241	
5,750.00	4,219.61	5,558.88	3,890.75	25.84	25.87	-76.448	1,019.02	2,000.74	1,403.65	1,353.05	50.61	27.737	
5,800.00	4,220.55	5,608.88	3,891.50	26.30	26.34	-76.441	1,020.10	2,050.72	1,403.69	1,352.18	51.51	27.250	
5,850.00	4,221.50	5,658.88	3,892.24	26.76	26.81	-76.433	1,021.19	2,100.71	1,403.74	1,351.31	52.43	26.773	
5,900.00	4,222.44	5,708.88	3,892.99	27.23	27.28	-76.426	1,022.27	2,150.69	1,403.78	1,350.43	53.35	26.312	
5,950.00	4,223.38	5,758.88	3,893.74	27.70	27.75	-76.418	1,023.36	2,200.67	1,403.82	1,349.54	54.28	25.861	
6,000.00	4,224.32	5,808.88	3,894.49	28.17	28.23	-76.410	1,024.45	2,250.65	1,403.87	1,348.65	55.22	25.425	
6,050.00	4,225.26	5,858.87	3,895.24	28.65	28.72	-76.403	1,025.53	2,300.63	1,403.91	1,347.75	56.16	24.998	
6,100.00	4,226.20	5,908.87	3,895.99	29.13	29.20	-76.395	1,026.62	2,350.62	1,403.95	1,346.85	57.11	24.585	
6,150.00	4,227.15	5,958.87	3,896.74	29.62	29.69	-76.387	1,027.70	2,400.60	1,404.00	1,345.94	58.06	24.182	
6,200.00	4,228.09	6,008.87	3,897.49	30.10	30.18	-76.380	1,028.79	2,450.58	1,404.04	1,345.02	59.02	23.791	
6,250.00	4,229.03	6,058.87	3,898.24	30.59	30.67	-76.372	1,029.87	2,500.56	1,404.08	1,344.10	59.98	23.409	
6,300.00	4,229.97	6,108.87	3,898.99	31.08	31.16	-76.364	1,030.96	2,550.55	1,404.13	1,343.18	60.95	23.039	
6,350.00	4,230.91	6,158.87	3,899.74	31.58	31.66	-76.357	1,032.05	2,600.53	1,404.17	1,342.25	61.92	22.677	
6,400.00	4,231.86	6,208.87	3,900.49	32.07	32.16	-76.349	1,033.13	2,650.51	1,404.21	1,341.32	62.89	22.327	
6,450.00	4,232.80	6,258.87	3,901.24	32.57	32.66	-76.341	1,034.22	2,700.49	1,404.26	1,340.38	63.88	21.984	
6,500.00	4,233.74	6,308.87	3,901.99	33.07	33.17	-76.334	1,035.30	2,750.47	1,404.30	1,339.44	64.86	21.652	
6,550.00	4,234.68	6,358.87	3,902.74	33.58	33.67	-76.326	1,036.39	2,800.46	1,404.35	1,338.50	65.85	21.328	
6,600.00	4,235.62	6,408.87	3,903.49	34.08	34.18	-76.319	1,037.48	2,850.44	1,404.39	1,337.55	66.84	21.012	
6,650.00	4,236.56	6,458.87	3,904.24	34.59	34.69	-76.311	1,038.56	2,900.42	1,404.43	1,336.60	67.83	20.705	
6,700.00	4,237.51	6,508.87	3,904.98	35.09	35.20	-76.303	1,039.65	2,950.40	1,404.48	1,335.65	68.83	20.406	
6,750.00	4,238.45	6,558.87	3,905.73	35.60	35.71	-76.296	1,040.73	3,000.39	1,404.52	1,334.69	69.83	20.114	
6,800.00	4,239.39	6,608.87	3,906.48	36.11	36.22	-76.288	1,041.82	3,050.37	1,404.56	1,333.73	70.83	19.830	
6,850.00	4,240.33	6,658.87	3,907.23	36.63	36.74	-76.280	1,042.91	3,100.35	1,404.61	1,332.77	71.84	19.552	
6,900.00	4,241.27	6,708.87	3,907.98	37.14	37.25	-76.273	1,043.99	3,150.33	1,404.65	1,331.80	72.85	19.282	
6,950.00	4,242.21	6,758.87	3,908.73	37.66	37.77	-76.265	1,045.08	3,200.31	1,404.69	1,330.84	73.86	19.019	
7,000.00	4,243.16	6,808.87	3,909.48	38.17	38.29	-76.257	1,046.16	3,250.30	1,404.74	1,329.87	74.87	18.762	
7,050.00	4,244.10	6,858.87	3,910.23	38.69	38.81	-76.250	1,047.25	3,300.28	1,404.78	1,328.89	75.89	18.511	
7,100.00	4,245.04	6,908.87	3,910.98	39.21	39.33	-76.242	1,048.34	3,350.26	1,404.83	1,327.92	76.91	18.267	
7,150.00	4,245.98	6,958.87	3,911.73	39.73	39.86	-76.234	1,049.42	3,400.24	1,404.87	1,326.94	77.93	18.028	
7,200.00	4,246.92	7,008.87	3,912.48	40.25	40.38	-76.227	1,050.51	3,450.23	1,404.91	1,325.96	78.95	17.795	
7,250.00	4,247.86	7,058.87	3,913.23	40.78	40.90	-76.219	1,051.59	3,500.21	1,404.96	1,324.98	79.97	17.568	
7,300.00	4,248.81	7,108.87	3,913.98	41.30	41.43	-76.212	1,052.68	3,550.19	1,405.00	1,324.00	81.00	17.346	
7,350.00	4,249.75	7,158.87	3,914.73	41.82	41.96	-76.204	1,053.76	3,600.17	1,405.04	1,323.02	82.03	17.129	
7,400.00	4,250.69	7,208.86	3,915.48	42.35	42.48	-76.196	1,054.85	3,650.15	1,405.09	1,322.03	83.06	16.917	
7,450.00	4,251.63	7,258.86	3,916.23	42.88	43.01	-76.189	1,055.94	3,700.14	1,405.13	1,321.04	84.09	16.710	
7,500.00	4,252.57	7,308.86	3,916.98	43.40	43.54	-76.181	1,057.02	3,750.12	1,405.18	1,320.05	85.12	16.507	
7,550.00	4,253.51	7,358.86	3,917.73	43.93	44.07	-76.173	1,058.11	3,800.10	1,405.22	1,319.06	86.16	16.310	
7,600.00	4,254.46	7,408.86	3,918.47	44.46	44.60	-76.166	1,059.19	3,850.08	1,405.26	1,318.07	87.20	16.116	
7,650.00	4,255.40	7,458.86	3,919.22	44.99	45.13	-76.158	1,060.28	3,900.07	1,405.31	1,317.08	88.23	15.927	
7,700.00	4,256.34	7,508.86	3,919.97	45.52	45.67	-76.151	1,061.37	3,950.05	1,405.35	1,316.08	89.27	15.742	
7,750.00	4,257.28	7,558.86	3,920.72	46.06	46.20	-76.143	1,062.45	4,000.03	1,405.40	1,315.08	90.31	15.561	
7,800.00	4,258.22	7,608.86	3,921.47	46.59	46.73	-76.135	1,063.54	4,050.01	1,405.44	1,314.09	91.36	15.384	
7,850.00	4,259.16	7,658.86	3,922.22	47.12	47.27	-76.128	1,064.62	4,099.99	1,405.49	1,313.09	92.40	15.211	
7,900.00	4,260.11	7,708.86	3,922.97	47.65	47.80	-76.120	1,065.71	4,149.98	1,405.53	1,312.09	93.44	15.042	
7,950.00	4,261.05	7,758.86	3,923.72	48.19	48.34	-76.112	1,066.80	4,199.96	1,405.57	1,311.08	94.49	14.875	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 20H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
8,000.00	4,261.99	7,808.86	3,924.47	48.72	48.88	-76.105	1,067.88	4,249.94	1,405.62	1,310.08	95.54	14.713	
8,050.00	4,262.93	7,858.86	3,925.22	49.26	49.41	-76.097	1,068.97	4,299.92	1,405.66	1,309.08	96.58	14.554	
8,100.00	4,263.87	7,908.86	3,925.97	49.80	49.95	-76.089	1,070.05	4,349.91	1,405.71	1,308.07	97.63	14.398	
8,150.00	4,264.81	7,958.86	3,926.72	50.33	50.49	-76.082	1,071.14	4,399.89	1,405.75	1,307.07	98.68	14.245	
8,200.00	4,265.76	8,008.86	3,927.47	50.87	51.03	-76.074	1,072.23	4,449.87	1,405.80	1,306.06	99.73	14.096	
8,250.00	4,266.70	8,058.86	3,928.22	51.41	51.57	-76.067	1,073.31	4,499.85	1,405.84	1,305.05	100.79	13.949	
8,300.00	4,267.64	8,108.86	3,928.97	51.95	52.11	-76.059	1,074.40	4,549.83	1,405.88	1,304.05	101.84	13.805	
8,350.00	4,268.58	8,158.86	3,929.72	52.49	52.65	-76.051	1,075.48	4,599.82	1,405.93	1,303.04	102.89	13.664	
8,400.00	4,269.52	8,208.86	3,930.47	53.03	53.19	-76.044	1,076.57	4,649.80	1,405.97	1,302.03	103.95	13.526	
8,450.00	4,270.46	8,258.86	3,931.21	53.57	53.73	-76.036	1,077.66	4,699.78	1,406.02	1,301.01	105.00	13.390	
8,500.00	4,271.41	8,308.86	3,931.96	54.11	54.27	-76.029	1,078.74	4,749.76	1,406.06	1,300.00	106.06	13.257	
8,550.00	4,272.35	8,358.86	3,932.71	54.65	54.81	-76.021	1,079.83	4,799.75	1,406.11	1,298.99	107.12	13.127	
8,600.00	4,273.29	8,408.86	3,933.46	55.19	55.35	-76.013	1,080.91	4,849.73	1,406.15	1,297.98	108.17	12.999	
8,650.00	4,274.23	8,458.86	3,934.21	55.73	55.90	-76.006	1,082.00	4,899.71	1,406.20	1,296.96	109.23	12.873	
8,700.00	4,275.17	8,508.86	3,934.96	56.27	56.44	-75.998	1,083.08	4,949.69	1,406.24	1,295.95	110.29	12.750	
8,750.00	4,276.11	8,558.85	3,935.71	56.82	56.98	-75.990	1,084.17	4,999.67	1,406.28	1,294.93	111.35	12.629	
8,800.00	4,277.06	8,608.85	3,936.46	57.36	57.53	-75.983	1,085.26	5,049.66	1,406.33	1,293.92	112.41	12.511	
8,850.00	4,278.00	8,658.85	3,937.21	57.90	58.07	-75.975	1,086.34	5,099.64	1,406.37	1,292.90	113.47	12.394	
8,900.00	4,278.94	8,708.85	3,937.96	58.45	58.62	-75.968	1,087.43	5,149.62	1,406.42	1,291.88	114.53	12.279	
8,950.00	4,279.88	8,758.85	3,938.71	58.99	59.16	-75.960	1,088.51	5,199.60	1,406.46	1,290.87	115.60	12.167	
9,000.00	4,280.82	8,808.85	3,939.46	59.54	59.71	-75.952	1,089.60	5,249.59	1,406.51	1,289.85	116.66	12.056	
9,050.00	4,281.76	8,858.85	3,940.21	60.08	60.25	-75.945	1,090.69	5,299.57	1,406.55	1,288.83	117.72	11.948	
9,100.00	4,282.71	8,908.85	3,940.96	60.63	60.80	-75.937	1,091.77	5,349.55	1,406.60	1,287.81	118.79	11.841	
9,150.00	4,283.65	8,958.85	3,941.71	61.17	61.35	-75.929	1,092.86	5,399.53	1,406.64	1,286.79	119.85	11.736	
9,200.00	4,284.59	9,008.85	3,942.46	61.72	61.89	-75.922	1,093.94	5,449.51	1,406.69	1,285.77	120.92	11.633	
9,250.00	4,285.53	9,058.85	3,943.21	62.26	62.44	-75.914	1,095.03	5,499.50	1,406.73	1,284.75	121.98	11.532	
9,300.00	4,286.47	9,108.85	3,943.95	62.81	62.99	-75.907	1,096.12	5,549.48	1,406.78	1,283.73	123.05	11.433	
9,350.00	4,287.41	9,158.85	3,944.70	63.36	63.53	-75.899	1,097.20	5,599.46	1,406.82	1,282.71	124.12	11.335	
9,400.00	4,288.36	9,208.85	3,945.45	63.90	64.08	-75.891	1,098.29	5,649.44	1,406.87	1,281.68	125.18	11.238	
9,450.00	4,289.30	9,258.85	3,946.20	64.45	64.63	-75.884	1,099.37	5,699.43	1,406.91	1,280.66	126.25	11.144	
9,500.00	4,290.24	9,308.85	3,946.95	65.00	65.18	-75.876	1,100.46	5,749.41	1,406.96	1,279.64	127.32	11.051	
9,550.00	4,291.18	9,358.85	3,947.70	65.55	65.73	-75.869	1,101.55	5,799.39	1,407.00	1,278.61	128.39	10.959	
9,600.00	4,292.12	9,408.85	3,948.45	66.10	66.28	-75.861	1,102.63	5,849.37	1,407.05	1,277.59	129.46	10.869	
9,650.00	4,293.06	9,458.85	3,949.20	66.64	66.82	-75.853	1,103.72	5,899.35	1,407.09	1,276.57	130.53	10.780	
9,700.00	4,294.01	9,508.85	3,949.95	67.19	67.37	-75.846	1,104.80	5,949.34	1,407.14	1,275.54	131.60	10.693	
9,750.00	4,294.95	9,558.85	3,950.70	67.74	67.92	-75.838	1,105.89	5,999.32	1,407.18	1,274.52	132.67	10.607	
9,800.00	4,295.89	9,608.85	3,951.45	68.29	68.47	-75.830	1,106.97	6,049.30	1,407.23	1,273.49	133.74	10.522	
9,850.00	4,296.83	9,658.85	3,952.20	68.84	69.02	-75.823	1,108.06	6,099.28	1,407.27	1,272.46	134.81	10.439	
9,900.00	4,297.77	9,708.85	3,952.95	69.39	69.57	-75.815	1,109.15	6,149.27	1,407.32	1,271.44	135.88	10.357	
9,950.00	4,298.71	9,758.85	3,953.70	69.94	70.12	-75.808	1,110.23	6,199.25	1,407.36	1,270.41	136.95	10.276	
10,000.00	4,299.66	9,808.85	3,954.45	70.49	70.67	-75.800	1,111.32	6,249.23	1,407.41	1,269.39	138.02	10.197	
10,050.00	4,300.60	9,858.85	3,955.20	71.04	71.22	-75.792	1,112.40	6,299.21	1,407.45	1,268.36	139.09	10.119	
10,100.00	4,301.54	9,908.84	3,955.95	71.59	71.77	-75.785	1,113.49	6,349.19	1,407.50	1,267.33	140.17	10.042	
10,150.00	4,302.48	9,958.84	3,956.70	72.14	72.33	-75.777	1,114.58	6,399.18	1,407.54	1,266.30	141.24	9.966	
10,200.00	4,303.42	10,008.84	3,957.44	72.69	72.88	-75.770	1,115.66	6,449.16	1,407.59	1,265.28	142.31	9.891	
10,250.00	4,304.36	10,058.84	3,958.19	73.24	73.43	-75.762	1,116.75	6,499.14	1,407.63	1,264.25	143.39	9.817	
10,300.00	4,305.31	10,108.84	3,958.94	73.79	73.98	-75.754	1,117.83	6,549.12	1,407.68	1,263.22	144.46	9.744	
10,350.00	4,306.25	10,158.84	3,959.69	74.34	74.53	-75.747	1,118.92	6,599.11	1,407.73	1,262.19	145.53	9.673	
10,400.00	4,307.19	10,208.84	3,960.44	74.90	75.08	-75.739	1,120.01	6,649.09	1,407.77	1,261.16	146.61	9.602	
10,450.00	4,308.13	10,258.84	3,961.19	75.45	75.64	-75.732	1,121.09	6,699.07	1,407.82	1,260.13	147.68	9.533	
10,500.00	4,309.07	10,308.84	3,961.94	76.00	76.19	-75.724	1,122.18	6,749.05	1,407.86	1,259.10	148.76	9.464	
10,550.00	4,310.01	10,358.84	3,962.69	76.55	76.74	-75.716	1,123.26	6,799.03	1,407.91	1,258.08	149.83	9.397	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 20H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
10,600.00	4,310.96	10,408.84	3,963.44	77.10	77.29	-75.709	1,124.35	6,849.02	1,407.95	1,257.05	150.91	9.330	
10,650.00	4,311.90	10,458.84	3,964.19	77.66	77.85	-75.701	1,125.44	6,899.00	1,408.00	1,256.02	151.98	9.264	
10,700.00	4,312.84	10,508.84	3,964.94	78.21	78.40	-75.694	1,126.52	6,948.98	1,408.04	1,254.99	153.06	9.199	
10,750.00	4,313.78	10,558.84	3,965.69	78.76	78.95	-75.686	1,127.61	6,998.96	1,408.09	1,253.96	154.13	9.135	
10,800.00	4,314.72	10,608.84	3,966.44	79.31	79.50	-75.678	1,128.69	7,048.95	1,408.14	1,252.93	155.21	9.072	
10,850.00	4,315.66	10,658.84	3,967.19	79.87	80.06	-75.671	1,129.78	7,098.93	1,408.18	1,251.89	156.29	9.010	
10,900.00	4,316.61	10,708.84	3,967.94	80.42	80.61	-75.663	1,130.87	7,148.91	1,408.23	1,250.86	157.36	8.949	
10,950.00	4,317.55	10,758.84	3,968.69	80.97	81.16	-75.656	1,131.95	7,198.89	1,408.27	1,249.83	158.44	8.888	
11,000.00	4,318.49	10,808.84	3,969.44	81.52	81.72	-75.648	1,133.04	7,248.87	1,408.32	1,248.80	159.52	8.829	
11,050.00	4,319.43	10,858.84	3,970.18	82.08	82.27	-75.640	1,134.12	7,298.86	1,408.36	1,247.77	160.59	8.770	
11,100.00	4,320.37	10,908.84	3,970.93	82.63	82.83	-75.633	1,135.21	7,348.84	1,408.41	1,246.74	161.67	8.712	
11,150.00	4,321.32	10,958.84	3,971.68	83.19	83.38	-75.625	1,136.29	7,398.82	1,408.46	1,245.71	162.75	8.654	
11,200.00	4,322.26	11,008.84	3,972.43	83.74	83.93	-75.618	1,137.38	7,448.80	1,408.50	1,244.68	163.83	8.598	
11,250.00	4,323.20	11,058.84	3,973.18	84.29	84.49	-75.610	1,138.47	7,498.79	1,408.55	1,243.64	164.90	8.542	
11,295.63	4,324.06	11,104.47	3,973.87	84.80	84.99	-75.603	1,139.46	7,544.40	1,408.59	1,242.70	165.89	8.491	
11,300.00	4,324.14	11,108.84	3,973.93	84.85	85.04	-75.602	1,139.55	7,548.77	1,408.59	1,242.61	165.98	8.486	
11,345.67	4,325.00	11,154.50	3,974.62	85.35	85.55	-75.595	1,140.54	7,594.42	1,408.64	1,241.67	166.96	8.437	SF

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 21H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
150.00	150.00	150.00	150.00	0.32	0.32	179.427	-20.00	0.20	20.00	19.36	0.65	30.997	
200.00	200.00	200.00	200.00	0.50	0.50	179.427	-20.00	0.20	20.00	19.00	1.00	19.927	
250.00	250.00	250.00	250.00	0.68	0.68	179.427	-20.00	0.20	20.00	18.64	1.36	14.683	
300.00	300.00	300.00	300.00	0.86	0.86	179.427	-20.00	0.20	20.00	18.28	1.72	11.624	CC
350.00	350.00	349.65	349.65	1.03	1.03	9.141	-20.43	0.23	20.00	17.93	2.07	9.674	
400.00	399.98	399.31	399.29	1.20	1.20	9.477	-21.72	0.33	20.01	17.59	2.42	8.274	
450.00	449.93	448.96	448.89	1.38	1.37	10.037	-23.86	0.50	20.02	17.25	2.77	7.232	
500.00	499.84	498.62	498.46	1.55	1.54	10.819	-26.86	0.73	20.03	16.92	3.12	6.429	
550.00	549.68	548.27	547.96	1.72	1.72	11.822	-30.72	1.03	20.06	16.59	3.47	5.776	
600.00	599.45	597.92	597.39	1.90	1.89	13.044	-35.43	1.39	20.10	16.27	3.83	5.251	
641.99	641.18	639.62	638.83	2.05	2.04	14.236	-40.05	1.75	20.15	16.02	4.13	4.881	
650.00	649.13	647.57	646.72	2.08	2.07	14.472	-41.00	1.82	20.17	15.99	4.18	4.822	ES
700.00	698.78	697.22	695.95	2.25	2.24	15.677	-47.41	2.32	20.81	16.29	4.52	4.600	
750.00	748.42	746.83	745.02	2.42	2.42	16.364	-54.67	2.88	22.31	17.44	4.87	4.579	
800.00	798.06	796.38	793.90	2.60	2.59	16.554	-62.77	3.50	24.66	19.44	5.22	4.725	
850.00	847.71	845.83	842.53	2.79	2.78	16.357	-71.69	4.19	27.85	22.28	5.57	5.000	
900.00	897.35	895.16	890.89	2.97	2.96	15.907	-81.42	4.95	31.89	25.97	5.92	5.387	
950.00	947.00	944.34	938.93	3.15	3.15	15.318	-91.94	5.76	36.77	30.50	6.27	5.863	
1,000.00	996.64	993.35	986.60	3.33	3.33	14.674	-103.25	6.63	42.49	35.87	6.62	6.417	
1,050.00	1,046.28	1,042.14	1,033.87	3.52	3.52	14.029	-115.31	7.56	49.05	42.08	6.97	7.036	
1,100.00	1,095.93	1,090.70	1,080.70	3.70	3.71	13.413	-128.11	8.55	56.46	49.13	7.32	7.709	
1,150.00	1,145.57	1,139.27	1,127.33	3.88	3.90	12.840	-141.67	9.60	64.67	56.99	7.68	8.423	
1,200.00	1,195.22	1,188.55	1,174.57	4.07	4.10	12.365	-155.66	10.68	73.11	65.09	8.03	9.107	
1,250.00	1,244.86	1,237.83	1,221.80	4.25	4.30	11.989	-169.65	11.76	81.57	73.19	8.38	9.734	
1,300.00	1,294.51	1,287.11	1,269.04	4.43	4.50	11.683	-183.64	12.84	90.02	81.29	8.73	10.310	
1,350.00	1,344.15	1,336.39	1,316.28	4.62	4.70	11.430	-197.63	13.92	98.48	89.39	9.08	10.841	
1,400.00	1,393.79	1,385.66	1,363.52	4.80	4.90	11.217	-211.62	15.00	106.94	97.50	9.44	11.332	
1,450.00	1,443.44	1,434.94	1,410.76	4.99	5.10	11.035	-225.60	16.09	115.39	105.60	9.79	11.787	
1,500.00	1,493.08	1,484.22	1,458.00	5.17	5.30	10.878	-239.59	17.17	123.86	113.71	10.14	12.209	
1,550.00	1,542.73	1,533.50	1,505.23	5.36	5.50	10.741	-253.58	18.25	132.32	121.82	10.50	12.603	
1,600.00	1,592.37	1,582.77	1,552.47	5.54	5.71	10.621	-267.57	19.33	140.78	129.93	10.85	12.971	
1,650.00	1,642.01	1,632.05	1,599.71	5.73	5.91	10.514	-281.56	20.41	149.24	138.03	11.21	13.315	
1,700.00	1,691.66	1,681.33	1,646.95	5.91	6.11	10.418	-295.55	21.49	157.70	146.14	11.56	13.638	
1,750.00	1,741.30	1,730.61	1,694.19	6.10	6.32	10.333	-309.54	22.57	166.17	154.25	11.92	13.941	
1,800.00	1,790.95	1,779.89	1,741.43	6.28	6.52	10.255	-323.52	23.65	174.63	162.36	12.27	14.227	
1,850.00	1,840.59	1,829.16	1,788.66	6.47	6.73	10.185	-337.51	24.73	183.09	170.46	12.63	14.496	
1,900.00	1,890.23	1,878.44	1,835.90	6.65	6.93	10.121	-351.50	25.81	191.56	178.57	12.99	14.750	
1,950.00	1,939.88	1,927.72	1,883.14	6.84	7.14	10.063	-365.49	26.89	200.02	186.68	13.34	14.991	
2,000.00	1,989.52	1,977.00	1,930.38	7.02	7.34	10.009	-379.48	27.97	208.49	194.79	13.70	15.218	
2,050.00	2,039.17	2,026.28	1,977.62	7.21	7.55	9.959	-393.47	29.05	216.95	202.90	14.06	15.434	
2,100.00	2,088.81	2,075.55	2,024.86	7.40	7.75	9.913	-407.45	30.14	225.42	211.00	14.41	15.639	
2,150.00	2,138.46	2,124.83	2,072.10	7.58	7.96	9.871	-421.44	31.22	233.88	219.11	14.77	15.834	
2,200.00	2,188.10	2,174.11	2,119.33	7.77	8.17	9.831	-435.43	32.30	242.35	227.22	15.13	16.020	
2,250.00	2,237.74	2,223.39	2,166.57	7.95	8.37	9.794	-449.42	33.38	250.81	235.33	15.48	16.197	
2,300.00	2,287.39	2,272.67	2,213.81	8.14	8.58	9.760	-463.41	34.46	259.28	243.44	15.84	16.366	
2,350.00	2,337.03	2,321.94	2,261.05	8.32	8.79	9.727	-477.40	35.54	267.74	251.54	16.20	16.528	
2,400.00	2,386.68	2,371.22	2,308.29	8.51	8.99	9.697	-491.39	36.62	276.21	259.65	16.56	16.682	
2,450.00	2,436.32	2,420.50	2,355.53	8.69	9.20	9.669	-505.37	37.70	284.67	267.76	16.91	16.830	
2,500.00	2,485.96	2,469.78	2,402.76	8.88	9.41	9.642	-519.36	38.78	293.14	275.87	17.27	16.971	
2,550.00	2,535.61	2,519.06	2,450.00	9.07	9.61	9.616	-533.35	39.86	301.60	283.97	17.63	17.107	
2,600.00	2,585.25	2,568.33	2,497.24	9.25	9.82	9.592	-547.34	40.94	310.07	292.08	17.99	17.237	
2,650.00	2,634.90	2,617.61	2,544.48	9.44	10.03	9.570	-561.33	42.02	318.54	300.19	18.35	17.362	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 21H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
2,700.00	2,684.54	2,666.89	2,591.72	9.62	10.23	9.548	-575.32	43.10	327.00	308.30	18.70	17.483	
2,750.00	2,734.19	2,716.17	2,638.96	9.81	10.44	9.528	-589.31	44.19	335.47	316.41	19.06	17.598	
2,800.00	2,783.83	2,765.45	2,686.20	9.99	10.65	9.508	-603.29	45.27	343.93	324.51	19.42	17.710	
2,850.00	2,833.47	2,814.72	2,733.43	10.18	10.86	9.490	-617.28	46.35	352.40	332.62	19.78	17.817	
2,900.00	2,883.12	2,864.00	2,780.67	10.36	11.06	9.472	-631.27	47.43	360.87	340.73	20.14	17.920	
2,950.00	2,932.76	2,913.28	2,827.91	10.55	11.27	9.455	-645.26	48.51	369.33	348.84	20.50	18.020	
3,000.00	2,982.41	2,962.56	2,875.15	10.74	11.48	9.439	-659.25	49.59	377.80	356.94	20.85	18.116	
3,050.00	3,032.05	3,012.75	2,923.27	10.92	11.69	9.412	-673.48	50.77	386.25	365.03	21.22	18.206	
3,100.00	3,081.69	3,066.03	2,974.36	11.11	11.91	9.083	-688.20	54.06	394.35	372.76	21.59	18.268	
3,150.00	3,131.34	3,119.08	3,025.13	11.29	12.13	8.352	-702.25	60.24	401.99	380.03	21.96	18.310	
3,200.00	3,180.98	3,171.58	3,075.13	11.48	12.35	7.254	-715.54	69.17	409.26	386.95	22.32	18.337	
3,232.06	3,212.81	3,204.81	3,106.57	11.60	12.48	6.377	-723.60	76.26	413.80	391.25	22.55	18.351	
3,250.00	3,230.62	3,223.26	3,123.95	11.67	12.56	14.475	-727.96	80.67	416.32	393.64	22.68	18.359	
3,300.00	3,280.19	3,274.37	3,171.70	11.85	12.76	33.341	-739.59	94.66	423.32	400.29	23.03	18.380	
3,350.00	3,329.55	3,325.01	3,218.37	12.04	12.95	45.597	-750.41	111.05	430.26	406.87	23.38	18.399	
3,400.00	3,378.57	3,375.20	3,263.86	12.22	13.13	52.974	-760.44	129.73	437.10	413.36	23.73	18.417	
3,450.00	3,427.11	3,424.95	3,308.07	12.40	13.31	57.394	-769.65	150.59	443.82	419.74	24.08	18.433	
3,500.00	3,475.03	3,474.27	3,350.92	12.57	13.49	60.047	-778.05	173.51	450.38	425.97	24.41	18.447	
3,550.00	3,522.22	3,523.18	3,392.33	12.75	13.65	61.612	-785.64	198.39	456.77	432.03	24.74	18.461	
3,600.00	3,568.53	3,571.68	3,432.23	12.92	13.81	62.481	-792.41	225.11	462.95	437.88	25.06	18.473	
3,650.00	3,613.84	3,619.80	3,470.56	13.08	13.97	62.890	-798.38	253.57	468.88	443.52	25.37	18.484	
3,700.00	3,658.03	3,667.53	3,507.27	13.25	14.12	62.988	-803.54	283.64	474.56	448.90	25.66	18.494	
3,750.00	3,700.98	3,714.90	3,542.29	13.41	14.26	62.871	-807.89	315.22	479.95	454.01	25.94	18.501	
3,800.00	3,742.57	3,761.91	3,575.60	13.56	14.41	62.605	-811.46	348.21	485.03	458.82	26.21	18.506	
3,850.00	3,782.67	3,808.58	3,607.13	13.72	14.55	62.235	-814.24	382.49	489.78	463.32	26.46	18.507	
3,900.00	3,821.20	3,854.91	3,636.87	13.88	14.69	61.795	-816.25	417.95	494.18	467.47	26.71	18.503	
3,950.00	3,858.03	3,900.00	3,664.25	14.04	14.82	61.322	-817.49	453.75	498.21	471.27	26.94	18.494	
4,000.00	3,893.07	3,946.61	3,690.85	14.20	14.97	60.787	-818.01	492.02	501.85	474.69	27.17	18.473	
4,050.00	3,926.22	3,991.99	3,715.03	14.38	15.11	60.251	-817.78	530.41	505.09	477.70	27.39	18.443	
4,100.00	3,957.40	4,039.93	3,739.12	14.56	15.27	59.717	-816.92	571.86	507.82	480.20	27.62	18.386	
4,150.00	3,986.50	4,089.68	3,763.99	14.76	15.44	59.415	-815.98	614.93	509.68	481.80	27.88	18.278	
4,200.00	4,013.47	4,139.62	3,788.96	14.96	15.63	59.396	-815.04	658.17	510.57	482.37	28.20	18.103	
4,219.41	4,023.34	4,159.03	3,798.67	15.04	15.71	59.466	-814.68	674.97	510.65	482.31	28.34	18.017	
4,250.00	4,038.64	4,189.62	3,813.96	15.18	15.84	59.466	-814.10	701.46	510.65	482.04	28.61	17.849	
4,260.59	4,043.93	4,200.21	3,819.25	15.23	15.89	59.466	-813.90	710.62	510.65	481.95	28.70	17.792	
4,300.00	4,063.64	4,229.85	3,833.72	15.41	16.02	59.427	-813.34	736.49	510.95	481.95	29.00	17.618	
4,350.00	4,088.64	4,264.10	3,848.81	15.66	16.18	59.205	-812.67	767.22	512.67	483.31	29.36	17.460	
4,400.00	4,113.64	4,300.00	3,862.61	15.92	16.36	58.764	-811.95	800.35	515.96	486.26	29.70	17.370	
4,419.41	4,123.34	4,310.94	3,866.41	16.02	16.42	58.588	-811.72	810.61	517.65	487.83	29.82	17.357	
4,450.00	4,137.92	4,331.30	3,872.94	16.19	16.52	58.028	-811.30	829.88	520.41	490.50	29.91	17.399	
4,500.00	4,158.60	4,364.45	3,882.10	16.46	16.70	57.244	-810.61	861.73	524.34	494.28	30.07	17.440	
4,550.00	4,175.24	4,400.00	3,889.86	16.75	16.89	56.598	-809.86	896.41	527.56	497.29	30.26	17.432	
4,600.00	4,187.70	4,430.41	3,894.78	17.04	17.06	56.161	-809.20	926.41	529.97	499.47	30.50	17.378	
4,650.00	4,195.90	4,463.28	3,898.30	17.34	17.24	55.858	-808.49	959.07	531.58	500.77	30.80	17.257	
4,700.00	4,199.77	4,499.66	3,900.00	17.63	17.45	55.709	-807.70	995.40	532.37	501.16	31.21	17.060	
4,708.62	4,200.00	4,502.86	3,900.05	17.68	17.46	55.704	-807.63	998.60	532.40	501.13	31.27	17.027	
4,750.00	4,200.78	4,544.24	3,900.67	17.94	17.71	55.691	-806.73	1,039.97	532.48	500.77	31.71	16.791	
4,800.00	4,201.72	4,594.24	3,901.43	18.24	18.01	55.674	-805.64	1,089.95	532.59	500.34	32.25	16.515	
4,850.00	4,202.66	4,644.24	3,902.18	18.57	18.33	55.657	-804.55	1,139.93	532.69	499.87	32.82	16.231	
4,900.00	4,203.60	4,694.24	3,902.94	18.90	18.66	55.641	-803.46	1,189.92	532.80	499.40	33.39	15.955	
4,950.00	4,204.55	4,744.24	3,903.69	19.25	19.00	55.624	-802.38	1,239.90	532.90	498.90	34.00	15.674	
5,000.00	4,205.49	4,794.24	3,904.45	19.60	19.36	55.608	-801.29	1,289.88	533.01	498.40	34.61	15.402	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 21H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
5,050.00	4,206.43	4,844.24	3,905.20	19.97	19.72	55.591	-800.20	1,339.86	533.11	497.87	35.24	15.128	
5,100.00	4,207.37	4,894.24	3,905.96	20.34	20.09	55.574	-799.11	1,389.84	533.22	497.34	35.88	14.862	
5,150.00	4,208.31	4,944.24	3,906.71	20.73	20.48	55.558	-798.02	1,439.83	533.32	496.78	36.54	14.596	
5,200.00	4,209.25	4,994.24	3,907.47	21.11	20.87	55.541	-796.94	1,489.81	533.43	496.23	37.20	14.338	
5,250.00	4,210.20	5,044.24	3,908.22	21.52	21.27	55.525	-795.85	1,539.79	533.54	495.65	37.89	14.081	
5,300.00	4,211.14	5,094.24	3,908.97	21.92	21.68	55.508	-794.76	1,589.77	533.64	495.06	38.58	13.833	
5,350.00	4,212.08	5,144.24	3,909.73	22.33	22.10	55.491	-793.67	1,639.75	533.75	494.46	39.29	13.586	
5,400.00	4,213.02	5,194.24	3,910.48	22.75	22.52	55.475	-792.58	1,689.74	533.85	493.86	39.99	13.348	
5,450.00	4,213.96	5,244.24	3,911.24	23.18	22.95	55.458	-791.49	1,739.72	533.96	493.24	40.72	13.112	
5,500.00	4,214.90	5,294.24	3,911.99	23.61	23.38	55.442	-790.41	1,789.70	534.06	492.61	41.45	12.885	
5,550.00	4,215.85	5,344.24	3,912.75	24.05	23.82	55.425	-789.32	1,839.68	534.17	491.98	42.19	12.660	
5,600.00	4,216.79	5,394.24	3,913.50	24.48	24.26	55.409	-788.23	1,889.67	534.28	491.34	42.94	12.443	
5,650.00	4,217.73	5,444.24	3,914.26	24.93	24.71	55.392	-787.14	1,939.65	534.38	490.68	43.70	12.229	
5,700.00	4,218.67	5,494.24	3,915.01	25.38	25.17	55.376	-786.05	1,989.63	534.49	490.03	44.46	12.022	
5,750.00	4,219.61	5,544.24	3,915.77	25.84	25.63	55.359	-784.96	2,039.61	534.59	489.36	45.23	11.819	
5,800.00	4,220.55	5,594.24	3,916.52	26.30	26.09	55.343	-783.88	2,089.59	534.70	488.69	46.01	11.622	
5,850.00	4,221.50	5,644.23	3,917.28	26.76	26.56	55.326	-782.79	2,139.58	534.81	488.01	46.79	11.429	
5,900.00	4,222.44	5,694.23	3,918.03	27.23	27.03	55.310	-781.70	2,189.56	534.91	487.33	47.58	11.242	
5,950.00	4,223.38	5,744.23	3,918.79	27.70	27.50	55.293	-780.61	2,239.54	535.02	486.64	48.38	11.060	
6,000.00	4,224.32	5,794.23	3,919.54	28.17	27.98	55.277	-779.52	2,289.52	535.12	485.95	49.17	10.882	
6,050.00	4,225.26	5,844.23	3,920.29	28.65	28.46	55.260	-778.44	2,339.50	535.23	485.25	49.98	10.709	
6,100.00	4,226.20	5,894.23	3,921.05	29.13	28.94	55.244	-777.35	2,389.49	535.34	484.55	50.79	10.541	
6,150.00	4,227.15	5,944.23	3,921.80	29.62	29.43	55.227	-776.26	2,439.47	535.44	483.84	51.60	10.376	
6,200.00	4,228.09	5,994.23	3,922.56	30.10	29.92	55.211	-775.17	2,489.45	535.55	483.13	52.42	10.216	
6,250.00	4,229.03	6,044.23	3,923.31	30.59	30.41	55.194	-774.08	2,539.43	535.66	482.41	53.24	10.060	
6,300.00	4,229.97	6,094.23	3,924.07	31.08	30.91	55.178	-772.99	2,589.41	535.76	481.69	54.07	9.909	
6,350.00	4,230.91	6,144.23	3,924.82	31.58	31.41	55.161	-771.91	2,639.40	535.87	480.97	54.90	9.761	
6,400.00	4,231.86	6,194.23	3,925.58	32.07	31.90	55.145	-770.82	2,689.38	535.98	480.24	55.73	9.617	
6,450.00	4,232.80	6,244.23	3,926.33	32.57	32.41	55.129	-769.73	2,739.36	536.08	479.51	56.57	9.476	
6,500.00	4,233.74	6,294.23	3,927.09	33.07	32.91	55.112	-768.64	2,789.34	536.19	478.78	57.41	9.340	
6,550.00	4,234.68	6,344.23	3,927.84	33.58	33.42	55.096	-767.55	2,839.33	536.30	478.04	58.25	9.206	
6,600.00	4,235.62	6,394.23	3,928.60	34.08	33.92	55.079	-766.46	2,889.31	536.40	477.31	59.10	9.077	
6,650.00	4,236.56	6,444.23	3,929.35	34.59	34.43	55.063	-765.38	2,939.29	536.51	476.56	59.95	8.950	
6,700.00	4,237.51	6,494.23	3,930.11	35.09	34.94	55.047	-764.29	2,989.27	536.62	475.82	60.80	8.826	
6,750.00	4,238.45	6,544.23	3,930.86	35.60	35.45	55.030	-763.20	3,039.25	536.72	475.07	61.65	8.706	
6,800.00	4,239.39	6,594.23	3,931.61	36.11	35.97	55.014	-762.11	3,089.24	536.83	474.32	62.51	8.588	
6,850.00	4,240.33	6,644.23	3,932.37	36.63	36.48	54.997	-761.02	3,139.22	536.94	473.57	63.37	8.474	
6,900.00	4,241.27	6,694.23	3,933.12	37.14	37.00	54.981	-759.94	3,189.20	537.04	472.82	64.22	8.362	
6,950.00	4,242.21	6,744.23	3,933.88	37.66	37.52	54.965	-758.85	3,239.18	537.15	472.06	65.09	8.253	
7,000.00	4,243.16	6,794.23	3,934.63	38.17	38.04	54.948	-757.76	3,289.16	537.26	471.31	65.95	8.146	
7,050.00	4,244.10	6,844.23	3,935.39	38.69	38.56	54.932	-756.67	3,339.15	537.37	470.55	66.82	8.042	
7,100.00	4,245.04	6,894.23	3,936.14	39.21	39.08	54.916	-755.58	3,389.13	537.47	469.79	67.68	7.941	
7,150.00	4,245.98	6,944.23	3,936.90	39.73	39.60	54.899	-754.49	3,439.11	537.58	469.02	68.56	7.842	
7,200.00	4,246.92	6,994.23	3,937.65	40.25	40.13	54.883	-753.41	3,489.09	537.69	468.26	69.43	7.745	
7,250.00	4,247.86	7,044.22	3,938.41	40.78	40.65	54.867	-752.32	3,539.07	537.79	467.50	70.30	7.650	
7,300.00	4,248.81	7,094.22	3,939.16	41.30	41.18	54.850	-751.23	3,589.06	537.90	466.73	71.17	7.558	
7,350.00	4,249.75	7,144.22	3,939.92	41.82	41.71	54.834	-750.14	3,639.04	538.01	465.96	72.05	7.467	
7,400.00	4,250.69	7,194.22	3,940.67	42.35	42.23	54.818	-749.05	3,689.02	538.12	465.19	72.93	7.379	
7,450.00	4,251.63	7,244.22	3,941.43	42.88	42.76	54.801	-747.96	3,739.00	538.22	464.42	73.80	7.293	
7,500.00	4,252.57	7,294.22	3,942.18	43.40	43.29	54.785	-746.88	3,788.99	538.33	463.65	74.68	7.208	
7,550.00	4,253.51	7,344.22	3,942.93	43.93	43.82	54.769	-745.79	3,838.97	538.44	462.88	75.56	7.126	
7,600.00	4,254.46	7,394.22	3,943.69	44.46	44.35	54.753	-744.70	3,888.95	538.55	462.10	76.45	7.045	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 21H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
7,650.00	4,255.40	7,444.22	3,944.44	44.99	44.89	54.736	-743.61	3,938.93	538.65	461.33	77.33	6.966	
7,700.00	4,256.34	7,494.22	3,945.20	45.52	45.42	54.720	-742.52	3,988.91	538.76	460.55	78.21	6.888	
7,750.00	4,257.28	7,544.22	3,945.95	46.06	45.95	54.704	-741.44	4,038.90	538.87	459.77	79.10	6.813	
7,800.00	4,258.22	7,594.22	3,946.71	46.59	46.49	54.688	-740.35	4,088.88	538.98	458.99	79.98	6.739	
7,850.00	4,259.16	7,644.22	3,947.46	47.12	47.02	54.671	-739.26	4,138.86	539.09	458.22	80.87	6.666	
7,900.00	4,260.11	7,694.22	3,948.22	47.65	47.56	54.655	-738.17	4,188.84	539.19	457.44	81.76	6.595	
7,950.00	4,261.05	7,744.22	3,948.97	48.19	48.09	54.639	-737.08	4,238.82	539.30	456.65	82.65	6.525	
8,000.00	4,261.99	7,794.22	3,949.73	48.72	48.63	54.623	-735.99	4,288.81	539.41	455.87	83.54	6.457	
8,050.00	4,262.93	7,844.22	3,950.48	49.26	49.17	54.606	-734.91	4,338.79	539.52	455.09	84.43	6.390	
8,100.00	4,263.87	7,894.22	3,951.24	49.80	49.71	54.590	-733.82	4,388.77	539.63	454.31	85.32	6.325	
8,150.00	4,264.81	7,944.22	3,951.99	50.33	50.24	54.574	-732.73	4,438.75	539.73	453.53	86.21	6.261	
8,200.00	4,265.76	7,994.22	3,952.75	50.87	50.78	54.558	-731.64	4,488.74	539.84	452.74	87.10	6.198	
8,250.00	4,266.70	8,044.22	3,953.50	51.41	51.32	54.542	-730.55	4,538.72	539.95	451.96	87.99	6.136	
8,300.00	4,267.64	8,094.22	3,954.25	51.95	51.86	54.525	-729.46	4,588.70	540.06	451.17	88.89	6.076	
8,350.00	4,268.58	8,144.22	3,955.01	52.49	52.40	54.509	-728.38	4,638.68	540.17	450.39	89.78	6.017	
8,400.00	4,269.52	8,194.22	3,955.76	53.03	52.94	54.493	-727.29	4,688.66	540.28	449.60	90.67	5.958	
8,450.00	4,270.46	8,244.22	3,956.52	53.57	53.49	54.477	-726.20	4,738.65	540.38	448.81	91.57	5.901	
8,500.00	4,271.41	8,294.22	3,957.27	54.11	54.03	54.461	-725.11	4,788.63	540.49	448.03	92.47	5.845	
8,550.00	4,272.35	8,344.22	3,958.03	54.65	54.57	54.445	-724.02	4,838.61	540.60	447.24	93.36	5.790	
8,600.00	4,273.29	8,394.22	3,958.78	55.19	55.11	54.428	-722.94	4,888.59	540.71	446.45	94.26	5.737	
8,650.00	4,274.23	8,444.22	3,959.54	55.73	55.66	54.412	-721.85	4,938.57	540.82	445.66	95.15	5.684	
8,700.00	4,275.17	8,494.21	3,960.29	56.27	56.20	54.396	-720.76	4,988.56	540.93	444.87	96.05	5.632	
8,750.00	4,276.11	8,544.21	3,961.05	56.82	56.74	54.380	-719.67	5,038.54	541.03	444.09	96.95	5.581	
8,800.00	4,277.06	8,594.21	3,961.80	57.36	57.29	54.364	-718.58	5,088.52	541.14	443.30	97.85	5.530	
8,850.00	4,278.00	8,644.21	3,962.56	57.90	57.83	54.348	-717.49	5,138.50	541.25	442.51	98.75	5.481	
8,900.00	4,278.94	8,694.21	3,963.31	58.45	58.38	54.332	-716.41	5,188.48	541.36	441.72	99.64	5.433	
8,950.00	4,279.88	8,744.21	3,964.07	58.99	58.92	54.316	-715.32	5,238.47	541.47	440.93	100.54	5.385	
9,000.00	4,280.82	8,794.21	3,964.82	59.54	59.47	54.300	-714.23	5,288.45	541.58	440.14	101.44	5.339	
9,050.00	4,281.76	8,844.21	3,965.58	60.08	60.02	54.283	-713.14	5,338.43	541.69	439.34	102.34	5.293	
9,100.00	4,282.71	8,894.21	3,966.33	60.63	60.56	54.267	-712.05	5,388.41	541.80	438.55	103.24	5.248	
9,150.00	4,283.65	8,944.21	3,967.08	61.17	61.11	54.251	-710.96	5,438.40	541.91	437.76	104.14	5.203	
9,200.00	4,284.59	8,994.21	3,967.84	61.72	61.66	54.235	-709.88	5,488.38	542.01	436.97	105.04	5.160	
9,250.00	4,285.53	9,044.21	3,968.59	62.26	62.20	54.219	-708.79	5,538.36	542.12	436.18	105.94	5.117	
9,300.00	4,286.47	9,094.21	3,969.35	62.81	62.75	54.203	-707.70	5,588.34	542.23	435.39	106.84	5.075	
9,350.00	4,287.41	9,144.21	3,970.10	63.36	63.30	54.187	-706.61	5,638.32	542.34	434.60	107.75	5.034	
9,400.00	4,288.36	9,194.21	3,970.86	63.90	63.85	54.171	-705.52	5,688.31	542.45	433.80	108.65	4.993	
9,450.00	4,289.30	9,244.21	3,971.61	64.45	64.40	54.155	-704.43	5,738.29	542.56	433.01	109.55	4.953	
9,500.00	4,290.24	9,294.21	3,972.37	65.00	64.94	54.139	-703.35	5,788.27	542.67	432.22	110.45	4.913	
9,550.00	4,291.18	9,344.21	3,973.12	65.55	65.49	54.123	-702.26	5,838.25	542.78	431.43	111.35	4.874	
9,600.00	4,292.12	9,394.21	3,973.88	66.10	66.04	54.107	-701.17	5,888.23	542.89	430.64	112.25	4.836	
9,650.00	4,293.06	9,444.21	3,974.63	66.64	66.59	54.091	-700.08	5,938.22	543.00	429.84	113.15	4.799	
9,700.00	4,294.01	9,494.21	3,975.39	67.19	67.14	54.075	-698.99	5,988.20	543.11	429.05	114.06	4.762	
9,750.00	4,294.95	9,544.21	3,976.14	67.74	67.69	54.059	-697.91	6,038.18	543.22	428.26	114.96	4.725	
9,800.00	4,295.89	9,594.21	3,976.90	68.29	68.24	54.043	-696.82	6,088.16	543.33	427.46	115.86	4.689	
9,850.00	4,296.83	9,644.21	3,977.65	68.84	68.79	54.027	-695.73	6,138.14	543.44	426.67	116.76	4.654	
9,900.00	4,297.77	9,694.21	3,978.40	69.39	69.34	54.011	-694.64	6,188.13	543.54	425.88	117.67	4.619	
9,950.00	4,298.71	9,744.21	3,979.16	69.94	69.89	53.995	-693.55	6,238.11	543.65	425.09	118.57	4.585	
10,000.00	4,299.66	9,794.21	3,979.91	70.49	70.44	53.979	-692.46	6,288.09	543.76	424.29	119.47	4.551	
10,050.00	4,300.60	9,844.21	3,980.67	71.04	70.99	53.963	-691.38	6,338.07	543.87	423.50	120.37	4.518	
10,100.00	4,301.54	9,894.21	3,981.42	71.59	71.54	53.947	-690.29	6,388.06	543.98	422.71	121.28	4.485	
10,150.00	4,302.48	9,944.20	3,982.18	72.14	72.10	53.931	-689.20	6,438.04	544.09	421.91	122.18	4.453	
10,200.00	4,303.42	9,994.20	3,982.93	72.69	72.65	53.915	-688.11	6,488.02	544.20	421.12	123.08	4.421	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 21H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
10,250.00	4,304.36	10,044.20	3,983.69	73.24	73.20	53.899	-687.02	6,538.00	544.31	420.33	123.98	4.390	
10,300.00	4,305.31	10,094.20	3,984.44	73.79	73.75	53.883	-685.93	6,587.98	544.42	419.54	124.89	4.359	
10,350.00	4,306.25	10,144.20	3,985.20	74.34	74.30	53.867	-684.85	6,637.97	544.53	418.74	125.79	4.329	
10,400.00	4,307.19	10,194.20	3,985.95	74.90	74.85	53.852	-683.76	6,687.95	544.64	417.95	126.69	4.299	
10,450.00	4,308.13	10,244.20	3,986.71	75.45	75.41	53.836	-682.67	6,737.93	544.75	417.16	127.60	4.269	
10,500.00	4,309.07	10,294.20	3,987.46	76.00	75.96	53.820	-681.58	6,787.91	544.86	416.36	128.50	4.240	
10,550.00	4,310.01	10,344.20	3,988.22	76.55	76.51	53.804	-680.49	6,837.89	544.97	415.57	129.40	4.212	
10,600.00	4,310.96	10,394.20	3,988.97	77.10	77.07	53.788	-679.41	6,887.88	545.08	414.78	130.30	4.183	
10,650.00	4,311.90	10,444.20	3,989.72	77.66	77.62	53.772	-678.32	6,937.86	545.19	413.99	131.21	4.155	
10,700.00	4,312.84	10,494.20	3,990.48	78.21	78.17	53.756	-677.23	6,987.84	545.30	413.19	132.11	4.128	
10,750.00	4,313.78	10,544.20	3,991.23	78.76	78.72	53.740	-676.14	7,037.82	545.41	412.40	133.01	4.100	
10,800.00	4,314.72	10,594.20	3,991.99	79.31	79.28	53.724	-675.05	7,087.80	545.52	411.61	133.91	4.074	
10,850.00	4,315.66	10,644.20	3,992.74	79.87	79.83	53.709	-673.96	7,137.79	545.64	410.82	134.82	4.047	
10,900.00	4,316.61	10,694.20	3,993.50	80.42	80.38	53.693	-672.88	7,187.77	545.75	410.03	135.72	4.021	
10,950.00	4,317.55	10,744.20	3,994.25	80.97	80.94	53.677	-671.79	7,237.75	545.86	409.23	136.62	3.995	
11,000.00	4,318.49	10,794.20	3,995.01	81.52	81.49	53.661	-670.70	7,287.73	545.97	408.44	137.52	3.970	
11,050.00	4,319.43	10,844.20	3,995.76	82.08	82.05	53.645	-669.61	7,337.72	546.08	407.65	138.43	3.945	
11,100.00	4,320.37	10,894.20	3,996.52	82.63	82.60	53.629	-668.52	7,387.70	546.19	406.86	139.33	3.920	
11,150.00	4,321.32	10,944.20	3,997.27	83.19	83.16	53.614	-667.43	7,437.68	546.30	406.07	140.23	3.896	
11,200.00	4,322.26	10,994.20	3,998.03	83.74	83.71	53.598	-666.35	7,487.66	546.41	405.28	141.13	3.872	
11,250.00	4,323.20	11,044.20	3,998.78	84.29	84.26	53.582	-665.26	7,537.64	546.52	404.49	142.03	3.848	
11,295.63	4,324.06	11,089.83	3,999.47	84.80	84.77	53.568	-664.27	7,583.26	546.62	403.76	142.86	3.826	
11,300.00	4,324.14	11,094.20	3,999.54	84.85	84.82	53.566	-664.17	7,587.63	546.63	403.69	142.94	3.824	
11,313.01	4,324.38	11,107.20	3,999.73	84.99	84.96	53.562	-663.89	7,600.63	546.66	403.49	143.17	3.818	
11,345.67	4,325.00	11,124.98	4,000.00	85.35	85.16	53.557	-663.50	7,618.40	546.93	403.31	143.63	3.808 SF	

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 60H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
200.00	200.00	200.00	200.00	0.50	0.50	-0.574	39.90	-0.40	39.90	38.90	1.00	39.754	
250.00	250.00	250.00	250.00	0.68	0.68	-0.574	39.90	-0.40	39.90	38.54	1.36	29.292	
300.00	300.00	300.00	300.00	0.86	0.86	-0.574	39.90	-0.40	39.90	38.18	1.72	23.190	CC, ES
350.00	350.00	349.30	349.30	1.03	1.04	-171.007	40.32	-0.36	40.76	38.69	2.07	19.645	
400.00	399.98	398.52	398.50	1.20	1.21	-171.102	41.59	-0.25	43.34	40.90	2.44	17.797	
450.00	449.93	447.56	447.49	1.38	1.39	-171.237	43.68	-0.07	47.62	44.83	2.80	17.016	
500.00	499.84	496.34	496.19	1.55	1.57	-171.387	46.60	0.18	53.61	50.45	3.16	16.956	
550.00	549.68	544.78	544.48	1.72	1.75	-171.534	50.31	0.51	61.30	57.77	3.53	17.375	
600.00	599.45	592.80	592.29	1.90	1.92	-171.667	54.79	0.90	70.65	66.76	3.89	18.162	
641.99	641.18	632.74	631.99	2.05	2.07	-171.763	59.13	1.28	79.79	75.60	4.19	19.033	
650.00	649.13	640.32	639.52	2.08	2.09	-171.785	60.01	1.35	81.66	77.41	4.25	19.231	
700.00	698.78	687.40	686.22	2.25	2.26	-171.865	65.95	1.87	93.75	89.17	4.58	20.464	
750.00	748.42	734.61	732.95	2.42	2.44	-171.880	72.64	2.45	106.60	101.68	4.92	21.648	
800.00	798.06	782.88	780.71	2.60	2.61	-171.882	79.67	3.07	119.64	114.38	5.26	22.758	
850.00	847.71	831.15	828.46	2.79	2.78	-171.883	86.69	3.68	132.68	127.09	5.59	23.731	
900.00	897.35	879.42	876.21	2.97	2.95	-171.884	93.71	4.29	145.72	139.79	5.93	24.581	
950.00	947.00	927.69	923.96	3.15	3.12	-171.884	100.74	4.90	158.75	152.49	6.27	25.332	
1,000.00	996.64	975.96	971.72	3.33	3.29	-171.885	107.76	5.52	171.79	165.19	6.61	26.005	
1,050.00	1,046.28	1,024.23	1,019.47	3.52	3.47	-171.886	114.78	6.13	184.83	177.89	6.95	26.612	
1,100.00	1,095.93	1,072.50	1,067.22	3.70	3.64	-171.886	121.81	6.74	197.87	190.58	7.29	27.157	
1,150.00	1,145.57	1,120.77	1,114.97	3.88	3.82	-171.887	128.83	7.35	210.91	203.28	7.63	27.650	
1,200.00	1,195.22	1,169.04	1,162.73	4.07	4.00	-171.887	135.85	7.96	223.95	215.98	7.97	28.099	
1,250.00	1,244.86	1,217.31	1,210.48	4.25	4.17	-171.887	142.87	8.58	236.98	228.67	8.31	28.509	
1,300.00	1,294.51	1,265.58	1,258.23	4.43	4.35	-171.888	149.90	9.19	250.02	241.37	8.66	28.885	
1,350.00	1,344.15	1,313.85	1,305.98	4.62	4.52	-171.888	156.92	9.80	263.06	254.06	9.00	29.230	
1,400.00	1,393.79	1,362.12	1,353.74	4.80	4.70	-171.888	163.94	10.41	276.10	266.75	9.34	29.549	
1,450.00	1,443.44	1,410.40	1,401.49	4.99	4.88	-171.888	170.97	11.02	289.14	279.45	9.69	29.844	
1,500.00	1,493.08	1,458.67	1,449.24	5.17	5.05	-171.888	177.99	11.64	302.17	292.14	10.03	30.118	
1,550.00	1,542.73	1,506.94	1,496.99	5.36	5.23	-171.889	185.01	12.25	315.21	304.83	10.38	30.373	
1,600.00	1,592.37	1,555.21	1,544.75	5.54	5.41	-171.889	192.04	12.86	328.25	317.53	10.72	30.610	
1,650.00	1,642.01	1,603.48	1,592.50	5.73	5.58	-171.889	199.06	13.47	341.29	330.22	11.07	30.833	
1,700.00	1,691.66	1,651.75	1,640.25	5.91	5.76	-171.889	206.08	14.09	354.33	342.91	11.41	31.041	
1,750.00	1,741.30	1,700.02	1,688.00	6.10	5.94	-171.889	213.11	14.70	367.36	355.60	11.76	31.236	
1,800.00	1,790.95	1,748.29	1,735.76	6.28	6.11	-171.889	220.13	15.31	380.40	368.30	12.11	31.420	
1,850.00	1,840.59	1,796.56	1,783.51	6.47	6.29	-171.890	227.15	15.92	393.44	380.99	12.45	31.593	
1,900.00	1,890.23	1,844.83	1,831.26	6.65	6.47	-171.890	234.18	16.53	406.48	393.68	12.80	31.756	
1,950.00	1,939.88	1,893.10	1,879.01	6.84	6.64	-171.890	241.20	17.15	419.52	406.37	13.15	31.911	
2,000.00	1,989.52	1,941.37	1,926.77	7.02	6.82	-171.890	248.22	17.76	432.56	419.06	13.49	32.057	
2,050.00	2,039.17	1,989.64	1,974.52	7.21	7.00	-171.890	255.25	18.37	445.59	431.75	13.84	32.195	
2,100.00	2,088.81	2,037.91	2,022.27	7.40	7.18	-171.890	262.27	18.98	458.63	444.44	14.19	32.327	
2,150.00	2,138.46	2,086.18	2,070.02	7.58	7.35	-171.890	269.29	19.60	471.67	457.14	14.53	32.452	
2,200.00	2,188.10	2,134.45	2,117.78	7.77	7.53	-171.890	276.32	20.21	484.71	469.83	14.88	32.571	
2,250.00	2,237.74	2,182.72	2,165.53	7.95	7.71	-171.890	283.34	20.82	497.75	482.52	15.23	32.684	
2,300.00	2,287.39	2,230.99	2,213.28	8.14	7.88	-171.890	290.36	21.43	510.78	495.21	15.58	32.793	
2,350.00	2,337.03	2,279.26	2,261.04	8.32	8.06	-171.890	297.39	22.04	523.82	507.90	15.92	32.896	
2,400.00	2,386.68	2,327.53	2,308.79	8.51	8.24	-171.890	304.41	22.66	536.86	520.59	16.27	32.995	
2,450.00	2,436.32	2,375.80	2,356.54	8.69	8.41	-171.891	311.43	23.27	549.90	533.28	16.62	33.089	
2,500.00	2,485.96	2,424.07	2,404.29	8.88	8.59	-171.891	318.46	23.88	562.94	545.97	16.97	33.179	
2,550.00	2,535.61	2,472.34	2,452.05	9.07	8.77	-171.891	325.48	24.49	575.97	558.66	17.31	33.266	
2,600.00	2,585.25	2,520.61	2,499.80	9.25	8.95	-171.891	332.50	25.11	589.01	571.35	17.66	33.349	
2,650.00	2,634.90	2,568.88	2,547.55	9.44	9.12	-171.891	339.53	25.72	602.05	584.04	18.01	33.429	
2,700.00	2,684.54	2,617.15	2,595.30	9.62	9.30	-171.891	346.55	26.33	615.09	596.73	18.36	33.506	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 60H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
2,750.00	2,734.19	2,665.42	2,643.06	9.81	9.48	-171.891	353.57	26.94	628.13	609.42	18.71	33.580	
2,800.00	2,783.83	2,713.69	2,690.81	9.99	9.65	-171.891	360.59	27.55	641.17	622.11	19.05	33.651	
2,850.00	2,833.47	2,761.96	2,738.56	10.18	9.83	-171.891	367.62	28.17	654.20	634.80	19.40	33.719	
2,900.00	2,883.12	2,810.23	2,786.31	10.36	10.01	-171.891	374.64	28.78	667.24	647.49	19.75	33.785	
2,950.00	2,932.76	2,858.50	2,834.07	10.55	10.19	-171.891	381.66	29.39	680.28	660.18	20.10	33.849	
3,000.00	2,982.41	2,906.77	2,881.82	10.74	10.36	-171.891	388.69	30.00	693.32	672.87	20.45	33.910	
3,050.00	3,032.05	2,955.04	2,929.57	10.92	10.54	-171.891	395.71	30.62	706.36	685.56	20.79	33.969	
3,100.00	3,081.69	3,003.31	2,977.32	11.11	10.72	-171.891	402.73	31.23	719.39	698.25	21.14	34.026	
3,150.00	3,131.34	3,051.58	3,025.08	11.29	10.89	-171.891	409.76	31.84	732.43	710.94	21.49	34.082	
3,200.00	3,180.98	3,099.85	3,072.83	11.48	11.07	-171.891	416.78	32.45	745.47	723.63	21.84	34.135	
3,232.06	3,212.81	3,130.80	3,103.45	11.60	11.18	-171.891	421.28	32.84	753.83	731.77	22.06	34.169	
3,250.00	3,230.62	3,148.12	3,120.58	11.67	11.25	-162.842	423.80	33.06	758.50	736.31	22.19	34.181	
3,300.00	3,280.19	3,196.38	3,168.32	11.85	11.43	-141.511	430.82	33.68	771.38	748.83	22.55	34.206	
3,350.00	3,329.55	3,244.91	3,216.33	12.04	11.60	-127.057	437.89	34.30	784.08	761.17	22.91	34.221	
3,400.00	3,378.57	3,297.59	3,268.41	12.22	11.80	-117.667	445.43	36.70	796.43	773.14	23.29	34.201	
3,450.00	3,427.11	3,350.85	3,320.87	12.40	11.99	-111.315	452.85	42.05	808.29	784.63	23.66	34.161	
3,500.00	3,475.03	3,404.69	3,373.54	12.57	12.19	-106.808	460.11	50.46	819.63	795.60	24.04	34.100	
3,550.00	3,522.22	3,459.12	3,426.26	12.75	12.38	-103.468	467.17	61.98	830.41	806.00	24.41	34.017	
3,600.00	3,568.53	3,514.13	3,478.82	12.92	12.57	-100.902	474.01	76.67	840.58	815.80	24.79	33.913	
3,650.00	3,613.84	3,569.71	3,531.02	13.08	12.77	-98.875	480.59	94.59	850.12	824.96	25.16	33.785	
3,700.00	3,658.03	3,625.86	3,582.63	13.25	12.96	-97.237	486.87	115.76	858.99	833.45	25.54	33.632	
3,750.00	3,700.98	3,682.55	3,633.43	13.41	13.15	-95.890	492.83	140.19	867.16	841.24	25.92	33.453	
3,800.00	3,742.57	3,739.75	3,683.17	13.56	13.34	-94.767	498.42	167.87	874.59	848.28	26.31	33.246	
3,850.00	3,782.67	3,797.44	3,731.60	13.72	13.53	-93.822	503.62	198.75	881.26	854.56	26.70	33.009	
3,900.00	3,821.20	3,855.56	3,778.47	13.88	13.72	-93.021	508.38	232.78	887.14	860.04	27.10	32.739	
3,950.00	3,858.03	3,914.08	3,823.52	14.04	13.93	-92.339	512.69	269.86	892.20	864.69	27.51	32.434	
4,000.00	3,893.07	3,972.93	3,866.50	14.20	14.15	-91.757	516.50	309.87	896.44	868.50	27.93	32.094	
4,050.00	3,926.22	4,032.07	3,907.17	14.38	14.37	-91.261	519.79	352.66	899.82	871.45	28.37	31.716	
4,100.00	3,957.40	4,091.42	3,945.30	14.56	14.62	-90.840	522.53	398.05	902.33	873.51	28.83	31.300	
4,150.00	3,986.50	4,150.93	3,980.66	14.76	14.87	-90.485	524.72	445.85	903.98	874.67	29.31	30.847	
4,200.00	4,013.47	4,210.52	4,013.07	14.96	15.14	-90.190	526.33	495.82	904.73	874.93	29.80	30.356	
4,219.41	4,023.34	4,233.18	4,024.59	15.04	15.25	-90.090	526.79	515.33	904.79	874.79	30.00	30.160	
4,250.00	4,038.64	4,263.77	4,039.88	15.18	15.40	-90.090	527.37	541.82	904.79	874.49	30.30	29.861	
4,300.00	4,063.64	4,313.77	4,064.88	15.41	15.64	-90.090	528.31	585.11	904.79	873.99	30.80	29.381	
4,350.00	4,088.64	4,363.77	4,089.88	15.66	15.91	-90.090	529.25	628.40	904.79	873.46	31.33	28.883	
4,400.00	4,113.64	4,413.77	4,114.88	15.92	16.18	-90.090	530.19	671.69	904.79	872.93	31.86	28.399	
4,419.41	4,123.34	4,433.19	4,124.58	16.02	16.28	-90.090	530.56	688.51	904.79	872.71	32.07	28.210	
4,450.00	4,137.92	4,463.85	4,139.08	16.19	16.46	-90.081	531.14	715.52	904.78	872.37	32.42	27.910	
4,500.00	4,158.60	4,513.96	4,159.60	16.46	16.75	-90.067	532.14	761.20	904.78	871.79	32.99	27.422	
4,550.00	4,175.24	4,564.04	4,176.04	16.75	17.04	-90.052	533.16	808.48	904.78	871.20	33.58	26.941	
4,600.00	4,187.70	4,614.10	4,188.28	17.04	17.34	-90.037	534.22	856.99	904.78	870.60	34.18	26.471	
4,650.00	4,195.90	4,664.14	4,196.24	17.34	17.64	-90.021	535.29	906.37	904.78	870.00	34.78	26.016	
4,700.00	4,199.77	4,714.16	4,199.86	17.63	17.94	-90.006	536.37	956.23	904.78	869.40	35.37	25.579	
4,708.62	4,200.00	4,722.78	4,200.05	17.68	17.99	-90.003	536.56	964.84	904.78	869.30	35.47	25.506	
4,750.00	4,200.78	4,764.16	4,200.83	17.94	18.24	-90.003	537.46	1,006.21	904.77	868.79	35.98	25.146	
4,800.00	4,201.72	4,814.16	4,201.77	18.24	18.55	-90.003	538.55	1,056.18	904.77	868.17	36.60	24.720	
4,850.00	4,202.66	4,864.16	4,202.71	18.57	18.87	-90.003	539.63	1,106.16	904.77	867.51	37.26	24.283	
4,900.00	4,203.60	4,914.16	4,203.65	18.90	19.21	-90.003	540.72	1,156.14	904.77	866.85	37.92	23.858	
4,950.00	4,204.55	4,964.16	4,204.58	19.25	19.55	-90.002	541.81	1,206.12	904.77	866.14	38.62	23.425	
5,000.00	4,205.49	5,014.16	4,205.52	19.60	19.91	-90.002	542.89	1,256.10	904.77	865.44	39.33	23.004	
5,050.00	4,206.43	5,064.16	4,206.46	19.97	20.27	-90.002	543.98	1,306.08	904.76	864.70	40.07	22.580	
5,100.00	4,207.37	5,114.16	4,207.40	20.34	20.64	-90.002	545.06	1,356.06	904.76	863.95	40.81	22.168	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 60H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
5,150.00	4,208.31	5,164.16	4,208.34	20.73	21.03	-90.001	546.15	1,406.04	904.76	863.18	41.59	21.756	
5,200.00	4,209.25	5,214.16	4,209.28	21.11	21.41	-90.001	547.24	1,456.02	904.76	862.40	42.36	21.357	
5,250.00	4,210.20	5,264.16	4,210.21	21.52	21.81	-90.001	548.32	1,506.00	904.76	861.59	43.17	20.959	
5,300.00	4,211.14	5,314.16	4,211.15	21.92	22.22	-90.001	549.41	1,555.98	904.76	860.78	43.98	20.574	
5,350.00	4,212.08	5,364.16	4,212.09	22.33	22.63	-90.001	550.50	1,605.96	904.76	859.95	44.81	20.193	
5,400.00	4,213.02	5,414.16	4,213.03	22.75	23.04	-90.000	551.58	1,655.94	904.75	859.11	45.64	19.823	
5,450.00	4,213.96	5,464.16	4,213.97	23.18	23.47	-90.000	552.67	1,705.92	904.75	858.26	46.50	19.459	
5,500.00	4,214.90	5,514.16	4,214.91	23.61	23.90	-90.000	553.75	1,755.90	904.75	857.40	47.36	19.106	
5,550.00	4,215.85	5,564.16	4,215.84	24.05	24.33	-90.000	554.84	1,805.88	904.75	856.52	48.23	18.758	
5,600.00	4,216.79	5,614.16	4,216.78	24.48	24.77	-90.000	555.93	1,855.85	904.75	855.63	49.11	18.422	
5,650.00	4,217.73	5,664.16	4,217.72	24.93	25.22	-89.999	557.01	1,905.83	904.75	854.74	50.01	18.091	
5,700.00	4,218.67	5,714.16	4,218.66	25.38	25.66	-89.999	558.10	1,955.81	904.74	853.84	50.91	17.772	
5,750.00	4,219.61	5,764.16	4,219.60	25.84	26.12	-89.999	559.19	2,005.79	904.74	852.92	51.82	17.458	
5,800.00	4,220.55	5,814.16	4,220.54	26.30	26.57	-89.999	560.27	2,055.77	904.74	852.00	52.74	17.154	
5,850.00	4,221.50	5,864.16	4,221.47	26.76	27.04	-89.999	561.36	2,105.75	904.74	851.07	53.67	16.857	
5,900.00	4,222.44	5,914.16	4,222.41	27.23	27.50	-89.998	562.45	2,155.73	904.74	850.13	54.60	16.569	
5,950.00	4,223.38	5,964.16	4,223.35	27.70	27.97	-89.998	563.53	2,205.71	904.74	849.19	55.55	16.287	
6,000.00	4,224.32	6,014.16	4,224.29	28.17	28.44	-89.998	564.62	2,255.69	904.74	848.24	56.50	16.014	
6,050.00	4,225.26	6,064.16	4,225.23	28.65	28.92	-89.998	565.70	2,305.67	904.73	847.28	57.45	15.747	
6,100.00	4,226.20	6,114.16	4,226.17	29.13	29.40	-89.998	566.79	2,355.65	904.73	846.32	58.41	15.489	
6,150.00	4,227.15	6,164.16	4,227.10	29.62	29.88	-89.997	567.88	2,405.63	904.73	845.35	59.38	15.236	
6,200.00	4,228.09	6,214.16	4,228.04	30.10	30.36	-89.997	568.96	2,455.61	904.73	844.38	60.35	14.991	
6,250.00	4,229.03	6,264.16	4,228.98	30.59	30.85	-89.997	570.05	2,505.59	904.73	843.40	61.33	14.751	
6,300.00	4,229.97	6,314.16	4,229.92	31.08	31.34	-89.997	571.14	2,555.57	904.73	842.41	62.31	14.519	
6,350.00	4,230.91	6,364.16	4,230.86	31.58	31.83	-89.996	572.22	2,605.55	904.72	841.42	63.30	14.292	
6,400.00	4,231.86	6,414.16	4,231.80	32.07	32.33	-89.996	573.31	2,655.53	904.72	840.43	64.29	14.072	
6,450.00	4,232.80	6,464.16	4,232.74	32.57	32.82	-89.996	574.39	2,705.50	904.72	839.43	65.29	13.857	
6,500.00	4,233.74	6,514.16	4,233.67	33.07	33.32	-89.996	575.48	2,755.48	904.72	838.43	66.29	13.648	
6,550.00	4,234.68	6,564.16	4,234.61	33.58	33.82	-89.996	576.57	2,805.46	904.72	837.42	67.30	13.444	
6,600.00	4,235.62	6,614.16	4,235.55	34.08	34.32	-89.995	577.65	2,855.44	904.72	836.41	68.30	13.246	
6,650.00	4,236.56	6,664.16	4,236.49	34.59	34.83	-89.995	578.74	2,905.42	904.72	835.40	69.32	13.052	
6,700.00	4,237.51	6,714.16	4,237.43	35.09	35.34	-89.995	579.83	2,955.40	904.71	834.38	70.33	12.864	
6,750.00	4,238.45	6,764.16	4,238.37	35.60	35.84	-89.995	580.91	3,005.38	904.71	833.36	71.35	12.680	
6,800.00	4,239.39	6,814.16	4,239.30	36.11	36.35	-89.995	582.00	3,055.36	904.71	832.34	72.37	12.501	
6,850.00	4,240.33	6,864.16	4,240.24	36.63	36.86	-89.994	583.08	3,105.34	904.71	831.31	73.40	12.326	
6,900.00	4,241.27	6,914.16	4,241.18	37.14	37.38	-89.994	584.17	3,155.32	904.71	830.28	74.43	12.156	
6,950.00	4,242.21	6,964.16	4,242.12	37.66	37.89	-89.994	585.26	3,205.30	904.71	829.25	75.46	11.990	
7,000.00	4,243.16	7,014.16	4,243.06	38.17	38.41	-89.994	586.34	3,255.28	904.70	828.21	76.49	11.828	
7,050.00	4,244.10	7,064.16	4,244.00	38.69	38.92	-89.994	587.43	3,305.26	904.70	827.18	77.53	11.670	
7,100.00	4,245.04	7,114.16	4,244.93	39.21	39.44	-89.993	588.52	3,355.24	904.70	826.14	78.56	11.515	
7,150.00	4,245.98	7,164.16	4,245.87	39.73	39.96	-89.993	589.60	3,405.22	904.70	825.09	79.61	11.365	
7,200.00	4,246.92	7,214.16	4,246.81	40.25	40.48	-89.993	590.69	3,455.20	904.70	824.05	80.65	11.218	
7,250.00	4,247.86	7,264.16	4,247.75	40.78	41.00	-89.993	591.77	3,505.17	904.70	823.00	81.69	11.074	
7,300.00	4,248.81	7,314.16	4,248.69	41.30	41.52	-89.993	592.86	3,555.15	904.69	821.95	82.74	10.934	
7,350.00	4,249.75	7,364.16	4,249.63	41.82	42.05	-89.992	593.95	3,605.13	904.69	820.90	83.79	10.797	
7,400.00	4,250.69	7,414.16	4,250.56	42.35	42.57	-89.992	595.03	3,655.11	904.69	819.85	84.84	10.663	
7,450.00	4,251.63	7,464.16	4,251.50	42.88	43.10	-89.992	596.12	3,705.09	904.69	818.79	85.90	10.532	
7,500.00	4,252.57	7,514.16	4,252.44	43.40	43.62	-89.992	597.21	3,755.07	904.69	817.74	86.95	10.405	
7,550.00	4,253.51	7,564.16	4,253.38	43.93	44.15	-89.991	598.29	3,805.05	904.69	816.68	88.01	10.280	
7,600.00	4,254.46	7,614.16	4,254.32	44.46	44.68	-89.991	599.38	3,855.03	904.69	815.62	89.07	10.157	
7,650.00	4,255.40	7,664.16	4,255.26	44.99	45.21	-89.991	600.47	3,905.01	904.68	814.56	90.13	10.038	
7,700.00	4,256.34	7,714.16	4,256.20	45.52	45.74	-89.991	601.55	3,954.99	904.68	813.49	91.19	9.921	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 60H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
7,750.00	4,257.28	7,764.16	4,257.13	46.06	46.27	-89.991	602.64	4,004.97	904.68	812.43	92.25	9.807	
7,800.00	4,258.22	7,814.16	4,258.07	46.59	46.80	-89.990	603.72	4,054.95	904.68	811.36	93.32	9.695	
7,850.00	4,259.16	7,864.16	4,259.01	47.12	47.33	-89.990	604.81	4,104.93	904.68	810.29	94.38	9.585	
7,900.00	4,260.11	7,914.16	4,259.95	47.65	47.87	-89.990	605.90	4,154.91	904.68	809.23	95.45	9.478	
7,950.00	4,261.05	7,964.16	4,260.89	48.19	48.40	-89.990	606.98	4,204.89	904.67	808.15	96.52	9.373	
8,000.00	4,261.99	8,014.16	4,261.83	48.72	48.93	-89.990	608.07	4,254.87	904.67	807.08	97.59	9.270	
8,050.00	4,262.93	8,064.16	4,262.76	49.26	49.47	-89.989	609.16	4,304.84	904.67	806.01	98.66	9.169	
8,100.00	4,263.87	8,114.16	4,263.70	49.80	50.00	-89.989	610.24	4,354.82	904.67	804.94	99.73	9.071	
8,150.00	4,264.81	8,164.16	4,264.64	50.33	50.54	-89.989	611.33	4,404.80	904.67	803.86	100.81	8.974	
8,200.00	4,265.76	8,214.16	4,265.58	50.87	51.08	-89.989	612.41	4,454.78	904.67	802.78	101.88	8.879	
8,250.00	4,266.70	8,264.16	4,266.52	51.41	51.61	-89.989	613.50	4,504.76	904.67	801.71	102.96	8.787	
8,300.00	4,267.64	8,314.16	4,267.46	51.95	52.15	-89.988	614.59	4,554.74	904.66	800.63	104.04	8.696	
8,350.00	4,268.58	8,364.16	4,268.39	52.49	52.69	-89.988	615.67	4,604.72	904.66	799.55	105.11	8.606	
8,400.00	4,269.52	8,414.16	4,269.33	53.03	53.23	-89.988	616.76	4,654.70	904.66	798.47	106.19	8.519	
8,450.00	4,270.46	8,464.16	4,270.27	53.57	53.77	-89.988	617.85	4,704.68	904.66	797.39	107.27	8.433	
8,500.00	4,271.41	8,514.16	4,271.21	54.11	54.31	-89.988	618.93	4,754.66	904.66	796.30	108.35	8.349	
8,550.00	4,272.35	8,564.16	4,272.15	54.65	54.85	-89.987	620.02	4,804.64	904.66	795.22	109.44	8.266	
8,600.00	4,273.29	8,614.16	4,273.09	55.19	55.39	-89.987	621.10	4,854.62	904.65	794.14	110.52	8.186	
8,650.00	4,274.23	8,664.16	4,274.02	55.73	55.93	-89.987	622.19	4,904.60	904.65	793.05	111.60	8.106	
8,700.00	4,275.17	8,714.16	4,274.96	56.27	56.47	-89.987	623.28	4,954.58	904.65	791.96	112.69	8.028	
8,750.00	4,276.11	8,764.16	4,275.90	56.82	57.01	-89.986	624.36	5,004.56	904.65	790.88	113.77	7.951	
8,800.00	4,277.06	8,814.16	4,276.84	57.36	57.56	-89.986	625.45	5,054.54	904.65	789.79	114.86	7.876	
8,850.00	4,278.00	8,864.16	4,277.78	57.90	58.10	-89.986	626.54	5,104.52	904.65	788.70	115.95	7.802	
8,900.00	4,278.94	8,914.16	4,278.72	58.45	58.64	-89.986	627.62	5,154.49	904.65	787.61	117.03	7.730	
8,950.00	4,279.88	8,964.16	4,279.65	58.99	59.19	-89.986	628.71	5,204.47	904.64	786.52	118.12	7.659	
9,000.00	4,280.82	9,014.16	4,280.59	59.54	59.73	-89.985	629.79	5,254.45	904.64	785.43	119.21	7.589	
9,050.00	4,281.76	9,064.16	4,281.53	60.08	60.27	-89.985	630.88	5,304.43	904.64	784.34	120.30	7.520	
9,100.00	4,282.71	9,114.16	4,282.47	60.63	60.82	-89.985	631.97	5,354.41	904.64	783.25	121.39	7.452	
9,150.00	4,283.65	9,164.16	4,283.41	61.17	61.36	-89.985	633.05	5,404.39	904.64	782.16	122.48	7.386	
9,200.00	4,284.59	9,214.16	4,284.35	61.72	61.91	-89.985	634.14	5,454.37	904.64	781.06	123.57	7.321	
9,250.00	4,285.53	9,264.16	4,285.29	62.26	62.45	-89.984	635.23	5,504.35	904.63	779.97	124.66	7.257	
9,300.00	4,286.47	9,314.16	4,286.22	62.81	63.00	-89.984	636.31	5,554.33	904.63	778.88	125.76	7.193	
9,350.00	4,287.41	9,364.16	4,287.16	63.36	63.55	-89.984	637.40	5,604.31	904.63	777.78	126.85	7.131	
9,400.00	4,288.36	9,414.16	4,288.10	63.90	64.09	-89.984	638.48	5,654.29	904.63	776.68	127.94	7.070	
9,450.00	4,289.30	9,464.16	4,289.04	64.45	64.64	-89.984	639.57	5,704.27	904.63	775.59	129.04	7.010	
9,500.00	4,290.24	9,514.16	4,289.98	65.00	65.19	-89.983	640.66	5,754.25	904.63	774.49	130.13	6.951	
9,550.00	4,291.18	9,564.16	4,290.92	65.55	65.73	-89.983	641.74	5,804.23	904.62	773.39	131.23	6.893	
9,600.00	4,292.12	9,614.16	4,291.85	66.10	66.28	-89.983	642.83	5,854.21	904.62	772.30	132.33	6.836	
9,650.00	4,293.06	9,664.16	4,292.79	66.64	66.83	-89.983	643.92	5,904.19	904.62	771.20	133.42	6.780	
9,700.00	4,294.01	9,714.16	4,293.73	67.19	67.38	-89.983	645.00	5,954.16	904.62	770.10	134.52	6.725	
9,750.00	4,294.95	9,764.16	4,294.67	67.74	67.92	-89.982	646.09	6,004.14	904.62	769.00	135.62	6.670	
9,800.00	4,295.89	9,814.16	4,295.61	68.29	68.47	-89.982	647.18	6,054.12	904.62	767.90	136.72	6.617	
9,850.00	4,296.83	9,864.16	4,296.55	68.84	69.02	-89.982	648.26	6,104.10	904.62	766.80	137.81	6.564	
9,900.00	4,297.77	9,914.16	4,297.48	69.39	69.57	-89.982	649.35	6,154.08	904.61	765.70	138.91	6.512	
9,950.00	4,298.71	9,964.16	4,298.42	69.94	70.12	-89.981	650.43	6,204.06	904.61	764.60	140.01	6.461	
10,000.00	4,299.66	10,014.16	4,299.36	70.49	70.67	-89.981	651.52	6,254.04	904.61	763.50	141.11	6.411	
10,050.00	4,300.60	10,064.16	4,300.30	71.04	71.22	-89.981	652.61	6,304.02	904.61	762.40	142.21	6.361	
10,100.00	4,301.54	10,114.16	4,301.24	71.59	71.77	-89.981	653.69	6,354.00	904.61	761.30	143.31	6.312	
10,150.00	4,302.48	10,164.16	4,302.18	72.14	72.32	-89.981	654.78	6,403.98	904.61	760.19	144.41	6.264	
10,200.00	4,303.42	10,214.16	4,303.11	72.69	72.87	-89.980	655.87	6,453.96	904.60	759.09	145.51	6.217	
10,250.00	4,304.36	10,264.16	4,304.05	73.24	73.42	-89.980	656.95	6,503.94	904.60	757.99	146.62	6.170	
10,300.00	4,305.31	10,314.16	4,304.99	73.79	73.97	-89.980	658.04	6,553.92	904.60	756.88	147.72	6.124	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - 60H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+SAG+FDIR — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
10,350.00	4,306.25	10,364.16	4,305.93	74.34	74.52	-89.980	659.12	6,603.90	904.60	755.78	148.82	6.078	
10,400.00	4,307.19	10,414.16	4,306.87	74.90	75.07	-89.980	660.21	6,653.88	904.60	754.68	149.92	6.034	
10,450.00	4,308.13	10,464.16	4,307.81	75.45	75.62	-89.979	661.30	6,703.86	904.60	753.57	151.03	5.990	
10,500.00	4,309.07	10,514.16	4,308.74	76.00	76.17	-89.979	662.38	6,753.84	904.60	752.47	152.13	5.946	
10,550.00	4,310.01	10,564.16	4,309.68	76.55	76.73	-89.979	663.47	6,803.81	904.59	751.36	153.23	5.903	
10,600.00	4,310.96	10,614.16	4,310.62	77.10	77.28	-89.979	664.56	6,853.79	904.59	750.25	154.34	5.861	
10,650.00	4,311.90	10,664.16	4,311.56	77.66	77.83	-89.979	665.64	6,903.77	904.59	749.15	155.44	5.819	
10,700.00	4,312.84	10,714.16	4,312.50	78.21	78.38	-89.978	666.73	6,953.75	904.59	748.04	156.55	5.778	
10,750.00	4,313.78	10,764.16	4,313.44	78.76	78.93	-89.978	667.81	7,003.73	904.59	746.94	157.65	5.738	
10,800.00	4,314.72	10,814.16	4,314.38	79.31	79.49	-89.978	668.90	7,053.71	904.59	745.83	158.76	5.698	
10,850.00	4,315.66	10,864.16	4,315.31	79.87	80.04	-89.978	669.99	7,103.69	904.58	744.72	159.86	5.659	
10,900.00	4,316.61	10,914.16	4,316.25	80.42	80.59	-89.977	671.07	7,153.67	904.58	743.61	160.97	5.620	
10,950.00	4,317.55	10,964.16	4,317.19	80.97	81.14	-89.977	672.16	7,203.65	904.58	742.51	162.07	5.581	
11,000.00	4,318.49	11,014.16	4,318.13	81.52	81.70	-89.977	673.25	7,253.63	904.58	741.40	163.18	5.543	
11,050.00	4,319.43	11,064.16	4,319.07	82.08	82.25	-89.977	674.33	7,303.61	904.58	740.29	164.29	5.506	
11,100.00	4,320.37	11,114.16	4,320.01	82.63	82.80	-89.977	675.42	7,353.59	904.58	739.18	165.39	5.469	
11,150.00	4,321.32	11,164.16	4,320.94	83.19	83.36	-89.976	676.50	7,403.57	904.58	738.07	166.50	5.433	
11,200.00	4,322.26	11,214.16	4,321.88	83.74	83.91	-89.976	677.59	7,453.55	904.57	736.96	167.61	5.397	
11,250.00	4,323.20	11,264.16	4,322.82	84.29	84.46	-89.976	678.68	7,503.53	904.57	735.86	168.72	5.361	
11,295.63	4,324.06	11,309.79	4,323.68	84.80	84.97	-89.976	679.67	7,549.14	904.57	734.84	169.73	5.330	
11,300.00	4,324.14	11,314.16	4,323.76	84.85	85.02	-89.976	679.76	7,553.51	904.57	734.75	169.82	5.327	
11,345.67	4,325.00	11,359.82	4,324.62	85.35	85.52	-89.976	680.76	7,599.15	904.57	733.73	170.84	5.295 SF	

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - OFFSET: AID STATE #10 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 304-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
4,708.62	4,200.00	4,313.20	4,200.00	17.68	85.03	-52.940	-163.51	5,360.48	4,380.76	4,299.44	81.31	53.876	
4,750.00	4,200.78	4,313.98	4,200.78	17.94	85.04	-53.202	-163.51	5,360.48	4,339.39	4,257.56	81.83	53.031	
4,800.00	4,201.72	4,314.92	4,201.72	18.24	85.06	-53.520	-163.51	5,360.48	4,289.42	4,206.96	82.45	52.022	
4,850.00	4,202.66	4,315.87	4,202.66	18.57	85.08	-53.840	-163.51	5,360.48	4,239.44	4,156.34	83.10	51.015	
4,900.00	4,203.60	4,316.81	4,203.60	18.90	85.09	-54.164	-163.51	5,360.48	4,189.47	4,105.72	83.75	50.022	
4,950.00	4,204.55	4,317.75	4,204.55	19.25	85.11	-54.489	-163.51	5,360.48	4,139.49	4,055.07	84.42	49.033	
5,000.00	4,205.49	4,318.69	4,205.49	19.60	85.13	-54.818	-163.51	5,360.48	4,089.52	4,004.43	85.09	48.058	
5,050.00	4,206.43	4,319.63	4,206.43	19.97	85.15	-55.149	-163.51	5,360.48	4,039.55	3,953.76	85.79	47.089	
5,100.00	4,207.37	4,320.57	4,207.37	20.34	85.17	-55.483	-163.51	5,360.48	3,989.57	3,903.10	86.48	46.134	
5,150.00	4,208.31	4,321.52	4,208.31	20.73	85.18	-55.820	-163.51	5,360.48	3,939.60	3,852.42	87.19	45.186	
5,200.00	4,209.25	4,322.46	4,209.25	21.11	85.20	-56.159	-163.51	5,360.48	3,889.63	3,801.73	87.90	44.252	
5,250.00	4,210.20	4,323.40	4,210.20	21.52	85.22	-56.502	-163.51	5,360.48	3,839.66	3,751.04	88.62	43.326	
5,300.00	4,211.14	4,324.34	4,211.14	21.92	85.24	-56.846	-163.51	5,360.48	3,789.69	3,700.34	89.35	42.414	
5,350.00	4,212.08	4,325.28	4,212.08	22.33	85.25	-57.194	-163.51	5,360.48	3,739.72	3,649.63	90.09	41.510	
5,400.00	4,213.02	4,326.22	4,213.02	22.75	85.27	-57.544	-163.51	5,360.48	3,689.75	3,598.92	90.83	40.621	
5,450.00	4,213.96	4,327.17	4,213.96	23.18	85.29	-57.897	-163.51	5,360.48	3,639.78	3,548.19	91.59	39.741	
5,500.00	4,214.90	4,328.11	4,214.90	23.61	85.31	-58.253	-163.51	5,360.48	3,589.81	3,497.47	92.34	38.875	
5,550.00	4,215.85	4,329.05	4,215.85	24.05	85.33	-58.612	-163.51	5,360.48	3,539.84	3,446.74	93.11	38.018	
5,600.00	4,216.79	4,329.99	4,216.79	24.48	85.34	-58.973	-163.51	5,360.48	3,489.88	3,396.00	93.88	37.175	
5,650.00	4,217.73	4,330.93	4,217.73	24.93	85.36	-59.337	-163.51	5,360.48	3,439.91	3,345.26	94.65	36.342	
5,700.00	4,218.67	4,331.87	4,218.67	25.38	85.38	-59.704	-163.51	5,360.48	3,389.95	3,294.51	95.43	35.522	
5,750.00	4,219.61	4,332.82	4,219.61	25.84	85.40	-60.073	-163.51	5,360.48	3,339.98	3,243.76	96.22	34.712	
5,800.00	4,220.55	4,333.76	4,220.55	26.30	85.41	-60.446	-163.51	5,360.48	3,290.02	3,193.01	97.01	33.915	
5,850.00	4,221.50	4,334.70	4,221.50	26.76	85.43	-60.821	-163.51	5,360.48	3,240.05	3,142.25	97.80	33.128	
5,900.00	4,222.44	4,335.64	4,222.44	27.23	85.45	-61.199	-163.51	5,360.48	3,190.09	3,091.49	98.60	32.354	
5,950.00	4,223.38	4,336.58	4,223.38	27.70	85.47	-61.580	-163.51	5,360.48	3,140.13	3,040.73	99.40	31.590	
6,000.00	4,224.32	4,337.52	4,224.32	28.17	85.49	-61.963	-163.51	5,360.48	3,090.17	2,989.96	100.21	30.838	
6,050.00	4,225.26	4,338.47	4,225.26	28.65	85.50	-62.349	-163.51	5,360.48	3,040.21	2,939.19	101.02	30.096	
6,100.00	4,226.20	4,339.41	4,226.20	29.13	85.52	-62.738	-163.51	5,360.48	2,990.25	2,888.43	101.83	29.366	
6,150.00	4,227.15	4,340.35	4,227.15	29.62	85.54	-63.130	-163.51	5,360.48	2,940.30	2,837.65	102.64	28.646	
6,200.00	4,228.09	4,341.29	4,228.09	30.10	85.56	-63.524	-163.51	5,360.48	2,890.34	2,786.88	103.46	27.937	
6,250.00	4,229.03	4,342.23	4,229.03	30.59	85.57	-63.921	-163.51	5,360.48	2,840.38	2,736.11	104.28	27.238	
6,300.00	4,229.97	4,343.17	4,229.97	31.08	85.59	-64.321	-163.51	5,360.48	2,790.43	2,685.33	105.10	26.550	
6,350.00	4,230.91	4,344.12	4,230.91	31.58	85.61	-64.724	-163.51	5,360.48	2,740.48	2,634.55	105.92	25.872	
6,400.00	4,231.86	4,345.06	4,231.86	32.07	85.63	-65.129	-163.51	5,360.48	2,690.53	2,583.78	106.75	25.205	
6,450.00	4,232.80	4,346.00	4,232.80	32.57	85.65	-65.537	-163.51	5,360.48	2,640.58	2,533.00	107.57	24.546	
6,500.00	4,233.74	4,346.94	4,233.74	33.07	85.66	-65.947	-163.51	5,360.48	2,590.63	2,482.23	108.40	23.899	
6,550.00	4,234.68	4,347.88	4,234.68	33.58	85.68	-66.360	-163.51	5,360.48	2,540.69	2,431.46	109.23	23.260	
6,600.00	4,235.62	4,348.82	4,235.62	34.08	85.70	-66.776	-163.51	5,360.48	2,490.74	2,380.68	110.06	22.631	
6,650.00	4,236.56	4,349.77	4,236.56	34.59	85.72	-67.195	-163.51	5,360.48	2,440.80	2,329.91	110.89	22.011	
6,700.00	4,237.51	4,350.71	4,237.51	35.09	85.73	-67.616	-163.51	5,360.48	2,390.86	2,279.14	111.72	21.401	
6,750.00	4,238.45	4,351.65	4,238.45	35.60	85.75	-68.039	-163.51	5,360.48	2,340.92	2,228.37	112.55	20.799	
6,800.00	4,239.39	4,352.59	4,239.39	36.11	85.77	-68.465	-163.51	5,360.48	2,290.99	2,177.61	113.38	20.207	
6,850.00	4,240.33	4,353.53	4,240.33	36.63	85.79	-68.894	-163.51	5,360.48	2,241.05	2,126.85	114.21	19.623	
6,900.00	4,241.27	4,354.47	4,241.27	37.14	85.81	-69.325	-163.51	5,360.48	2,191.12	2,076.09	115.03	19.048	
6,950.00	4,242.21	4,355.42	4,242.21	37.66	85.82	-69.759	-163.51	5,360.48	2,141.20	2,025.33	115.86	18.481	
7,000.00	4,243.16	4,356.36	4,243.16	38.17	85.84	-70.195	-163.51	5,360.48	2,091.27	1,974.58	116.69	17.922	
7,050.00	4,244.10	4,357.30	4,244.10	38.69	85.86	-70.633	-163.51	5,360.48	2,041.35	1,923.84	117.51	17.372	
7,100.00	4,245.04	4,358.24	4,245.04	39.21	85.88	-71.074	-163.51	5,360.48	1,991.43	1,873.10	118.33	16.829	
7,150.00	4,245.98	4,359.18	4,245.98	39.73	85.89	-71.517	-163.51	5,360.48	1,941.52	1,822.36	119.15	16.294	
7,200.00	4,246.92	4,360.12	4,246.92	40.25	85.91	-71.962	-163.51	5,360.48	1,891.61	1,771.64	119.97	15.767	
7,250.00	4,247.86	4,361.07	4,247.86	40.78	85.93	-72.410	-163.51	5,360.48	1,841.70	1,720.91	120.79	15.247	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - OFFSET: AID STATE #10 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 304-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
7,300.00	4,248.81	4,362.01	4,248.81	41.30	85.95	-72.860	-163.51	5,360.48	1,791.80	1,670.20	121.60	14.735	
7,350.00	4,249.75	4,362.95	4,249.75	41.82	85.97	-73.312	-163.51	5,360.48	1,741.91	1,619.49	122.41	14.230	
7,400.00	4,250.69	4,363.89	4,250.69	42.35	85.98	-73.766	-163.51	5,360.48	1,692.02	1,568.80	123.22	13.732	
7,450.00	4,251.63	4,364.83	4,251.63	42.88	86.00	-74.223	-163.51	5,360.48	1,642.13	1,518.11	124.03	13.240	
7,500.00	4,252.57	4,365.77	4,252.57	43.40	86.02	-74.681	-163.51	5,360.48	1,592.26	1,467.43	124.83	12.756	
7,550.00	4,253.51	4,366.72	4,253.51	43.93	86.04	-75.142	-163.51	5,360.48	1,542.39	1,416.76	125.62	12.278	
7,600.00	4,254.46	4,367.66	4,254.46	44.46	86.05	-75.604	-163.51	5,360.48	1,492.52	1,366.11	126.41	11.807	
7,650.00	4,255.40	4,368.60	4,255.40	44.99	86.07	-76.068	-163.51	5,360.48	1,442.67	1,315.47	127.20	11.341	
7,700.00	4,256.34	4,369.54	4,256.34	45.52	86.09	-76.535	-163.51	5,360.48	1,392.83	1,264.84	127.99	10.883	
7,750.00	4,257.28	4,370.48	4,257.28	46.06	86.11	-77.003	-163.51	5,360.48	1,343.00	1,214.23	128.77	10.430	
7,800.00	4,258.22	4,371.42	4,258.22	46.59	86.13	-77.472	-163.51	5,360.48	1,293.18	1,163.64	129.54	9.983	
7,850.00	4,259.16	4,372.37	4,259.16	47.12	86.14	-77.944	-163.51	5,360.48	1,243.37	1,113.06	130.31	9.542	
7,900.00	4,260.11	4,373.31	4,260.11	47.65	86.16	-78.417	-163.51	5,360.48	1,193.58	1,062.51	131.07	9.106	
7,950.00	4,261.05	4,374.25	4,261.05	48.19	86.18	-78.892	-163.51	5,360.48	1,143.81	1,011.98	131.83	8.676	
8,000.00	4,261.99	4,375.19	4,261.99	48.72	86.20	-79.368	-163.51	5,360.48	1,094.06	961.48	132.58	8.252	
8,050.00	4,262.93	4,376.13	4,262.93	49.26	86.21	-79.846	-163.51	5,360.48	1,044.33	911.00	133.33	7.833	
8,100.00	4,263.87	4,377.07	4,263.87	49.80	86.23	-80.325	-163.51	5,360.48	994.63	860.56	134.07	7.419	
8,150.00	4,264.81	4,378.02	4,264.81	50.33	86.25	-80.806	-163.51	5,360.48	944.95	810.16	134.80	7.010	
8,200.00	4,265.76	4,378.96	4,265.76	50.87	86.27	-81.288	-163.51	5,360.48	895.32	759.79	135.52	6.606	
8,250.00	4,266.70	4,379.90	4,266.70	51.41	86.29	-81.771	-163.51	5,360.48	845.72	709.48	136.24	6.207	
8,300.00	4,267.64	4,380.84	4,267.64	51.95	86.30	-82.256	-163.51	5,360.48	796.17	659.22	136.95	5.813	
8,350.00	4,268.58	4,381.78	4,268.58	52.49	86.32	-82.741	-163.51	5,360.48	746.69	609.03	137.66	5.424	
8,400.00	4,269.52	4,382.72	4,269.52	53.03	86.34	-83.228	-163.51	5,360.48	697.27	558.92	138.35	5.040	
8,450.00	4,270.46	4,383.67	4,270.46	53.57	86.36	-83.715	-163.51	5,360.48	647.95	508.90	139.04	4.660	
8,500.00	4,271.41	4,384.61	4,271.41	54.11	86.37	-84.204	-163.51	5,360.48	598.73	459.01	139.72	4.285	
8,550.00	4,272.35	4,385.55	4,272.35	54.65	86.39	-84.693	-163.51	5,360.48	549.65	409.26	140.39	3.915	
8,600.00	4,273.29	4,386.49	4,273.29	55.19	86.41	-85.183	-163.51	5,360.48	500.76	359.70	141.06	3.550	
8,650.00	4,274.23	4,387.43	4,274.23	55.73	86.43	-85.674	-163.51	5,360.48	452.10	310.39	141.71	3.190	
8,700.00	4,275.17	4,388.38	4,275.17	56.27	86.45	-86.165	-163.51	5,360.48	403.77	261.41	142.36	2.836	
8,750.00	4,276.11	4,389.32	4,276.11	56.82	86.46	-86.657	-163.51	5,360.48	355.90	212.90	142.99	2.489	
8,800.00	4,277.06	4,390.26	4,277.06	57.36	86.48	-87.150	-163.51	5,360.48	308.70	165.08	143.62	2.149	
8,850.00	4,278.00	4,391.20	4,278.00	57.90	86.50	-87.642	-163.51	5,360.48	262.54	118.30	144.24	1.820	
8,900.00	4,278.94	4,392.14	4,278.94	58.45	86.52	-88.136	-163.51	5,360.48	218.07	73.22	144.85	1.506	
8,950.00	4,279.88	4,393.08	4,279.88	58.99	86.53	-88.629	-163.51	5,360.48	176.59	31.14	145.45	1.214	Level 2
9,000.00	4,280.82	4,394.03	4,280.82	59.54	86.55	-89.123	-163.51	5,360.48	140.74	-5.30	146.04	0.964	Level 1
9,050.00	4,281.76	4,394.97	4,281.76	60.08	86.57	-89.617	-163.51	5,360.48	115.90	-30.72	146.62	0.790	Level 1
9,088.79	4,282.49	4,395.70	4,282.49	60.50	86.58	-90.000	-163.51	5,360.48	109.22	-37.85	147.06	0.743	Level 1, CC, ES, SF
9,100.00	4,282.71	4,395.91	4,282.71	60.63	86.59	-90.111	-163.51	5,360.48	109.79	-37.40	147.19	0.746	Level 1
9,150.00	4,283.65	4,396.85	4,283.65	61.17	86.61	-90.605	-163.51	5,360.48	125.20	-22.55	147.75	0.847	Level 1
9,200.00	4,284.59	4,397.79	4,284.59	61.72	86.62	-91.098	-163.51	5,360.48	155.86	7.56	148.30	1.051	Level 2
9,250.00	4,285.53	4,398.73	4,285.53	62.26	86.64	-91.592	-163.51	5,360.48	194.70	45.86	148.84	1.308	Level 3
9,300.00	4,286.47	4,399.68	4,286.47	62.81	86.66	-92.086	-163.51	5,360.48	237.75	88.38	149.37	1.592	
9,350.00	4,287.41	4,400.62	4,287.41	63.36	86.68	-92.579	-163.51	5,360.48	283.08	133.20	149.89	1.889	
9,400.00	4,288.36	4,401.56	4,288.36	63.90	86.69	-93.071	-163.51	5,360.48	329.77	179.37	150.40	2.193	
9,450.00	4,289.30	4,402.50	4,289.30	64.45	86.71	-93.564	-163.51	5,360.48	377.30	226.41	150.89	2.500	
9,500.00	4,290.24	4,403.44	4,290.24	65.00	86.73	-94.055	-163.51	5,360.48	425.40	274.02	151.38	2.810	
9,550.00	4,291.18	4,404.38	4,291.18	65.55	86.75	-94.546	-163.51	5,360.48	473.89	322.03	151.86	3.121	
9,600.00	4,292.12	4,405.33	4,292.12	66.10	86.77	-95.037	-163.51	5,360.48	522.66	370.34	152.32	3.431	
9,650.00	4,293.06	4,406.27	4,293.06	66.64	86.78	-95.527	-163.51	5,360.48	571.64	418.87	152.78	3.742	
9,700.00	4,294.01	4,407.21	4,294.01	67.19	86.80	-96.016	-163.51	5,360.48	620.79	467.57	153.22	4.052	
9,750.00	4,294.95	4,408.15	4,294.95	67.74	86.82	-96.504	-163.51	5,360.48	670.06	516.40	153.65	4.361	
9,800.00	4,295.89	4,409.09	4,295.89	68.29	86.84	-96.991	-163.51	5,360.48	719.43	565.35	154.07	4.669	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - OFFSET: AID STATE #10 - Wellbore #1 - Wellbore #1

Offset Site Error: 0.00 usft

Survey Program: 304-INC-ONLY

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
9,850.00	4,296.83	4,410.03	4,296.83	68.84	86.85	-97.477	-163.51	5,360.48	768.87	614.39	154.49	4.977	
9,900.00	4,297.77	4,410.98	4,297.77	69.39	86.87	-97.962	-163.51	5,360.48	818.39	663.50	154.89	5.284	
9,950.00	4,298.71	4,411.92	4,298.71	69.94	86.89	-98.446	-163.51	5,360.48	867.96	712.68	155.28	5.590	
10,000.00	4,299.66	4,412.86	4,299.66	70.49	86.91	-98.928	-163.51	5,360.48	917.57	761.92	155.65	5.895	
10,050.00	4,300.60	4,413.80	4,300.60	71.04	86.93	-99.410	-163.51	5,360.48	967.23	811.21	156.02	6.199	
10,100.00	4,301.54	4,414.74	4,301.54	71.59	86.94	-99.890	-163.51	5,360.48	1,016.92	860.54	156.38	6.503	
10,150.00	4,302.48	4,415.68	4,302.48	72.14	86.96	-100.368	-163.51	5,360.48	1,066.63	909.91	156.72	6.806	
10,200.00	4,303.42	4,416.63	4,303.42	72.69	86.98	-100.846	-163.51	5,360.48	1,116.37	959.31	157.06	7.108	
10,250.00	4,304.36	4,417.57	4,304.36	73.24	87.00	-101.321	-163.51	5,360.48	1,166.13	1,008.75	157.38	7.410	
10,300.00	4,305.31	4,418.51	4,305.31	73.79	87.01	-101.795	-163.51	5,360.48	1,215.91	1,058.22	157.70	7.710	
10,350.00	4,306.25	4,419.45	4,306.25	74.34	87.03	-102.268	-163.51	5,360.48	1,265.71	1,107.71	158.00	8.011	
10,400.00	4,307.19	4,420.39	4,307.19	74.90	87.05	-102.739	-163.51	5,360.48	1,315.52	1,157.23	158.29	8.311	
10,450.00	4,308.13	4,421.33	4,308.13	75.45	87.07	-103.208	-163.51	5,360.48	1,365.35	1,206.77	158.57	8.610	
10,500.00	4,309.07	4,422.28	4,309.07	76.00	87.09	-103.675	-163.51	5,360.48	1,415.18	1,256.34	158.85	8.909	
10,550.00	4,310.01	4,423.22	4,310.01	76.55	87.10	-104.140	-163.51	5,360.48	1,465.03	1,305.92	159.11	9.208	
10,600.00	4,310.96	4,424.16	4,310.96	77.10	87.12	-104.604	-163.51	5,360.48	1,514.89	1,355.53	159.36	9.506	
10,650.00	4,311.90	4,425.10	4,311.90	77.66	87.14	-105.065	-163.51	5,360.48	1,564.75	1,405.15	159.60	9.804	
10,700.00	4,312.84	4,426.04	4,312.84	78.21	87.16	-105.525	-163.51	5,360.48	1,614.63	1,454.79	159.83	10.102	
10,750.00	4,313.78	4,426.98	4,313.78	78.76	87.17	-105.982	-163.51	5,360.48	1,664.51	1,504.45	160.05	10.400	
10,800.00	4,314.72	4,427.93	4,314.72	79.31	87.19	-106.438	-163.51	5,360.48	1,714.39	1,554.13	160.26	10.697	
10,850.00	4,315.66	4,428.87	4,315.66	79.87	87.21	-106.891	-163.51	5,360.48	1,764.28	1,603.82	160.47	10.995	
10,900.00	4,316.61	4,429.81	4,316.61	80.42	87.23	-107.342	-163.51	5,360.48	1,814.18	1,653.53	160.66	11.292	
10,950.00	4,317.55	4,430.75	4,317.55	80.97	87.25	-107.791	-163.51	5,360.48	1,864.09	1,703.25	160.84	11.590	
11,000.00	4,318.49	4,431.69	4,318.49	81.52	87.26	-108.238	-163.51	5,360.48	1,913.99	1,752.98	161.01	11.887	
11,050.00	4,319.43	4,432.63	4,319.43	82.08	87.28	-108.682	-163.51	5,360.48	1,963.90	1,802.73	161.18	12.185	
11,100.00	4,320.37	4,433.58	4,320.37	82.63	87.30	-109.124	-163.51	5,360.48	2,013.82	1,852.49	161.33	12.482	
11,150.00	4,321.32	4,434.52	4,321.32	83.19	87.32	-109.564	-163.51	5,360.48	2,063.74	1,902.26	161.48	12.780	
11,200.00	4,322.26	4,435.46	4,322.26	83.74	87.33	-110.001	-163.51	5,360.48	2,113.66	1,952.05	161.62	13.078	
11,250.00	4,323.20	4,436.40	4,323.20	84.29	87.35	-110.436	-163.51	5,360.48	2,163.59	2,001.84	161.74	13.377	
11,295.63	4,324.06	4,437.26	4,324.06	84.80	87.37	-110.831	-163.51	5,360.48	2,209.15	2,047.30	161.85	13.649	
11,300.00	4,324.14	4,437.34	4,324.14	84.85	87.37	-110.869	-163.51	5,360.48	2,213.52	2,051.65	161.86	13.675	
11,345.67	4,325.00	4,438.20	4,325.00	85.35	87.39	-111.261	-163.51	5,360.48	2,259.12	2,097.15	161.97	13.948	

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - OFFSET: AID STATE #6 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 166-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
5,500.00	4,214.90	4,310.00	4,214.90	23.61	79.44	79.923	-818.32	7,340.12	5,584.17	5,482.53	101.64	54.941	
5,550.00	4,215.85	4,310.95	4,215.85	24.05	79.46	80.012	-818.32	7,340.12	5,534.46	5,432.35	102.11	54.199	
5,600.00	4,216.79	4,311.89	4,216.79	24.48	79.48	80.101	-818.32	7,340.12	5,484.76	5,382.17	102.59	53.463	
5,650.00	4,217.73	4,312.83	4,217.73	24.93	79.50	80.190	-818.32	7,340.12	5,435.06	5,331.98	103.08	52.729	
5,700.00	4,218.67	4,313.77	4,218.67	25.38	79.51	80.279	-818.32	7,340.12	5,385.36	5,281.80	103.56	52.002	
5,750.00	4,219.61	4,314.71	4,219.61	25.84	79.53	80.368	-818.32	7,340.12	5,335.67	5,231.62	104.05	51.278	
5,800.00	4,220.55	4,315.66	4,220.55	26.30	79.55	80.457	-818.32	7,340.12	5,285.99	5,181.44	104.55	50.560	
5,850.00	4,221.50	4,316.60	4,221.50	26.76	79.57	80.546	-818.32	7,340.12	5,236.31	5,131.26	105.05	49.846	
5,900.00	4,222.44	4,317.54	4,222.44	27.23	79.58	80.636	-818.32	7,340.12	5,186.64	5,081.09	105.55	49.139	
5,950.00	4,223.38	4,318.48	4,223.38	27.70	79.60	80.725	-818.32	7,340.12	5,136.98	5,030.92	106.06	48.435	
6,000.00	4,224.32	4,319.42	4,224.32	28.17	79.62	80.814	-818.32	7,340.12	5,087.32	4,980.75	106.57	47.738	
6,050.00	4,225.26	4,320.36	4,225.26	28.65	79.64	80.903	-818.32	7,340.12	5,037.66	4,930.58	107.08	47.045	
6,100.00	4,226.20	4,321.31	4,226.20	29.13	79.65	80.993	-818.32	7,340.12	4,988.02	4,880.42	107.60	46.358	
6,150.00	4,227.15	4,322.25	4,227.15	29.62	79.67	81.082	-818.32	7,340.12	4,938.38	4,830.26	108.12	45.676	
6,200.00	4,228.09	4,323.19	4,228.09	30.10	79.69	81.172	-818.32	7,340.12	4,888.75	4,780.11	108.64	45.000	
6,250.00	4,229.03	4,324.13	4,229.03	30.59	79.71	81.261	-818.32	7,340.12	4,839.13	4,729.96	109.16	44.329	
6,300.00	4,229.97	4,325.07	4,229.97	31.08	79.72	81.351	-818.32	7,340.12	4,789.51	4,679.82	109.69	43.664	
6,350.00	4,230.91	4,326.01	4,230.91	31.58	79.74	81.441	-818.32	7,340.12	4,739.90	4,629.68	110.22	43.004	
6,400.00	4,231.86	4,326.96	4,231.86	32.07	79.76	81.530	-818.32	7,340.12	4,690.30	4,579.55	110.75	42.350	
6,450.00	4,232.80	4,327.90	4,232.80	32.57	79.78	81.620	-818.32	7,340.12	4,640.71	4,529.42	111.29	41.701	
6,500.00	4,233.74	4,328.84	4,233.74	33.07	79.79	81.710	-818.32	7,340.12	4,591.13	4,479.31	111.82	41.058	
6,550.00	4,234.68	4,329.78	4,234.68	33.58	79.81	81.799	-818.32	7,340.12	4,541.55	4,429.19	112.36	40.420	
6,600.00	4,235.62	4,330.72	4,235.62	34.08	79.83	81.889	-818.32	7,340.12	4,491.99	4,379.09	112.90	39.789	
6,650.00	4,236.56	4,331.66	4,236.56	34.59	79.84	81.979	-818.32	7,340.12	4,442.43	4,328.99	113.44	39.162	
6,700.00	4,237.51	4,332.61	4,237.51	35.09	79.86	82.069	-818.32	7,340.12	4,392.89	4,278.91	113.98	38.541	
6,750.00	4,238.45	4,333.55	4,238.45	35.60	79.88	82.159	-818.32	7,340.12	4,343.35	4,228.82	114.53	37.925	
6,800.00	4,239.39	4,334.49	4,239.39	36.11	79.90	82.249	-818.32	7,340.12	4,293.83	4,178.76	115.07	37.315	
6,850.00	4,240.33	4,335.43	4,240.33	36.63	79.91	82.339	-818.32	7,340.12	4,244.31	4,128.69	115.62	36.710	
6,900.00	4,241.27	4,336.37	4,241.27	37.14	79.93	82.429	-818.32	7,340.12	4,194.81	4,078.64	116.17	36.110	
6,950.00	4,242.21	4,337.31	4,242.21	37.66	79.95	82.519	-818.32	7,340.12	4,145.32	4,028.60	116.72	35.516	
7,000.00	4,243.16	4,338.26	4,243.16	38.17	79.97	82.609	-818.32	7,340.12	4,095.84	3,978.57	117.27	34.927	
7,050.00	4,244.10	4,339.20	4,244.10	38.69	79.98	82.699	-818.32	7,340.12	4,046.37	3,928.55	117.82	34.343	
7,100.00	4,245.04	4,340.14	4,245.04	39.21	80.00	82.790	-818.32	7,340.12	3,996.92	3,878.55	118.37	33.765	
7,150.00	4,245.98	4,341.08	4,245.98	39.73	80.02	82.880	-818.32	7,340.12	3,947.48	3,828.55	118.93	33.192	
7,200.00	4,246.92	4,342.02	4,246.92	40.25	80.04	82.970	-818.32	7,340.12	3,898.06	3,778.57	119.49	32.624	
7,250.00	4,247.86	4,342.96	4,247.86	40.78	80.05	83.060	-818.32	7,340.12	3,848.65	3,728.60	120.04	32.061	
7,300.00	4,248.81	4,343.91	4,248.81	41.30	80.07	83.151	-818.32	7,340.12	3,799.25	3,678.65	120.60	31.503	
7,350.00	4,249.75	4,344.85	4,249.75	41.82	80.09	83.241	-818.32	7,340.12	3,749.87	3,628.71	121.16	30.950	
7,400.00	4,250.69	4,345.79	4,250.69	42.35	80.11	83.331	-818.32	7,340.12	3,700.51	3,578.79	121.72	30.402	
7,450.00	4,251.63	4,346.73	4,251.63	42.88	80.12	83.422	-818.32	7,340.12	3,651.16	3,528.88	122.28	29.859	
7,500.00	4,252.57	4,347.67	4,252.57	43.40	80.14	83.512	-818.32	7,340.12	3,601.83	3,478.99	122.84	29.321	
7,550.00	4,253.51	4,348.61	4,253.51	43.93	80.16	83.603	-818.32	7,340.12	3,552.52	3,429.12	123.40	28.788	
7,600.00	4,254.46	4,349.56	4,254.46	44.46	80.18	83.693	-818.32	7,340.12	3,503.23	3,379.27	123.97	28.260	
7,650.00	4,255.40	4,350.50	4,255.40	44.99	80.19	83.784	-818.32	7,340.12	3,453.96	3,329.43	124.53	27.736	
7,700.00	4,256.34	4,351.44	4,256.34	45.52	80.21	83.875	-818.32	7,340.12	3,404.71	3,279.62	125.09	27.217	
7,750.00	4,257.28	4,352.38	4,257.28	46.06	80.23	83.965	-818.32	7,340.12	3,355.48	3,229.83	125.66	26.703	
7,800.00	4,258.22	4,353.32	4,258.22	46.59	80.24	84.056	-818.32	7,340.12	3,306.28	3,180.06	126.22	26.194	
7,850.00	4,259.16	4,354.26	4,259.16	47.12	80.26	84.147	-818.32	7,340.12	3,257.10	3,130.31	126.79	25.689	
7,900.00	4,260.11	4,355.21	4,260.11	47.65	80.28	84.237	-818.32	7,340.12	3,207.94	3,080.59	127.36	25.188	
7,950.00	4,261.05	4,356.15	4,261.05	48.19	80.30	84.328	-818.32	7,340.12	3,158.81	3,030.89	127.93	24.693	
8,000.00	4,261.99	4,357.09	4,261.99	48.72	80.31	84.419	-818.32	7,340.12	3,109.71	2,981.22	128.49	24.201	
8,050.00	4,262.93	4,358.03	4,262.93	49.26	80.33	84.510	-818.32	7,340.12	3,060.64	2,931.58	129.06	23.715	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - OFFSET: AID STATE #6 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 166-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
8,100.00	4,263.87	4,358.97	4,263.87	49.80	80.35	84.600	-818.32	7,340.12	3,011.60	2,881.97	129.63	23.232	
8,150.00	4,264.81	4,359.91	4,264.81	50.33	80.37	84.691	-818.32	7,340.12	2,962.59	2,832.39	130.20	22.754	
8,200.00	4,265.76	4,360.86	4,265.76	50.87	80.38	84.782	-818.32	7,340.12	2,913.61	2,782.84	130.77	22.281	
8,250.00	4,266.70	4,361.80	4,266.70	51.41	80.40	84.873	-818.32	7,340.12	2,864.66	2,733.33	131.34	21.811	
8,300.00	4,267.64	4,362.74	4,267.64	51.95	80.42	84.964	-818.32	7,340.12	2,815.76	2,683.85	131.91	21.346	
8,350.00	4,268.58	4,363.68	4,268.58	52.49	80.44	85.055	-818.32	7,340.12	2,766.89	2,634.41	132.48	20.885	
8,400.00	4,269.52	4,364.62	4,269.52	53.03	80.45	85.146	-818.32	7,340.12	2,718.06	2,585.01	133.05	20.429	
8,450.00	4,270.46	4,365.56	4,270.46	53.57	80.47	85.237	-818.32	7,340.12	2,669.28	2,535.66	133.62	19.976	
8,500.00	4,271.41	4,366.51	4,271.41	54.11	80.49	85.328	-818.32	7,340.12	2,620.54	2,486.35	134.19	19.528	
8,550.00	4,272.35	4,367.45	4,272.35	54.65	80.51	85.419	-818.32	7,340.12	2,571.85	2,437.09	134.77	19.084	
8,600.00	4,273.29	4,368.39	4,273.29	55.19	80.52	85.510	-818.32	7,340.12	2,523.22	2,387.88	135.34	18.644	
8,650.00	4,274.23	4,369.33	4,274.23	55.73	80.54	85.601	-818.32	7,340.12	2,474.63	2,338.72	135.91	18.208	
8,700.00	4,275.17	4,370.27	4,275.17	56.27	80.56	85.693	-818.32	7,340.12	2,426.10	2,289.62	136.48	17.776	
8,750.00	4,276.11	4,371.21	4,276.11	56.82	80.58	85.784	-818.32	7,340.12	2,377.64	2,240.58	137.06	17.348	
8,800.00	4,277.06	4,372.16	4,277.06	57.36	80.59	85.875	-818.32	7,340.12	2,329.23	2,191.60	137.63	16.924	
8,850.00	4,278.00	4,373.10	4,278.00	57.90	80.61	85.966	-818.32	7,340.12	2,280.90	2,142.70	138.20	16.504	
8,900.00	4,278.94	4,374.04	4,278.94	58.45	80.63	86.057	-818.32	7,340.12	2,232.64	2,093.86	138.77	16.088	
8,950.00	4,279.88	4,382.00	4,286.90	58.99	80.77	86.829	-818.32	7,340.12	2,184.47	2,044.90	139.57	15.652	
9,000.00	4,280.82	4,382.00	4,286.90	59.54	80.77	86.829	-818.32	7,340.12	2,136.36	1,996.25	140.11	15.248	
9,050.00	4,281.76	4,382.00	4,286.90	60.08	80.77	86.829	-818.32	7,340.12	2,088.35	1,947.69	140.65	14.847	
9,100.00	4,282.71	4,382.00	4,286.90	60.63	80.77	86.829	-818.32	7,340.12	2,040.43	1,899.23	141.20	14.451	
9,150.00	4,283.65	4,382.00	4,286.90	61.17	80.77	86.829	-818.32	7,340.12	1,992.61	1,850.87	141.74	14.058	
9,200.00	4,284.59	4,382.00	4,286.90	61.72	80.77	86.829	-818.32	7,340.12	1,944.91	1,802.62	142.29	13.669	
9,250.00	4,285.53	4,382.00	4,286.90	62.26	80.77	86.829	-818.32	7,340.12	1,897.32	1,754.49	142.83	13.283	
9,300.00	4,286.47	4,382.00	4,286.90	62.81	80.77	86.829	-818.32	7,340.12	1,849.86	1,706.48	143.38	12.902	
9,350.00	4,287.41	4,382.52	4,287.41	63.36	80.78	86.879	-818.32	7,340.12	1,802.54	1,658.59	143.94	12.523	
9,400.00	4,288.36	4,383.46	4,288.36	63.90	80.80	86.971	-818.32	7,340.12	1,755.36	1,610.84	144.52	12.146	
9,450.00	4,289.30	4,384.40	4,289.30	64.45	80.82	87.062	-818.32	7,340.12	1,708.34	1,563.25	145.09	11.774	
9,500.00	4,290.24	4,385.34	4,290.24	65.00	80.84	87.153	-818.32	7,340.12	1,661.50	1,515.84	145.67	11.406	
9,550.00	4,291.18	4,386.28	4,291.18	65.55	80.86	87.245	-818.32	7,340.12	1,614.85	1,468.61	146.24	11.042	
9,600.00	4,292.12	4,387.22	4,292.12	66.10	80.87	87.336	-818.32	7,340.12	1,568.40	1,421.59	146.82	10.683	
9,650.00	4,293.06	4,388.17	4,293.06	66.64	80.89	87.428	-818.32	7,340.12	1,522.18	1,374.79	147.39	10.327	
9,700.00	4,294.01	4,389.11	4,294.01	67.19	80.91	87.519	-818.32	7,340.12	1,476.20	1,328.24	147.97	9.977	
9,750.00	4,294.95	4,390.05	4,294.95	67.74	80.93	87.611	-818.32	7,340.12	1,430.49	1,281.95	148.54	9.630	
9,800.00	4,295.89	4,390.99	4,295.89	68.29	80.95	87.702	-818.32	7,340.12	1,385.08	1,235.97	149.12	9.289	
9,850.00	4,296.83	4,391.93	4,296.83	68.84	80.96	87.794	-818.32	7,340.12	1,340.00	1,190.31	149.69	8.952	
9,900.00	4,297.77	4,392.87	4,297.77	69.39	80.98	87.885	-818.32	7,340.12	1,295.27	1,145.00	150.27	8.620	
9,950.00	4,298.71	4,393.82	4,298.71	69.94	81.00	87.977	-818.32	7,340.12	1,250.94	1,100.10	150.84	8.293	
10,000.00	4,299.66	4,394.76	4,299.66	70.49	81.02	88.068	-818.32	7,340.12	1,207.06	1,055.64	151.42	7.972	
10,050.00	4,300.60	4,395.70	4,300.60	71.04	81.03	88.160	-818.32	7,340.12	1,163.67	1,011.68	151.99	7.656	
10,100.00	4,301.54	4,396.64	4,301.54	71.59	81.05	88.252	-818.32	7,340.12	1,120.83	968.26	152.56	7.347	
10,150.00	4,302.48	4,397.58	4,302.48	72.14	81.07	88.343	-818.32	7,340.12	1,078.60	925.46	153.14	7.043	
10,200.00	4,303.42	4,398.52	4,303.42	72.69	81.09	88.435	-818.32	7,340.12	1,037.07	883.35	153.71	6.747	
10,250.00	4,304.36	4,399.47	4,304.36	73.24	81.11	88.526	-818.32	7,340.12	996.31	842.02	154.29	6.457	
10,300.00	4,305.31	4,400.41	4,305.31	73.79	81.12	88.618	-818.32	7,340.12	956.43	801.56	154.86	6.176	
10,350.00	4,306.25	4,401.35	4,306.25	74.34	81.14	88.709	-818.32	7,340.12	917.54	762.10	155.44	5.903	
10,400.00	4,307.19	4,402.29	4,307.19	74.90	81.16	88.801	-818.32	7,340.12	879.77	723.76	156.01	5.639	
10,450.00	4,308.13	4,403.23	4,308.13	75.45	81.18	88.893	-818.32	7,340.12	843.27	686.69	156.58	5.385	
10,500.00	4,309.07	4,404.17	4,309.07	76.00	81.20	88.984	-818.32	7,340.12	808.22	651.06	157.16	5.143	
10,550.00	4,310.01	4,405.12	4,310.01	76.55	81.21	89.076	-818.32	7,340.12	774.81	617.08	157.73	4.912	
10,600.00	4,310.96	4,406.06	4,310.96	77.10	81.23	89.168	-818.32	7,340.12	743.27	584.96	158.30	4.695	
10,650.00	4,311.90	4,407.00	4,311.90	77.66	81.25	89.259	-818.32	7,340.12	713.83	554.95	158.88	4.493	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - OFFSET: AID STATE #6 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 166-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
10,700.00	4,312.84	4,407.94	4,312.84	78.21	81.27	89.351	-818.32	7,340.12	686.78	527.33	159.45	4.307	
10,750.00	4,313.78	4,408.88	4,313.78	78.76	81.29	89.443	-818.32	7,340.12	662.40	502.37	160.02	4.139	
10,800.00	4,314.72	4,409.82	4,314.72	79.31	81.30	89.534	-818.32	7,340.12	640.99	480.40	160.59	3.991	
10,850.00	4,315.66	4,410.77	4,315.66	79.87	81.32	89.626	-818.32	7,340.12	622.88	461.71	161.17	3.865	
10,900.00	4,316.61	4,411.71	4,316.61	80.42	81.34	89.718	-818.32	7,340.12	608.34	446.60	161.74	3.761	
10,950.00	4,317.55	4,412.65	4,317.55	80.97	81.36	89.809	-818.32	7,340.12	597.64	435.33	162.31	3.682	
11,000.00	4,318.49	4,413.59	4,318.49	81.52	81.38	89.901	-818.32	7,340.12	590.99	428.11	162.88	3.628	
11,050.00	4,319.43	4,414.53	4,319.43	82.08	81.39	89.993	-818.32	7,340.12	588.53	425.08	163.45	3.601	
11,054.06	4,319.51	4,414.61	4,319.51	82.12	81.39	90.000	-818.32	7,340.12	588.51	425.02	163.50	3.599	CC, ES
11,100.00	4,320.37	4,415.47	4,320.37	82.63	81.41	90.084	-818.32	7,340.12	590.30	426.28	164.02	3.599	SF
11,150.00	4,321.32	4,416.42	4,321.32	83.19	81.43	90.176	-818.32	7,340.12	596.28	431.69	164.60	3.623	
11,200.00	4,322.26	4,417.36	4,322.26	83.74	81.45	90.268	-818.32	7,340.12	606.33	441.17	165.17	3.671	
11,250.00	4,323.20	4,418.30	4,323.20	84.29	81.47	90.359	-818.32	7,340.12	620.27	454.53	165.74	3.742	
11,295.63	4,324.06	4,419.16	4,324.06	84.80	81.48	90.443	-818.32	7,340.12	636.15	469.89	166.26	3.826	
11,300.00	4,324.14	4,419.24	4,324.14	84.85	81.48	90.451	-818.32	7,340.12	637.82	471.52	166.31	3.835	
11,345.67	4,325.00	4,420.10	4,325.00	85.35	81.50	90.535	-818.32	7,340.12	656.78	489.95	166.83	3.937	

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - OFFSET: AID STATE #8 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 335-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
5,200.00	4,209.25	4,317.44	4,209.25	21.11	88.53	-81.386	502.00	7,341.84	5,928.76	5,820.62	108.15	54.822	
5,250.00	4,210.20	4,318.38	4,210.20	21.52	88.55	-81.458	502.00	7,341.84	5,879.16	5,770.57	108.59	54.140	
5,300.00	4,211.14	4,319.32	4,211.14	21.92	88.57	-81.530	502.00	7,341.84	5,829.56	5,720.52	109.04	53.464	
5,350.00	4,212.08	4,320.27	4,212.08	22.33	88.59	-81.602	502.00	7,341.84	5,779.97	5,670.47	109.49	52.788	
5,400.00	4,213.02	4,321.21	4,213.02	22.75	88.61	-81.674	502.00	7,341.84	5,730.38	5,620.43	109.95	52.116	
5,450.00	4,213.96	4,322.15	4,213.96	23.18	88.63	-81.747	502.00	7,341.84	5,680.80	5,570.38	110.42	51.445	
5,500.00	4,214.90	4,323.09	4,214.90	23.61	88.65	-81.819	502.00	7,341.84	5,631.23	5,520.34	110.89	50.780	
5,550.00	4,215.85	4,324.03	4,215.85	24.05	88.67	-81.891	502.00	7,341.84	5,581.67	5,470.29	111.38	50.116	
5,600.00	4,216.79	4,324.97	4,216.79	24.48	88.69	-81.963	502.00	7,341.84	5,532.11	5,420.25	111.86	49.457	
5,650.00	4,217.73	4,325.92	4,217.73	24.93	88.71	-82.036	502.00	7,341.84	5,482.56	5,370.22	112.35	48.800	
5,700.00	4,218.67	4,326.86	4,218.67	25.38	88.73	-82.108	502.00	7,341.84	5,433.02	5,320.19	112.84	48.149	
5,750.00	4,219.61	4,327.80	4,219.61	25.84	88.75	-82.180	502.00	7,341.84	5,383.49	5,270.15	113.34	47.500	
5,800.00	4,220.55	4,328.74	4,220.55	26.30	88.78	-82.253	502.00	7,341.84	5,333.97	5,220.13	113.83	46.857	
5,850.00	4,221.50	4,329.68	4,221.50	26.76	88.80	-82.325	502.00	7,341.84	5,284.45	5,170.11	114.34	46.216	
5,900.00	4,222.44	4,330.62	4,222.44	27.23	88.82	-82.398	502.00	7,341.84	5,234.95	5,120.10	114.85	45.582	
5,950.00	4,223.38	4,331.57	4,223.38	27.70	88.84	-82.470	502.00	7,341.84	5,185.45	5,070.09	115.36	44.950	
6,000.00	4,224.32	4,332.51	4,224.32	28.17	88.86	-82.543	502.00	7,341.84	5,135.97	5,020.09	115.87	44.324	
6,050.00	4,225.26	4,333.45	4,225.26	28.65	88.88	-82.615	502.00	7,341.84	5,086.49	4,970.09	116.39	43.701	
6,100.00	4,226.20	4,334.39	4,226.20	29.13	88.90	-82.688	502.00	7,341.84	5,037.02	4,920.11	116.91	43.084	
6,150.00	4,227.15	4,335.33	4,227.15	29.62	88.92	-82.760	502.00	7,341.84	4,987.57	4,870.13	117.44	42.470	
6,200.00	4,228.09	4,336.27	4,228.09	30.10	88.94	-82.833	502.00	7,341.84	4,938.12	4,820.16	117.96	41.862	
6,250.00	4,229.03	4,337.22	4,229.03	30.59	88.96	-82.906	502.00	7,341.84	4,888.69	4,770.19	118.49	41.257	
6,300.00	4,229.97	4,338.16	4,229.97	31.08	88.98	-82.978	502.00	7,341.84	4,839.26	4,720.24	119.02	40.658	
6,350.00	4,230.91	4,339.00	4,230.79	31.58	89.00	-83.041	502.00	7,341.84	4,789.85	4,670.30	119.55	40.065	
6,400.00	4,231.86	4,339.00	4,230.79	32.07	89.00	-83.041	502.00	7,341.84	4,740.46	4,620.41	120.05	39.488	
6,450.00	4,232.80	4,339.00	4,230.79	32.57	89.00	-83.041	502.00	7,341.84	4,691.07	4,570.52	120.55	38.915	
6,500.00	4,233.74	4,339.00	4,230.79	33.07	89.00	-83.041	502.00	7,341.84	4,641.70	4,520.65	121.04	38.347	
6,550.00	4,234.68	4,339.00	4,230.79	33.58	89.00	-83.041	502.00	7,341.84	4,592.34	4,470.79	121.55	37.782	
6,600.00	4,235.62	4,339.00	4,230.79	34.08	89.00	-83.041	502.00	7,341.84	4,542.99	4,420.94	122.05	37.223	
6,650.00	4,236.56	4,339.00	4,230.79	34.59	89.00	-83.041	502.00	7,341.84	4,493.66	4,371.11	122.56	36.666	
6,700.00	4,237.51	4,339.00	4,230.79	35.09	89.00	-83.041	502.00	7,341.84	4,444.35	4,321.28	123.06	36.115	
6,750.00	4,238.45	4,339.00	4,230.79	35.60	89.00	-83.041	502.00	7,341.84	4,395.05	4,271.48	123.57	35.567	
6,800.00	4,239.39	4,339.00	4,230.79	36.11	89.00	-83.041	502.00	7,341.84	4,345.76	4,221.68	124.08	35.024	
6,850.00	4,240.33	4,339.00	4,230.79	36.63	89.00	-83.041	502.00	7,341.84	4,296.49	4,171.90	124.59	34.484	
6,900.00	4,241.27	4,339.00	4,230.79	37.14	89.00	-83.041	502.00	7,341.84	4,247.24	4,122.14	125.11	33.949	
6,950.00	4,242.21	4,339.00	4,230.79	37.66	89.00	-83.041	502.00	7,341.84	4,198.01	4,072.39	125.62	33.418	
7,000.00	4,243.16	4,339.00	4,230.79	38.17	89.00	-83.041	502.00	7,341.84	4,148.80	4,022.66	126.14	32.892	
7,050.00	4,244.10	4,339.00	4,230.79	38.69	89.00	-83.041	502.00	7,341.84	4,099.60	3,972.95	126.65	32.369	
7,100.00	4,245.04	4,339.00	4,230.79	39.21	89.00	-83.041	502.00	7,341.84	4,050.43	3,923.26	127.17	31.850	
7,150.00	4,245.98	4,339.00	4,230.79	39.73	89.00	-83.041	502.00	7,341.84	4,001.27	3,873.58	127.69	31.336	
7,200.00	4,246.92	4,339.00	4,230.79	40.25	89.00	-83.041	502.00	7,341.84	3,952.14	3,823.93	128.21	30.826	
7,250.00	4,247.86	4,339.00	4,230.79	40.78	89.00	-83.041	502.00	7,341.84	3,903.02	3,774.29	128.73	30.319	
7,300.00	4,248.81	4,357.01	4,248.81	41.30	89.43	-84.435	502.00	7,341.84	3,853.89	3,723.86	130.03	29.638	
7,350.00	4,249.75	4,357.96	4,249.75	41.82	89.46	-84.508	502.00	7,341.84	3,804.82	3,674.23	130.60	29.134	
7,400.00	4,250.69	4,358.90	4,250.69	42.35	89.48	-84.582	502.00	7,341.84	3,755.78	3,624.62	131.16	28.635	
7,450.00	4,251.63	4,359.84	4,251.63	42.88	89.50	-84.655	502.00	7,341.84	3,706.75	3,575.03	131.72	28.140	
7,500.00	4,252.57	4,360.78	4,252.57	43.40	89.52	-84.728	502.00	7,341.84	3,657.76	3,525.47	132.29	27.650	
7,550.00	4,253.51	4,361.72	4,253.51	43.93	89.55	-84.801	502.00	7,341.84	3,608.79	3,475.94	132.86	27.163	
7,600.00	4,254.46	4,362.66	4,254.46	44.46	89.57	-84.874	502.00	7,341.84	3,559.85	3,426.43	133.42	26.681	
7,650.00	4,255.40	4,363.61	4,255.40	44.99	89.59	-84.947	502.00	7,341.84	3,510.94	3,376.95	133.99	26.203	
7,700.00	4,256.34	4,364.55	4,256.34	45.52	89.61	-85.020	502.00	7,341.84	3,462.07	3,327.51	134.56	25.729	
7,750.00	4,257.28	4,365.49	4,257.28	46.06	89.64	-85.094	502.00	7,341.84	3,413.22	3,278.09	135.13	25.259	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - OFFSET: AID STATE #8 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 335-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
7,800.00	4,258.22	4,366.43	4,258.22	46.59	89.66	-85.167	502.00	7,341.84	3,364.41	3,228.71	135.70	24.794	
7,850.00	4,259.16	4,367.37	4,259.16	47.12	89.68	-85.240	502.00	7,341.84	3,315.63	3,179.36	136.27	24.332	
7,900.00	4,260.11	4,368.31	4,260.11	47.65	89.70	-85.313	502.00	7,341.84	3,266.89	3,130.05	136.84	23.874	
7,950.00	4,261.05	4,369.26	4,261.05	48.19	89.73	-85.387	502.00	7,341.84	3,218.19	3,080.78	137.41	23.421	
8,000.00	4,261.99	4,370.20	4,261.99	48.72	89.75	-85.460	502.00	7,341.84	3,169.52	3,031.54	137.98	22.971	
8,050.00	4,262.93	4,371.14	4,262.93	49.26	89.77	-85.533	502.00	7,341.84	3,120.90	2,982.35	138.55	22.525	
8,100.00	4,263.87	4,372.08	4,263.87	49.80	89.80	-85.606	502.00	7,341.84	3,072.33	2,933.20	139.12	22.083	
8,150.00	4,264.81	4,373.02	4,264.81	50.33	89.82	-85.680	502.00	7,341.84	3,023.80	2,884.10	139.70	21.645	
8,200.00	4,265.76	4,373.96	4,265.76	50.87	89.84	-85.753	502.00	7,341.84	2,975.31	2,835.04	140.27	21.211	
8,250.00	4,266.70	4,374.91	4,266.70	51.41	89.86	-85.826	502.00	7,341.84	2,926.88	2,786.04	140.84	20.781	
8,300.00	4,267.64	4,375.85	4,267.64	51.95	89.89	-85.900	502.00	7,341.84	2,878.51	2,737.09	141.42	20.355	
8,350.00	4,268.58	4,376.79	4,268.58	52.49	89.91	-85.973	502.00	7,341.84	2,830.18	2,688.19	141.99	19.932	
8,400.00	4,269.52	4,377.73	4,269.52	53.03	89.93	-86.047	502.00	7,341.84	2,781.92	2,639.35	142.57	19.513	
8,450.00	4,270.46	4,378.67	4,270.46	53.57	89.95	-86.120	502.00	7,341.84	2,733.72	2,590.58	143.14	19.098	
8,500.00	4,271.41	4,379.61	4,271.41	54.11	89.98	-86.193	502.00	7,341.84	2,685.59	2,541.87	143.72	18.687	
8,550.00	4,272.35	4,380.56	4,272.35	54.65	90.00	-86.267	502.00	7,341.84	2,637.52	2,493.23	144.29	18.279	
8,600.00	4,273.29	4,381.50	4,273.29	55.19	90.02	-86.340	502.00	7,341.84	2,589.53	2,444.66	144.87	17.875	
8,650.00	4,274.23	4,382.44	4,274.23	55.73	90.04	-86.414	502.00	7,341.84	2,541.61	2,396.16	145.45	17.475	
8,700.00	4,275.17	4,383.38	4,275.17	56.27	90.07	-86.487	502.00	7,341.84	2,493.78	2,347.75	146.02	17.078	
8,750.00	4,276.11	4,384.32	4,276.11	56.82	90.09	-86.561	502.00	7,341.84	2,446.03	2,299.43	146.60	16.685	
8,800.00	4,277.06	4,385.27	4,277.06	57.36	90.11	-86.634	502.00	7,341.84	2,398.37	2,251.19	147.18	16.296	
8,850.00	4,278.00	4,386.21	4,278.00	57.90	90.13	-86.708	502.00	7,341.84	2,350.81	2,203.06	147.75	15.910	
8,900.00	4,278.94	4,387.15	4,278.94	58.45	90.16	-86.781	502.00	7,341.84	2,303.35	2,155.02	148.33	15.529	
8,950.00	4,279.88	4,388.09	4,279.88	58.99	90.18	-86.855	502.00	7,341.84	2,256.01	2,107.10	148.91	15.150	
9,000.00	4,280.82	4,389.03	4,280.82	59.54	90.20	-86.928	502.00	7,341.84	2,208.77	2,059.29	149.48	14.776	
9,050.00	4,281.76	4,389.97	4,281.76	60.08	90.22	-87.002	502.00	7,341.84	2,161.67	2,011.61	150.06	14.405	
9,100.00	4,282.71	4,390.92	4,282.71	60.63	90.25	-87.075	502.00	7,341.84	2,114.69	1,964.05	150.64	14.038	
9,150.00	4,283.65	4,391.86	4,283.65	61.17	90.27	-87.149	502.00	7,341.84	2,067.86	1,916.64	151.22	13.675	
9,200.00	4,284.59	4,392.80	4,284.59	61.72	90.29	-87.223	502.00	7,341.84	2,021.18	1,869.38	151.80	13.315	
9,250.00	4,285.53	4,393.74	4,285.53	62.26	90.31	-87.296	502.00	7,341.84	1,974.66	1,822.28	152.37	12.959	
9,300.00	4,286.47	4,394.68	4,286.47	62.81	90.34	-87.370	502.00	7,341.84	1,928.31	1,775.36	152.95	12.607	
9,350.00	4,287.41	4,395.62	4,287.41	63.36	90.36	-87.443	502.00	7,341.84	1,882.15	1,728.62	153.53	12.259	
9,400.00	4,288.36	4,396.57	4,288.36	63.90	90.38	-87.517	502.00	7,341.84	1,836.19	1,682.09	154.11	11.915	
9,450.00	4,289.30	4,397.51	4,289.30	64.45	90.40	-87.591	502.00	7,341.84	1,790.45	1,635.76	154.69	11.575	
9,500.00	4,290.24	4,398.45	4,290.24	65.00	90.43	-87.664	502.00	7,341.84	1,744.94	1,589.68	155.27	11.238	
9,550.00	4,291.18	4,399.39	4,291.18	65.55	90.45	-87.738	502.00	7,341.84	1,699.68	1,543.84	155.84	10.906	
9,600.00	4,292.12	4,400.33	4,292.12	66.10	90.47	-87.811	502.00	7,341.84	1,654.70	1,498.28	156.42	10.578	
9,650.00	4,293.06	4,401.27	4,293.06	66.64	90.49	-87.885	502.00	7,341.84	1,610.01	1,453.01	157.00	10.255	
9,700.00	4,294.01	4,402.22	4,294.01	67.19	90.52	-87.959	502.00	7,341.84	1,565.64	1,408.06	157.58	9.936	
9,750.00	4,294.95	4,403.16	4,294.95	67.74	90.54	-88.032	502.00	7,341.84	1,521.62	1,363.46	158.16	9.621	
9,800.00	4,295.89	4,404.10	4,295.89	68.29	90.56	-88.106	502.00	7,341.84	1,477.98	1,319.24	158.74	9.311	
9,850.00	4,296.83	4,405.04	4,296.83	68.84	90.58	-88.180	502.00	7,341.84	1,434.75	1,275.44	159.32	9.006	
9,900.00	4,297.77	4,405.98	4,297.77	69.39	90.61	-88.253	502.00	7,341.84	1,391.98	1,232.08	159.89	8.706	
9,950.00	4,298.71	4,406.92	4,298.71	69.94	90.63	-88.327	502.00	7,341.84	1,349.70	1,189.23	160.47	8.411	
10,000.00	4,299.66	4,407.87	4,299.66	70.49	90.65	-88.401	502.00	7,341.84	1,307.97	1,146.92	161.05	8.121	
10,050.00	4,300.60	4,408.81	4,300.60	71.04	90.67	-88.474	502.00	7,341.84	1,266.83	1,105.20	161.63	7.838	
10,100.00	4,301.54	4,409.75	4,301.54	71.59	90.70	-88.548	502.00	7,341.84	1,226.36	1,064.15	162.21	7.560	
10,150.00	4,302.48	4,410.69	4,302.48	72.14	90.72	-88.622	502.00	7,341.84	1,186.61	1,023.82	162.79	7.289	
10,200.00	4,303.42	4,411.63	4,303.42	72.69	90.74	-88.696	502.00	7,341.84	1,147.66	984.29	163.37	7.025	
10,250.00	4,304.36	4,412.57	4,304.36	73.24	90.76	-88.769	502.00	7,341.84	1,109.59	945.65	163.94	6.768	
10,300.00	4,305.31	4,413.52	4,305.31	73.79	90.79	-88.843	502.00	7,341.84	1,072.51	907.98	164.52	6.519	
10,350.00	4,306.25	4,414.46	4,306.25	74.34	90.81	-88.917	502.00	7,341.84	1,036.51	871.41	165.10	6.278	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - OFFSET: AID STATE #8 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 335-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
10,400.00	4,307.19	4,415.40	4,307.19	74.90	90.83	-88.990	502.00	7,341.84	1,001.71	836.03	165.68	6.046	
10,450.00	4,308.13	4,416.34	4,308.13	75.45	90.85	-89.064	502.00	7,341.84	968.24	801.98	166.26	5.824	
10,500.00	4,309.07	4,417.28	4,309.07	76.00	90.88	-89.138	502.00	7,341.84	936.25	769.41	166.83	5.612	
10,550.00	4,310.01	4,418.22	4,310.01	76.55	90.90	-89.212	502.00	7,341.84	905.89	738.47	167.41	5.411	
10,600.00	4,310.96	4,419.17	4,310.96	77.10	90.92	-89.285	502.00	7,341.84	877.32	709.33	167.99	5.222	
10,650.00	4,311.90	4,420.11	4,311.90	77.66	90.94	-89.359	502.00	7,341.84	850.74	682.17	168.57	5.047	
10,700.00	4,312.84	4,421.05	4,312.84	78.21	90.97	-89.433	502.00	7,341.84	826.33	657.19	169.15	4.885	
10,750.00	4,313.78	4,421.99	4,313.78	78.76	90.99	-89.507	502.00	7,341.84	804.29	634.57	169.72	4.739	
10,800.00	4,314.72	4,422.93	4,314.72	79.31	91.01	-89.580	502.00	7,341.84	784.82	614.52	170.30	4.608	
10,850.00	4,315.66	4,423.87	4,315.66	79.87	91.04	-89.654	502.00	7,341.84	768.12	597.24	170.88	4.495	
10,900.00	4,316.61	4,424.82	4,316.61	80.42	91.06	-89.728	502.00	7,341.84	754.36	582.91	171.45	4.400	
10,950.00	4,317.55	4,425.76	4,317.55	80.97	91.08	-89.802	502.00	7,341.84	743.72	571.68	172.03	4.323	
11,000.00	4,318.49	4,426.70	4,318.49	81.52	91.10	-89.875	502.00	7,341.84	736.32	563.71	172.61	4.266	
11,050.00	4,319.43	4,427.64	4,319.43	82.08	91.13	-89.949	502.00	7,341.84	732.27	559.08	173.18	4.228	
11,084.51	4,320.08	4,428.29	4,320.08	82.46	91.14	-90.000	502.00	7,341.84	731.45	557.87	173.58	4.214	CC
11,100.00	4,320.37	4,428.58	4,320.37	82.63	91.15	-90.023	502.00	7,341.84	731.62	557.86	173.76	4.210	ES, SF
11,150.00	4,321.32	4,429.52	4,321.32	83.19	91.17	-90.097	502.00	7,341.84	734.38	560.04	174.34	4.212	
11,200.00	4,322.26	4,430.47	4,322.26	83.74	91.19	-90.170	502.00	7,341.84	740.51	565.60	174.91	4.234	
11,250.00	4,323.20	4,431.41	4,323.20	84.29	91.22	-90.244	502.00	7,341.84	749.93	574.45	175.49	4.273	
11,295.63	4,324.06	4,432.27	4,324.06	84.80	91.24	-90.311	502.00	7,341.84	761.30	585.29	176.02	4.325	
11,300.00	4,324.14	4,432.35	4,324.14	84.85	91.24	-90.318	502.00	7,341.84	762.52	586.46	176.07	4.331	
11,345.67	4,325.00	4,433.21	4,325.00	85.35	91.26	-90.385	502.00	7,341.84	776.66	600.07	176.59	4.398	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - OFFSET: AID STATE #9 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 821-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
4,650.00	4,195.90	4,297.01	4,195.90	17.34	75.50	-69.302	1,156.76	5,362.18	4,691.26	4,604.79	86.47	54.255	
4,700.00	4,199.77	4,300.88	4,199.77	17.63	75.57	-84.023	1,156.76	5,362.18	4,643.82	4,551.37	92.45	50.233	
4,708.62	4,200.00	4,301.11	4,200.00	17.68	75.57	-86.674	1,156.76	5,362.18	4,635.62	4,542.71	92.91	49.895	
4,750.00	4,200.78	4,301.89	4,200.78	17.94	75.59	-86.705	1,156.76	5,362.18	4,596.28	4,503.10	93.18	49.326	
4,800.00	4,201.72	4,302.83	4,201.72	18.24	75.61	-86.743	1,156.76	5,362.18	4,548.79	4,455.28	93.51	48.643	
4,850.00	4,202.66	4,303.77	4,202.66	18.57	75.62	-86.780	1,156.76	5,362.18	4,501.36	4,407.49	93.87	47.954	
4,900.00	4,203.60	4,304.71	4,203.60	18.90	75.64	-86.818	1,156.76	5,362.18	4,453.98	4,359.76	94.22	47.271	
4,950.00	4,204.55	4,305.65	4,204.55	19.25	75.66	-86.856	1,156.76	5,362.18	4,406.66	4,312.07	94.60	46.583	
5,000.00	4,205.49	4,306.59	4,205.49	19.60	75.68	-86.893	1,156.76	5,362.18	4,359.40	4,264.43	94.97	45.902	
5,050.00	4,206.43	4,307.54	4,206.43	19.97	75.70	-86.931	1,156.76	5,362.18	4,312.21	4,216.84	95.37	45.217	
5,100.00	4,207.37	4,308.48	4,207.37	20.34	75.71	-86.969	1,156.76	5,362.18	4,265.07	4,169.31	95.76	44.538	
5,150.00	4,208.31	4,309.42	4,208.31	20.73	75.73	-87.006	1,156.76	5,362.18	4,218.01	4,121.83	96.17	43.858	
5,200.00	4,209.25	4,310.36	4,209.25	21.11	75.75	-87.044	1,156.76	5,362.18	4,171.01	4,074.42	96.58	43.185	
5,250.00	4,210.20	4,311.30	4,210.20	21.52	75.77	-87.082	1,156.76	5,362.18	4,124.08	4,027.07	97.01	42.511	
5,300.00	4,211.14	4,312.24	4,211.14	21.92	75.79	-87.119	1,156.76	5,362.18	4,077.22	3,979.78	97.44	41.844	
5,350.00	4,212.08	4,313.19	4,212.08	22.33	75.80	-87.157	1,156.76	5,362.18	4,030.44	3,932.56	97.88	41.178	
5,400.00	4,213.02	4,314.13	4,213.02	22.75	75.82	-87.194	1,156.76	5,362.18	3,983.73	3,885.42	98.32	40.519	
5,450.00	4,213.96	4,315.07	4,213.96	23.18	75.84	-87.232	1,156.76	5,362.18	3,937.11	3,838.34	98.77	39.862	
5,500.00	4,214.90	4,316.01	4,214.90	23.61	75.86	-87.270	1,156.76	5,362.18	3,890.57	3,791.35	99.22	39.211	
5,550.00	4,215.85	4,316.95	4,215.85	24.05	75.88	-87.307	1,156.76	5,362.18	3,844.12	3,744.44	99.68	38.563	
5,600.00	4,216.79	4,317.89	4,216.79	24.48	75.89	-87.345	1,156.76	5,362.18	3,797.76	3,697.61	100.15	37.922	
5,650.00	4,217.73	4,318.84	4,217.73	24.93	75.91	-87.383	1,156.76	5,362.18	3,751.49	3,650.87	100.62	37.284	
5,700.00	4,218.67	4,319.78	4,218.67	25.38	75.93	-87.420	1,156.76	5,362.18	3,705.32	3,604.22	101.09	36.653	
5,750.00	4,219.61	4,320.72	4,219.61	25.84	75.95	-87.458	1,156.76	5,362.18	3,659.24	3,557.67	101.57	36.026	
5,800.00	4,220.55	4,321.66	4,220.55	26.30	75.96	-87.496	1,156.76	5,362.18	3,613.28	3,511.22	102.05	35.406	
5,850.00	4,221.50	4,322.60	4,221.50	26.76	75.98	-87.533	1,156.76	5,362.18	3,567.42	3,464.87	102.54	34.790	
5,900.00	4,222.44	4,323.54	4,222.44	27.23	76.00	-87.571	1,156.76	5,362.18	3,521.67	3,418.64	103.03	34.181	
5,950.00	4,223.38	4,324.49	4,223.38	27.70	76.02	-87.609	1,156.76	5,362.18	3,476.04	3,372.51	103.53	33.576	
6,000.00	4,224.32	4,325.43	4,224.32	28.17	76.04	-87.647	1,156.76	5,362.18	3,430.53	3,326.51	104.02	32.979	
6,050.00	4,225.26	4,326.37	4,225.26	28.65	76.05	-87.684	1,156.76	5,362.18	3,385.15	3,280.62	104.52	32.386	
6,100.00	4,226.20	4,327.31	4,226.20	29.13	76.07	-87.722	1,156.76	5,362.18	3,339.90	3,234.87	105.03	31.801	
6,150.00	4,227.15	4,328.25	4,227.15	29.62	76.09	-87.760	1,156.76	5,362.18	3,294.78	3,189.25	105.53	31.220	
6,200.00	4,228.09	4,329.19	4,228.09	30.10	76.11	-87.797	1,156.76	5,362.18	3,249.81	3,143.77	106.04	30.647	
6,250.00	4,229.03	4,330.14	4,229.03	30.59	76.13	-87.835	1,156.76	5,362.18	3,204.99	3,098.44	106.55	30.079	
6,300.00	4,229.97	4,331.08	4,229.97	31.08	76.14	-87.873	1,156.76	5,362.18	3,160.32	3,053.26	107.07	29.518	
6,350.00	4,230.91	4,332.02	4,230.91	31.58	76.16	-87.910	1,156.76	5,362.18	3,115.82	3,008.23	107.58	28.962	
6,400.00	4,231.86	4,332.96	4,231.86	32.07	76.18	-87.948	1,156.76	5,362.18	3,071.48	2,963.38	108.10	28.413	
6,450.00	4,232.80	4,333.90	4,232.80	32.57	76.20	-87.986	1,156.76	5,362.18	3,027.32	2,918.70	108.62	27.870	
6,500.00	4,233.74	4,334.84	4,233.74	33.07	76.22	-88.023	1,156.76	5,362.18	2,983.34	2,874.20	109.14	27.334	
6,550.00	4,234.68	4,335.79	4,234.68	33.58	76.23	-88.061	1,156.76	5,362.18	2,939.56	2,829.89	109.67	26.804	
6,600.00	4,235.62	4,336.73	4,235.62	34.08	76.25	-88.099	1,156.76	5,362.18	2,895.97	2,785.78	110.19	26.281	
6,650.00	4,236.56	4,337.67	4,236.56	34.59	76.27	-88.137	1,156.76	5,362.18	2,852.60	2,741.88	110.72	25.764	
6,700.00	4,237.51	4,338.61	4,237.51	35.09	76.29	-88.174	1,156.76	5,362.18	2,809.45	2,698.20	111.25	25.253	
6,750.00	4,238.45	4,339.55	4,238.45	35.60	76.31	-88.212	1,156.76	5,362.18	2,766.52	2,654.74	111.78	24.749	
6,800.00	4,239.39	4,340.49	4,239.39	36.11	76.32	-88.250	1,156.76	5,362.18	2,723.84	2,611.53	112.31	24.252	
6,850.00	4,240.33	4,341.44	4,240.33	36.63	76.34	-88.287	1,156.76	5,362.18	2,681.41	2,568.56	112.85	23.761	
6,900.00	4,241.27	4,342.38	4,241.27	37.14	76.36	-88.325	1,156.76	5,362.18	2,639.25	2,525.86	113.38	23.277	
6,950.00	4,242.21	4,343.32	4,242.21	37.66	76.38	-88.363	1,156.76	5,362.18	2,597.36	2,483.44	113.92	22.799	
7,000.00	4,243.16	4,344.26	4,243.16	38.17	76.39	-88.401	1,156.76	5,362.18	2,555.77	2,441.31	114.46	22.329	
7,050.00	4,244.10	4,345.20	4,244.10	38.69	76.41	-88.438	1,156.76	5,362.18	2,514.48	2,399.48	115.00	21.865	
7,100.00	4,245.04	4,346.14	4,245.04	39.21	76.43	-88.476	1,156.76	5,362.18	2,473.51	2,357.97	115.54	21.408	
7,150.00	4,245.98	4,347.09	4,245.98	39.73	76.45	-88.514	1,156.76	5,362.18	2,432.88	2,316.80	116.08	20.958	

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

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Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - OFFSET: AID STATE #9 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 821-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
7,200.00	4,246.92	4,348.03	4,246.92	40.25	76.47	-88.551	1,156.76	5,362.18	2,392.60	2,275.98	116.62	20.516	
7,250.00	4,247.86	4,348.97	4,247.86	40.78	76.48	-88.589	1,156.76	5,362.18	2,352.70	2,235.53	117.17	20.080	
7,300.00	4,248.81	4,349.91	4,248.81	41.30	76.50	-88.627	1,156.76	5,362.18	2,313.19	2,195.47	117.71	19.651	
7,350.00	4,249.75	4,350.85	4,249.75	41.82	76.52	-88.665	1,156.76	5,362.18	2,274.09	2,155.83	118.26	19.230	
7,400.00	4,250.69	4,351.80	4,250.69	42.35	76.54	-88.702	1,156.76	5,362.18	2,235.42	2,116.62	118.80	18.816	
7,450.00	4,251.63	4,352.74	4,251.63	42.88	76.56	-88.740	1,156.76	5,362.18	2,197.21	2,077.86	119.35	18.409	
7,500.00	4,252.57	4,353.68	4,252.57	43.40	76.57	-88.778	1,156.76	5,362.18	2,159.49	2,039.59	119.90	18.011	
7,550.00	4,253.51	4,354.62	4,253.51	43.93	76.59	-88.816	1,156.76	5,362.18	2,122.27	2,001.82	120.45	17.620	
7,600.00	4,254.46	4,355.56	4,254.46	44.46	76.61	-88.853	1,156.76	5,362.18	2,085.58	1,964.58	121.00	17.236	
7,650.00	4,255.40	4,356.50	4,255.40	44.99	76.63	-88.891	1,156.76	5,362.18	2,049.46	1,927.91	121.55	16.861	
7,700.00	4,256.34	4,357.45	4,256.34	45.52	76.65	-88.929	1,156.76	5,362.18	2,013.93	1,891.83	122.10	16.494	
7,750.00	4,257.28	4,358.39	4,257.28	46.06	76.66	-88.966	1,156.76	5,362.18	1,979.03	1,856.37	122.65	16.135	
7,800.00	4,258.22	4,359.33	4,258.22	46.59	76.68	-89.004	1,156.76	5,362.18	1,944.78	1,821.57	123.21	15.785	
7,850.00	4,259.16	4,360.27	4,259.16	47.12	76.70	-89.042	1,156.76	5,362.18	1,911.23	1,787.47	123.76	15.443	
7,900.00	4,260.11	4,361.21	4,260.11	47.65	76.72	-89.080	1,156.76	5,362.18	1,878.41	1,754.09	124.31	15.110	
7,950.00	4,261.05	4,362.15	4,261.05	48.19	76.74	-89.117	1,156.76	5,362.18	1,846.36	1,721.49	124.87	14.786	
8,000.00	4,261.99	4,363.10	4,261.99	48.72	76.75	-89.155	1,156.76	5,362.18	1,815.12	1,689.69	125.42	14.472	
8,050.00	4,262.93	4,364.04	4,262.93	49.26	76.77	-89.193	1,156.76	5,362.18	1,784.73	1,658.75	125.98	14.167	
8,100.00	4,263.87	4,364.98	4,263.87	49.80	76.79	-89.231	1,156.76	5,362.18	1,755.24	1,628.71	126.54	13.872	
8,150.00	4,264.81	4,365.92	4,264.81	50.33	76.81	-89.268	1,156.76	5,362.18	1,726.70	1,599.61	127.09	13.586	
8,200.00	4,265.76	4,366.86	4,265.76	50.87	76.82	-89.306	1,156.76	5,362.18	1,699.15	1,571.50	127.65	13.311	
8,250.00	4,266.70	4,367.80	4,266.70	51.41	76.84	-89.344	1,156.76	5,362.18	1,672.64	1,544.43	128.21	13.046	
8,300.00	4,267.64	4,368.75	4,267.64	51.95	76.86	-89.382	1,156.76	5,362.18	1,647.22	1,518.45	128.77	12.792	
8,350.00	4,268.58	4,369.69	4,268.58	52.49	76.88	-89.419	1,156.76	5,362.18	1,622.94	1,493.61	129.32	12.549	
8,400.00	4,269.52	4,370.63	4,269.52	53.03	76.90	-89.457	1,156.76	5,362.18	1,599.85	1,469.97	129.88	12.318	
8,450.00	4,270.46	4,371.57	4,270.46	53.57	76.91	-89.495	1,156.76	5,362.18	1,578.02	1,447.57	130.44	12.097	
8,500.00	4,271.41	4,372.51	4,271.41	54.11	76.93	-89.533	1,156.76	5,362.18	1,557.48	1,426.47	131.00	11.889	
8,550.00	4,272.35	4,373.45	4,272.35	54.65	76.95	-89.570	1,156.76	5,362.18	1,538.29	1,406.73	131.56	11.692	
8,600.00	4,273.29	4,374.40	4,273.29	55.19	76.97	-89.608	1,156.76	5,362.18	1,520.50	1,388.38	132.12	11.508	
8,650.00	4,274.23	4,375.34	4,274.23	55.73	76.99	-89.646	1,156.76	5,362.18	1,504.17	1,371.48	132.69	11.336	
8,700.00	4,275.17	4,376.28	4,275.17	56.27	77.00	-89.684	1,156.76	5,362.18	1,489.34	1,356.09	133.25	11.177	
8,750.00	4,276.11	4,377.22	4,276.11	56.82	77.02	-89.721	1,156.76	5,362.18	1,476.05	1,342.24	133.81	11.031	
8,800.00	4,277.06	4,378.16	4,277.06	57.36	77.04	-89.759	1,156.76	5,362.18	1,464.34	1,329.97	134.37	10.898	
8,850.00	4,278.00	4,379.10	4,278.00	57.90	77.06	-89.797	1,156.76	5,362.18	1,454.27	1,319.33	134.93	10.778	
8,900.00	4,278.94	4,380.05	4,278.94	58.45	77.08	-89.834	1,156.76	5,362.18	1,445.85	1,310.35	135.50	10.671	
8,950.00	4,279.88	4,380.99	4,279.88	58.99	77.09	-89.872	1,156.76	5,362.18	1,439.12	1,303.06	136.06	10.577	
9,000.00	4,280.82	4,381.93	4,280.82	59.54	77.11	-89.910	1,156.76	5,362.18	1,434.10	1,297.48	136.62	10.497	
9,050.00	4,281.76	4,382.87	4,281.76	60.08	77.13	-89.948	1,156.76	5,362.18	1,430.81	1,293.63	137.19	10.430	
9,100.00	4,282.71	4,383.81	4,282.71	60.63	77.15	-89.985	1,156.76	5,362.18	1,429.27	1,291.52	137.75	10.376	
9,119.22	4,283.07	4,384.17	4,283.07	60.84	77.15	-90.000	1,156.76	5,362.18	1,429.14	1,291.17	137.97	10.359	CC
9,150.00	4,283.65	4,384.75	4,283.65	61.17	77.17	-90.023	1,156.76	5,362.18	1,429.47	1,291.16	138.31	10.335	ES
9,200.00	4,284.59	4,385.70	4,284.59	61.72	77.18	-90.061	1,156.76	5,362.18	1,431.42	1,292.54	138.88	10.307	
9,250.00	4,285.53	4,386.64	4,285.53	62.26	77.20	-90.099	1,156.76	5,362.18	1,435.11	1,295.67	139.44	10.292	
9,300.00	4,286.47	4,387.58	4,286.47	62.81	77.22	-90.136	1,156.76	5,362.18	1,440.52	1,300.52	140.01	10.289	SF
9,350.00	4,287.41	4,388.52	4,287.41	63.36	77.24	-90.174	1,156.76	5,362.18	1,447.65	1,307.07	140.57	10.298	
9,400.00	4,288.36	4,389.46	4,288.36	63.90	77.25	-90.212	1,156.76	5,362.18	1,456.45	1,315.31	141.14	10.319	
9,450.00	4,289.30	4,390.40	4,289.30	64.45	77.27	-90.250	1,156.76	5,362.18	1,466.91	1,325.20	141.70	10.352	
9,500.00	4,290.24	4,391.35	4,290.24	65.00	77.29	-90.287	1,156.76	5,362.18	1,478.98	1,336.71	142.27	10.396	
9,550.00	4,291.18	4,392.29	4,291.18	65.55	77.31	-90.325	1,156.76	5,362.18	1,492.63	1,349.80	142.83	10.450	
9,600.00	4,292.12	4,393.23	4,292.12	66.10	77.33	-90.363	1,156.76	5,362.18	1,507.81	1,364.41	143.40	10.515	
9,650.00	4,293.06	4,394.17	4,293.06	66.64	77.34	-90.401	1,156.76	5,362.18	1,524.49	1,380.52	143.96	10.589	
9,700.00	4,294.01	4,395.11	4,294.01	67.19	77.36	-90.438	1,156.76	5,362.18	1,542.60	1,398.07	144.53	10.673	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - OFFSET: AID STATE #9 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 821-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
9,750.00	4,294.95	4,396.05	4,294.95	67.74	77.38	-90.476	1,156.76	5,362.18	1,562.11	1,417.01	145.10	10.766	
9,800.00	4,295.89	4,397.00	4,295.89	68.29	77.40	-90.514	1,156.76	5,362.18	1,582.95	1,437.29	145.66	10.867	
9,850.00	4,296.83	4,397.94	4,296.83	68.84	77.42	-90.552	1,156.76	5,362.18	1,605.08	1,458.85	146.23	10.976	
9,900.00	4,297.77	4,398.88	4,297.77	69.39	77.43	-90.589	1,156.76	5,362.18	1,628.45	1,481.65	146.80	11.093	
9,950.00	4,298.71	4,399.82	4,298.71	69.94	77.45	-90.627	1,156.76	5,362.18	1,652.99	1,505.63	147.36	11.217	
10,000.00	4,299.66	4,400.76	4,299.66	70.49	77.47	-90.665	1,156.76	5,362.18	1,678.67	1,530.74	147.93	11.348	
10,050.00	4,300.60	4,401.70	4,300.60	71.04	77.49	-90.703	1,156.76	5,362.18	1,705.43	1,556.93	148.50	11.484	
10,100.00	4,301.54	4,402.65	4,301.54	71.59	77.51	-90.740	1,156.76	5,362.18	1,733.21	1,584.14	149.07	11.627	
10,150.00	4,302.48	4,403.59	4,302.48	72.14	77.52	-90.778	1,156.76	5,362.18	1,761.98	1,612.34	149.63	11.775	
10,200.00	4,303.42	4,404.53	4,303.42	72.69	77.54	-90.816	1,156.76	5,362.18	1,791.68	1,641.47	150.20	11.928	
10,250.00	4,304.36	4,405.47	4,304.36	73.24	77.56	-90.854	1,156.76	5,362.18	1,822.26	1,671.49	150.77	12.086	
10,300.00	4,305.31	4,406.41	4,305.31	73.79	77.58	-90.891	1,156.76	5,362.18	1,853.69	1,702.36	151.34	12.249	
10,350.00	4,306.25	4,407.35	4,306.25	74.34	77.60	-90.929	1,156.76	5,362.18	1,885.93	1,734.02	151.90	12.415	
10,400.00	4,307.19	4,408.30	4,307.19	74.90	77.61	-90.967	1,156.76	5,362.18	1,918.92	1,766.45	152.47	12.585	
10,450.00	4,308.13	4,409.24	4,308.13	75.45	77.63	-91.005	1,156.76	5,362.18	1,952.63	1,799.59	153.04	12.759	
10,500.00	4,309.07	4,410.18	4,309.07	76.00	77.65	-91.042	1,156.76	5,362.18	1,987.04	1,833.43	153.61	12.936	
10,550.00	4,310.01	4,411.12	4,310.01	76.55	77.67	-91.080	1,156.76	5,362.18	2,022.09	1,867.91	154.18	13.115	
10,600.00	4,310.96	4,412.06	4,310.96	77.10	77.68	-91.118	1,156.76	5,362.18	2,057.76	1,903.01	154.75	13.298	
10,650.00	4,311.90	4,413.00	4,311.90	77.66	77.70	-91.155	1,156.76	5,362.18	2,094.01	1,938.70	155.31	13.482	
10,700.00	4,312.84	4,413.95	4,312.84	78.21	77.72	-91.193	1,156.76	5,362.18	2,130.82	1,974.94	155.88	13.669	
10,750.00	4,313.78	4,414.89	4,313.78	78.76	77.74	-91.231	1,156.76	5,362.18	2,168.16	2,011.71	156.45	13.858	
10,800.00	4,314.72	4,415.83	4,314.72	79.31	77.76	-91.269	1,156.76	5,362.18	2,206.00	2,048.98	157.02	14.049	
10,850.00	4,315.66	4,416.77	4,315.66	79.87	77.77	-91.306	1,156.76	5,362.18	2,244.32	2,086.73	157.59	14.242	
10,900.00	4,316.61	4,417.71	4,316.61	80.42	77.79	-91.344	1,156.76	5,362.18	2,283.09	2,124.93	158.16	14.436	
10,950.00	4,317.55	4,418.65	4,317.55	80.97	77.81	-91.382	1,156.76	5,362.18	2,322.28	2,163.56	158.73	14.631	
11,000.00	4,318.49	4,419.60	4,318.49	81.52	77.83	-91.420	1,156.76	5,362.18	2,361.89	2,202.59	159.29	14.827	
11,050.00	4,319.43	4,420.54	4,319.43	82.08	77.85	-91.457	1,156.76	5,362.18	2,401.88	2,242.02	159.86	15.025	
11,100.00	4,320.37	4,421.48	4,320.37	82.63	77.86	-91.495	1,156.76	5,362.18	2,442.24	2,281.81	160.43	15.223	
11,150.00	4,321.32	4,422.42	4,321.32	83.19	77.88	-91.533	1,156.76	5,362.18	2,482.95	2,321.95	161.00	15.422	
11,200.00	4,322.26	4,423.36	4,322.26	83.74	77.90	-91.570	1,156.76	5,362.18	2,523.99	2,362.42	161.57	15.622	
11,250.00	4,323.20	4,424.30	4,323.20	84.29	77.92	-91.608	1,156.76	5,362.18	2,565.35	2,403.22	162.14	15.822	
11,295.63	4,324.06	4,425.16	4,324.06	84.80	77.93	-91.643	1,156.76	5,362.18	2,603.37	2,440.71	162.66	16.005	
11,300.00	4,324.14	4,425.25	4,324.14	84.85	77.94	-91.646	1,156.76	5,362.18	2,607.02	2,444.31	162.71	16.023	
11,345.67	4,325.00	4,426.11	4,325.00	85.35	77.95	-91.680	1,156.76	5,362.18	2,645.32	2,482.10	163.23	16.206	

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - OFFSET: PUMA #1 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 209-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
700.00	698.78	687.78	698.78	2.25	12.00	-140.055	627.10	384.32	756.28	742.04	14.24	53.107	CC, ES
750.00	748.42	737.43	748.42	2.42	13.06	-140.342	627.10	384.32	760.87	745.40	15.46	49.203	
800.00	798.06	787.07	798.06	2.60	14.11	-140.626	627.10	384.32	765.47	748.79	16.69	45.873	
850.00	847.71	836.72	847.71	2.79	15.17	-140.906	627.10	384.32	770.10	752.19	17.91	42.992	
900.00	897.35	886.36	897.35	2.97	16.22	-141.183	627.10	384.32	774.74	755.61	19.14	40.484	
950.00	947.00	936.03	947.00	3.15	17.28	-141.456	627.10	384.32	779.41	759.04	20.36	38.273	
1,000.00	996.64	985.67	996.64	3.33	18.33	-141.727	627.10	384.32	784.08	762.49	21.59	36.313	
1,050.00	1,046.28	1,035.31	1,046.28	3.52	19.39	-141.994	627.10	384.32	788.78	765.96	22.82	34.564	
1,100.00	1,095.93	1,084.96	1,095.93	3.70	20.45	-142.258	627.10	384.32	793.49	769.44	24.05	32.995	
1,150.00	1,145.57	1,134.60	1,145.57	3.88	21.50	-142.519	627.10	384.32	798.22	772.94	25.28	31.578	
1,200.00	1,195.22	1,184.25	1,195.22	4.07	22.56	-142.777	627.10	384.32	802.97	776.46	26.51	30.292	
1,250.00	1,244.86	1,233.89	1,244.86	4.25	23.61	-143.032	627.10	384.32	807.73	779.99	27.74	29.121	
1,300.00	1,294.51	1,283.53	1,294.51	4.43	24.67	-143.284	627.10	384.32	812.51	783.54	28.97	28.050	
1,350.00	1,344.15	1,333.18	1,344.15	4.62	25.73	-143.533	627.10	384.32	817.30	787.11	30.20	27.067	
1,400.00	1,393.79	1,376.00	1,386.95	4.80	26.64	-143.745	627.10	384.32	822.14	790.86	31.28	26.282	
1,450.00	1,443.44	1,432.49	1,443.44	4.99	27.84	-144.022	627.10	384.32	826.93	794.28	32.66	25.322	
1,500.00	1,493.08	1,482.13	1,493.08	5.17	28.90	-144.262	627.10	384.32	831.77	797.89	33.89	24.546	
1,550.00	1,542.73	1,531.78	1,542.73	5.36	29.95	-144.500	627.10	384.32	836.62	801.51	35.12	23.824	
1,600.00	1,592.37	1,581.42	1,592.37	5.54	31.01	-144.735	627.10	384.32	841.49	805.14	36.35	23.152	
1,650.00	1,642.01	1,631.07	1,642.01	5.73	32.06	-144.967	627.10	384.32	846.37	808.79	37.58	22.523	
1,700.00	1,691.66	1,680.71	1,691.66	5.91	33.12	-145.196	627.10	384.32	851.26	812.46	38.81	21.935	
1,750.00	1,741.30	1,730.36	1,741.30	6.10	34.18	-145.423	627.10	384.32	856.17	816.13	40.04	21.384	
1,800.00	1,790.95	1,780.00	1,790.95	6.28	35.23	-145.648	627.10	384.32	861.09	819.82	41.27	20.866	
1,850.00	1,840.59	1,829.64	1,840.59	6.47	36.29	-145.870	627.10	384.32	866.03	823.53	42.50	20.378	
1,900.00	1,890.23	1,879.31	1,890.23	6.65	37.40	-146.089	627.10	384.32	870.97	827.19	43.78	19.895	
1,950.00	1,939.88	1,928.96	1,939.88	6.84	38.54	-146.306	627.10	384.32	875.93	830.84	45.09	19.424	
2,000.00	1,989.52	1,978.60	1,989.52	7.02	39.68	-146.520	627.10	384.32	880.90	834.49	46.41	18.981	
2,050.00	2,039.17	2,028.24	2,039.17	7.21	40.82	-146.732	627.10	384.32	885.89	838.16	47.73	18.562	
2,100.00	2,088.81	2,077.89	2,088.81	7.40	41.96	-146.942	627.10	384.32	890.88	841.84	49.04	18.166	
2,150.00	2,138.46	2,127.53	2,138.46	7.58	43.11	-147.149	627.10	384.32	895.89	845.53	50.36	17.790	
2,200.00	2,188.10	2,159.00	2,169.91	7.77	43.83	-147.279	627.10	384.32	901.09	849.83	51.26	17.580	
2,250.00	2,237.74	2,226.84	2,237.74	7.95	45.27	-147.557	627.10	384.32	905.94	853.07	52.87	17.134	
2,300.00	2,287.39	2,276.48	2,287.39	8.14	46.33	-147.757	627.10	384.32	910.98	856.88	54.10	16.838	
2,350.00	2,337.03	2,326.12	2,337.03	8.32	47.39	-147.956	627.10	384.32	916.03	860.70	55.33	16.555	
2,400.00	2,386.68	2,375.77	2,386.68	8.51	48.44	-148.152	627.10	384.32	921.09	864.53	56.56	16.284	
2,450.00	2,436.32	2,425.44	2,436.32	8.69	49.44	-148.346	627.10	384.32	926.17	868.43	57.74	16.041	
2,500.00	2,485.96	2,475.09	2,485.96	8.88	50.37	-148.538	627.10	384.32	931.25	872.41	58.84	15.826	
2,550.00	2,535.61	2,524.73	2,535.61	9.07	51.30	-148.727	627.10	384.32	936.35	876.40	59.95	15.620	
2,600.00	2,585.25	2,574.37	2,585.25	9.25	52.23	-148.915	627.10	384.32	941.45	880.40	61.05	15.420	
2,650.00	2,634.90	2,624.02	2,634.90	9.44	53.17	-149.101	627.10	384.32	946.57	884.41	62.16	15.228	
2,700.00	2,684.54	2,673.66	2,684.54	9.62	54.10	-149.285	627.10	384.32	951.69	888.43	63.26	15.043	
2,750.00	2,734.19	2,723.31	2,734.19	9.81	55.03	-149.467	627.10	384.32	956.82	892.45	64.37	14.865	
2,800.00	2,783.83	2,772.95	2,783.83	9.99	55.96	-149.646	627.10	384.32	961.97	896.49	65.47	14.693	
2,850.00	2,833.47	2,822.59	2,833.47	10.18	56.89	-149.824	627.10	384.32	967.12	900.54	66.58	14.526	
2,900.00	2,883.12	2,872.24	2,883.12	10.36	57.82	-150.000	627.10	384.32	972.28	904.60	67.68	14.365	
2,950.00	2,932.76	2,921.88	2,932.76	10.55	58.75	-150.175	627.10	384.32	977.45	908.66	68.79	14.209	
3,000.00	2,982.41	2,971.53	2,982.41	10.74	59.68	-150.347	627.10	384.32	982.63	912.74	69.89	14.059	
3,050.00	3,032.05	3,021.17	3,032.05	10.92	60.61	-150.518	627.10	384.32	987.82	916.82	71.00	13.913	
3,100.00	3,081.69	3,070.81	3,081.69	11.11	61.54	-150.686	627.10	384.32	993.02	920.91	72.10	13.772	
3,150.00	3,131.34	3,120.46	3,131.34	11.29	62.47	-150.853	627.10	384.32	998.22	925.01	73.21	13.635	
3,200.00	3,180.98	3,170.10	3,180.98	11.48	63.40	-151.019	627.10	384.32	1,003.43	929.12	74.31	13.503	
3,232.06	3,212.81	3,201.93	3,212.81	11.60	64.00	-151.124	627.10	384.32	1,006.78	931.76	75.02	13.420	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - OFFSET: PUMA #1 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 209-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
3,250.00	3,230.62	3,219.74	3,230.62	11.67	64.34	-142.319	627.10	384.32	1,008.59	933.12	75.47	13.364	
3,300.00	3,280.19	3,269.32	3,280.19	11.85	65.27	-121.655	627.10	384.32	1,012.89	936.19	76.70	13.206	
3,350.00	3,329.55	3,318.68	3,329.55	12.04	66.20	-107.847	627.10	384.32	1,016.16	938.27	77.89	13.046	
3,400.00	3,378.57	3,367.70	3,378.57	12.22	67.12	-99.161	627.10	384.32	1,018.42	939.38	79.04	12.886	
3,450.00	3,427.11	3,416.24	3,427.11	12.40	68.04	-93.667	627.10	384.32	1,019.73	939.59	80.14	12.724	
3,500.00	3,475.03	3,464.16	3,475.03	12.57	68.94	-90.164	627.10	384.32	1,020.18	938.97	81.21	12.562	
3,550.00	3,522.22	3,511.35	3,522.22	12.75	69.83	-87.965	627.10	384.32	1,019.86	937.61	82.25	12.400	
3,600.00	3,568.53	3,557.66	3,568.53	12.92	70.70	-86.663	627.10	384.32	1,018.88	935.62	83.26	12.238	
3,650.00	3,613.84	3,602.97	3,613.84	13.08	71.56	-86.008	627.10	384.32	1,017.37	933.12	84.25	12.076	
3,700.00	3,658.03	3,647.16	3,658.03	13.25	72.39	-85.834	627.10	384.32	1,015.47	930.24	85.23	11.915	
3,750.00	3,700.98	3,690.11	3,700.98	13.41	73.20	-86.025	627.10	384.32	1,013.34	927.15	86.19	11.756	
3,800.00	3,742.57	3,731.71	3,742.57	13.56	74.04	-86.492	627.10	384.32	1,011.16	923.96	87.20	11.595	
3,850.00	3,782.67	3,771.82	3,782.67	13.72	74.86	-87.165	627.10	384.32	1,009.10	920.89	88.21	11.440	
3,900.00	3,821.20	3,810.34	3,821.20	13.88	75.64	-87.985	627.10	384.32	1,007.34	918.15	89.19	11.294	
3,950.00	3,858.03	3,847.17	3,858.03	14.04	76.40	-88.901	627.10	384.32	1,006.10	915.95	90.15	11.160	
4,000.00	3,893.07	3,882.22	3,893.07	14.20	77.11	-89.865	627.10	384.32	1,005.56	914.49	91.07	11.042	
4,006.94	3,897.79	3,886.93	3,897.79	14.23	77.21	-90.000	627.10	384.32	1,005.55	914.35	91.19	11.027	
4,050.00	3,926.22	3,915.37	3,926.22	14.38	77.79	-90.835	627.10	384.32	1,005.91	913.97	91.95	10.940	
4,100.00	3,957.40	3,946.54	3,957.40	14.56	78.43	-91.773	627.10	384.32	1,007.35	914.58	92.77	10.858	
4,150.00	3,986.50	3,975.65	3,986.50	14.76	79.02	-92.642	627.10	384.32	1,010.06	916.50	93.55	10.797	
4,200.00	4,013.47	4,002.61	4,013.47	14.96	79.58	-93.410	627.10	384.32	1,014.19	919.91	94.28	10.757	
4,219.41	4,023.34	4,012.48	4,023.34	15.04	79.78	-93.675	627.10	384.32	1,016.21	921.66	94.55	10.748	
4,250.00	4,038.64	4,027.78	4,038.64	15.18	80.09	-94.425	627.10	384.32	1,019.92	924.97	94.96	10.741	SF
4,300.00	4,063.64	4,052.78	4,063.64	15.41	80.60	-95.646	627.10	384.32	1,027.44	931.84	95.59	10.748	
4,350.00	4,088.64	4,077.78	4,088.64	15.66	81.11	-96.862	627.10	384.32	1,036.71	940.49	96.21	10.775	
4,400.00	4,113.64	4,102.78	4,113.64	15.92	81.62	-98.072	627.10	384.32	1,047.69	950.88	96.80	10.823	
4,419.41	4,123.34	4,112.48	4,123.34	16.02	81.82	-98.540	627.10	384.32	1,052.40	955.37	97.03	10.847	
4,450.00	4,137.92	4,127.07	4,137.92	16.19	82.12	-98.427	627.10	384.32	1,060.44	962.97	97.47	10.879	
4,500.00	4,158.60	4,147.75	4,158.60	16.46	82.54	-97.916	627.10	384.32	1,075.46	977.24	98.22	10.950	
4,550.00	4,175.24	4,164.38	4,175.24	16.75	82.88	-96.959	627.10	384.32	1,092.79	993.81	98.98	11.040	
4,600.00	4,187.70	4,174.00	4,184.85	17.04	83.08	-95.361	627.10	384.32	1,112.39	1,012.69	99.70	11.157	
4,650.00	4,195.90	4,174.00	4,184.85	17.34	83.08	-92.945	627.10	384.32	1,134.18	1,033.94	100.24	11.315	
4,700.00	4,199.77	4,174.00	4,184.85	17.63	83.08	-90.249	627.10	384.32	1,157.92	1,057.31	100.61	11.510	
4,708.62	4,200.00	4,174.00	4,184.85	17.68	83.08	-89.758	627.10	384.32	1,162.18	1,061.54	100.64	11.547	
4,750.00	4,200.78	4,174.00	4,184.85	17.94	83.08	-89.758	627.10	384.32	1,183.33	1,082.43	100.90	11.728	
4,800.00	4,201.72	4,174.00	4,184.85	18.24	83.08	-89.758	627.10	384.32	1,210.27	1,109.07	101.21	11.958	
4,850.00	4,202.66	4,174.00	4,184.85	18.57	83.08	-89.758	627.10	384.32	1,238.65	1,137.11	101.54	12.199	
4,900.00	4,203.60	4,174.00	4,184.85	18.90	83.08	-89.758	627.10	384.32	1,268.37	1,166.49	101.87	12.451	
4,950.00	4,204.55	4,174.00	4,184.85	19.25	83.08	-89.758	627.10	384.32	1,299.33	1,197.10	102.23	12.710	
5,000.00	4,205.49	4,174.00	4,184.85	19.60	83.08	-89.758	627.10	384.32	1,331.44	1,228.87	102.58	12.980	
5,050.00	4,206.43	4,195.58	4,206.43	19.97	83.52	-90.985	627.10	384.32	1,364.47	1,261.06	103.41	13.195	
5,100.00	4,207.37	4,196.52	4,207.37	20.34	83.54	-91.038	627.10	384.32	1,398.65	1,294.85	103.80	13.475	
5,150.00	4,208.31	4,197.46	4,208.31	20.73	83.56	-91.092	627.10	384.32	1,433.76	1,329.56	104.21	13.759	
5,200.00	4,209.25	4,198.41	4,209.25	21.11	83.58	-91.145	627.10	384.32	1,469.74	1,365.12	104.61	14.049	
5,250.00	4,210.20	4,199.35	4,210.20	21.52	83.60	-91.199	627.10	384.32	1,506.51	1,401.48	105.04	14.343	
5,300.00	4,211.14	4,200.29	4,211.14	21.92	83.62	-91.252	627.10	384.32	1,544.03	1,438.57	105.46	14.641	
5,350.00	4,212.08	4,201.23	4,212.08	22.33	83.64	-91.306	627.10	384.32	1,582.23	1,476.34	105.89	14.942	
5,400.00	4,213.02	4,202.17	4,213.02	22.75	83.66	-91.359	627.10	384.32	1,621.08	1,514.75	106.33	15.246	
5,450.00	4,213.96	4,203.11	4,213.96	23.18	83.68	-91.413	627.10	384.32	1,660.53	1,553.75	106.78	15.551	
5,500.00	4,214.90	4,204.06	4,214.90	23.61	83.70	-91.466	627.10	384.32	1,700.53	1,593.30	107.22	15.860	
5,550.00	4,215.85	4,205.00	4,215.85	24.05	83.71	-91.519	627.10	384.32	1,741.04	1,633.36	107.68	16.168	
5,600.00	4,216.79	4,205.94	4,216.79	24.48	83.73	-91.573	627.10	384.32	1,782.04	1,673.90	108.14	16.479	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - OFFSET: PUMA #1 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 209-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
5,650.00	4,217.73	4,206.88	4,217.73	24.93	83.75	-91.626	627.10	384.32	1,823.49	1,714.88	108.61	16.790	
5,700.00	4,218.67	4,207.82	4,218.67	25.38	83.77	-91.680	627.10	384.32	1,865.35	1,756.27	109.07	17.102	
5,750.00	4,219.61	4,208.76	4,219.61	25.84	83.79	-91.733	627.10	384.32	1,907.61	1,798.05	109.55	17.413	
5,800.00	4,220.55	4,209.71	4,220.55	26.30	83.81	-91.787	627.10	384.32	1,950.23	1,840.20	110.03	17.725	
5,850.00	4,221.50	4,210.65	4,221.50	26.76	83.83	-91.840	627.10	384.32	1,993.19	1,882.68	110.51	18.036	
5,900.00	4,222.44	4,211.59	4,222.44	27.23	83.85	-91.894	627.10	384.32	2,036.48	1,925.48	110.99	18.348	
5,950.00	4,223.38	4,212.53	4,223.38	27.70	83.87	-91.947	627.10	384.32	2,080.06	1,968.58	111.48	18.658	
6,000.00	4,224.32	4,213.47	4,224.32	28.17	83.89	-92.001	627.10	384.32	2,123.93	2,011.96	111.97	18.968	
6,050.00	4,225.26	4,214.41	4,225.26	28.65	83.91	-92.054	627.10	384.32	2,168.06	2,055.59	112.47	19.277	
6,100.00	4,226.20	4,215.36	4,226.20	29.13	83.93	-92.108	627.10	384.32	2,212.45	2,099.48	112.97	19.585	
6,150.00	4,227.15	4,216.30	4,227.15	29.62	83.95	-92.161	627.10	384.32	2,257.06	2,143.60	113.47	19.892	
6,200.00	4,228.09	4,217.24	4,228.09	30.10	83.97	-92.215	627.10	384.32	2,301.90	2,187.93	113.97	20.197	
6,250.00	4,229.03	4,218.18	4,229.03	30.59	83.98	-92.268	627.10	384.32	2,346.95	2,232.47	114.48	20.502	
6,300.00	4,229.97	4,219.12	4,229.97	31.08	84.00	-92.321	627.10	384.32	2,392.19	2,277.21	114.98	20.805	
6,350.00	4,230.91	4,220.06	4,230.91	31.58	84.02	-92.375	627.10	384.32	2,437.62	2,322.13	115.49	21.106	
6,400.00	4,231.86	4,221.01	4,231.86	32.07	84.04	-92.428	627.10	384.32	2,483.22	2,367.22	116.01	21.406	
6,450.00	4,232.80	4,221.95	4,232.80	32.57	84.06	-92.482	627.10	384.32	2,528.99	2,412.47	116.52	21.704	
6,500.00	4,233.74	4,222.89	4,233.74	33.07	84.08	-92.535	627.10	384.32	2,574.92	2,457.88	117.04	22.001	
6,550.00	4,234.68	4,223.83	4,234.68	33.58	84.10	-92.589	627.10	384.32	2,620.99	2,503.44	117.55	22.296	
6,600.00	4,235.62	4,224.77	4,235.62	34.08	84.12	-92.642	627.10	384.32	2,667.21	2,549.14	118.07	22.590	
6,650.00	4,236.56	4,225.71	4,236.56	34.59	84.14	-92.695	627.10	384.32	2,713.56	2,594.97	118.59	22.881	
6,700.00	4,237.51	4,226.66	4,237.51	35.09	84.16	-92.749	627.10	384.32	2,760.04	2,640.92	119.12	23.171	
6,750.00	4,238.45	4,227.60	4,238.45	35.60	84.18	-92.802	627.10	384.32	2,806.63	2,686.99	119.64	23.459	
6,800.00	4,239.39	4,228.54	4,239.39	36.11	84.20	-92.856	627.10	384.32	2,853.35	2,733.18	120.17	23.745	
6,850.00	4,240.33	4,229.48	4,240.33	36.63	84.22	-92.909	627.10	384.32	2,900.17	2,779.48	120.69	24.029	
6,900.00	4,241.27	4,230.42	4,241.27	37.14	84.23	-92.962	627.10	384.32	2,947.10	2,825.87	121.22	24.312	
6,950.00	4,242.21	4,231.36	4,242.21	37.66	84.25	-93.016	627.10	384.32	2,994.12	2,872.37	121.75	24.592	
7,000.00	4,243.16	4,232.31	4,243.16	38.17	84.27	-93.069	627.10	384.32	3,041.24	2,918.96	122.28	24.871	
7,050.00	4,244.10	4,233.25	4,244.10	38.69	84.29	-93.122	627.10	384.32	3,088.45	2,965.64	122.81	25.148	
7,100.00	4,245.04	4,234.19	4,245.04	39.21	84.31	-93.176	627.10	384.32	3,135.75	3,012.40	123.35	25.422	
7,150.00	4,245.98	4,235.13	4,245.98	39.73	84.33	-93.229	627.10	384.32	3,183.13	3,059.25	123.88	25.695	
7,200.00	4,246.92	4,236.07	4,246.92	40.25	84.35	-93.282	627.10	384.32	3,230.58	3,106.17	124.41	25.966	
7,250.00	4,247.86	4,237.01	4,247.86	40.78	84.37	-93.336	627.10	384.32	3,278.12	3,153.17	124.95	26.235	
7,300.00	4,248.81	4,237.96	4,248.81	41.30	84.39	-93.389	627.10	384.32	3,325.72	3,200.24	125.49	26.503	
7,350.00	4,249.75	4,238.90	4,249.75	41.82	84.41	-93.442	627.10	384.32	3,373.40	3,247.37	126.02	26.768	
7,400.00	4,250.69	4,239.84	4,250.69	42.35	84.43	-93.496	627.10	384.32	3,421.14	3,294.57	126.56	27.031	
7,450.00	4,251.63	4,240.78	4,251.63	42.88	84.45	-93.549	627.10	384.32	3,468.94	3,341.84	127.10	27.293	
7,500.00	4,252.57	4,241.72	4,252.57	43.40	84.47	-93.602	627.10	384.32	3,516.80	3,389.16	127.64	27.553	
7,550.00	4,253.51	4,242.66	4,253.51	43.93	84.49	-93.656	627.10	384.32	3,564.73	3,436.55	128.18	27.810	
7,600.00	4,254.46	4,243.61	4,254.46	44.46	84.50	-93.709	627.10	384.32	3,612.71	3,483.98	128.72	28.066	
7,650.00	4,255.40	4,244.55	4,255.40	44.99	84.52	-93.762	627.10	384.32	3,660.74	3,531.47	129.26	28.320	
7,700.00	4,256.34	4,245.49	4,256.34	45.52	84.54	-93.816	627.10	384.32	3,708.82	3,579.02	129.81	28.572	
7,750.00	4,257.28	4,246.43	4,257.28	46.06	84.56	-93.869	627.10	384.32	3,756.96	3,626.61	130.35	28.822	
7,800.00	4,258.22	4,247.37	4,258.22	46.59	84.58	-93.922	627.10	384.32	3,805.14	3,674.25	130.89	29.071	
7,850.00	4,259.16	4,248.31	4,259.16	47.12	84.60	-93.975	627.10	384.32	3,853.37	3,721.93	131.44	29.318	
7,900.00	4,260.11	4,249.26	4,260.11	47.65	84.62	-94.029	627.10	384.32	3,901.64	3,769.66	131.98	29.562	
7,950.00	4,261.05	4,250.20	4,261.05	48.19	84.64	-94.082	627.10	384.32	3,949.95	3,817.43	132.52	29.805	
8,000.00	4,261.99	4,251.14	4,261.99	48.72	84.66	-94.135	627.10	384.32	3,998.31	3,865.24	133.07	30.047	
8,050.00	4,262.93	4,252.08	4,262.93	49.26	84.68	-94.188	627.10	384.32	4,046.71	3,913.09	133.62	30.286	
8,100.00	4,263.87	4,253.02	4,263.87	49.80	84.70	-94.242	627.10	384.32	4,095.14	3,960.98	134.16	30.524	
8,150.00	4,264.81	4,253.96	4,264.81	50.33	84.72	-94.295	627.10	384.32	4,143.61	4,008.91	134.71	30.760	
8,200.00	4,265.76	4,254.91	4,265.76	50.87	84.74	-94.348	627.10	384.32	4,192.12	4,056.87	135.25	30.994	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - OFFSET: PUMA #1 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 209-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	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
8,250.00	4,266.70	4,255.85	4,266.70	51.41	84.75	-94.401	627.10	384.32	4,240.66	4,104.86	135.80	31.227	
8,300.00	4,267.64	4,256.79	4,267.64	51.95	84.77	-94.454	627.10	384.32	4,289.24	4,152.89	136.35	31.458	
8,350.00	4,268.58	4,257.73	4,268.58	52.49	84.79	-94.508	627.10	384.32	4,337.85	4,200.95	136.90	31.687	
8,400.00	4,269.52	4,258.67	4,269.52	53.03	84.81	-94.561	627.10	384.32	4,386.48	4,249.04	137.45	31.914	
8,450.00	4,270.46	4,259.61	4,270.46	53.57	84.83	-94.614	627.10	384.32	4,435.15	4,297.16	137.99	32.140	
8,500.00	4,271.41	4,260.56	4,271.41	54.11	84.85	-94.667	627.10	384.32	4,483.85	4,345.31	138.54	32.364	
8,550.00	4,272.35	4,261.50	4,272.35	54.65	84.87	-94.720	627.10	384.32	4,532.57	4,393.48	139.09	32.587	
8,600.00	4,273.29	4,262.44	4,273.29	55.19	84.89	-94.774	627.10	384.32	4,581.33	4,441.69	139.64	32.808	
8,650.00	4,274.23	4,263.38	4,274.23	55.73	84.91	-94.827	627.10	384.32	4,630.11	4,489.92	140.19	33.027	
8,700.00	4,275.17	4,264.32	4,275.17	56.27	84.93	-94.880	627.10	384.32	4,678.91	4,538.17	140.74	33.245	
8,750.00	4,276.11	4,265.26	4,276.11	56.82	84.95	-94.933	627.10	384.32	4,727.74	4,586.45	141.29	33.461	
8,800.00	4,277.06	4,266.21	4,277.06	57.36	84.97	-94.986	627.10	384.32	4,776.60	4,634.76	141.84	33.676	
8,850.00	4,278.00	4,267.15	4,278.00	57.90	84.99	-95.039	627.10	384.32	4,825.47	4,683.08	142.39	33.889	
8,900.00	4,278.94	4,268.09	4,278.94	58.45	85.01	-95.092	627.10	384.32	4,874.37	4,731.43	142.94	34.101	
8,950.00	4,279.88	4,269.03	4,279.88	58.99	85.02	-95.145	627.10	384.32	4,923.29	4,779.80	143.49	34.311	
9,000.00	4,280.82	4,269.97	4,280.82	59.54	85.04	-95.198	627.10	384.32	4,972.24	4,828.20	144.04	34.520	
9,050.00	4,281.76	4,270.91	4,281.76	60.08	85.06	-95.252	627.10	384.32	5,021.20	4,876.61	144.59	34.727	
9,100.00	4,282.71	4,271.86	4,282.71	60.63	85.08	-95.305	627.10	384.32	5,070.18	4,925.04	145.14	34.932	
9,150.00	4,283.65	4,272.80	4,283.65	61.17	85.10	-95.358	627.10	384.32	5,119.19	4,973.49	145.69	35.137	
9,200.00	4,284.59	4,273.74	4,284.59	61.72	85.12	-95.411	627.10	384.32	5,168.21	5,021.96	146.24	35.339	
9,250.00	4,285.53	4,274.68	4,285.53	62.26	85.14	-95.464	627.10	384.32	5,217.25	5,070.45	146.80	35.541	
9,300.00	4,286.47	4,275.62	4,286.47	62.81	85.16	-95.517	627.10	384.32	5,266.31	5,118.96	147.35	35.741	
9,350.00	4,287.41	4,276.56	4,287.41	63.36	85.18	-95.570	627.10	384.32	5,315.38	5,167.48	147.90	35.939	
9,400.00	4,288.36	4,277.51	4,288.36	63.90	85.20	-95.623	627.10	384.32	5,364.48	5,216.03	148.45	36.137	
9,450.00	4,289.30	4,278.45	4,289.30	64.45	85.22	-95.676	627.10	384.32	5,413.58	5,264.58	149.00	36.332	
9,500.00	4,290.24	4,279.39	4,290.24	65.00	85.24	-95.729	627.10	384.32	5,462.71	5,313.16	149.55	36.527	
9,550.00	4,291.18	4,280.33	4,291.18	65.55	85.26	-95.782	627.10	384.32	5,511.85	5,361.74	150.10	36.720	
9,600.00	4,292.12	4,281.27	4,292.12	66.10	85.27	-95.835	627.10	384.32	5,561.01	5,410.35	150.66	36.912	
9,650.00	4,293.06	4,282.21	4,293.06	66.64	85.29	-95.888	627.10	384.32	5,610.18	5,458.97	151.21	37.102	
9,700.00	4,294.01	4,283.16	4,294.01	67.19	85.31	-95.941	627.10	384.32	5,659.36	5,507.60	151.76	37.292	
9,750.00	4,294.95	4,284.10	4,294.95	67.74	85.33	-95.994	627.10	384.32	5,708.56	5,556.25	152.31	37.480	
9,800.00	4,295.89	4,285.04	4,295.89	68.29	85.35	-96.047	627.10	384.32	5,757.77	5,604.91	152.86	37.666	
9,850.00	4,296.83	4,285.98	4,296.83	68.84	85.37	-96.099	627.10	384.32	5,807.00	5,653.58	153.41	37.852	
9,900.00	4,297.77	4,286.92	4,297.77	69.39	85.39	-96.152	627.10	384.32	5,856.24	5,702.27	153.97	38.036	
9,950.00	4,298.71	4,287.86	4,298.71	69.94	85.41	-96.205	627.10	384.32	5,905.49	5,750.97	154.52	38.219	
10,000.00	4,299.66	4,288.81	4,299.66	70.49	85.43	-96.258	627.10	384.32	5,954.75	5,799.68	155.07	38.401	
10,050.00	4,300.60	4,289.75	4,300.60	71.04	85.45	-96.311	627.10	384.32	6,004.03	5,848.41	155.62	38.581	
10,100.00	4,301.54	4,290.69	4,301.54	71.59	85.47	-96.364	627.10	384.32	6,053.31	5,897.14	156.17	38.761	
10,150.00	4,302.48	4,291.63	4,302.48	72.14	85.49	-96.417	627.10	384.32	6,102.61	5,945.89	156.72	38.939	
10,200.00	4,303.42	4,292.57	4,303.42	72.69	85.51	-96.470	627.10	384.32	6,151.92	5,994.65	157.28	39.116	
10,250.00	4,304.36	4,293.52	4,304.36	73.24	85.53	-96.522	627.10	384.32	6,201.24	6,043.42	157.83	39.291	
10,300.00	4,305.31	4,294.46	4,305.31	73.79	85.54	-96.575	627.10	384.32	6,250.58	6,092.20	158.38	39.466	
10,350.00	4,306.25	4,295.40	4,306.25	74.34	85.56	-96.628	627.10	384.32	6,299.92	6,140.99	158.93	39.640	
10,400.00	4,307.19	4,296.34	4,307.19	74.90	85.58	-96.681	627.10	384.32	6,349.27	6,189.79	159.48	39.812	
10,450.00	4,308.13	4,297.28	4,308.13	75.45	85.60	-96.734	627.10	384.32	6,398.63	6,238.60	160.03	39.984	
10,500.00	4,309.07	4,298.22	4,309.07	76.00	85.62	-96.786	627.10	384.32	6,448.00	6,287.42	160.58	40.154	
10,550.00	4,310.01	4,299.17	4,310.01	76.55	85.64	-96.839	627.10	384.32	6,497.39	6,336.25	161.13	40.323	
10,600.00	4,310.96	4,300.11	4,310.96	77.10	85.66	-96.892	627.10	384.32	6,546.78	6,385.09	161.68	40.491	
10,650.00	4,311.90	4,301.05	4,311.90	77.66	85.68	-96.945	627.10	384.32	6,596.18	6,433.94	162.24	40.658	
10,700.00	4,312.84	4,301.99	4,312.84	78.21	85.70	-96.997	627.10	384.32	6,645.58	6,482.80	162.79	40.824	
10,750.00	4,313.78	4,302.93	4,313.78	78.76	85.72	-97.050	627.10	384.32	6,695.00	6,531.66	163.34	40.989	
10,800.00	4,314.72	4,303.87	4,314.72	79.31	85.74	-97.103	627.10	384.32	6,744.43	6,580.54	163.89	41.153	

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

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Offset Design AID NORTH 14-13 STATE COM - OFFSET: PUMA #1 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 209-INC-ONLY — **Offset Well Error:** 0.00 usft

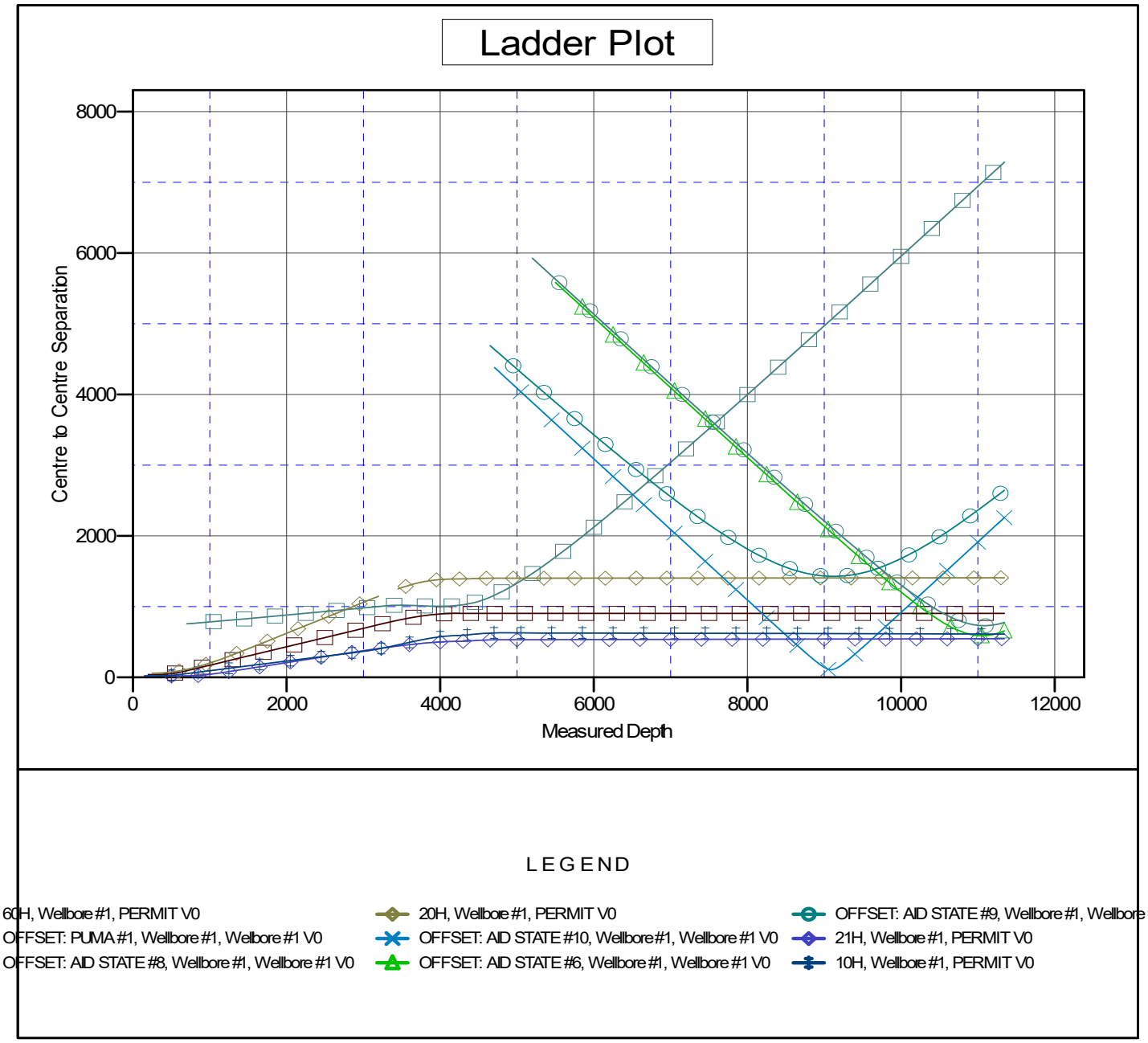
Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,850.00	4,315.66	4,304.82	4,315.66	79.87	85.76	-97.156	627.10	384.32	6,793.86	6,629.42	164.44	41.316	
10,900.00	4,316.61	4,305.76	4,316.61	80.42	85.78	-97.208	627.10	384.32	6,843.30	6,678.31	164.99	41.477	
10,950.00	4,317.55	4,306.70	4,317.55	80.97	85.79	-97.261	627.10	384.32	6,892.75	6,727.21	165.54	41.638	
11,000.00	4,318.49	4,307.64	4,318.49	81.52	85.81	-97.314	627.10	384.32	6,942.21	6,776.12	166.09	41.798	
11,050.00	4,319.43	4,308.58	4,319.43	82.08	85.83	-97.366	627.10	384.32	6,991.68	6,825.04	166.64	41.957	
11,100.00	4,320.37	4,309.52	4,320.37	82.63	85.85	-97.419	627.10	384.32	7,041.15	6,873.96	167.19	42.115	
11,150.00	4,321.32	4,310.47	4,321.32	83.19	85.87	-97.472	627.10	384.32	7,090.63	6,922.89	167.74	42.272	
11,200.00	4,322.26	4,311.41	4,322.26	83.74	85.89	-97.524	627.10	384.32	7,140.12	6,971.83	168.29	42.428	
11,250.00	4,323.20	4,312.35	4,323.20	84.29	85.91	-97.577	627.10	384.32	7,189.61	7,020.77	168.84	42.583	
11,295.63	4,324.06	4,313.21	4,324.06	84.80	85.93	-97.625	627.10	384.32	7,234.78	7,065.45	169.34	42.724	
11,300.00	4,324.14	4,313.29	4,324.14	84.85	85.93	-97.629	627.10	384.32	7,239.11	7,069.72	169.39	42.737	
11,345.67	4,325.00	4,314.15	4,325.00	85.35	85.95	-97.677	627.10	384.32	7,284.33	7,114.44	169.89	42.877	

SPUR ENERGY PARTNERS

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Reference Depths are relative to RKB = 20' @ 3620.00usft (AKITA 57) Coordinates are relative to: 61H
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Central Meridian is -104.3333333 Grid Convergence at Surface is: 0.101°

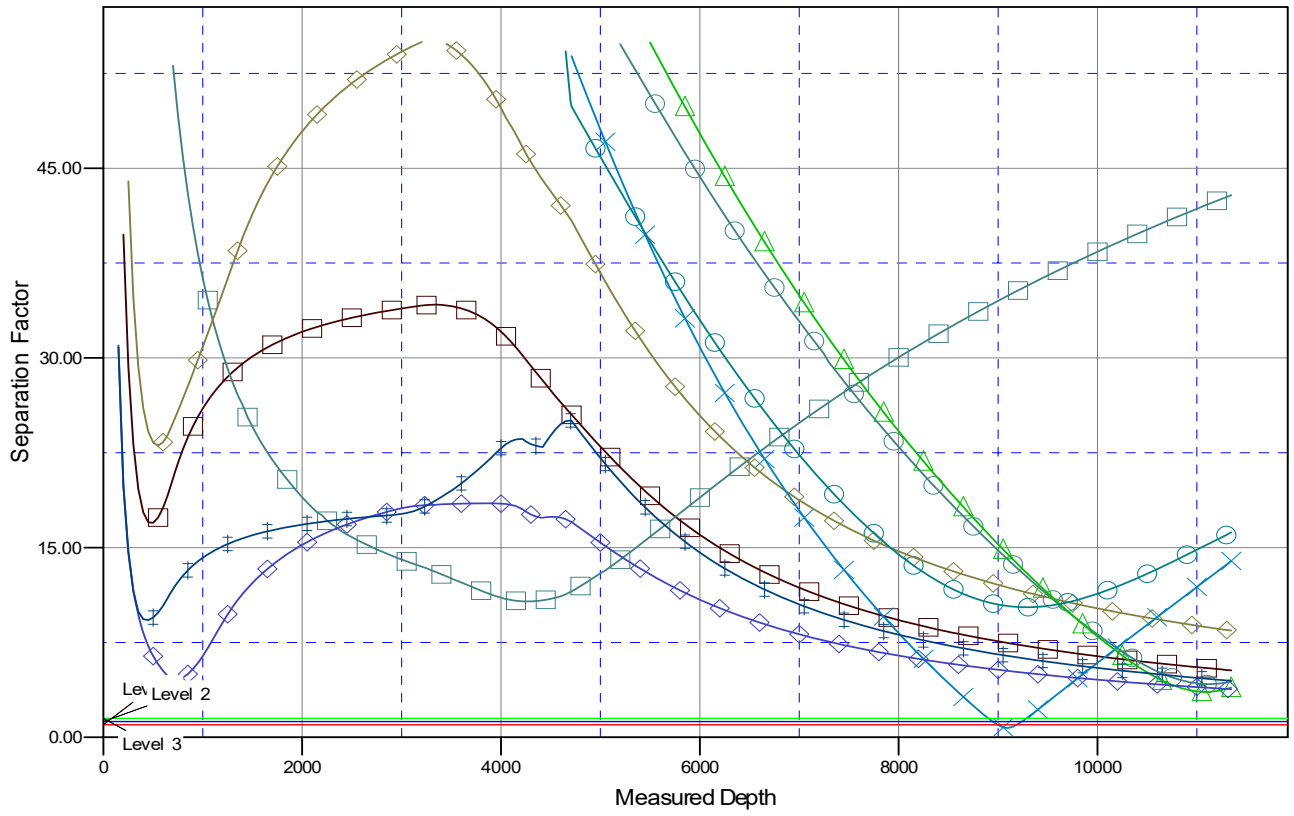


Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	**Local Co-ordinate Reference:**	Well 61H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.1.13 Single User Db
Reference Design:	PERMIT	**Offset TVD Reference:**	Reference Datum

Reference Depths are relative to RKB = 20' @ 3620.00usft (AKITA 57) Coordinates are relative to: 61H
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Central Meridian is -104.3333333 Grid Convergence at Surface is: 0.101°

Separation Factor Plot



LEGEND

60H, Wellbore #1, PERMIT V0
OFFSET: PUMA #1, Wellbore #1, Wellbore #1 V0
OFFSET: AID STATE #8, Wellbore #1, Wellbore #1 V0
20H, Wellbore #1, PERMIT V0
OFFSET: AID STATE #10, Wellbore #1, Wellbore #1 V0
OFFSET: AID STATE #6, Wellbore #1, Wellbore #1 V0
OFFSET: AID STATE #9, Wellbore #1, Wellbore #
21H, Wellbore #1, PERMIT V0
10H, Wellbore #1, PERMIT V0

SPUR ENERGY PARTNERS, LLC

EDDY COUNTY, NM (NAD 83 - NME)
AID NORTH 14-13 STATE COM
61H

Wellbore #1

Plan: PERMIT

Standard Planning Report

01 August, 2023

SPUR ENERGY PARTNERS

Planning Report

Database:	EDM 5000.1.13 Single User Db	**Local Co-ordinate Reference:**	Well 61H
Company:	SPUR ENERGY PARTNERS, LLC	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site:	AID NORTH 14-13 STATE COM	**North Reference:**	Grid
Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Project EDDY COUNTY, NM (NAD 83 - NME)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site AID NORTH 14-13 STATE COM

Site Position:		**Northing:**	669,070.00 usft	**Latitude:**	32.8391593
From:	Map	**Easting:**	598,767.90 usft	**Longitude:**	-104.1463439
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.101 °

Well 61H

Well Position	**+N/-S**	-19.90 usft	**Northing:**	669,050.10 usft	**Latitude:**	32.8391046
	+E/-W	0.20 usft	**Easting:**	598,768.10 usft	**Longitude:**	-104.1463434
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	0.00 usft	**Ground Level:**	3,600.00 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	08/01/23	6.613	60.303	47,574

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	88.75

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	0.000	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.000	
641.99	6.84	170.40	641.18	-20.10	3.40	2.00	2.00	0.00	170.399	
3,232.06	6.84	170.40	3,212.81	-324.25	54.85	0.00	0.00	0.00	0.000	
4,219.41	60.00	88.75	4,023.34	-377.77	535.71	6.00	5.38	-8.27	-85.636	
4,419.41	60.00	88.75	4,123.34	-374.00	708.88	0.00	0.00	0.00	0.000	
4,708.62	88.92	88.75	4,200.00	-368.00	984.50	10.00	10.00	0.00	0.000	AID NORTH 61H F
11,295.63	88.92	88.75	4,324.06	-224.69	7,568.79	0.00	0.00	0.00	0.000	AID NORTH 61H L
11,345.67	88.92	88.75	4,325.00	-223.60	7,618.80	0.00	0.00	0.00	0.000	AID NORTH 61H B

SPUR ENERGY PARTNERS

Planning Report

Database:	EDM 5000.1.13 Single User Db	**Local Co-ordinate Reference:**	Well 61H
Company:	SPUR ENERGY PARTNERS, LLC	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site:	AID NORTH 14-13 STATE COM	**North Reference:**	Grid
Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/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
AID NORTH 61H SHL: 1248' FNL, 2383' FEL									
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	170.40	399.98	-1.72	0.29	0.25	2.00	2.00	0.00
500.00	4.00	170.40	499.84	-6.88	1.16	1.01	2.00	2.00	0.00
600.00	6.00	170.40	599.45	-15.47	2.62	2.28	2.00	2.00	0.00
641.99	6.84	170.40	641.18	-20.10	3.40	2.96	2.00	2.00	0.00
700.00	6.84	170.40	698.78	-26.91	4.55	3.96	0.00	0.00	0.00
800.00	6.84	170.40	798.06	-38.66	6.54	5.69	0.00	0.00	0.00
900.00	6.84	170.40	897.35	-50.40	8.53	7.42	0.00	0.00	0.00
1,000.00	6.84	170.40	996.64	-62.14	10.51	9.15	0.00	0.00	0.00
1,100.00	6.84	170.40	1,095.93	-73.89	12.50	10.88	0.00	0.00	0.00
1,200.00	6.84	170.40	1,195.22	-85.63	14.49	12.61	0.00	0.00	0.00
1,300.00	6.84	170.40	1,294.51	-97.37	16.47	14.34	0.00	0.00	0.00
1,400.00	6.84	170.40	1,393.79	-109.11	18.46	16.07	0.00	0.00	0.00
1,500.00	6.84	170.40	1,493.08	-120.86	20.44	17.80	0.00	0.00	0.00
1,600.00	6.84	170.40	1,592.37	-132.60	22.43	19.53	0.00	0.00	0.00
1,700.00	6.84	170.40	1,691.66	-144.34	24.42	21.26	0.00	0.00	0.00
1,800.00	6.84	170.40	1,790.95	-156.08	26.40	22.99	0.00	0.00	0.00
1,900.00	6.84	170.40	1,890.23	-167.83	28.39	24.72	0.00	0.00	0.00
2,000.00	6.84	170.40	1,989.52	-179.57	30.38	26.45	0.00	0.00	0.00
2,100.00	6.84	170.40	2,088.81	-191.31	32.36	28.18	0.00	0.00	0.00
2,200.00	6.84	170.40	2,188.10	-203.05	34.35	29.91	0.00	0.00	0.00
2,300.00	6.84	170.40	2,287.39	-214.80	36.34	31.64	0.00	0.00	0.00
2,400.00	6.84	170.40	2,386.68	-226.54	38.32	33.37	0.00	0.00	0.00
2,500.00	6.84	170.40	2,485.96	-238.28	40.31	35.10	0.00	0.00	0.00
2,600.00	6.84	170.40	2,585.25	-250.03	42.29	36.83	0.00	0.00	0.00
2,700.00	6.84	170.40	2,684.54	-261.77	44.28	38.56	0.00	0.00	0.00
2,800.00	6.84	170.40	2,783.83	-273.51	46.27	40.29	0.00	0.00	0.00
2,900.00	6.84	170.40	2,883.12	-285.25	48.25	42.02	0.00	0.00	0.00
3,000.00	6.84	170.40	2,982.41	-297.00	50.24	43.75	0.00	0.00	0.00
3,100.00	6.84	170.40	3,081.69	-308.74	52.23	45.48	0.00	0.00	0.00
3,200.00	6.84	170.40	3,180.98	-320.48	54.21	47.21	0.00	0.00	0.00
3,232.06	6.84	170.40	3,212.81	-324.25	54.85	47.76	0.00	0.00	0.00
AID NORTH 61H KOP: 3232.06' MD									
3,250.00	7.00	161.56	3,230.62	-326.34	55.37	48.24	6.00	0.92	-49.25
3,300.00	8.22	140.68	3,280.19	-332.00	58.60	51.35	6.00	2.43	-41.77
3,350.00	10.20	126.46	3,329.55	-337.39	64.43	57.05	6.00	3.96	-28.43
3,400.00	12.58	117.19	3,378.57	-342.51	72.84	65.35	6.00	4.77	-18.55
3,450.00	15.18	110.94	3,427.11	-347.34	83.80	76.20	6.00	5.20	-12.51
3,500.00	17.91	106.51	3,475.03	-351.87	97.29	89.59	6.00	5.45	-8.85
3,550.00	20.71	103.24	3,522.22	-356.08	113.27	105.47	6.00	5.60	-6.55
3,600.00	23.55	100.72	3,568.53	-359.96	131.69	123.81	6.00	5.69	-5.04
3,650.00	26.43	98.71	3,613.84	-363.51	152.52	144.55	6.00	5.76	-4.00
3,700.00	29.33	97.08	3,658.03	-366.70	175.68	167.63	6.00	5.80	-3.27
3,750.00	32.25	95.72	3,700.98	-369.54	201.11	193.00	6.00	5.84	-2.72
3,800.00	35.18	94.56	3,742.57	-372.02	228.75	220.58	6.00	5.86	-2.32
3,850.00	38.12	93.56	3,782.67	-374.12	258.52	250.30	6.00	5.88	-2.00
3,900.00	41.07	92.68	3,821.20	-375.85	290.34	282.07	6.00	5.89	-1.76
3,950.00	44.02	91.90	3,858.03	-377.20	324.12	315.81	6.00	5.91	-1.56
4,000.00	46.98	91.20	3,893.07	-378.16	359.76	351.43	6.00	5.92	-1.40
4,050.00	49.94	90.56	3,926.22	-378.73	397.18	388.82	6.00	5.92	-1.27

SPUR ENERGY PARTNERS

Planning Report

Database:	EDM 5000.1.13 Single User Db	**Local Co-ordinate Reference:**	Well 61H
Company:	SPUR ENERGY PARTNERS, LLC	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site:	AID NORTH 14-13 STATE COM	**North Reference:**	Grid
Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,100.00	52.91	89.98	3,957.40	-378.91	436.27	427.90	6.00	5.93	-1.17
4,150.00	55.88	89.44	3,986.50	-378.70	476.91	468.54	6.00	5.94	-1.08
4,200.00	58.85	88.94	4,013.47	-378.10	519.01	510.64	6.00	5.94	-1.01
4,219.41	60.00	88.75	4,023.34	-377.77	535.71	527.34	6.00	5.94	-0.96
4,300.00	60.00	88.75	4,063.64	-376.25	605.49	597.14	0.00	0.00	0.00
4,400.00	60.00	88.75	4,113.64	-374.36	692.07	683.74	0.00	0.00	0.00
4,419.41	60.00	88.75	4,123.34	-374.00	708.88	700.55	0.00	0.00	0.00
4,450.00	63.06	88.75	4,137.92	-373.41	735.76	727.44	10.00	10.00	0.00
4,500.00	68.06	88.75	4,158.60	-372.42	781.25	772.94	10.00	10.00	0.00
4,550.00	73.06	88.75	4,175.24	-371.40	828.38	820.08	10.00	10.00	0.00
4,600.00	78.06	88.75	4,187.70	-370.34	876.77	868.48	10.00	10.00	0.00
4,650.00	83.06	88.75	4,195.90	-369.27	926.07	917.79	10.00	10.00	0.00
4,700.00	88.06	88.75	4,199.77	-368.19	975.89	967.62	10.00	10.00	0.00
4,708.62	88.92	88.75	4,200.00	-368.00	984.50	976.24	10.00	10.00	0.00
AID NORTH 61H FTP: 1709' FNL, 1404' FEL									
4,800.00	88.92	88.75	4,201.72	-366.01	1,075.85	1,067.61	0.00	0.00	0.00
4,900.00	88.92	88.75	4,203.60	-363.84	1,175.80	1,167.59	0.00	0.00	0.00
5,000.00	88.92	88.75	4,205.49	-361.66	1,275.76	1,267.57	0.00	0.00	0.00
5,100.00	88.92	88.75	4,207.37	-359.48	1,375.72	1,367.55	0.00	0.00	0.00
5,200.00	88.92	88.75	4,209.25	-357.31	1,475.68	1,467.53	0.00	0.00	0.00
5,300.00	88.92	88.75	4,211.14	-355.13	1,575.64	1,567.52	0.00	0.00	0.00
5,400.00	88.92	88.75	4,213.02	-352.96	1,675.60	1,667.50	0.00	0.00	0.00
5,500.00	88.92	88.75	4,214.90	-350.78	1,775.56	1,767.48	0.00	0.00	0.00
5,600.00	88.92	88.75	4,216.79	-348.61	1,875.51	1,867.46	0.00	0.00	0.00
5,700.00	88.92	88.75	4,218.67	-346.43	1,975.47	1,967.45	0.00	0.00	0.00
5,800.00	88.92	88.75	4,220.55	-344.26	2,075.43	2,067.43	0.00	0.00	0.00
5,900.00	88.92	88.75	4,222.44	-342.08	2,175.39	2,167.41	0.00	0.00	0.00
6,000.00	88.92	88.75	4,224.32	-339.90	2,275.35	2,267.39	0.00	0.00	0.00
6,100.00	88.92	88.75	4,226.20	-337.73	2,375.31	2,367.37	0.00	0.00	0.00
6,200.00	88.92	88.75	4,228.09	-335.55	2,475.27	2,467.36	0.00	0.00	0.00
6,300.00	88.92	88.75	4,229.97	-333.38	2,575.22	2,567.34	0.00	0.00	0.00
6,400.00	88.92	88.75	4,231.86	-331.20	2,675.18	2,667.32	0.00	0.00	0.00
6,500.00	88.92	88.75	4,233.74	-329.03	2,775.14	2,767.30	0.00	0.00	0.00
6,600.00	88.92	88.75	4,235.62	-326.85	2,875.10	2,867.29	0.00	0.00	0.00
6,700.00	88.92	88.75	4,237.51	-324.67	2,975.06	2,967.27	0.00	0.00	0.00
6,800.00	88.92	88.75	4,239.39	-322.50	3,075.02	3,067.25	0.00	0.00	0.00
6,900.00	88.92	88.75	4,241.27	-320.32	3,174.98	3,167.23	0.00	0.00	0.00
7,000.00	88.92	88.75	4,243.16	-318.15	3,274.93	3,267.21	0.00	0.00	0.00
7,100.00	88.92	88.75	4,245.04	-315.97	3,374.89	3,367.20	0.00	0.00	0.00
7,200.00	88.92	88.75	4,246.92	-313.80	3,474.85	3,467.18	0.00	0.00	0.00
7,300.00	88.92	88.75	4,248.81	-311.62	3,574.81	3,567.16	0.00	0.00	0.00
7,400.00	88.92	88.75	4,250.69	-309.44	3,674.77	3,667.14	0.00	0.00	0.00
7,500.00	88.92	88.75	4,252.57	-307.27	3,774.73	3,767.13	0.00	0.00	0.00
7,600.00	88.92	88.75	4,254.46	-305.09	3,874.69	3,867.11	0.00	0.00	0.00
7,700.00	88.92	88.75	4,256.34	-302.92	3,974.64	3,967.09	0.00	0.00	0.00
7,800.00	88.92	88.75	4,258.22	-300.74	4,074.60	4,067.07	0.00	0.00	0.00
7,900.00	88.92	88.75	4,260.11	-298.57	4,174.56	4,167.06	0.00	0.00	0.00
8,000.00	88.92	88.75	4,261.99	-296.39	4,274.52	4,267.04	0.00	0.00	0.00
8,100.00	88.92	88.75	4,263.87	-294.21	4,374.48	4,367.02	0.00	0.00	0.00
8,200.00	88.92	88.75	4,265.76	-292.04	4,474.44	4,467.00	0.00	0.00	0.00
8,300.00	88.92	88.75	4,267.64	-289.86	4,574.40	4,566.98	0.00	0.00	0.00
8,400.00	88.92	88.75	4,269.52	-287.69	4,674.35	4,666.97	0.00	0.00	0.00
8,500.00	88.92	88.75	4,271.41	-285.51	4,774.31	4,766.95	0.00	0.00	0.00
8,600.00	88.92	88.75	4,273.29	-283.34	4,874.27	4,866.93	0.00	0.00	0.00

SPUR ENERGY PARTNERS

Planning Report

Database:	EDM 5000.1.13 Single User Db	**Local Co-ordinate Reference:**	Well 61H
Company:	SPUR ENERGY PARTNERS, LLC	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site:	AID NORTH 14-13 STATE COM	**North Reference:**	Grid
Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,700.00	88.92	88.75	4,275.17	-281.16	4,974.23	4,966.91	0.00	0.00	0.00
8,800.00	88.92	88.75	4,277.06	-278.99	5,074.19	5,066.90	0.00	0.00	0.00
8,900.00	88.92	88.75	4,278.94	-276.81	5,174.15	5,166.88	0.00	0.00	0.00
9,000.00	88.92	88.75	4,280.82	-274.63	5,274.11	5,266.86	0.00	0.00	0.00
9,100.00	88.92	88.75	4,282.71	-272.46	5,374.06	5,366.84	0.00	0.00	0.00
9,200.00	88.92	88.75	4,284.59	-270.28	5,474.02	5,466.82	0.00	0.00	0.00
9,300.00	88.92	88.75	4,286.47	-268.11	5,573.98	5,566.81	0.00	0.00	0.00
9,400.00	88.92	88.75	4,288.36	-265.93	5,673.94	5,666.79	0.00	0.00	0.00
9,500.00	88.92	88.75	4,290.24	-263.76	5,773.90	5,766.77	0.00	0.00	0.00
9,600.00	88.92	88.75	4,292.12	-261.58	5,873.86	5,866.75	0.00	0.00	0.00
9,700.00	88.92	88.75	4,294.01	-259.40	5,973.82	5,966.74	0.00	0.00	0.00
9,800.00	88.92	88.75	4,295.89	-257.23	6,073.78	6,066.72	0.00	0.00	0.00
9,900.00	88.92	88.75	4,297.77	-255.05	6,173.73	6,166.70	0.00	0.00	0.00
10,000.00	88.92	88.75	4,299.66	-252.88	6,273.69	6,266.68	0.00	0.00	0.00
10,100.00	88.92	88.75	4,301.54	-250.70	6,373.65	6,366.67	0.00	0.00	0.00
10,200.00	88.92	88.75	4,303.42	-248.53	6,473.61	6,466.65	0.00	0.00	0.00
10,300.00	88.92	88.75	4,305.31	-246.35	6,573.57	6,566.63	0.00	0.00	0.00
10,400.00	88.92	88.75	4,307.19	-244.17	6,673.53	6,666.61	0.00	0.00	0.00
10,500.00	88.92	88.75	4,309.07	-242.00	6,773.49	6,766.59	0.00	0.00	0.00
10,600.00	88.92	88.75	4,310.96	-239.82	6,873.44	6,866.58	0.00	0.00	0.00
10,700.00	88.92	88.75	4,312.84	-237.65	6,973.40	6,966.56	0.00	0.00	0.00
10,800.00	88.92	88.75	4,314.72	-235.47	7,073.36	7,066.54	0.00	0.00	0.00
10,900.00	88.92	88.75	4,316.61	-233.30	7,173.32	7,166.52	0.00	0.00	0.00
11,000.00	88.92	88.75	4,318.49	-231.12	7,273.28	7,266.51	0.00	0.00	0.00
11,100.00	88.92	88.75	4,320.37	-228.94	7,373.24	7,366.49	0.00	0.00	0.00
11,200.00	88.92	88.75	4,322.26	-226.77	7,473.20	7,466.47	0.00	0.00	0.00
11,295.63	88.92	88.75	4,324.06	-224.69	7,568.79	7,562.08	0.00	0.00	0.00
AID NORTH 61H LTP: 100' FEL									
11,300.00	88.92	88.75	4,324.14	-224.59	7,573.15	7,566.45	0.00	0.00	0.00
11,345.67	88.92	88.75	4,325.00	-223.60	7,618.80	7,612.11	0.00	0.00	0.00
AID NORTH 61H BHL: 1715' FNL, 50' FEL									

SPUR ENERGY PARTNERS

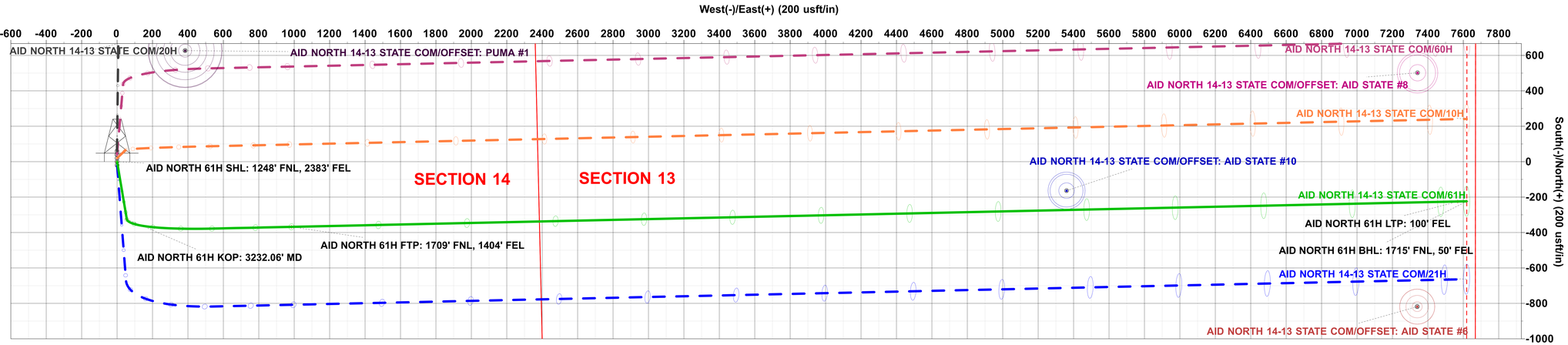
Planning Report

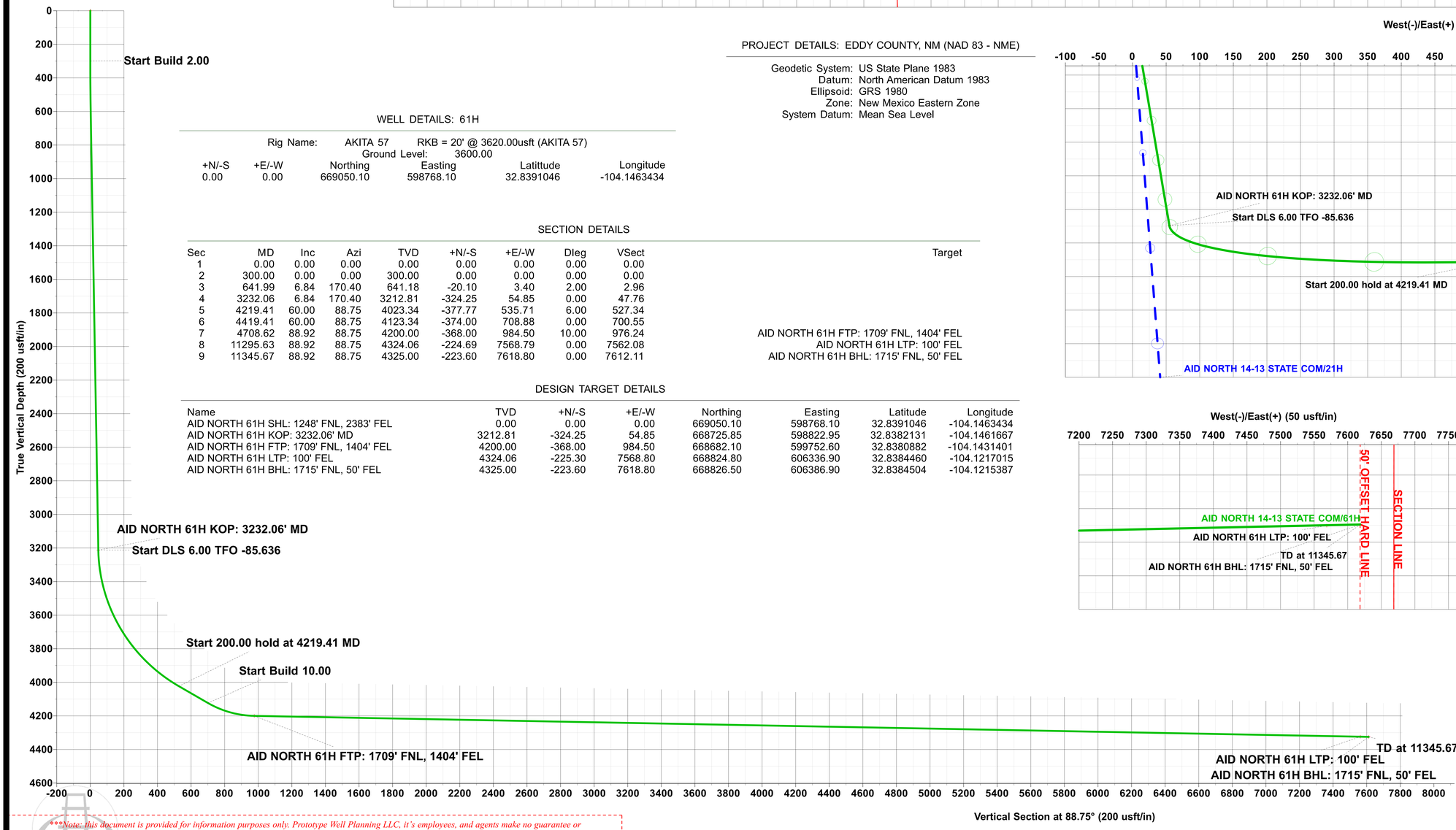
Database:	EDM 5000.1.13 Single User Db	**Local Co-ordinate Reference:**	Well 61H
Company:	SPUR ENERGY PARTNERS, LLC	**TVD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Project:	EDDY COUNTY, NM (NAD 83 - NME)	**MD Reference:**	RKB = 20' @ 3620.00usft (AKITA 57)
Site:	AID NORTH 14-13 STATE COM	**North Reference:**	Grid
Well:	61H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
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
AID NORTH 61H SHL - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	669,050.10	598,768.10	32.8391046	-104.1463434
AID NORTH 61H KOF - plan hits target center - Point	0.00	0.00	3,212.81	-324.25	54.85	668,725.86	598,822.95	32.8382131	-104.1461666
AID NORTH 61H FTP - plan hits target center - Point	0.00	0.00	4,200.00	-368.00	984.50	668,682.10	599,752.60	32.8380882	-104.1431401
AID NORTH 61H LTP - plan misses target center by 0.61usft at 11295.63usft MD (4324.06 TVD, -224.69 N, 7568.79 E) - Point	0.00	0.00	4,324.06	-225.30	7,568.80	668,824.80	606,336.90	32.8384461	-104.1217015
AID NORTH 61H BHL - plan hits target center - Point	0.00	0.00	4,325.00	-223.60	7,618.80	668,826.50	606,386.90	32.8384505	-104.1215387

Project: EDDY COUNTY, NM (NAD 83 - NME)
Site: AID NORTH 14-13 STATE COM
Well: 61H
Wellbore: Wellbore #1
Design: PERMIT





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

WELL DETAILS: 61H

Rig Name: AKITA 57 RKB = 20' @ 3620.00usft (AKITA 57)
Ground Level: 3600.00

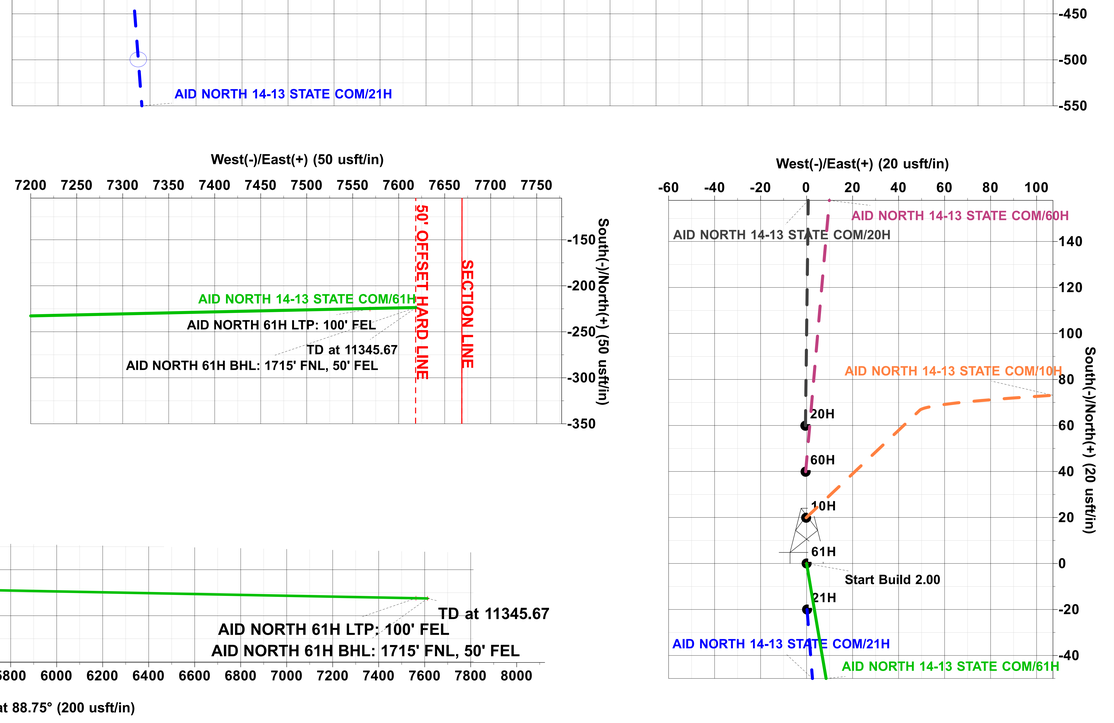
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	669050.10	598768.10	32.8391046	-104.1463434

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSect	Target
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	641.99	6.84	170.40	641.18	-20.10	3.40	2.00	2.96	
4	3232.06	6.84	170.40	3212.81	-324.25	54.85	0.00	47.76	
5	4219.41	60.00	88.75	4023.34	-377.77	535.71	6.00	527.34	
6	4419.41	60.00	88.75	4123.34	-374.00	708.88	0.00	700.55	
7	4708.62	88.92	88.75	4200.00	-368.00	984.50	10.00	976.24	AID NORTH 61H FTP: 1709' FNL, 1404' FEL
8	11295.63	88.92	88.75	4324.06	-224.69	7568.79	0.00	7562.08	AID NORTH 61H LTP: 100' FEL
9	11345.67	88.92	88.75	4325.00	-223.60	7618.80	0.00	7612.11	AID NORTH 61H BHL: 1715' FNL, 50' FEL

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
AID NORTH 61H SHL: 1248' FNL, 2383' FEL	0.00	0.00	0.00	669050.10	598768.10	32.8391046	-104.1463434
AID NORTH 61H KOP: 3232.06' MD	3212.81	-324.25	54.85	668725.85	598822.95	32.8382131	-104.1461667
AID NORTH 61H FTP: 1709' FNL, 1404' FEL	4200.00	-368.00	984.50	668682.10	599752.60	32.8380882	-104.1431401
AID NORTH 61H LTP: 100' FEL	4324.06	-225.30	7568.80	668824.80	606336.90	32.8384460	-104.1217015
AID NORTH 61H BHL: 1715' FNL, 50' FEL	4325.00	-223.60	7618.80	668826.50	606386.90	32.8384504	-104.1215387



Plan: PERMIT (61H/Wellbore #1)

Created By: PROTOTYPE WELL PLANNING / Date: 16:29, August 01 2023

Spur Energy Partners LLC – Aid North 14-13 State Com 61H

1. Geologic Formations

TVD of Target	4,325'
MD at TD	11,346'

Formation	Depth	Lithology	Expected Fluids
Quaternary	0'	Dolomite, other: Caliche	Useable Water
Tansill	485'	Sandstone, Dolomite	None
Yates	595'	Dolomite, Limestone, Shale, Siltstone	None
Seven Rivers	850'	Dolomite, Limestone	Natural Gas, Oil
Queen	1395'	Anhydrite, Dolomite, Sandstone	Natural Gas, Oil
Grayburg	1825'	Anhydrite	Natural Gas, Oil
San Andres	2170'	Dolomite	Natural Gas, Oil
Glorieta	3520'	Dolomite, Siltstone	Natural Gas, Oil
Paddock	3620'	Dolomite, Limestone	Natural Gas, Oil
Blinebry	4015'	Dolomite, Limestone	Natural Gas, Oil
Abo	5675'	Dolomite, Limestone	Natural Gas, Oil

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

2. Casing Program

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

Casing Formation Set Interval	Hole Size (in)	Casing Interval		Csg. Size (in)	Weight	Grade	Conn.	SF	SF Burst	Body SF	Joint SF
		From (ft)	To (ft)		(lbs)			Collapse		Tension	Tension
Seven Rivers	12.25	0	1275	9.625	36	J-55	BTC	1.125	1.2	1.4	1.4
N/A	8.75	0	4450	7	32	L-80	BK-HT	1.125	1.2	1.4	1.4
Yeso	8.75	4450	11346	5.5	20	L-80	BK-HT	1.125	1.2	1.4	1.4
								SF Values will meet or Exceed			

Spur Energy Partners LLC – Aid North 14-13 State Com 61H

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
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	100%
Surface (Tail)	950	1275	100%
Production (Lead)	0	3450	100%
Production (Tail)	3450	11346	25%

Casing String	# Sks	Wt. (lb/gal)	Yld (ft3/sack)	H20 (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface (Lead)	259	12	2.4	13.48	8:12	Clas C Premium Plus Cement
Surface (Tail)	119	13.2	1.87	9.92	6:59	Clas C Premium Plus Cement
Production (Lead)	359	11.4	2.42	15.29	N/A	Clas C Premium Plus Cement
Production (Tail)	1520	13.2	1.56	9.81	N/A	Clas C Premium Plus Cement

Spur Energy Partners LLC – Aid North 14-13 State Com 61H

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	2002 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	115°F

*Specify if additional ram is utilized.

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

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

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

Spur Energy Partners LLC – Aid North 14-13 State Com 61H

	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	1275	Water-Based Mud	8.6-8.9	32-36	N/C
1275	11346	Water-Based Mud	8.6-8.9	32-36	N/C

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

Spur Energy Partners LLC – Aid North 14-13 State Com 61H

7. Logging and Testing Procedures

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

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

8. Drilling Conditions

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

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

Total estimated cuttings volume: 1029.7 bbls**.**

Spur Energy Partners LLC – Aid North 14-13 State Com 61H

9. Other facets of operation

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

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

10. Company Personnel

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: SPUR ENERGY PARTNERS LLC **OGRID:** 328947 **Date:** 08 / 08 / 2023

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
AID NORTH 14 13 STATE COM 10H	30-015-	B-14-17S-28E	1228' FNL 2382' FEL	260 BBL/D	300 MCF/D	700 BBL/D
AID NORTH 14 13 STATE COM 20H	30-015-	B-14-17S-28E	1188' FNL 2382' FEL	260 BBL/D	300 MCF/D	700 BBL/D
AID NORTH 14 13 STATE COM 21H	30-015-	B-14-17S-28E	1268' FNL 2383' FEL	260 BBL/D	300 MCF/D	700 BBL/D
AID NORTH 14 13 STATE COM 60H	30-015-	B-14-17S-28E	1208' FNL 2382' FEL	200 BBL/D	275 MCF/D	800 BBL/D
AID NORTH 14 13 STATE COM 61H	30-015-	B-14-17S-28E	1248' FNL 2383' FEL	200 BBL/D	275 MCF/D	800 BBL/D

IV. Central Delivery Point Name: AID NORTH 14 13 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
AID NORTH 14 13 STATE COM 10H	30-015-	10/26/2023	11/03/2023	12/16/2023	01/15/2024	01/20/2024
AID NORTH 14 13 STATE COM 20H	30-015-	11/04/2023	11/12/2023	12/16/2023	01/15/2024	01/20/2024
AID NORTH 14 13 STATE COM 21H	30-015-	11/13/2023	11/21/2023	12/16/2023	01/15/2024	01/20/2024
AID NORTH 14 13 STATE COM 60H	30-015-	11/22/2023	11/30/2023	12/16/2023	01/15/2024	01/20/2024
AID NORTH 14 13 STATE COM 61H	30-015-	12/01/2023	12/09/2023	12/16/2023	01/15/2024	01/24/2024

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

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

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

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature:	Sarah Chapman
Printed Name:	SARAH CHAPMAN
Title:	REGULATORY DIRECTOR
E-mail Address:	SCHAPMAN@SPURENERGY.COM
Date:	08/08/2023
Phone:	832-930-8613

OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

Natural Gas Management Plan – Attachment

VI. Separation equipment will be sized by construction engineering staff based on anticipated daily production to ensure adequate capacity.

VII. Spur Energy Partners LLC ("Spur") will take the following actions to comply with the regulations listed in 19.15.27.8:

A. Spur will maximize the recovery of natural gas by minimizing waste, as defined by 19.15.2 NMAC, of natural gas through venting and flaring. Spur will ensure that our wells will be connected to a natural gas gathering system with sufficient capacity to transport natural gas.

B. All drilling operations will be equipped with a rig flare at least 100 feet from the nearest surface hole location. Rig flare will be utilized to combust any natural gas that is brought to surface during normal operations. In the case of emergency, flaring volumes will be reported appropriately.

C. During completion operations any natural gas brought to surface will be flared. Immediately following completion operations, wells will flow to permanent separation equipment. Produced natural gas from separation equipment will be sent to sales. If natural gas does not meet gathering pipeline specifications, Spur will flare for 60 days or until natural gas meets the pipeline specifications. Spur will ensure flare is properly sized and is equipped with an automatic igniter or continuous pilot. Gas samples will be taken twice per week and natural gas will be routed into a gathering system as soon as the pipeline specifications are met.

D. Natural gas will not be flared with the exception of 19.15.27.8(D)(1-4). If there is no adequate takeaway for the separator gas, wells will be shut-in until that natural gas gathering system is available with exception of emergency or malfunction situations. Volumes will be reported appropriately.

E. Spur will comply with performance standards pursuant to 19.15.27.8(E)(1-8). All equipment will be designed and sized to handle maximum pressures to minimize waste. Storage tanks constructed after May 25, 2021 will be equipped with an automatic gauging system that reduces venting of natural gas. Flare stacks installed or replaced after May 25, 2021 will be equipped with an automatic ignitor or continuous pilot. Spur will conduct AVO inspections as described in 19.15.27.8(E)(5)(a) with frequencies specified in 19.15.27.8(E)(5)(b) and (c). All emergencies or malfunctions will be resolved as quickly and safely as possible to minimize waste.

F. The volume of natural gas that is vented or flared as the result of an emergency or malfunction during drilling and/or completion operations will be estimated and reported accordingly. The volume of natural gas that is vented, flared or beneficially used during production operations, will be measured and reported accordingly. Spur will install equipment to measure the volume of natural gas flared from existing piping or a flowline piped from equipment such as high-pressure separators, heater treaters, or VRUs associated with a well or facility associated with a well authorized by an APD after May 25, 2021 that has an average daily production of less than 60,000 cubic feet of natural gas. If metering is not practicable due to circumstances such as low flow rate or low pressure venting or flaring, Spur will estimate the volume of flared or vented natural gas. Measuring equipment will conform to industry standards and will not be equipped with a manifold

that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing equipment.

VIII. For maintenance activities involving production equipment and compression, venting be limited to the depressurization of the subject equipment to ensure safe working conditions. For maintenance of production equipment, the associated producing wells will be shut-in to eliminate venting. For maintenance of VRUs, all natural gas normally routed to the VRU will be routed to flare.

Hydrogen Sulfide (H2S)

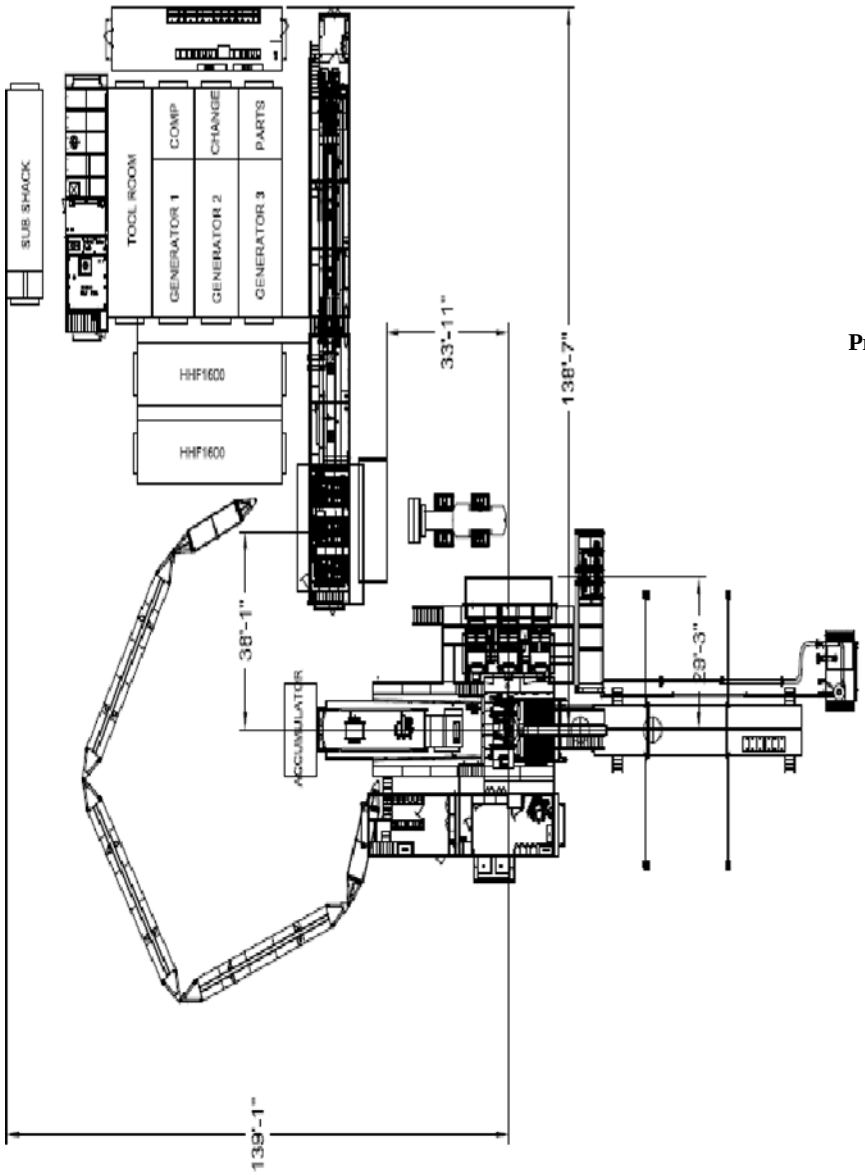
Operations Plan

For

Spur Energy Partners

New Mexico Operations

Secondary Briefing Area



Primary Briefing Area

Exit to road. Caution sign placed here.

N

Secondary Egress

WIND: Prevailing winds are from the Southwest

Spur Energy Partners
New Mexico Operations
Hydrogen Sulfide Operation Plan

A. Introduction:

The Safety of all personnel at Spur Energy Partners Facilities is of utmost importance to the company, and therefor management and employees must take responsibility for their safety and for the safety of all employees and others at a facility. If you have any concerns about the safe operations of the facility, contract personnel, or vendors, please contact the Company's Safety Contact, Superintendent, or Production Foreman immediately.

The objective of this contingency plan is to provide an organized plan of action for alerting, responding to and protecting employees, other workers and the public from H2S exposure in the event of a release of a potentially hazardous volume of H2S to the atmosphere. This plan should be activated immediately if any such release occurs. The Superintendent is responsible for initiating and carrying out the plan.

B. Scope:

Prevent the uncontrolled release of H_2S into the atmosphere. Provide proper procedures and equipment to alert and respond to emergencies.

Provide immediate and adequate medical attention should an injury occur.

To provide Company employees working at actual or potential Hydrogen Sulfide (H2S) facilities with a safe procedure to comply with applicable Federal, State and Company requirements.

This document is intended to provide general policy, procedures and expectations surrounding elevated levels of H2S. The intent is to promote sound and safe operations, while seeking effective communication surrounding operational considerations working around H2S.

This procedure applies to all Company employees and contractors working at facilities that have the potential to release 100 ppm or higher concentrations of H2S.

The plan establishes guidelines for all personnel whose work activity may involve exposure to Hydrogen Sulfide Gas (H_2S).

C. Hydrogen Sulfide Gas (H2S) Characteristics:

1. H2S is a toxic, poisonous gas that could cause death or injury. And it is also flammable.
2. H2S is an irritant and extremely toxic gas that is several times deadlier than carbon monoxide (CO).
3. H2S is heavier than air with a specific gravity of 1.1895 @ 600 F. so it will tend to lie in lower areas. Wind movement or air currents can readily disperse H2S since wind currents can easily overcome the heavier weight. On calm days, with no wind, the H2S will tend to accumulate in dangerous concentrations; however, if the H2S is warmer than the surrounding air it may rise.
4. H2S is colorless.
5. In small concentrations, H2S has the characteristic odor of rotten eggs. It may be detected by smell at a concentration in air of about 2 ppm but may NOT be detected

at high concentrations. DO NOT DEPEND ON THE SENSE OF SMELL TO DETECT H2S! H2S will paralyze the olfactory nerve causing a loss of the sense of smell within 2 – 15 minutes of an exposure in concentrations as low as 100-150 ppm.

6. H2S burns with a blue flame and has an auto ignition temperature of 5000 F. H2S forms an explosive mixture in the range of 4.3% to 45% by volume with air. H2S, when ignited, produces Sulfur Dioxide (SO2). SO2 is another toxic gas but less toxic than H2S.
7. Physiological Effects
    - 1,000-2,000+ ppm: Loss of consciousness and possible death.
    - 100-1,000 ppm: Serious respiratory, central nervous, and cardiovascular system effects.
    - 150-200 ppm: Olfactory fatigue (sense of smell is significantly impaired).
    - 100 ppm: Immediately Dangerous to Life and Health (IDLH concentration).
    - 5-30 ppm: Moderate irritation of the eyes.
    - 5-10 ppm: Relatively minor metabolic changes in exercising individuals during short-term exposures.
    - Less than 5 ppm: Metabolic changes observed in exercising individuals, but not clinically significant.
    - 5 ppm: Increase in anxiety symptoms (single exposure).
    - 5 ppm: Start of the dose-response curve (short-term exposure).
    - 0.032-0.02 ppm: Olfactory threshold (begin to smell).

D. H_2S Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing work at an effected facility:

1. The hazards and characteristics of hydrogen sulfide (H2S)
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.
5. The procedures for operating process equipment.

In addition, supervisory personnel will be trained in the following areas:

1. Corrective action and shutdown procedures when a release or leak occurs.
2. Notification process

Annual drills will be conducted to utilize the procedures and make improvements as needed. It will also serve as refresher training on the process.

Note: All H_2S safety equipment and systems will be installed, tested, and operational when operation commences.

E. Protective equipment controls:

Any facility that has the potential to emit H2S at 100 ppm or higher will be required to install and utilize the below controls:

1. Where applicable, area air monitors will be installed and function tested and calibrated no less than monthly and set on a quarterly basis PM schedule.
2. Facility operators will use self contained breathing apparatuses (SCBA's) to perform routine operations in areas where H2S may be present.
3. Trigger of 100 PPM or more must be communicated and work proceeding the trigger must use the buddy system.
4. Visible windsocks must be installed at key locations surrounding the facility.
5. H2S warning signs must be placed at the entrance to the facility as well as other key locations.
6. Personal H2S Monitor are required to be worn by all personnel on locations.
7. Stairs and ladders leading to the top of a tank or vessel containing 300 ppm or greater shall be chained or marked to restrict entry.

F. Emergency Procedures

1. Spill or Release of H_2S gas

If a spill or leak releases H_2S the following action must be initiated and completed:

a. Internally – Employee contacts supervisor and HSE Department and performs “d” below.

b. Externally - Someone identifies a possible H_2S emergency and reports it to Company Management, via the listed phone number on posted facility signs.

c. The Company dispatches an employee to investigate possible H_2S emergency and will secure situation or initiate emergency call for backup.

d. If the Radius of Exposure has been breached begin the following:

- Establish safe command center.
- Call for additional personnel and delegate the following:
  - i. Notifying public safety agencies (Sheriff, Fire Department, Department of Public Safety, Hwy. Department).
  - ii. Safeguarding the facility and effected area.
  - iii. Blocking roads as needed.
  - iv. Notifying/evacuating public.
  - v. Notifying regulatory agencies.
  - vi. Gathering additional information about release ie., location, flowrate, quantity, etc.
  - vii. Stopping release if safe to do so (use 2 trained persons)
  - viii. Notifying company management.
  - ix. Cleanup/repair facilities.

e. Facility Standard Operating Procedure

- Evacuate the area, travel crosswind then proceed upwind.
- Gather at muster point. Ensure Primary Muster point is upwind
- Notify managers & appropriate EMS if required.
- Safely shut down (ESD) facility if the facility hasn't already shut in.
- Pick up SCBA (should be a 30 minute - 1 hour pack, located at Muster point.)
- Use buddy system for man down scenario with rescuers assigned.
  - 1 person to mask up to operate facility controls as needed.
  - 1 person for rescue if needed.
  - 1 person for calling EMS and company management
- Investigate area and isolate release of gas if safe to do and ensure closure using 4 gas monitor.
- If venting gas can't be isolated, return to muster point, and re-evaluate path forward.
- Give detailed description where/how gas is being released.
- After isolation verify that area monitors return to 0 and are not in alarm.
- Resume normal operations, once managers agree the ROOT CAUSE has been addressed and corrected.

G. Contacting Authorities

Company personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the NM Emergency Response Commission must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Spur Energy Partners response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER).

H. Call List

Spur Energy Partners Emergency Contact List			
Person	**Location**	**Office Phone**	**Cell Phone**
Drilling and Completions Department			
Drilling Manager - Chris Hollis	Houston	832-930-8629	713-380-7754
Completions Manager - Theresa Voss	Houston	832-930-8614	832-849-8635
VP of Operations - Seth Ireland	Houston	832-930-8527	940-704-6375
Senior VP of Operations - John Nabors	Houston	832-930-8526	281-904-8811
Executive VP of Operations - Todd Mucha	Houston	832-930-8515	281-795-2286
HES/Environmental and Regulatory Department			
EHS Manager - Braidy Moulder	Artesia	575-616-5400	713-264-2517
Superintendent - Jerry Mathews	Artesia	575-616-5400	575-748-5234
Asst. Superintendent - Kenny Kidd	Artesia	575-616-5400	575-703-5851
Regulatory Director - Sarah Chapman	Houston	832-930-8613	281-642-5503
Regulatory Agencies			
Bureau of Land Management	Carlsbad	575-886-6544	
Bureau of Land Management	Hobbs	575-393-3612	
Bureau of Land Management	Roswell	575-622-5335	
Bureau of Land Management	Santa Fe	505-954-2000	
DOT Judicial Pipelines - Incident Reporting NM Public Regulation Commission	Santa Fe	505-827-3549 505-490-2375	
EPA Hotline	Dallas	214-665-6444	
Federal OSHA, Area Office	Lubbock	806-472-7681	
National Response Center	Washington, D.C.	800-424-8803	
National Infrastructure Coordinator Center	Washington, D.C.	202-282-2901	
New Mexico Air Quality Bureau	Santa Fe	505-827-1494	
New Mexico Oil Conservation Division	Artesia	575-748-1283 575-370-7545After	
New Mexico Oil Conservation Division	Hobbs	575-393-6161	
New Mexico Oil Conservation Division	Santa Fe	505-476-3770	
New Mexico OCD Environmental Bureau	Santa Fe	505-827-7152 505-476-3470	
New Mexico Environmental Department	Hobbs	575-827-9329	
NM State Emergency Response Center	Santa Fe	505-476-9600	

Medical Facilities		
Artesia General Hospital	Artesia	575-748-3333
Covenant Medical Center	Lubbock	806-725-1011
Covenant Medical Center Lakeside	Lubbock	806-725-6000
Guadalupe County Hospital	Carlsbad	575-887-6633
Lea Regional Hospital	Hobbs	575-492-5000
Medical Center Hospital	Odessa	432-640-4000
Midland Memorial Hospital	Midland	432-685-1111
Nor-Lea General Hospital	Lovington	575-396-6611
Odessa Regional Hospital	Odessa	432-334-8200
Union County General Hospital	Clayton	575-374-2585
University Medical Center	Lubbock	806-725-8200
Law Enforcement - Sheriff		
Ector County Sheriff's Department	Odessa	432-335-3050
Ector County Sheriff's Department	Artesia	575-746-2704
Ector County Sheriff's Department	Carlsbad	575-887-7551
Lea County Sherrif's Department	Eunice	575-384-2020
Lea County Sherrif's Department	Hobbs	575-393-2515
Lea County Sherrif's Department	Lovington	575-396-3611
Lubbock County Sheriff's Department	Abernathy	806-296-2724
Midland County Sheriff's Department	Midland	432-688-1277
Union County Sheriff's Department	Clayton	575-374-2583
Law Enforcement - Police		
Abernathy Police Department	Abernathy	806-298-2545
Artesia City Police	Artesia	575-746-2704
Carlsbad City Police	Carlsbad	575-885-2111
Clayton City Police	Clayton	575-374-2504
Eunice City Police	Eunice	575-394-2112
Hobbs City Police	Hobbs	575-397-9265 575-393-2677
Jal City Police	Jal	575-395-2501
Lovington City Police	Lovington	575-396-2811

Midland City Police	Midland	432-685-7113
Odessa City Police	Odessa	432-335-3378
Law Enforcement - FBI		
FBI	Albuquerque	505-224-2000
FBI	Midland	432-570-0255
Law Enforcement - DPS (911)		
NM State Police	Artesia	575-746-2704
NM State Police	Carlsbad	575-885-3137
NM State Police	Eunice	575-392-5588
NM State Police	Hobbs	575-392-5588
NM State Police	Clayton	575-374-2473
Firefighting and Rescue (911)		
Abernathy	Abernathy	806-298-2022
Amistad/Rosebud	Amistad/Rosebud	575-633-9113
Artesia	Artesia	575-746-5751
Carlsbad	Carlsbad	575-885-3125
Clayton	Clayton	575-374-2435
Eunice	Eunice	575-394-2111
Hobbs	Hobbs	575-397-9308
Jal	Jal	575-395-2221
Lovington	Lovington	575-396-2359
Maljamar	Maljamar	575-676-4100
Midland	Midland	432-685-7346
Nara Visa	Nara Visa	575-461-3300
Odessa	Odessa	432-335-4659
Tucumcari	Tucumcari	911
West Odessa	Odessa	432-381-3033

Ambulance (911)		
Abernathy Ambulance	Abernathy	806-298-2241
Amistad/Rosebud	Amistad/Rosebud	575-633-9113
Artesia Ambulance	Artesia	575-746-2701
Carlsbad Ambulance	Carlsbad	575-885-2111
Clayton Ambulance	Clayton	575-374-2501
Eunice Ambulance	Eunice	575-394-3258
Hobbs Ambulance	Hobbs	575-397-9308
Jal Ambulance	Jal	575-395-3501
Lovington Ambulance	Lovington	575-396-2811
Midland Ambulance	Midland	432-685-7499
Nara Visa Ambulance	Nara Visa	575-461-3300
Odessa Ambulance	Odessa	432-335-3378
Tucumcari Ambulance	Tucumcari	911
Medical Air Ambulance Service		
AEROCARE - Methodist Hospital	Lubbock	800-627-2376
Southwest MediVac	Hobbs	800-242-6199
Odessa Care Star	Odessa	888-624-3571

I. List of Facilities with the potential for 500ppm or higher H2S exposure.

ATTACHMENT 1: SPUR FACILITIES WITH ROE REVIEW

ALASKA 29 FEE TANK BATTERY
ARABIAN 6 FEE TANK BATTERY
ARCO 26 A STATE OIL BATTERY
ARCO B FEDERAL COM NO. 001
ARKANSAS STATE 23 TANK BATTERY
AVALON FEDERAL #001
B&B/ROSS RANCH OIL TANK BATTERY
BC FEDERAL 10 (9-13) TNK BTY
BC FEDERAL 1-8 &14 TNK BTY
BC FEDERAL 42 TNK BTY
BEE FED OIL BATTERY
BEECH 25 FEDERAL #9H BATTERY
BEECH FEDERAL 1
BEECH FEDERAL 2 BATTERY
BERRY A FEDERAL #005 SWB
BERRY A FEDERAL PADD BATTERY
BIG BOY STATE TB
BLUETAIL 8 FEDERAL 2 TANK BATTERY
BONE YARD 11 FEE TANK BATTERY
BOOT HILL 25 1H SWB
BOSE IKARD 4 ST COM 18H BATTERY
BRANTLEY FEDERAL #001
BR-549 STATE BATTERY
BRADLEY 8 FEE #3H-BATTERY
BRADLEY 8 FEE BATTERY
BRAGG 10 FEE 1 BATTERY
BRIGHAM H 2
BRIGHAM H FED (NORTH) BATTERY
BURCH KEELY 13C TK BTY
BURCH KEELY 18A TK BATT
BURCH KEELY 19A OIL BATT
BURCH KEELY 23A TK BATT
BURCH KEELY EAST 18B TANK BAT
BURCH KEELY SEC 13A NORTH BTTY
BURCH KEELY SEC 13B SOUTH BTTY
BURCH KEELY UNIT CTB BTTY
BURCH KEELY UNIT E BATTERY
BURKETT 16 STATE
CADDO FEDERAL BATTERY
CADILLAC ST 4 BATTERY
CALIFORNIA 29 FEE 1
CARMEN 3 FEDERAL BATTERY
CARRINGTON 12 ST 3,4,7 BATTERY
CHASER 8 STATE 2 TANK BATTERY
CHEYENNE FEDERAL TNK BTY
CLYDESDALE 1 FEE #1H BAT
CLYDESDALE 1 FEE 6H - BATTERY
COAL TRAIN FEDERAL COM #1
COFFIN STATE #1
COLLIER 22 STATE COM #43H
COLLIER STATE OIL BATTERY
CONOCO 8 STATE 4 TB
CONTINENTAL A STATE TNK BTY
CONTINENTAL B YESO TANK BTY
CONTINENTAL STATE 15A TNK BTY
CRYPT 30 STATE #1H
DAGGER DRAW FED/FOSTER FED TANK BATTERY
DARNER 9 STATE 1 TANK BATTERY
DARNER 9 STATE 2
DARTER 9 STATE 8 TANK BATTERY
DARNER 9 STATE CTB
DEXTER FEDERAL PAD TNK BTY
DODD 10A OIL BATTERY
DODD 10B TK BTTY
DODD FED #14C TK BATT
DODD FED 11A BATTERY
DODD FED UNIT 980H BATTERY
DODD FEDERAL 14A-TB
DODD FEDERAL UNIT 15A BTTY
DODD FEDERAL UNIT NORTH BTTY
DODD FEDERAL UNIT SOUTH BTTY
DOGWOOD FEDERAL TNK BTY
DORAMI 33 FEDERAL COM 2H.4H.9H TANK BATTERY
EBONY STATE TB
EDWARD STATE TNK BTY
ELECTRA FEDERAL 33 (NORTH) BATTERY
ELECTRA FEDERAL 5 (SWEET) TNK BTY
ELECTRA FEDERAL SOUR TNK BTY
EMPIRE SOUTH DEEP UNIT 21
FALABELLA 31 FEE #1H TK BATT
FALABELLA 31 FEE 8H TK BTY
FAT TIRE 12 COM FEDERAL CTB
FEDERAL BA COM NO. 001
FEDERAL BB NO. 001
FLAT HEAD FED COM 6H TANK BATTERY
FLAT HEAD FED COM 27H TANK BATTERY

ATTACHMENT 1: SPUR FACILITIES WITH ROE REVIEW

FIR FEDERAL TNK BTY
FIRECRACKER STATE TB
FLEMMING STATE OIL BATTERY
FOLK FEDERAL B TNK BTY
FOLK FEDERAL TNK BTY
FOLK STATE TANK BATTERY
FORAN STATE OIL BATTERY
GC FEDERAL 11 TNK BTY
GC FEDERAL 27 TNK BTY
GC FEDERAL TNK BTY
GILLESPIE STATE OIL BATTERY
GISSLER FEDERAL 13H TANK BATT
GJ WEST COOP SOUTH TB
GJ WEST COOP UNIT 092 BTY
GJ WEST COOP UNIT 191 BTY
GJ WEST COOP UNIT 210 BTY
GJ WEST COOP UNIT CENTRAL
GJ WEST COOP UNIT N TNK BTY
GOLD STAR TNK BTY
GOODMAN 22 TANK BATTERY
GRAVE DIGGER FEDERAL COM TANK BATTERY
GRAVE DIGGER ST COM #3H TANK BATTERY
GRAVE DIGGER STATE COM #8H SWB
HALBERD 27 ST 3H BATTERY
HANOVER STATE #3 (YESO)
HARPER STATE TNK BTY
HARVARD FEDERAL TNK BTY
HATFIELD B TB
HEARSE 36 ST COM TANK BATTERY
HOBGOBLIN 7 FED COM 4H TK BAT
HOLDER CB 11 TNK BTY
HOLDER CB FEDERAL 6&7 TNK BTY
HOLIDAY
HOUMA STATE TNK BTY
HT 18 FED 01.05.04 TANK BATTERY
HT 18 FEDERAL 8
HUBER 10,11,12 FEDERAL OIL TANK BATTERY
HUBER 3 FEDERAL OIL TANK BATTERY
HUBER 5 FEDERAL OIL TANK BATTERY
HYDRUS 10 FED 03.07.08.11 TANK BATTERY
HYDRUS 10 FED 04.05 TANK BATTERY
HYDRUS 10 FED 06.09.10.12 TANK BATTERY
IMPERIAL STATE TNK BTY
IVAR THE BONELESS FED 11H - BATTERY
JC FEDERAL 13 TNK BTY
JC FEDERAL 2 (SOUR) TNK BTY
JC FEDERAL 27 TNK BTY
JENKINS B FEDERAL TNK BTY
JG STATE 16 1 TANK BATTERY
JG STATE 16 7 TANK BATTERY
JON BOB 1
JUNIPER STATE TNK BTY
KIOWA OIL BATTERY
KOOL AID STATE
LAKEWOOD NORTH TANK BATTERY
LAKEWOOD SOUTH TANK BATTERY
LARA MICHELLE STATE OIL BTTY
LEAKER CC STATE TB
LEE 3 FEE 6H - TK BATT
LIVE OAK TANK BATTERY
MALCO 23 FEDERAL COM #13H
MAPLE STATE
MARACAS 22 STATE TANK BATTERY
MARY FEDERAL OIL BATTERY
MAYARO 22 STATE TANK BATTERY
MC FEDERAL 14 TANK BATTERY
MC FEDERAL 6 DEVONIAN
MC FEDERAL PADDOCK TNK BTY
MC SOUTHEAST BATTERY
MC STATE OIL BATTERY
MCCOY STATE TB
MCINTYRE A EAST TANK BATTERY
MCINTYRE B 10
MCINTYRE B 4
MCINTYRE B TNK BTY
MCINTYRE DK 15 TNK BTY
MCINTYRE DK FEDERAL 28H SWB
MEADOWHAWK 5 FEDERAL 3
MELROSE FEDERAL TNK BTY
MERAK 7 FEDERAL 8 TANK BATTERY
MESILLA STATE 3 & 5 TNK BTY
MESILLA STATE TNK BTY
MESQUITE STATE TANK BATTERY
MIMOSA STATE TNK BTY
MIRANDA FEDERAL B TNK BTY
MIRANDA FEDERAL TB

ATTACHMENT 1: SPUR FACILITIES WITH ROE REVIEW

MOE FEDERAL OIL BATTERY
MOHAWK FEDERAL TNK BTY
MONCRIEF 3 OIL BATTERY
MOORE STATE OIL BATTERY
MORRIS BOYD 26 FEE COM 1H
MORRIS BOYD TANK BATTERY
MORRIS E & F TANK BATTERY
MUSKEGON SOUTH STATE OIL BATTERY
NAVAHO FEDERAL TNK BTY
NELSON 13.23. TNK BATT
NEWCASTLE 6 FED COM - TANK BATTERY
NIRVANA TANK BATTERY
NOOSE FED 10 TANK BATTERY
NOOSE FED 5 TANK BATTERY
OKLAHOMA 32 TANK BATTERY
OSAGE BOYD 15 FED 09.12.13.14 TANK BATTERY
OSAGE BOYD YESO TANK BATTERY
PAINT 32 FEE OIL BATTERY
PAN CANADIAN A2-B3 TANK BATTERY
PASSION 1 FED PDK 5H TK BATT
PATTON 5 FEE 2H OIL BATTERY
PATTON 5 FEE 8H OIL BATTERY
PAWNEE STATE TNK BTY
PEACEMAKER 25 FEDERAL TANK BATTERY
PERE MARQUETTE 18 FEDERAL 1 TANK BATTERY
PILUM 15 FEE 2H BATTERY
PINTO 36 STATE COM 1H TNK BTY
PINTO 36 STATE COM 4H TNK BTY
PINTO 36 STATE TB
POLARIS B 5-10 TANK BTTY
POSEIDON 3 FEDERAL 4 TANK BATTERY
POSEIDON 3 FEDERAL 05.07.17.18 TANK BATTERY
PUCKETT 13 FEDERAL COM 35H
PUCKETT 13 FEDERAL TB
RAGNAR FED COM 25H - BATTERY
RANDALL FED 3 BATTERY
RED LAKE 32 TANK BATTERY
REDBUD FEDERAL TNK BTY
RINCON STATE TANK BATTERY
RJ UNIT NORTH TANK BATTERY
RJ UNIT SOUTH TANK BATTERY
RONCO FEDERAL #1
ROSE 02.03.04.05.06 TANK BATTERY
ROSE SOUTH TANK BATTERY
ROSS RANCH 09.13.14 BATTERY
SAM ADAMS 12 FED 4H UBB TK BATT
SANDY CROSSING 32 STATE COM 1
SCHLEY FEDERAL TNK BTY
SHAWNEE FEDERAL TNK BTY
SHELBY 23 BATTERY
SHERMAN 4 FEE 4H BATTERY
SHERMAN 4 FEE 6H BATTERY
SHORTY 2 STATE COM TANK BATTERY
SINCLAIR PARKE (PADDOCK) TNK BTY
SKELLY 605 BATTERY
SKELLY 942 BATTERY
SKELLY 968 BATTERY
SKELLY 973 BATTERY
SKELLY 989 BATTERY
SKELLY UNIT 907 CTB BATTERY
SKELLY UNIT 940 BATTERY
SOUTH BOYD FED COM OIL TANK BATTERY
SOUTH EMPIRE STATE COM 1
SPIKETAIL 5 STATE 2 TANK BATTERY
SPRUCE FEDERAL TNK BTY
STATE B GAS COM NO. 001
STATE S-19 YESO (SOUR) TNK BTY
STONEWALL 9 FEE #1H TBAT
STONEWALL 9 FEE 8H BATTERY
SUBMARINE 10 FED COM 2H OIL BAT
TAYLOR D TANK BATTEY
TENNECO STATE TNK BTY
TEX MACK FED
TEXACO BE TNK BTY
TEXAS 32 FEE TANK BATTERY
TEXMACK 36 STATE COM #1
TH STATE #1
THO STATE OIL BATTRY
THORNTAIL 31 FEDERAL 1
THUNDER ROAD FEDERAL OIL BTTY
TUMAK FED 3 BAT
VEGA 9 FED TANK BATTERY
VT 36 STATE #1H
W D MCINTYRE C 10
WAUKEE 36 STATE COME CTB
WD MCINTYRE C 8-9 TNK BTY

ATTACHMENT 1: SPUR FACILITIES WITH ROE REVIEW

WD MCINTYRE E TNK BTY
WELCH A 28 10.20.50 CTB
WESTERN FEDERAL TNK BTY
WHITE OAK STATE B TB
WHITE OAK STATE TNK BTY
WHITE STAR FEDERAL TNK BTY
WICHITA STATE TNK BTY
WILLOW STATE TNK BTY
YALE B OIL BATTERY
YALE STATE TANK BTY
YUCCA STATE TNK BTY

Intent ☐ As Drilled ☐

API #

Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

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

Latitude	Longitude	NAD

First Take Point (FTP)

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

Latitude	Longitude	NAD

Last Take Point (LTP)

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

Latitude	Longitude	NAD

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

Is this well an infill well? ☐

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

API #

Operator Name:	Property Name:	Well Number

KZ 06/29/2018