

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

Form C-101

August 1, 2011

Permit 346973

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

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

1. Operator Name and Address Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024		2. OGRID Number 328947
		3. API Number 30-015-54075
4. Property Code 334602	5. Property Name AID NORTH 14 13 STATE COM	6. Well No. 010H

7. Surface Location

UL - Lot B	Section 14	Township 17S	Range 28E	Lot Idn	Feet From 1228	N/S Line N	Feet From 2382	E/W Line E	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot A	Section 13	Township 17S	Range 28E	Lot Idn A	Feet From 1250	N/S Line N	Feet From 50	E/W Line E	County Eddy
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9. Pool Information

EMPIRE; GLORIETA-YESO	96210
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3600
16. Multiple N	17. Proposed Depth 10909	18. Formation Paddock	19. Contractor	20. Spud Date 10/2/2023
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	4000	1826	0
Prod	8.75	5.5	20	10909	1826	0

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5	5000	SHAFFER

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.	OIL CONSERVATION DIVISION	
Signature:		
Printed Name: Electronically filed by Sarah Chapman	Approved By: 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 30-015-54075		² Pool Code 96210	³ Pool Name EMPIRE; GLORIETA-YESO
⁴ Property Code 334602	⁵ Property Name AID NORTH 14-13 STATE COM		⁶ Well Number 10H
⁷ OGRID NO. 328947	⁸ Operator Name SPUR ENERGY PARTNERS LLC.		⁹ Elevation 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		1228	NORTH	2382	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
A	13	17S	28E		1250	NORTH	50	EAST	EDDY

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

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.

GEODETIC DATA NAD 83 GRID – NM EAST SURFACE LOCATION (SL) N: 669070.0 — E: 598767.9 LAT: 32.8391594° N LONG: 104.1463439° W FIRST TAKE POINT (FTP) <u>1244' FNL & 1405' FEL – SEC 14</u> N: 669146.9 — E: 599741.0 LAT: 32.8393657° N LONG: 104.1431751° W LAST TAKE POINT (LTP) <u>1252' FNL & 100' FEL – SEC 13</u> N: 669289.7 — E: 606337.3 LAT: 32.8397237° N LONG: 104.1216970° W BOTTOM HOLE (BH) N: 669291.4 — E: 606387.3 LAT: 32.8397283° N LONG: 104.1215344° W	CORNER DATA NAD 83 GRID – NM EAST <table style="width: 100%;"> <tr> <td>A: FOUND BRASS CAP "1941" N: 664715.7 — E: 596062.5</td> <td>G: FOUND BRASS CAP "1941" N: 670541.3 — E: 606438.4</td> </tr> <tr> <td>B: FOUND BRASS CAP "1941" N: 667371.0 — E: 595986.7</td> <td>H: FOUND BRASS CAP "1941" N: 665238.8 — E: 606433.6</td> </tr> <tr> <td>C: FOUND BRASS CAP "1941" N: 670028.0 — E: 595911.3</td> <td>I: FOUND BRASS CAP "1941" N: 665220.7 — E: 603835.2</td> </tr> <tr> <td>D: FOUND BRASS CAP "1941" N: 670275.9 — E: 598509.8</td> <td>J: FOUND BRASS CAP "1941" N: 665202.5 — E: 601236.8</td> </tr> <tr> <td>E: FOUND BRASS CAP "1941" N: 670523.4 — E: 601110.0</td> <td>K: FOUND BRASS CAP "1941" N: 664959.0 — E: 598649.4</td> </tr> <tr> <td>F: FOUND 1/2" REBAR N: 670530.5 — E: 603773.2</td> <td>L: FOUND BRASS CAP "1941" N: 667862.4 — E: 601172.4</td> </tr> </table>	A: FOUND BRASS CAP "1941" N: 664715.7 — E: 596062.5	G: FOUND BRASS CAP "1941" N: 670541.3 — E: 606438.4	B: FOUND BRASS CAP "1941" N: 667371.0 — E: 595986.7	H: FOUND BRASS CAP "1941" N: 665238.8 — E: 606433.6	C: FOUND BRASS CAP "1941" N: 670028.0 — E: 595911.3	I: FOUND BRASS CAP "1941" N: 665220.7 — E: 603835.2	D: FOUND BRASS CAP "1941" N: 670275.9 — E: 598509.8	J: FOUND BRASS CAP "1941" N: 665202.5 — E: 601236.8	E: FOUND BRASS CAP "1941" N: 670523.4 — E: 601110.0	K: FOUND BRASS CAP "1941" N: 664959.0 — E: 598649.4	F: FOUND 1/2" REBAR N: 670530.5 — E: 603773.2	L: FOUND BRASS CAP "1941" N: 667862.4 — E: 601172.4
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17 OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> <i>Sarah Chapman</i> 08/07/2023 Signature Date SARAH CHAPMAN Printed Name SCHAPMAN@SPUREENERGY.COM E-mail Address	18 SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> 06/14/2023 Date of Survey Signature and Seal of Professional Surveyor 14400 Certificate Number
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Job No: LS23060534

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

Form APD Comments

Permit 346973

PERMIT COMMENTS

Operator Name and Address: Spur Energy Partners LLC [328947] 9655 Katy Freeway Houston, TX 77024		API Number: 30-015-54075
		Well: AID NORTH 14 13 STATE COM #010H
Created By	Comment	Comment Date
ward.rikala	This is the defining well for the dedicated acreage.	8/17/2023

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

Form APD Conditions

Permit 346973

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: Spur Energy Partners LLC [328947] 9655 Katy Freeway Houston, TX 77024	API Number: 30-015-54075
	Well: AID NORTH 14 13 STATE COM #010H

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
10H**

**Wellbore #1
PERMIT**

Anticollision Report

01 August, 2023



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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
Depth Range:	0.00 to 10,909.80usft
Results Limited by:	Maximum separation factor of 55.00
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Elliptical Conic
Casing Method:	Not applied

Survey Tool Program		Date	08/01/23		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	10,909.06	PERMIT (Wellbore #1)	MWD+IFR1+SAG+FDIR	OWSG MWD + IFR1 + Sag + FDIR Correction	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
AID NORTH 14-13 STATE COM						
20H - Wellbore #1 - PERMIT	300.00	300.00	40.00	38.28	23.247	CC
20H - Wellbore #1 - PERMIT	379.54	378.44	40.34	38.05	17.618	ES
20H - Wellbore #1 - PERMIT	10,909.80	11,159.74	900.94	730.55	5.287	SF
21H - Wellbore #1 - PERMIT	300.00	300.00	39.90	38.18	23.190	CC, ES
21H - Wellbore #1 - PERMIT	10,909.80	11,124.98	907.92	738.05	5.345	SF
60H - Wellbore #1 - PERMIT	300.00	300.00	20.00	18.28	11.624	CC
60H - Wellbore #1 - PERMIT	350.00	349.65	20.14	18.06	9.684	ES
60H - Wellbore #1 - PERMIT	10,909.80	11,363.55	594.31	461.72	4.482	SF
61H - Wellbore #1 - PERMIT	300.00	300.00	19.90	18.18	11.566	CC, ES
61H - Wellbore #1 - PERMIT	10,909.80	11,345.67	613.30	476.26	4.475	SF
OFFSET: AID STATE #10 - Wellbore #1 - Wellbore #1	8,641.50	3,986.98	355.62	216.72	2.560	CC, ES
OFFSET: AID STATE #10 - Wellbore #1 - Wellbore #1	8,650.00	3,987.18	355.72	216.72	2.559	SF
OFFSET: AID STATE #6 - Wellbore #1 - Wellbore #1	10,606.94	4,013.28	1,053.30	897.41	6.756	CC, ES
OFFSET: AID STATE #6 - Wellbore #1 - Wellbore #1	10,700.00	4,015.38	1,057.40	900.43	6.736	SF
OFFSET: AID STATE #8 - Wellbore #1 - Wellbore #1	10,637.36	4,027.06	266.67	102.31	1.622	CC, ES, SF
OFFSET: AID STATE #9 - Wellbore #1 - Wellbore #1	8,671.90	3,975.63	964.30	834.18	7.411	CC, ES
OFFSET: AID STATE #9 - Wellbore #1 - Wellbore #1	8,750.00	3,977.40	967.46	836.45	7.385	SF
OFFSET: PUMA #1 - Wellbore #1 - Wellbore #1	3,617.03	3,499.24	543.25	460.75	6.585	CC, ES
OFFSET: PUMA #1 - Wellbore #1 - Wellbore #1	3,700.00	3,548.96	547.38	463.72	6.543	SF

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		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
200.00	200.00	200.00	200.00	0.50	0.50	-0.430	40.00	-0.30	40.00	39.00	1.00	39.853	
250.00	250.00	250.00	250.00	0.68	0.68	-0.430	40.00	-0.30	40.00	38.64	1.36	29.365	
300.00	300.00	300.00	300.00	0.86	0.86	-0.430	40.00	-0.30	40.00	38.28	1.72	23.247	CC
350.00	350.00	349.31	349.31	1.04	1.04	-47.457	40.42	-0.29	40.14	38.06	2.08	19.312	
379.54	379.53	378.44	378.43	1.14	1.14	-48.118	41.07	-0.29	40.34	38.05	2.29	17.618	ES
400.00	399.98	398.61	398.59	1.22	1.21	-48.672	41.70	-0.28	40.60	38.16	2.43	16.678	
450.00	449.96	447.87	447.81	1.40	1.39	-49.937	43.82	-0.25	41.84	39.05	2.79	14.998	
500.00	499.94	497.09	496.93	1.57	1.57	-51.028	46.78	-0.22	43.96	40.81	3.15	13.976	
550.00	549.92	546.22	545.92	1.75	1.75	-51.906	50.57	-0.17	46.94	43.44	3.50	13.406	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toelface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
600.00	599.90	595.24	594.72	1.93	1.93	-52.565	55.20	-0.11	50.79	46.93	3.86	13.164		
650.00	649.89	644.12	643.29	2.11	2.11	-53.021	60.64	-0.05	55.48	51.26	4.21	13.166		
700.00	699.87	692.83	691.60	2.29	2.28	-53.302	66.89	0.03	61.01	56.44	4.57	13.354		
750.00	749.85	741.34	739.60	2.47	2.46	-53.441	73.93	0.12	67.39	62.46	4.92	13.686		
800.00	799.83	789.64	787.26	2.64	2.63	-53.471	81.74	0.21	74.59	69.31	5.28	14.134		
850.00	849.81	837.68	834.53	2.82	2.81	-53.418	90.31	0.32	82.61	76.98	5.63	14.674		
900.00	899.79	885.46	881.39	3.00	2.98	-53.308	99.61	0.43	91.45	85.47	5.98	15.290		
950.00	949.77	932.93	927.80	3.18	3.15	-53.159	109.63	0.55	101.11	94.78	6.33	15.970		
1,000.00	999.75	980.09	973.72	3.36	3.32	-52.984	120.34	0.68	111.56	104.88	6.68	16.703		
1,050.00	1,049.73	1,026.91	1,019.13	3.54	3.49	-52.793	131.72	0.82	122.81	115.79	7.03	17.479		
1,100.00	1,099.71	1,073.36	1,064.00	3.72	3.66	-52.596	143.75	0.97	134.85	127.48	7.37	18.294		
1,150.00	1,149.69	1,119.43	1,108.30	3.90	3.83	-52.396	156.39	1.13	147.67	139.95	7.71	19.141		
1,200.00	1,199.67	1,165.10	1,152.01	4.08	4.01	-52.198	169.62	1.29	161.25	153.20	8.06	20.017		
1,250.00	1,249.65	1,210.35	1,195.11	4.26	4.18	-52.004	183.42	1.46	175.60	167.20	8.40	20.915		
1,300.00	1,299.64	1,255.17	1,237.57	4.43	4.35	-51.816	197.75	1.63	190.69	181.96	8.73	21.831		
1,350.00	1,349.62	1,302.40	1,282.18	4.61	4.53	-51.633	213.27	1.82	206.22	197.15	9.08	22.715		
1,400.00	1,399.60	1,349.92	1,327.06	4.79	4.72	-51.474	228.89	2.02	221.76	212.34	9.42	23.542		
1,450.00	1,449.58	1,397.44	1,371.94	4.97	4.90	-51.337	244.51	2.21	237.30	227.54	9.76	24.311		
1,500.00	1,499.56	1,444.96	1,416.82	5.15	5.09	-51.216	260.13	2.40	252.84	242.74	10.10	25.026		
1,550.00	1,549.54	1,492.49	1,461.70	5.33	5.28	-51.109	275.75	2.59	268.38	257.94	10.45	25.694		
1,600.00	1,599.52	1,540.01	1,506.58	5.51	5.46	-51.014	291.37	2.78	283.93	273.14	10.79	26.318		
1,650.00	1,649.50	1,587.53	1,551.46	5.69	5.65	-50.929	306.99	2.97	299.47	288.34	11.13	26.904		
1,700.00	1,699.48	1,635.05	1,596.34	5.87	5.84	-50.852	322.61	3.16	315.01	303.54	11.47	27.453		
1,750.00	1,749.46	1,682.57	1,641.22	6.05	6.03	-50.782	338.23	3.36	330.56	318.74	11.82	27.970		
1,800.00	1,799.44	1,730.09	1,686.10	6.23	6.22	-50.719	353.85	3.55	346.10	333.94	12.16	28.457		
1,850.00	1,849.42	1,777.61	1,730.98	6.41	6.41	-50.661	369.47	3.74	361.65	349.14	12.51	28.917		
1,900.00	1,899.40	1,825.13	1,775.86	6.59	6.60	-50.608	385.09	3.93	377.19	364.34	12.85	29.352		
1,950.00	1,949.38	1,872.65	1,820.74	6.76	6.79	-50.559	400.71	4.12	392.74	379.54	13.20	29.764		
2,000.00	1,999.37	1,920.17	1,865.62	6.94	6.98	-50.514	416.32	4.31	408.28	394.74	13.54	30.154		
2,050.00	2,049.35	1,967.70	1,910.50	7.12	7.17	-50.472	431.94	4.51	423.83	409.94	13.88	30.524		
2,100.00	2,099.33	2,015.22	1,955.38	7.30	7.36	-50.433	447.56	4.70	439.37	425.14	14.23	30.877		
2,150.00	2,149.31	2,062.74	2,000.26	7.48	7.55	-50.397	463.18	4.89	454.92	440.34	14.58	31.212		
2,200.00	2,199.29	2,110.26	2,045.14	7.66	7.74	-50.363	478.80	5.08	470.47	455.55	14.92	31.531		
2,250.00	2,249.27	2,157.78	2,090.03	7.84	7.93	-50.331	494.42	5.27	486.01	470.75	15.27	31.836		
2,300.00	2,299.25	2,205.30	2,134.91	8.02	8.12	-50.301	510.04	5.46	501.56	485.95	15.61	32.127		
2,350.00	2,349.23	2,252.82	2,179.79	8.20	8.32	-50.273	525.66	5.65	517.11	501.15	15.96	32.405		
2,400.00	2,399.21	2,300.34	2,224.67	8.38	8.51	-50.247	541.28	5.85	532.65	516.35	16.30	32.671		
2,450.00	2,449.19	2,347.86	2,269.55	8.56	8.70	-50.222	556.90	6.04	548.20	531.55	16.65	32.926		
2,500.00	2,499.17	2,395.38	2,314.43	8.74	8.89	-50.199	572.52	6.23	563.75	546.75	17.00	33.170		
2,550.00	2,549.15	2,442.91	2,359.31	8.92	9.09	-50.176	588.14	6.42	579.29	561.95	17.34	33.405		
2,600.00	2,599.13	2,490.43	2,404.19	9.10	9.28	-50.155	603.76	6.61	594.84	577.15	17.69	33.630		
2,650.00	2,649.11	2,537.95	2,449.07	9.27	9.47	-50.135	619.38	6.80	610.39	592.35	18.03	33.846		
2,700.00	2,699.10	2,585.47	2,493.95	9.45	9.66	-50.116	634.99	6.99	625.93	607.55	18.38	34.054		
2,750.00	2,749.08	2,632.99	2,538.83	9.63	9.86	-50.098	650.61	7.19	641.48	622.75	18.73	34.254		
2,791.98	2,791.04	2,672.89	2,576.51	9.78	10.02	-50.084	663.73	7.35	654.54	635.52	19.02	34.416		
2,800.00	2,799.06	2,680.51	2,583.71	9.81	10.05	-50.071	666.23	7.38	657.03	637.96	19.07	34.449		
2,850.00	2,848.97	2,727.98	2,628.54	9.99	10.24	-78.774	681.83	7.57	672.65	653.24	19.41	34.646		
2,900.00	2,898.66	2,775.26	2,673.20	10.17	10.43	-83.176	697.38	7.76	688.37	668.61	19.76	34.838		
2,950.00	2,948.01	2,822.24	2,717.56	10.35	10.62	-84.977	712.82	7.95	704.18	684.08	20.10	35.028		
3,000.00	2,996.88	2,868.77	2,761.51	10.53	10.81	-85.972	728.11	8.14	720.12	699.67	20.45	35.219		
3,050.00	3,045.13	2,914.73	2,804.92	10.71	11.00	-86.666	743.22	8.32	736.22	715.43	20.79	35.416		
3,100.00	3,092.63	2,960.01	2,847.67	10.89	11.18	-87.241	758.10	8.50	752.55	731.43	21.13	35.623		

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
3,150.00	3,139.25	3,006.93	2,891.99	11.07	11.38	-87.837	773.51	8.74	769.18	747.71	21.47	35.832	
3,200.00	3,184.86	3,067.09	2,948.88	11.25	11.62	-88.700	792.87	11.46	785.60	763.75	21.85	35.960	
3,250.00	3,229.33	3,129.61	3,007.92	11.43	11.87	-89.495	812.24	18.23	801.44	779.20	22.23	36.049	
3,300.00	3,272.56	3,194.63	3,068.97	11.61	12.13	-90.243	831.51	29.51	816.59	793.96	22.62	36.093	
3,350.00	3,314.41	3,262.26	3,131.80	11.80	12.38	-90.953	850.50	45.77	830.94	807.91	23.03	36.088	
3,400.00	3,354.77	3,332.63	3,196.10	11.99	12.65	-91.632	869.02	67.50	844.37	820.94	23.44	36.030	
3,450.00	3,393.54	3,405.79	3,261.42	12.19	12.91	-92.282	886.84	95.16	856.76	832.90	23.86	35.913	
3,500.00	3,430.60	3,481.76	3,327.20	12.39	13.17	-92.901	903.66	129.20	867.98	843.69	24.29	35.731	
3,550.00	3,465.85	3,560.48	3,392.72	12.60	13.43	-93.487	919.19	169.94	877.90	853.16	24.75	35.478	
3,600.00	3,499.20	3,641.84	3,457.13	12.81	13.69	-94.035	933.09	217.61	886.41	861.19	25.22	35.145	
3,650.00	3,530.55	3,725.61	3,519.47	13.04	13.95	-94.537	945.02	272.25	893.38	867.65	25.73	34.727	
3,700.00	3,559.83	3,811.49	3,578.68	13.28	14.21	-94.989	954.63	333.67	898.71	872.45	26.27	34.217	
3,750.00	3,586.95	3,899.08	3,633.68	13.52	14.49	-95.382	961.64	401.44	902.31	875.47	26.84	33.613	
3,772.42	3,598.38	3,938.80	3,656.70	13.63	14.63	-95.538	963.87	433.72	903.34	876.22	27.12	33.310	
3,800.00	3,612.17	3,987.94	3,683.44	13.77	14.80	-95.692	965.80	474.89	904.06	876.58	27.48	32.895	
3,850.00	3,637.17	4,050.72	3,715.18	14.05	15.04	-95.717	967.14	529.04	904.18	876.10	28.07	32.207	
3,900.00	3,662.17	4,100.72	3,740.18	14.33	15.25	-95.717	968.08	572.33	904.18	875.57	28.61	31.604	
3,950.00	3,687.17	4,150.72	3,765.18	14.62	15.48	-95.717	969.02	615.62	904.18	874.99	29.18	30.982	
3,972.42	3,698.38	4,173.14	3,776.40	14.75	15.58	-95.717	969.44	635.04	904.17	874.73	29.44	30.712	
3,972.50	3,698.42	4,173.22	3,776.43	14.75	15.58	-95.717	969.44	635.11	904.17	874.73	29.44	30.711	
4,000.00	3,711.59	4,200.71	3,790.18	14.92	15.72	-95.752	969.96	658.91	904.24	874.50	29.74	30.407	
4,050.00	3,732.51	4,257.11	3,817.14	15.22	16.01	-95.961	971.03	708.41	904.59	874.27	30.32	29.833	
4,100.00	3,749.40	4,317.03	3,840.54	15.54	16.35	-96.145	972.23	763.54	904.89	873.94	30.95	29.240	
4,150.00	3,762.12	4,377.30	3,858.13	15.86	16.70	-96.273	973.48	821.14	905.10	873.51	31.59	28.650	
4,200.00	3,770.57	4,437.80	3,869.61	16.18	17.06	-96.341	974.77	880.50	905.21	872.96	32.25	28.068	
4,250.00	3,774.71	4,498.39	3,874.76	16.49	17.43	-96.349	976.08	940.82	905.22	872.31	32.91	27.502	
4,259.50	3,775.00	4,509.63	3,875.02	16.55	17.50	-96.344	976.33	952.06	905.22	872.18	33.04	27.398	
4,300.00	3,775.91	4,550.13	3,875.63	16.81	17.75	-96.325	977.21	992.55	905.18	871.62	33.56	26.973	
4,350.00	3,777.04	4,600.13	3,876.38	17.15	18.07	-96.301	978.29	1,042.53	905.14	870.92	34.22	26.449	
4,400.00	3,778.17	4,650.13	3,877.12	17.49	18.41	-96.277	979.38	1,092.51	905.10	870.19	34.91	25.929	
4,450.00	3,779.30	4,700.13	3,877.87	17.85	18.75	-96.253	980.46	1,142.49	905.05	869.44	35.61	25.413	
4,500.00	3,780.43	4,750.12	3,878.62	18.21	19.10	-96.230	981.55	1,192.47	905.01	868.67	36.34	24.903	
4,550.00	3,781.55	4,800.12	3,879.37	18.60	19.46	-96.206	982.64	1,242.45	904.97	867.88	37.09	24.399	
4,600.00	3,782.68	4,850.12	3,880.12	18.98	19.84	-96.182	983.72	1,292.43	904.93	867.07	37.86	23.904	
4,650.00	3,783.81	4,900.12	3,880.87	19.37	20.22	-96.158	984.81	1,342.41	904.89	866.25	38.64	23.419	
4,700.00	3,784.94	4,950.12	3,881.62	19.77	20.61	-96.134	985.89	1,392.40	904.85	865.41	39.44	22.942	
4,750.00	3,786.06	5,000.12	3,882.37	20.19	21.01	-96.111	986.98	1,442.38	904.81	864.55	40.26	22.477	
4,800.00	3,787.19	5,050.12	3,883.12	20.60	21.41	-96.087	988.07	1,492.36	904.76	863.68	41.09	22.022	
4,850.00	3,788.32	5,100.11	3,883.87	21.03	21.82	-96.063	989.15	1,542.34	904.72	862.80	41.93	21.578	
4,900.00	3,789.45	5,150.11	3,884.62	21.46	22.25	-96.039	990.24	1,592.32	904.68	861.90	42.79	21.145	
4,950.00	3,790.58	5,200.11	3,885.37	21.89	22.67	-96.015	991.32	1,642.30	904.64	860.99	43.65	20.723	
5,000.00	3,791.70	5,250.11	3,886.12	22.33	23.10	-95.991	992.41	1,692.28	904.60	860.07	44.53	20.313	
5,050.00	3,792.83	5,300.11	3,886.87	22.78	23.54	-95.968	993.50	1,742.26	904.56	859.14	45.42	19.914	
5,100.00	3,793.96	5,350.11	3,887.62	23.23	23.98	-95.944	994.58	1,792.24	904.52	858.20	46.32	19.526	
5,150.00	3,795.09	5,400.11	3,888.37	23.69	24.42	-95.920	995.67	1,842.23	904.48	857.25	47.23	19.149	
5,200.00	3,796.22	5,450.10	3,889.12	24.15	24.88	-95.896	996.75	1,892.21	904.44	856.29	48.15	18.782	
5,250.00	3,797.34	5,500.10	3,889.86	24.62	25.33	-95.872	997.84	1,942.19	904.40	855.32	49.08	18.426	
5,300.00	3,798.47	5,550.10	3,890.61	25.09	25.79	-95.848	998.92	1,992.17	904.36	854.35	50.02	18.081	
5,350.00	3,799.60	5,600.10	3,891.36	25.57	26.26	-95.824	1,000.01	2,042.15	904.32	853.36	50.96	17.745	
5,400.00	3,800.73	5,650.10	3,892.11	26.04	26.72	-95.801	1,001.10	2,092.13	904.29	852.37	51.91	17.420	
5,450.00	3,801.86	5,700.10	3,892.86	26.52	27.19	-95.777	1,002.18	2,142.11	904.25	851.38	52.87	17.104	
5,500.00	3,802.98	5,750.10	3,893.61	27.00	27.67	-95.753	1,003.27	2,192.09	904.21	850.37	53.83	16.797	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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	Offset	Semi Major Axis		Distance								Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,550.00	3,804.11	5,800.09	3,894.36	27.49	28.15	-95.729	1,004.35	2,242.07	904.17	849.37	54.80	16.499	
5,600.00	3,805.24	5,850.09	3,895.11	27.98	28.63	-95.705	1,005.44	2,292.06	904.13	848.35	55.78	16.209	
5,650.00	3,806.37	5,900.09	3,895.86	28.48	29.11	-95.681	1,006.53	2,342.04	904.09	847.33	56.76	15.928	
5,700.00	3,807.49	5,950.09	3,896.61	28.97	29.60	-95.657	1,007.61	2,392.02	904.05	846.31	57.75	15.656	
5,750.00	3,808.62	6,000.09	3,897.36	29.47	30.09	-95.634	1,008.70	2,442.00	904.02	845.28	58.74	15.391	
5,800.00	3,809.75	6,050.09	3,898.11	29.97	30.58	-95.610	1,009.78	2,491.98	903.98	844.24	59.73	15.134	
5,850.00	3,810.88	6,100.09	3,898.86	30.47	31.08	-95.586	1,010.87	2,541.96	903.94	843.21	60.73	14.884	
5,900.00	3,812.01	6,150.08	3,899.61	30.97	31.57	-95.562	1,011.96	2,591.94	903.90	842.16	61.74	14.641	
5,950.00	3,813.13	6,200.08	3,900.36	31.48	32.07	-95.538	1,013.04	2,641.92	903.87	841.12	62.75	14.405	
6,000.00	3,814.26	6,250.08	3,901.11	31.99	32.57	-95.514	1,014.13	2,691.91	903.83	840.07	63.76	14.175	
6,050.00	3,815.39	6,300.08	3,901.86	32.50	33.08	-95.490	1,015.21	2,741.89	903.79	839.01	64.78	13.952	
6,100.00	3,816.52	6,350.08	3,902.60	33.01	33.58	-95.466	1,016.30	2,791.87	903.75	837.96	65.80	13.735	
6,150.00	3,817.65	6,400.08	3,903.35	33.52	34.09	-95.443	1,017.39	2,841.85	903.72	836.90	66.82	13.524	
6,200.00	3,818.77	6,450.08	3,904.10	34.03	34.60	-95.419	1,018.47	2,891.83	903.68	835.83	67.85	13.319	
6,250.00	3,819.90	6,500.07	3,904.85	34.55	35.11	-95.395	1,019.56	2,941.81	903.64	834.77	68.88	13.120	
6,300.00	3,821.03	6,550.07	3,905.60	35.07	35.62	-95.371	1,020.64	2,991.79	903.61	833.70	69.91	12.925	
6,350.00	3,822.16	6,600.07	3,906.35	35.59	36.13	-95.347	1,021.73	3,041.77	903.57	832.63	70.95	12.736	
6,400.00	3,823.29	6,650.07	3,907.10	36.11	36.65	-95.323	1,022.81	3,091.75	903.54	831.55	71.98	12.552	
6,450.00	3,824.41	6,700.07	3,907.85	36.63	37.16	-95.299	1,023.90	3,141.74	903.50	830.48	73.03	12.372	
6,500.00	3,825.54	6,750.07	3,908.60	37.15	37.68	-95.275	1,024.99	3,191.72	903.46	829.40	74.07	12.198	
6,550.00	3,826.67	6,800.07	3,909.35	37.68	38.20	-95.251	1,026.07	3,241.70	903.43	828.31	75.11	12.027	
6,600.00	3,827.80	6,850.06	3,910.10	38.20	38.72	-95.227	1,027.16	3,291.68	903.39	827.23	76.16	11.861	
6,650.00	3,828.92	6,900.06	3,910.85	38.73	39.24	-95.204	1,028.24	3,341.66	903.36	826.15	77.21	11.700	
6,700.00	3,830.05	6,950.06	3,911.60	39.25	39.76	-95.180	1,029.33	3,391.64	903.32	825.06	78.27	11.542	
6,750.00	3,831.18	7,000.06	3,912.35	39.78	40.29	-95.156	1,030.42	3,441.62	903.29	823.97	79.32	11.388	
6,800.00	3,832.31	7,050.06	3,913.10	40.31	40.81	-95.132	1,031.50	3,491.60	903.25	822.88	80.38	11.238	
6,850.00	3,833.44	7,100.06	3,913.85	40.84	41.34	-95.108	1,032.59	3,541.58	903.22	821.78	81.43	11.091	
6,900.00	3,834.56	7,150.06	3,914.60	41.37	41.86	-95.084	1,033.67	3,591.57	903.19	820.69	82.49	10.948	
6,950.00	3,835.69	7,200.05	3,915.34	41.90	42.39	-95.060	1,034.76	3,641.55	903.15	819.59	83.56	10.809	
7,000.00	3,836.82	7,250.05	3,916.09	42.44	42.92	-95.036	1,035.85	3,691.53	903.12	818.50	84.62	10.673	
7,050.00	3,837.95	7,300.05	3,916.84	42.97	43.45	-95.012	1,036.93	3,741.51	903.08	817.40	85.69	10.540	
7,100.00	3,839.08	7,350.05	3,917.59	43.50	43.98	-94.988	1,038.02	3,791.49	903.05	816.30	86.75	10.410	
7,150.00	3,840.20	7,400.05	3,918.34	44.04	44.51	-94.964	1,039.10	3,841.47	903.02	815.20	87.82	10.283	
7,200.00	3,841.33	7,450.05	3,919.09	44.57	45.04	-94.941	1,040.19	3,891.45	902.98	814.09	88.89	10.158	
7,250.00	3,842.46	7,500.05	3,919.84	45.11	45.57	-94.917	1,041.27	3,941.43	902.95	812.99	89.96	10.037	
7,300.00	3,843.59	7,550.04	3,920.59	45.65	46.11	-94.893	1,042.36	3,991.42	902.92	811.88	91.03	9.918	
7,350.00	3,844.72	7,600.04	3,921.34	46.18	46.64	-94.869	1,043.45	4,041.40	902.88	810.78	92.11	9.802	
7,400.00	3,845.84	7,650.04	3,922.09	46.72	47.17	-94.845	1,044.53	4,091.38	902.85	809.67	93.18	9.689	
7,450.00	3,846.97	7,700.04	3,922.84	47.26	47.71	-94.821	1,045.62	4,141.36	902.82	808.56	94.26	9.578	
7,500.00	3,848.10	7,750.04	3,923.59	47.80	48.24	-94.797	1,046.70	4,191.34	902.78	807.45	95.34	9.469	
7,550.00	3,849.23	7,800.04	3,924.34	48.34	48.78	-94.773	1,047.79	4,241.32	902.75	806.34	96.42	9.363	
7,600.00	3,850.35	7,850.04	3,925.09	48.88	49.32	-94.749	1,048.88	4,291.30	902.72	805.23	97.50	9.259	
7,650.00	3,851.48	7,900.03	3,925.84	49.42	49.86	-94.725	1,049.96	4,341.28	902.69	804.11	98.58	9.157	
7,700.00	3,852.61	7,950.03	3,926.59	49.96	50.39	-94.701	1,051.05	4,391.26	902.66	803.00	99.66	9.058	
7,750.00	3,853.74	8,000.03	3,927.34	50.50	50.93	-94.677	1,052.13	4,441.25	902.62	801.88	100.74	8.960	
7,800.00	3,854.87	8,050.03	3,928.08	51.05	51.47	-94.653	1,053.22	4,491.23	902.59	800.77	101.82	8.864	
7,850.00	3,855.99	8,100.03	3,928.83	51.59	52.01	-94.629	1,054.31	4,541.21	902.56	799.65	102.91	8.770	
7,900.00	3,857.12	8,150.03	3,929.58	52.13	52.55	-94.605	1,055.39	4,591.19	902.53	798.54	104.00	8.679	
7,950.00	3,858.25	8,200.03	3,930.33	52.67	53.09	-94.581	1,056.48	4,641.17	902.50	797.42	105.08	8.589	
8,000.00	3,859.38	8,250.02	3,931.08	53.22	53.63	-94.558	1,057.56	4,691.15	902.47	796.30	106.17	8.500	
8,050.00	3,860.51	8,300.02	3,931.83	53.76	54.17	-94.534	1,058.65	4,741.13	902.44	795.18	107.26	8.414	
8,100.00	3,861.63	8,350.02	3,932.58	54.31	54.72	-94.510	1,059.74	4,791.11	902.41	794.06	108.35	8.329	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
8,150.00	3,862.76	8,400.02	3,933.33	54.85	55.26	-94.486	1,060.82	4,841.09	902.38	792.94	109.44	8.246	
8,200.00	3,863.89	8,450.02	3,934.08	55.40	55.80	-94.462	1,061.91	4,891.08	902.35	791.82	110.53	8.164	
8,250.00	3,865.02	8,500.02	3,934.83	55.94	56.34	-94.438	1,062.99	4,941.06	902.32	790.70	111.62	8.084	
8,300.00	3,866.15	8,550.02	3,935.58	56.49	56.89	-94.414	1,064.08	4,991.04	902.29	789.57	112.71	8.005	
8,350.00	3,867.27	8,600.01	3,936.33	57.04	57.43	-94.390	1,065.16	5,041.02	902.26	788.45	113.80	7.928	
8,400.00	3,868.40	8,650.01	3,937.08	57.58	57.98	-94.366	1,066.25	5,091.00	902.23	787.33	114.90	7.852	
8,450.00	3,869.53	8,700.01	3,937.83	58.13	58.52	-94.342	1,067.34	5,140.98	902.20	786.20	115.99	7.778	
8,500.00	3,870.66	8,750.01	3,938.58	58.68	59.07	-94.318	1,068.42	5,190.96	902.17	785.08	117.09	7.705	
8,550.00	3,871.78	8,800.01	3,939.33	59.22	59.61	-94.294	1,069.51	5,240.94	902.14	783.96	118.18	7.633	
8,600.00	3,872.91	8,850.01	3,940.08	59.77	60.16	-94.270	1,070.59	5,290.93	902.11	782.83	119.28	7.563	
8,650.00	3,874.04	8,900.01	3,940.82	60.32	60.70	-94.246	1,071.68	5,340.91	902.08	781.70	120.38	7.494	
8,700.00	3,875.17	8,950.00	3,941.57	60.87	61.25	-94.222	1,072.77	5,390.89	902.05	780.58	121.47	7.426	
8,750.00	3,876.30	9,000.00	3,942.32	61.42	61.80	-94.198	1,073.85	5,440.87	902.02	779.45	122.57	7.359	
8,800.00	3,877.42	9,050.00	3,943.07	61.97	62.34	-94.174	1,074.94	5,490.85	902.00	778.32	123.67	7.294	
8,850.00	3,878.55	9,100.00	3,943.82	62.52	62.89	-94.150	1,076.02	5,540.83	901.97	777.20	124.77	7.229	
8,900.00	3,879.68	9,150.00	3,944.57	63.06	63.44	-94.126	1,077.11	5,590.81	901.94	776.07	125.87	7.166	
8,950.00	3,880.81	9,200.00	3,945.32	63.61	63.98	-94.102	1,078.20	5,640.79	901.91	774.94	126.97	7.103	
9,000.00	3,881.94	9,250.00	3,946.07	64.16	64.53	-94.078	1,079.28	5,690.77	901.88	773.81	128.07	7.042	
9,050.00	3,883.06	9,299.99	3,946.82	64.71	65.08	-94.054	1,080.37	5,740.76	901.86	772.68	129.17	6.982	
9,100.00	3,884.19	9,349.99	3,947.57	65.26	65.63	-94.030	1,081.45	5,790.74	901.83	771.55	130.27	6.923	
9,150.00	3,885.32	9,399.99	3,948.32	65.82	66.18	-94.006	1,082.54	5,840.72	901.80	770.43	131.38	6.864	
9,200.00	3,886.45	9,449.99	3,949.07	66.37	66.73	-93.982	1,083.62	5,890.70	901.77	769.30	132.48	6.807	
9,250.00	3,887.58	9,499.99	3,949.82	66.92	67.28	-93.958	1,084.71	5,940.68	901.75	768.17	133.58	6.751	
9,300.00	3,888.70	9,549.99	3,950.57	67.47	67.83	-93.934	1,085.80	5,990.66	901.72	767.04	134.68	6.695	
9,350.00	3,889.83	9,599.99	3,951.32	68.02	68.38	-93.910	1,086.88	6,040.64	901.69	765.90	135.79	6.640	
9,400.00	3,890.96	9,649.98	3,952.07	68.57	68.92	-93.886	1,087.97	6,090.62	901.67	764.77	136.89	6.587	
9,450.00	3,892.09	9,699.98	3,952.82	69.12	69.47	-93.862	1,089.05	6,140.61	901.64	763.64	138.00	6.534	
9,500.00	3,893.21	9,749.98	3,953.56	69.67	70.03	-93.838	1,090.14	6,190.59	901.61	762.51	139.10	6.482	
9,550.00	3,894.34	9,799.98	3,954.31	70.23	70.58	-93.814	1,091.23	6,240.57	901.59	761.38	140.21	6.430	
9,600.00	3,895.47	9,849.98	3,955.06	70.78	71.13	-93.790	1,092.31	6,290.55	901.56	760.25	141.31	6.380	
9,650.00	3,896.60	9,899.98	3,955.81	71.33	71.68	-93.766	1,093.40	6,340.53	901.54	759.12	142.42	6.330	
9,700.00	3,897.73	9,949.98	3,956.56	71.88	72.23	-93.742	1,094.48	6,390.51	901.51	757.98	143.53	6.281	
9,750.00	3,898.85	9,999.97	3,957.31	72.44	72.78	-93.718	1,095.57	6,440.49	901.49	756.85	144.64	6.233	
9,800.00	3,899.98	10,049.97	3,958.06	72.99	73.33	-93.694	1,096.66	6,490.47	901.46	755.72	145.74	6.185	
9,850.00	3,901.11	10,099.97	3,958.81	73.54	73.88	-93.670	1,097.74	6,540.45	901.44	754.59	146.85	6.138	
9,900.00	3,902.24	10,149.97	3,959.56	74.10	74.43	-93.646	1,098.83	6,590.44	901.41	753.45	147.96	6.092	
9,950.00	3,903.37	10,199.97	3,960.31	74.65	74.99	-93.622	1,099.91	6,640.42	901.39	752.32	149.07	6.047	
10,000.00	3,904.49	10,249.97	3,961.06	75.20	75.54	-93.598	1,101.00	6,690.40	901.36	751.19	150.18	6.002	
10,050.00	3,905.62	10,299.97	3,961.81	75.76	76.09	-93.574	1,102.08	6,740.38	901.34	750.05	151.28	5.958	
10,100.00	3,906.75	10,349.96	3,962.56	76.31	76.64	-93.550	1,103.17	6,790.36	901.31	748.92	152.39	5.914	
10,150.00	3,907.88	10,399.96	3,963.31	76.86	77.19	-93.526	1,104.26	6,840.34	901.29	747.78	153.50	5.871	
10,200.00	3,909.01	10,449.96	3,964.06	77.42	77.75	-93.502	1,105.34	6,890.32	901.26	746.65	154.61	5.829	
10,250.00	3,910.13	10,499.96	3,964.81	77.97	78.30	-93.478	1,106.43	6,940.30	901.24	745.52	155.72	5.787	
10,300.00	3,911.26	10,549.96	3,965.56	78.53	78.85	-93.454	1,107.51	6,990.28	901.22	744.38	156.84	5.746	
10,350.00	3,912.39	10,599.96	3,966.30	79.08	79.41	-93.430	1,108.60	7,040.27	901.19	743.25	157.95	5.706	
10,400.00	3,913.52	10,649.96	3,967.05	79.63	79.96	-93.406	1,109.69	7,090.25	901.17	742.11	159.06	5.666	
10,450.00	3,914.64	10,699.95	3,967.80	80.19	80.51	-93.382	1,110.77	7,140.23	901.15	740.98	160.17	5.626	
10,500.00	3,915.77	10,749.95	3,968.55	80.74	81.07	-93.358	1,111.86	7,190.21	901.12	739.84	161.28	5.587	
10,550.00	3,916.90	10,799.95	3,969.30	81.30	81.62	-93.334	1,112.94	7,240.19	901.10	738.71	162.39	5.549	
10,600.00	3,918.03	10,849.95	3,970.05	81.85	82.17	-93.310	1,114.03	7,290.17	901.08	737.57	163.50	5.511	
10,650.00	3,919.16	10,899.95	3,970.80	82.41	82.73	-93.286	1,115.12	7,340.15	901.06	736.44	164.62	5.474	
10,700.00	3,920.28	10,949.95	3,971.55	82.96	83.28	-93.262	1,116.20	7,390.13	901.03	735.30	165.73	5.437	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,750.00	3,921.41	10,999.95	3,972.30	83.52	83.84	-93.238	1,117.29	7,440.12	901.01	734.17	166.84	5.400	
10,800.00	3,922.54	11,049.94	3,973.05	84.07	84.39	-93.214	1,118.37	7,490.10	900.99	733.03	167.96	5.364	
10,850.00	3,923.67	11,099.94	3,973.80	84.63	84.94	-93.190	1,119.46	7,540.08	900.97	731.90	169.07	5.329	
10,859.02	3,923.87	11,108.97	3,973.93	84.73	85.04	-93.186	1,119.66	7,549.10	900.96	731.69	169.27	5.323	
10,900.00	3,924.80	11,149.94	3,974.55	85.19	85.50	-93.166	1,120.55	7,590.06	900.95	730.76	170.18	5.294	
10,909.06	3,925.00	11,159.00	3,974.68	85.29	85.60	-93.162	1,120.74	7,599.12	900.94	730.56	170.38	5.288	
10,909.80	3,925.02	11,159.74	3,974.69	85.29	85.61	-93.161	1,120.76	7,599.85	900.94	730.55	170.40	5.287 SF	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
200.00	200.00	200.00	200.00	0.50	0.50	179.426	-39.90	0.40	39.90	38.90	1.00	39.754	
250.00	250.00	250.00	250.00	0.68	0.68	179.426	-39.90	0.40	39.90	38.54	1.36	29.292	
300.00	300.00	300.00	300.00	0.86	0.86	179.426	-39.90	0.40	39.90	38.18	1.72	23.190 CC, ES	
350.00	350.00	349.30	349.30	1.04	1.03	133.228	-40.32	0.43	40.63	38.56	2.07	19.619	
379.54	379.53	378.41	378.40	1.14	1.13	133.805	-40.97	0.48	41.75	39.47	2.28	18.314	
400.00	399.98	398.54	398.52	1.22	1.20	134.276	-41.59	0.53	42.77	40.35	2.42	17.664	
450.00	449.96	447.68	447.61	1.40	1.37	135.253	-43.69	0.69	45.88	43.12	2.77	16.579	
500.00	499.94	496.70	496.55	1.57	1.54	135.986	-46.63	0.92	49.86	46.74	3.11	16.013	
550.00	549.92	545.58	545.28	1.75	1.71	136.492	-50.39	1.21	54.68	51.22	3.46	15.791	
600.00	599.90	594.29	593.78	1.93	1.88	136.805	-54.96	1.56	60.35	56.54	3.81	15.832	
650.00	649.89	642.80	641.98	2.11	2.05	136.964	-60.32	1.98	66.85	62.69	4.16	16.063	
700.00	699.87	691.09	689.87	2.29	2.22	137.004	-66.47	2.45	74.18	69.67	4.51	16.444	
750.00	749.85	739.12	737.40	2.47	2.39	136.956	-73.39	2.99	82.33	77.47	4.86	16.941	
800.00	799.83	786.87	784.53	2.64	2.56	136.845	-81.05	3.58	91.30	86.09	5.21	17.530	
850.00	849.81	834.33	831.24	2.82	2.73	136.692	-89.44	4.23	101.08	95.52	5.56	18.195	
900.00	899.79	881.46	877.48	3.00	2.91	136.511	-98.53	4.93	111.66	105.76	5.90	18.921	
950.00	949.77	928.25	923.23	3.18	3.09	136.315	-108.31	5.69	123.03	116.79	6.25	19.700	
1,000.00	999.75	974.67	968.45	3.36	3.26	136.109	-118.74	6.49	135.19	128.60	6.59	20.518	
1,050.00	1,049.73	1,020.71	1,013.13	3.54	3.44	135.902	-129.81	7.35	148.12	141.19	6.93	21.375	
1,100.00	1,099.71	1,066.34	1,057.24	3.72	3.62	135.695	-141.49	8.25	161.83	154.56	7.27	22.261	
1,150.00	1,149.69	1,111.55	1,100.74	3.90	3.79	135.493	-153.74	9.20	176.29	168.68	7.61	23.168	
1,200.00	1,199.67	1,158.27	1,145.53	4.08	3.98	135.295	-166.96	10.22	191.33	183.38	7.95	24.064	
1,250.00	1,249.65	1,205.93	1,191.23	4.26	4.17	135.120	-180.50	11.26	206.43	198.14	8.29	24.896	
1,300.00	1,299.64	1,253.59	1,236.92	4.43	4.36	134.969	-194.03	12.31	221.53	212.89	8.63	25.663	
1,350.00	1,349.62	1,301.26	1,282.61	4.61	4.55	134.837	-207.56	13.35	236.62	227.65	8.97	26.371	
1,400.00	1,399.60	1,348.92	1,328.30	4.79	4.75	134.721	-221.09	14.40	251.72	242.41	9.31	27.025	
1,450.00	1,449.58	1,396.58	1,373.99	4.97	4.94	134.619	-234.62	15.44	266.82	257.17	9.66	27.633	
1,500.00	1,499.56	1,444.25	1,419.68	5.15	5.14	134.527	-248.15	16.49	281.92	271.92	10.00	28.197	
1,550.00	1,549.54	1,491.91	1,465.37	5.33	5.33	134.444	-261.68	17.53	297.02	286.68	10.34	28.724	
1,600.00	1,599.52	1,539.57	1,511.06	5.51	5.53	134.370	-275.21	18.58	312.12	301.44	10.68	29.215	
1,650.00	1,649.50	1,587.24	1,556.75	5.69	5.72	134.302	-288.74	19.63	327.23	316.20	11.03	29.676	
1,700.00	1,699.48	1,634.90	1,602.44	5.87	5.92	134.241	-302.27	20.67	342.33	330.96	11.37	30.107	
1,750.00	1,749.46	1,682.56	1,648.13	6.05	6.12	134.184	-315.80	21.72	357.43	345.72	11.71	30.513	
1,800.00	1,799.44	1,730.23	1,693.82	6.23	6.32	134.133	-329.33	22.76	372.53	360.48	12.06	30.895	
1,850.00	1,849.42	1,777.89	1,739.51	6.41	6.51	134.085	-342.86	23.81	387.64	375.24	12.40	31.256	
1,900.00	1,899.40	1,825.56	1,785.21	6.59	6.71	134.041	-356.39	24.85	402.74	389.99	12.75	31.596	
1,950.00	1,949.38	1,873.22	1,830.90	6.76	6.91	134.000	-369.92	25.90	417.84	404.75	13.09	31.918	
2,000.00	1,999.37	1,920.88	1,876.59	6.94	7.11	133.961	-383.45	26.94	432.95	419.51	13.44	32.223	
2,050.00	2,049.35	1,968.55	1,922.28	7.12	7.31	133.926	-396.98	27.99	448.05	434.27	13.78	32.513	
2,100.00	2,099.33	2,016.21	1,967.97	7.30	7.51	133.893	-410.51	29.03	463.16	449.03	14.13	32.788	
2,150.00	2,149.31	2,063.87	2,013.66	7.48	7.70	133.861	-424.04	30.08	478.26	463.79	14.47	33.050	
2,200.00	2,199.29	2,111.54	2,059.35	7.66	7.90	133.832	-437.57	31.12	493.36	478.55	14.82	33.299	
2,250.00	2,249.27	2,159.20	2,105.04	7.84	8.10	133.805	-451.10	32.17	508.47	493.31	15.16	33.537	
2,300.00	2,299.25	2,206.86	2,150.73	8.02	8.30	133.779	-464.63	33.22	523.57	508.07	15.51	33.764	
2,350.00	2,349.23	2,254.53	2,196.42	8.20	8.50	133.754	-478.16	34.26	538.68	522.82	15.85	33.980	
2,400.00	2,399.21	2,302.19	2,242.11	8.38	8.70	133.731	-491.69	35.31	553.78	537.58	16.20	34.188	
2,450.00	2,449.19	2,349.85	2,287.80	8.56	8.90	133.709	-505.22	36.35	568.89	552.34	16.54	34.386	
2,500.00	2,499.17	2,397.52	2,333.49	8.74	9.10	133.688	-518.75	37.40	583.99	567.10	16.89	34.576	
2,550.00	2,549.15	2,445.18	2,379.19	8.92	9.30	133.669	-532.28	38.44	599.10	581.86	17.24	34.759	
2,600.00	2,599.13	2,492.84	2,424.88	9.10	9.50	133.650	-545.81	39.49	614.20	596.62	17.58	34.934	
2,650.00	2,649.11	2,540.51	2,470.57	9.27	9.70	133.632	-559.34	40.53	629.31	611.38	17.93	35.102	
2,700.00	2,699.10	2,588.17	2,516.26	9.45	9.90	133.615	-572.87	41.58	644.41	626.14	18.27	35.263	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
2,750.00	2,749.08	2,635.83	2,561.95	9.63	10.10	133.599	-586.40	42.62	659.52	640.90	18.62	35.419		
2,791.98	2,791.04	2,675.85	2,600.31	9.78	10.27	133.586	-597.76	43.50	672.20	653.29	18.91	35.545		
2,800.00	2,799.06	2,683.50	2,607.64	9.81	10.30	123.890	-599.93	43.67	674.62	655.66	18.97	35.570		
2,850.00	2,848.97	2,731.13	2,653.30	9.99	10.50	102.924	-613.45	44.71	689.74	670.43	19.31	35.717		
2,900.00	2,898.66	2,778.60	2,698.81	10.17	10.70	97.287	-626.93	45.75	704.87	685.21	19.66	35.856		
2,950.00	2,948.01	2,825.79	2,744.05	10.35	10.90	94.646	-640.33	46.79	720.00	699.99	20.01	35.988		
3,000.00	2,996.88	2,872.57	2,788.89	10.53	11.10	93.163	-653.60	47.82	735.17	714.81	20.35	36.119		
3,050.00	3,045.13	2,918.81	2,833.22	10.71	11.29	92.291	-666.73	48.83	750.42	729.72	20.70	36.254		
3,100.00	3,092.63	2,964.39	2,876.90	10.89	11.49	91.801	-679.67	49.83	765.81	744.77	21.04	36.397		
3,150.00	3,139.25	3,011.65	2,922.21	11.07	11.69	91.635	-693.07	50.93	781.42	760.03	21.39	36.539		
3,200.00	3,184.86	3,070.10	2,978.26	11.25	11.93	91.871	-709.20	54.64	796.80	775.03	21.76	36.610		
3,250.00	3,229.33	3,130.64	3,036.17	11.43	12.18	92.177	-725.13	62.16	811.65	789.50	22.15	36.646		
3,300.00	3,272.56	3,193.41	3,095.80	11.61	12.44	92.534	-740.77	73.90	825.88	803.34	22.54	36.644		
3,350.00	3,314.41	3,258.50	3,156.94	11.80	12.69	92.929	-755.95	90.24	839.38	816.45	22.93	36.602		
3,400.00	3,354.77	3,326.02	3,219.29	11.99	12.95	93.351	-770.52	111.61	852.06	828.72	23.33	36.514		
3,450.00	3,393.54	3,396.02	3,282.48	12.19	13.21	93.793	-784.28	138.38	863.80	840.06	23.75	36.377		
3,500.00	3,430.60	3,468.54	3,345.99	12.39	13.47	94.245	-797.01	170.94	874.51	850.34	24.17	36.185		
3,550.00	3,465.85	3,543.54	3,409.23	12.60	13.72	94.700	-808.48	209.57	884.06	859.45	24.60	35.931		
3,600.00	3,499.20	3,620.96	3,471.47	12.81	13.97	95.149	-818.41	254.48	892.35	867.29	25.06	35.609		
3,650.00	3,530.55	3,700.63	3,531.90	13.04	14.22	95.584	-826.56	305.73	899.27	873.73	25.54	35.212		
3,700.00	3,559.83	3,782.35	3,589.60	13.28	14.47	95.997	-832.67	363.23	904.72	878.68	26.05	34.733		
3,750.00	3,586.95	3,865.81	3,643.63	13.52	14.72	96.379	-836.52	426.69	908.63	882.04	26.59	34.168		
3,772.42	3,598.38	3,903.71	3,666.42	13.63	14.83	96.539	-837.46	456.95	909.86	883.01	26.85	33.889		
3,800.00	3,612.17	3,950.69	3,693.09	13.77	14.98	96.765	-837.92	495.62	910.88	883.69	27.19	33.506		
3,850.00	3,637.17	4,024.70	3,731.50	14.05	15.22	96.863	-837.11	558.86	911.32	883.51	27.81	32.772		
3,900.00	3,662.17	4,074.70	3,756.50	14.33	15.39	96.863	-836.17	602.15	911.32	882.98	28.34	32.160		
3,950.00	3,687.17	4,124.70	3,781.50	14.62	15.57	96.863	-835.22	645.44	911.32	882.42	28.89	31.539		
3,972.42	3,698.38	4,147.12	3,792.71	14.75	15.66	96.863	-834.80	664.86	911.32	882.17	29.15	31.263		
3,972.55	3,698.45	4,147.25	3,792.77	14.75	15.66	96.863	-834.80	664.97	911.32	882.16	29.15	31.261		
4,000.00	3,711.59	4,174.68	3,806.49	14.92	15.78	96.897	-834.28	688.73	911.40	881.95	29.44	30.957		
4,050.00	3,732.51	4,228.47	3,833.08	15.22	16.02	97.137	-833.26	735.47	911.92	881.93	29.99	30.410		
4,100.00	3,749.40	4,290.94	3,859.33	15.54	16.32	97.429	-832.03	792.11	912.49	881.89	30.60	29.820		
4,150.00	3,762.12	4,354.06	3,879.43	15.86	16.64	97.648	-830.73	851.89	912.93	881.69	31.24	29.226		
4,200.00	3,770.57	4,417.65	3,892.91	16.18	16.99	97.792	-829.38	913.99	913.22	881.33	31.89	28.634		
4,250.00	3,774.71	4,481.51	3,899.44	16.49	17.34	97.857	-827.99	977.47	913.35	880.79	32.56	28.052		
4,259.50	3,775.00	4,493.66	3,899.88	16.55	17.41	97.861	-827.73	989.60	913.36	880.67	32.69	27.944		
4,300.00	3,775.91	4,535.47	3,900.54	16.81	17.66	97.843	-826.82	1,031.40	913.32	880.10	33.22	27.497		
4,350.00	3,777.04	4,585.46	3,901.30	17.15	17.96	97.820	-825.73	1,081.38	913.27	879.39	33.88	26.956		
4,400.00	3,778.17	4,635.46	3,902.05	17.49	18.27	97.797	-824.64	1,131.36	913.21	878.65	34.56	26.423		
4,450.00	3,779.30	4,685.46	3,902.80	17.85	18.60	97.774	-823.56	1,181.34	913.16	877.89	35.27	25.889		
4,500.00	3,780.43	4,735.46	3,903.56	18.21	18.94	97.751	-822.47	1,231.32	913.11	877.11	36.00	25.366		
4,550.00	3,781.55	4,785.46	3,904.31	18.60	19.29	97.727	-821.38	1,281.30	913.06	876.31	36.75	24.846		
4,600.00	3,782.68	4,835.46	3,905.07	18.98	19.66	97.704	-820.29	1,331.28	913.01	875.49	37.51	24.338		
4,650.00	3,783.81	4,885.46	3,905.82	19.37	20.03	97.681	-819.20	1,381.26	912.96	874.66	38.30	23.837		
4,700.00	3,784.94	4,935.45	3,906.58	19.77	20.41	97.658	-818.11	1,431.24	912.90	873.81	39.10	23.349		
4,750.00	3,786.06	4,985.45	3,907.33	20.19	20.80	97.635	-817.03	1,481.23	912.85	872.94	39.92	22.869		
4,800.00	3,787.19	5,035.45	3,908.09	20.60	21.20	97.611	-815.94	1,531.21	912.80	872.06	40.75	22.403		
4,850.00	3,788.32	5,085.45	3,908.84	21.03	21.61	97.588	-814.85	1,581.19	912.75	871.16	41.59	21.945		
4,900.00	3,789.45	5,135.45	3,909.60	21.46	22.02	97.565	-813.76	1,631.17	912.70	870.25	42.45	21.502		
4,950.00	3,790.58	5,185.45	3,910.35	21.89	22.44	97.542	-812.67	1,681.15	912.65	869.33	43.32	21.068		
5,000.00	3,791.70	5,235.45	3,911.11	22.33	22.87	97.519	-811.59	1,731.13	912.60	868.40	44.20	20.648		
5,050.00	3,792.83	5,285.44	3,911.86	22.78	23.30	97.495	-810.50	1,781.11	912.55	867.46	45.09	20.238		

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	3,793.96	5,335.44	3,912.62	23.23	23.74	97.472	-809.41	1,831.09	912.50	866.51	45.99	19.841	
5,150.00	3,795.09	5,385.44	3,913.37	23.69	24.18	97.449	-808.32	1,881.07	912.45	865.55	46.90	19.454	
5,200.00	3,796.22	5,435.44	3,914.12	24.15	24.63	97.426	-807.23	1,931.05	912.40	864.58	47.82	19.079	
5,250.00	3,797.34	5,485.44	3,914.88	24.62	25.09	97.402	-806.14	1,981.04	912.35	863.60	48.75	18.714	
5,300.00	3,798.47	5,535.44	3,915.63	25.09	25.55	97.379	-805.06	2,031.02	912.30	862.61	49.69	18.361	
5,350.00	3,799.60	5,585.44	3,916.39	25.57	26.01	97.356	-803.97	2,081.00	912.25	861.62	50.63	18.017	
5,400.00	3,800.73	5,635.43	3,917.14	26.04	26.47	97.333	-802.88	2,130.98	912.20	860.62	51.58	17.684	
5,450.00	3,801.86	5,685.43	3,917.90	26.52	26.94	97.309	-801.79	2,180.96	912.15	859.61	52.54	17.360	
5,500.00	3,802.98	5,735.43	3,918.65	27.00	27.42	97.286	-800.70	2,230.94	912.10	858.60	53.51	17.046	
5,550.00	3,804.11	5,785.43	3,919.41	27.49	27.90	97.263	-799.62	2,280.92	912.05	857.58	54.48	16.742	
5,600.00	3,805.24	5,835.43	3,920.16	27.98	28.38	97.240	-798.53	2,330.90	912.01	856.55	55.45	16.446	
5,650.00	3,806.37	5,885.43	3,920.92	28.48	28.86	97.216	-797.44	2,380.88	911.96	855.52	56.44	16.159	
5,700.00	3,807.49	5,935.43	3,921.67	28.97	29.35	97.193	-796.35	2,430.87	911.91	854.48	57.42	15.880	
5,750.00	3,808.62	5,985.43	3,922.43	29.47	29.84	97.170	-795.26	2,480.85	911.86	853.44	58.42	15.610	
5,800.00	3,809.75	6,035.42	3,923.18	29.97	30.33	97.147	-794.17	2,530.83	911.81	852.40	59.41	15.347	
5,850.00	3,810.88	6,085.42	3,923.93	30.47	30.82	97.123	-793.09	2,580.81	911.76	851.35	60.41	15.092	
5,900.00	3,812.01	6,135.42	3,924.69	30.97	31.32	97.100	-792.00	2,630.79	911.72	850.30	61.42	14.844	
5,950.00	3,813.13	6,185.42	3,925.44	31.48	31.82	97.077	-790.91	2,680.77	911.67	849.24	62.43	14.603	
6,000.00	3,814.26	6,235.42	3,926.20	31.99	32.32	97.054	-789.82	2,730.75	911.62	848.18	63.44	14.369	
6,050.00	3,815.39	6,285.42	3,926.95	32.50	32.82	97.030	-788.73	2,780.73	911.57	847.11	64.46	14.141	
6,100.00	3,816.52	6,335.42	3,927.71	33.01	33.33	97.007	-787.64	2,830.71	911.53	846.05	65.48	13.920	
6,150.00	3,817.65	6,385.41	3,928.46	33.52	33.83	96.984	-786.56	2,880.70	911.48	844.97	66.51	13.705	
6,200.00	3,818.77	6,435.41	3,929.22	34.03	34.34	96.961	-785.47	2,930.68	911.43	843.90	67.53	13.496	
6,250.00	3,819.90	6,485.41	3,929.97	34.55	34.85	96.937	-784.38	2,980.66	911.39	842.82	68.56	13.293	
6,300.00	3,821.03	6,535.41	3,930.73	35.07	35.36	96.914	-783.29	3,030.64	911.34	841.74	69.60	13.095	
6,350.00	3,822.16	6,585.41	3,931.48	35.59	35.88	96.891	-782.20	3,080.62	911.29	840.66	70.63	12.902	
6,400.00	3,823.29	6,635.41	3,932.24	36.11	36.39	96.867	-781.12	3,130.60	911.25	839.58	71.67	12.714	
6,450.00	3,824.41	6,685.41	3,932.99	36.63	36.91	96.844	-780.03	3,180.58	911.20	838.49	72.71	12.531	
6,500.00	3,825.54	6,735.40	3,933.75	37.15	37.43	96.821	-778.94	3,230.56	911.15	837.40	73.76	12.354	
6,550.00	3,826.67	6,785.40	3,934.50	37.68	37.95	96.798	-777.85	3,280.54	911.11	836.31	74.80	12.180	
6,600.00	3,827.80	6,835.40	3,935.25	38.20	38.47	96.774	-776.76	3,330.52	911.06	835.21	75.85	12.011	
6,650.00	3,828.92	6,885.40	3,936.01	38.73	38.99	96.751	-775.67	3,380.51	911.02	834.12	76.90	11.846	
6,700.00	3,830.05	6,935.40	3,936.76	39.25	39.51	96.728	-774.59	3,430.49	910.97	833.02	77.96	11.686	
6,750.00	3,831.18	6,985.40	3,937.52	39.78	40.03	96.704	-773.50	3,480.47	910.93	831.92	79.01	11.529	
6,800.00	3,832.31	7,035.40	3,938.27	40.31	40.56	96.681	-772.41	3,530.45	910.88	830.82	80.07	11.377	
6,850.00	3,833.44	7,085.39	3,939.03	40.84	41.08	96.658	-771.32	3,580.43	910.84	829.71	81.13	11.227	
6,900.00	3,834.56	7,135.39	3,939.78	41.37	41.61	96.634	-770.23	3,630.41	910.79	828.61	82.19	11.082	
6,950.00	3,835.69	7,185.39	3,940.54	41.90	42.14	96.611	-769.15	3,680.39	910.75	827.50	83.25	10.940	
7,000.00	3,836.82	7,235.39	3,941.29	42.44	42.67	96.588	-768.06	3,730.37	910.70	826.39	84.31	10.802	
7,050.00	3,837.95	7,285.39	3,942.05	42.97	43.20	96.564	-766.97	3,780.35	910.66	825.28	85.38	10.666	
7,100.00	3,839.08	7,335.39	3,942.80	43.50	43.73	96.541	-765.88	3,830.34	910.62	824.17	86.44	10.534	
7,150.00	3,840.20	7,385.39	3,943.56	44.04	44.26	96.518	-764.79	3,880.32	910.57	823.06	87.51	10.405	
7,200.00	3,841.33	7,435.38	3,944.31	44.57	44.79	96.494	-763.70	3,930.30	910.53	821.94	88.58	10.279	
7,250.00	3,842.46	7,485.38	3,945.07	45.11	45.32	96.471	-762.62	3,980.28	910.48	820.83	89.65	10.155	
7,300.00	3,843.59	7,535.38	3,945.82	45.65	45.86	96.448	-761.53	4,030.26	910.44	819.71	90.73	10.035	
7,350.00	3,844.72	7,585.38	3,946.57	46.18	46.39	96.424	-760.44	4,080.24	910.40	818.60	91.80	9.917	
7,400.00	3,845.84	7,635.38	3,947.33	46.72	46.93	96.401	-759.35	4,130.22	910.35	817.48	92.88	9.802	
7,450.00	3,846.97	7,685.38	3,948.08	47.26	47.46	96.378	-758.26	4,180.20	910.31	816.36	93.95	9.689	
7,500.00	3,848.10	7,735.38	3,948.84	47.80	48.00	96.354	-757.17	4,230.18	910.27	815.24	95.03	9.579	
7,550.00	3,849.23	7,785.38	3,949.59	48.34	48.54	96.331	-756.09	4,280.17	910.22	814.12	96.11	9.471	
7,600.00	3,850.35	7,835.37	3,950.35	48.88	49.07	96.308	-755.00	4,330.15	910.18	812.99	97.19	9.365	
7,650.00	3,851.48	7,885.37	3,951.10	49.42	49.61	96.284	-753.91	4,380.13	910.14	811.87	98.27	9.262	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,700.00	3,852.61	7,935.37	3,951.86	49.96	50.15	96.261	-752.82	4,430.11	910.10	810.74	99.35	9.160	
7,750.00	3,853.74	7,985.37	3,952.61	50.50	50.69	96.238	-751.73	4,480.09	910.05	809.62	100.44	9.061	
7,800.00	3,854.87	8,035.37	3,953.37	51.05	51.23	96.214	-750.65	4,530.07	910.01	808.49	101.52	8.964	
7,850.00	3,855.99	8,085.37	3,954.12	51.59	51.77	96.191	-749.56	4,580.05	909.97	807.37	102.60	8.869	
7,900.00	3,857.12	8,135.37	3,954.88	52.13	52.31	96.168	-748.47	4,630.03	909.93	806.24	103.69	8.775	
7,950.00	3,858.25	8,185.36	3,955.63	52.67	52.85	96.144	-747.38	4,680.01	909.89	805.11	104.78	8.684	
8,000.00	3,859.38	8,235.36	3,956.39	53.22	53.39	96.121	-746.29	4,729.99	909.85	803.98	105.86	8.594	
8,050.00	3,860.51	8,285.36	3,957.14	53.76	53.93	96.098	-745.20	4,779.98	909.81	802.85	106.95	8.507	
8,100.00	3,861.63	8,335.36	3,957.89	54.31	54.47	96.074	-744.12	4,829.96	909.76	801.72	108.04	8.420	
8,150.00	3,862.76	8,385.36	3,958.65	54.85	55.02	96.051	-743.03	4,879.94	909.72	800.59	109.13	8.336	
8,200.00	3,863.89	8,435.36	3,959.40	55.40	55.56	96.028	-741.94	4,929.92	909.68	799.46	110.22	8.253	
8,250.00	3,865.02	8,485.36	3,960.16	55.94	56.10	96.004	-740.85	4,979.90	909.64	798.33	111.31	8.172	
8,300.00	3,866.15	8,535.35	3,960.91	56.49	56.65	95.981	-739.76	5,029.88	909.60	797.19	112.41	8.092	
8,350.00	3,867.27	8,585.35	3,961.67	57.04	57.19	95.957	-738.67	5,079.86	909.56	796.06	113.50	8.014	
8,400.00	3,868.40	8,635.35	3,962.42	57.58	57.74	95.934	-737.59	5,129.84	909.52	794.93	114.59	7.937	
8,450.00	3,869.53	8,685.35	3,963.18	58.13	58.28	95.911	-736.50	5,179.82	909.48	793.79	115.69	7.861	
8,500.00	3,870.66	8,735.35	3,963.93	58.68	58.83	95.887	-735.41	5,229.81	909.44	792.66	116.78	7.787	
8,550.00	3,871.78	8,785.35	3,964.69	59.22	59.37	95.864	-734.32	5,279.79	909.40	791.52	117.88	7.715	
8,600.00	3,872.91	8,835.35	3,965.44	59.77	59.92	95.840	-733.23	5,329.77	909.36	790.39	118.98	7.643	
8,650.00	3,874.04	8,885.34	3,966.20	60.32	60.47	95.817	-732.15	5,379.75	909.32	789.25	120.07	7.573	
8,700.00	3,875.17	8,935.34	3,966.95	60.87	61.01	95.794	-731.06	5,429.73	909.28	788.11	121.17	7.504	
8,750.00	3,876.30	8,985.34	3,967.71	61.42	61.56	95.770	-729.97	5,479.71	909.24	786.98	122.27	7.437	
8,800.00	3,877.42	9,035.34	3,968.46	61.97	62.11	95.747	-728.88	5,529.69	909.20	785.84	123.37	7.370	
8,850.00	3,878.55	9,085.34	3,969.21	62.52	62.65	95.724	-727.79	5,579.67	909.17	784.70	124.47	7.305	
8,900.00	3,879.68	9,135.34	3,969.97	63.06	63.20	95.700	-726.70	5,629.65	909.13	783.56	125.56	7.240	
8,950.00	3,880.81	9,185.34	3,970.72	63.61	63.75	95.677	-725.62	5,679.63	909.09	782.42	126.67	7.177	
9,000.00	3,881.94	9,235.33	3,971.48	64.16	64.30	95.653	-724.53	5,729.62	909.05	781.28	127.77	7.115	
9,050.00	3,883.06	9,285.33	3,972.23	64.71	64.85	95.630	-723.44	5,779.60	909.01	780.14	128.87	7.054	
9,100.00	3,884.19	9,335.33	3,972.99	65.26	65.40	95.607	-722.35	5,829.58	908.97	779.00	129.97	6.994	
9,150.00	3,885.32	9,385.33	3,973.74	65.82	65.94	95.583	-721.26	5,879.56	908.94	777.86	131.07	6.935	
9,200.00	3,886.45	9,435.33	3,974.50	66.37	66.49	95.560	-720.18	5,929.54	908.90	776.72	132.17	6.877	
9,250.00	3,887.58	9,485.33	3,975.25	66.92	67.04	95.536	-719.09	5,979.52	908.86	775.58	133.28	6.819	
9,300.00	3,888.70	9,535.33	3,976.01	67.47	67.59	95.513	-718.00	6,029.50	908.82	774.44	134.38	6.763	
9,350.00	3,889.83	9,585.32	3,976.76	68.02	68.14	95.489	-716.91	6,079.48	908.78	773.30	135.48	6.708	
9,400.00	3,890.96	9,635.32	3,977.52	68.57	68.69	95.466	-715.82	6,129.46	908.75	772.16	136.59	6.653	
9,450.00	3,892.09	9,685.32	3,978.27	69.12	69.24	95.443	-714.73	6,179.45	908.71	771.02	137.69	6.600	
9,500.00	3,893.21	9,735.32	3,979.03	69.67	69.79	95.419	-713.65	6,229.43	908.67	769.88	138.80	6.547	
9,550.00	3,894.34	9,785.32	3,979.78	70.23	70.34	95.396	-712.56	6,279.41	908.64	768.73	139.90	6.495	
9,600.00	3,895.47	9,835.32	3,980.53	70.78	70.90	95.372	-711.47	6,329.39	908.60	767.59	141.01	6.444	
9,650.00	3,896.60	9,885.32	3,981.29	71.33	71.45	95.349	-710.38	6,379.37	908.56	766.45	142.12	6.393	
9,700.00	3,897.73	9,935.32	3,982.04	71.88	72.00	95.326	-709.29	6,429.35	908.53	765.30	143.22	6.343	
9,750.00	3,898.85	9,985.31	3,982.80	72.44	72.55	95.302	-708.20	6,479.33	908.49	764.16	144.33	6.295	
9,800.00	3,899.98	10,035.31	3,983.55	72.99	73.10	95.279	-707.12	6,529.31	908.46	763.02	145.44	6.246	
9,850.00	3,901.11	10,085.31	3,984.31	73.54	73.65	95.255	-706.03	6,579.29	908.42	761.87	146.55	6.199	
9,900.00	3,902.24	10,135.31	3,985.06	74.10	74.20	95.232	-704.94	6,629.28	908.38	760.73	147.65	6.152	
9,950.00	3,903.37	10,185.31	3,985.82	74.65	74.76	95.208	-703.85	6,679.26	908.35	759.59	148.76	6.106	
10,000.00	3,904.49	10,235.31	3,986.57	75.20	75.31	95.185	-702.76	6,729.24	908.31	758.44	149.87	6.061	
10,050.00	3,905.62	10,285.31	3,987.33	75.76	75.86	95.161	-701.68	6,779.22	908.28	757.30	150.98	6.016	
10,100.00	3,906.75	10,335.30	3,988.08	76.31	76.41	95.138	-700.59	6,829.20	908.24	756.15	152.09	5.972	
10,150.00	3,907.88	10,385.30	3,988.84	76.86	76.97	95.115	-699.50	6,879.18	908.21	755.01	153.20	5.928	
10,200.00	3,909.01	10,435.30	3,989.59	77.42	77.52	95.091	-698.41	6,929.16	908.17	753.86	154.31	5.885	
10,250.00	3,910.13	10,485.30	3,990.34	77.97	78.07	95.068	-697.32	6,979.14	908.14	752.72	155.42	5.843	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,300.00	3,911.26	10,535.30	3,991.10	78.53	78.63	95.044	-696.23	7,029.12	908.10	751.58	156.53	5.801	
10,350.00	3,912.39	10,585.30	3,991.85	79.08	79.18	95.021	-695.15	7,079.10	908.07	750.43	157.64	5.760	
10,400.00	3,913.52	10,635.30	3,992.61	79.63	79.73	94.997	-694.06	7,129.09	908.04	749.28	158.75	5.720	
10,450.00	3,914.64	10,685.29	3,993.36	80.19	80.29	94.974	-692.97	7,179.07	908.00	748.14	159.86	5.680	
10,500.00	3,915.77	10,735.29	3,994.12	80.74	80.84	94.950	-691.88	7,229.05	907.97	746.99	160.97	5.640	
10,550.00	3,916.90	10,785.29	3,994.87	81.30	81.39	94.927	-690.79	7,279.03	907.93	745.85	162.09	5.602	
10,600.00	3,918.03	10,835.29	3,995.63	81.85	81.95	94.903	-689.71	7,329.01	907.90	744.70	163.20	5.563	
10,650.00	3,919.16	10,885.29	3,996.38	82.41	82.50	94.880	-688.62	7,378.99	907.87	743.56	164.31	5.525	
10,700.00	3,920.28	10,935.29	3,997.14	82.96	83.06	94.857	-687.53	7,428.97	907.83	742.41	165.42	5.488	
10,750.00	3,921.41	10,985.29	3,997.89	83.52	83.61	94.833	-686.44	7,478.95	907.80	741.26	166.54	5.451	
10,800.00	3,922.54	11,035.28	3,998.65	84.07	84.16	94.810	-685.35	7,528.93	907.77	740.12	167.65	5.415	
10,850.00	3,923.67	11,085.28	3,999.40	84.63	84.72	94.786	-684.26	7,578.92	907.74	738.97	168.76	5.379	
10,859.02	3,923.87	11,094.31	3,999.54	84.73	84.82	94.782	-684.07	7,587.94	907.73	738.77	168.96	5.372	
10,888.55	3,924.54	11,123.83	3,999.98	85.06	85.15	94.768	-683.43	7,617.45	907.71	738.09	169.62	5.351	
10,900.00	3,924.80	11,124.98	4,000.00	85.19	85.16	94.768	-683.40	7,618.60	907.76	738.00	169.76	5.347	
10,909.06	3,925.00	11,124.98	4,000.00	85.29	85.16	94.768	-683.40	7,618.60	907.90	738.04	169.86	5.345	
10,909.80	3,925.02	11,124.98	4,000.00	85.29	85.16	94.768	-683.40	7,618.60	907.92	738.05	169.86	5.345 SF	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
150.00	150.00	150.00	150.00	0.32	0.32	-0.573	20.00	-0.20	20.00	19.36	0.65	30.997	
200.00	200.00	200.00	200.00	0.50	0.50	-0.573	20.00	-0.20	20.00	19.00	1.00	19.927	
250.00	250.00	250.00	250.00	0.68	0.68	-0.573	20.00	-0.20	20.00	18.64	1.36	14.683	
300.00	300.00	300.00	300.00	0.86	0.86	-0.573	20.00	-0.20	20.00	18.28	1.72	11.624 CC	
350.00	350.00	349.65	349.65	1.04	1.04	-47.948	20.43	-0.16	20.14	18.06	2.08	9.684 ES	
379.54	379.53	378.99	378.98	1.14	1.14	-49.126	21.08	-0.11	20.35	18.06	2.29	8.881	
400.00	399.98	399.30	399.28	1.22	1.22	-50.082	21.71	-0.05	20.62	18.18	2.44	8.461	
450.00	449.96	448.91	448.84	1.40	1.40	-52.019	23.85	0.14	21.88	19.09	2.79	7.834	
500.00	499.94	498.47	498.32	1.57	1.58	-53.311	26.85	0.40	24.01	20.86	3.15	7.624	
550.00	549.92	547.95	547.64	1.75	1.76	-53.987	30.68	0.73	27.00	23.49	3.51	7.698	
600.00	599.90	597.32	596.79	1.93	1.94	-54.172	35.36	1.14	30.83	26.96	3.86	7.976	
650.00	649.89	646.55	645.70	2.11	2.12	-54.013	40.86	1.62	35.49	31.27	4.22	8.406	
700.00	699.87	695.60	694.35	2.29	2.29	-53.637	47.17	2.17	40.99	36.41	4.58	8.952	
750.00	749.85	744.86	743.09	2.47	2.47	-53.165	54.23	2.78	47.22	42.28	4.94	9.562	
800.00	799.83	794.46	792.16	2.64	2.65	-52.777	61.45	3.41	53.55	48.26	5.29	10.118	
850.00	849.81	844.05	841.22	2.82	2.82	-52.472	68.67	4.04	59.88	54.23	5.65	10.603	
900.00	899.79	893.65	890.29	3.00	3.00	-52.225	75.88	4.67	66.22	60.21	6.00	11.033	
950.00	949.77	943.25	939.35	3.18	3.17	-52.021	83.10	5.30	72.55	66.19	6.36	11.413	
1,000.00	999.75	992.84	988.41	3.36	3.35	-51.850	90.31	5.93	78.89	72.18	6.71	11.753	
1,050.00	1,049.73	1,042.44	1,037.48	3.54	3.53	-51.704	97.53	6.56	85.22	78.16	7.07	12.059	
1,100.00	1,099.71	1,092.04	1,086.54	3.72	3.71	-51.579	104.75	7.19	91.56	84.14	7.42	12.335	
1,150.00	1,149.69	1,141.63	1,135.61	3.90	3.90	-51.470	111.96	7.82	97.90	90.12	7.78	12.585	
1,200.00	1,199.67	1,191.23	1,184.67	4.08	4.08	-51.374	119.18	8.45	104.24	96.10	8.13	12.814	
1,250.00	1,249.65	1,240.83	1,233.74	4.26	4.26	-51.289	126.40	9.07	110.58	102.09	8.49	13.023	
1,300.00	1,299.64	1,290.42	1,282.80	4.43	4.44	-51.213	133.61	9.70	116.91	108.07	8.85	13.215	
1,350.00	1,349.62	1,340.02	1,331.87	4.61	4.62	-51.145	140.83	10.33	123.25	114.05	9.20	13.392	
1,400.00	1,399.60	1,389.61	1,380.93	4.79	4.80	-51.084	148.04	10.96	129.59	120.03	9.56	13.556	
1,450.00	1,449.58	1,439.21	1,430.00	4.97	4.98	-51.028	155.26	11.59	135.93	126.02	9.92	13.708	
1,500.00	1,499.56	1,488.81	1,479.06	5.15	5.16	-50.978	162.48	12.22	142.27	132.00	10.27	13.850	
1,550.00	1,549.54	1,538.40	1,528.13	5.33	5.35	-50.931	169.69	12.85	148.61	137.98	10.63	13.982	
1,600.00	1,599.52	1,588.00	1,577.19	5.51	5.53	-50.889	176.91	13.48	154.95	143.96	10.99	14.105	
1,650.00	1,649.50	1,637.60	1,626.25	5.69	5.71	-50.850	184.13	14.11	161.29	149.95	11.34	14.220	
1,700.00	1,699.48	1,687.19	1,675.32	5.87	5.89	-50.813	191.34	14.74	167.63	155.93	11.70	14.329	
1,750.00	1,749.46	1,736.79	1,724.38	6.05	6.07	-50.780	198.56	15.36	173.97	161.91	12.06	14.431	
1,800.00	1,799.44	1,786.39	1,773.45	6.23	6.25	-50.749	205.77	15.99	180.31	167.89	12.41	14.527	
1,850.00	1,849.42	1,835.98	1,822.51	6.41	6.44	-50.719	212.99	16.62	186.65	173.88	12.77	14.617	
1,900.00	1,899.40	1,885.58	1,871.58	6.59	6.62	-50.692	220.21	17.25	192.99	179.86	13.13	14.703	
1,950.00	1,949.38	1,935.17	1,920.64	6.76	6.80	-50.667	227.42	17.88	199.33	185.84	13.48	14.784	
2,000.00	1,999.37	1,984.77	1,969.71	6.94	6.98	-50.643	234.64	18.51	205.67	191.83	13.84	14.861	
2,050.00	2,049.35	2,034.37	2,018.77	7.12	7.16	-50.621	241.85	19.14	212.01	197.81	14.20	14.934	
2,100.00	2,099.33	2,083.96	2,067.84	7.30	7.34	-50.599	249.07	19.77	218.35	203.79	14.55	15.003	
2,150.00	2,149.31	2,133.56	2,116.90	7.48	7.53	-50.579	256.29	20.40	224.69	209.78	14.91	15.070	
2,200.00	2,199.29	2,183.16	2,165.96	7.66	7.71	-50.561	263.50	21.03	231.03	215.76	15.27	15.133	
2,250.00	2,249.27	2,232.75	2,215.03	7.84	7.89	-50.543	270.72	21.65	237.36	221.74	15.62	15.193	
2,300.00	2,299.25	2,282.35	2,264.09	8.02	8.07	-50.526	277.94	22.28	243.70	227.72	15.98	15.250	
2,350.00	2,349.23	2,331.95	2,313.16	8.20	8.25	-50.510	285.15	22.91	250.04	233.71	16.34	15.305	
2,400.00	2,399.21	2,381.54	2,362.22	8.38	8.44	-50.494	292.37	23.54	256.38	239.69	16.69	15.357	
2,450.00	2,449.19	2,431.14	2,411.29	8.56	8.62	-50.480	299.58	24.17	262.72	245.67	17.05	15.408	
2,500.00	2,499.17	2,480.73	2,460.35	8.74	8.80	-50.466	306.80	24.80	269.06	251.66	17.41	15.456	
2,550.00	2,549.15	2,530.33	2,509.42	8.92	8.98	-50.453	314.02	25.43	275.40	257.64	17.77	15.502	
2,600.00	2,599.13	2,579.93	2,558.48	9.10	9.16	-50.440	321.23	26.06	281.74	263.62	18.12	15.547	
2,650.00	2,649.11	2,629.52	2,607.55	9.27	9.34	-50.428	328.45	26.69	288.08	269.61	18.48	15.589	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
2,700.00	2,699.10	2,679.12	2,656.61	9.45	9.53	-50.417	335.67	27.32	294.42	275.59	18.84	15.630		
2,750.00	2,749.08	2,728.72	2,705.67	9.63	9.71	-50.406	342.88	27.94	300.76	281.57	19.19	15.670		
2,791.98	2,791.04	2,770.36	2,746.87	9.78	9.86	-50.397	348.94	28.47	306.09	286.59	19.49	15.702		
2,800.00	2,799.06	2,778.31	2,754.74	9.81	9.89	-59.884	350.10	28.57	307.11	287.56	19.55	15.709		
2,850.00	2,848.97	2,827.86	2,803.76	9.99	10.07	-79.952	357.31	29.20	313.54	293.64	19.90	15.753		
2,900.00	2,898.66	2,877.24	2,852.61	10.17	10.25	-85.353	364.49	29.83	320.15	299.89	20.26	15.805		
2,950.00	2,948.01	2,926.31	2,901.15	10.35	10.43	-88.359	371.63	30.45	327.01	306.40	20.60	15.871		
3,000.00	2,996.88	2,974.94	2,949.25	10.53	10.61	-90.743	378.71	31.07	334.25	313.30	20.95	15.957		
3,050.00	3,045.13	3,022.99	2,996.79	10.71	10.79	-92.977	385.70	31.68	342.05	320.77	21.28	16.074		
3,100.00	3,092.63	3,070.33	3,043.62	10.89	10.96	-95.211	392.59	32.28	350.61	329.01	21.60	16.232		
3,150.00	3,139.25	3,116.83	3,089.63	11.07	11.13	-97.480	399.35	32.87	360.17	338.26	21.90	16.443		
3,200.00	3,184.86	3,162.37	3,134.68	11.25	11.30	-99.774	405.98	33.44	370.95	348.76	22.18	16.721		
3,250.00	3,229.33	3,206.82	3,178.65	11.43	11.46	-102.057	412.44	34.01	383.19	360.75	22.44	17.078		
3,300.00	3,272.56	3,252.39	3,223.74	11.61	11.63	-104.438	419.07	34.67	397.09	374.42	22.66	17.522		
3,350.00	3,314.41	3,306.19	3,276.90	11.80	11.83	-107.170	426.75	37.56	412.02	389.15	22.86	18.021		
3,400.00	3,354.77	3,362.03	3,331.85	11.99	12.03	-109.748	434.48	43.75	427.54	404.51	23.03	18.566		
3,450.00	3,393.54	3,420.11	3,388.54	12.19	12.24	-112.183	442.24	53.61	443.48	420.33	23.15	19.153		
3,500.00	3,430.60	3,480.62	3,446.90	12.39	12.46	-114.489	449.98	67.56	459.67	436.43	23.24	19.777		
3,550.00	3,465.85	3,543.80	3,506.81	12.60	12.68	-116.673	457.66	86.06	475.92	452.63	23.29	20.433		
3,600.00	3,499.20	3,609.85	3,568.04	12.81	12.90	-118.745	465.22	109.62	492.06	468.76	23.30	21.115		
3,650.00	3,530.55	3,679.01	3,630.30	13.04	13.13	-120.710	472.57	138.78	507.89	484.61	23.28	21.816		
3,700.00	3,559.83	3,751.48	3,693.16	13.28	13.37	-122.573	479.62	174.10	523.20	499.98	23.23	22.527		
3,750.00	3,586.95	3,827.44	3,756.05	13.52	13.63	-124.335	486.24	216.16	537.81	514.66	23.15	23.236		
3,772.42	3,598.38	3,862.69	3,784.08	13.63	13.75	-125.093	489.03	237.34	544.07	520.97	23.10	23.550		
3,800.00	3,612.17	3,907.28	3,818.41	13.77	13.91	-126.295	492.31	265.61	551.25	528.11	23.15	23.817		
3,850.00	3,637.17	3,991.91	3,879.84	14.05	14.22	-128.064	497.71	323.52	562.08	538.75	23.33	24.097		
3,900.00	3,662.17	4,080.53	3,938.51	14.33	14.57	-129.283	502.17	389.75	569.72	546.08	23.63	24.106		
3,950.00	3,687.17	4,171.84	3,992.39	14.62	14.97	-129.937	505.45	463.35	573.87	549.78	24.10	23.817		
3,972.42	3,698.38	4,213.24	4,014.48	14.75	15.15	-130.044	506.49	498.35	574.56	550.21	24.35	23.597		
4,000.00	3,711.59	4,248.82	4,032.40	14.92	15.32	-130.072	507.19	529.07	575.05	550.75	24.30	23.663		
4,050.00	3,732.51	4,298.60	4,057.29	15.22	15.57	-130.192	508.12	572.17	578.01	553.85	24.16	23.920		
4,100.00	3,749.40	4,347.78	4,081.88	15.54	15.82	-130.409	509.05	614.75	583.82	559.78	24.05	24.277		
4,150.00	3,762.12	4,396.00	4,106.00	15.86	16.08	-130.688	509.96	656.51	592.56	568.60	23.96	24.736		
4,200.00	3,770.57	4,474.70	4,143.86	16.18	16.52	-131.771	511.45	725.45	603.97	580.19	23.78	25.395		
4,250.00	3,774.71	4,657.69	4,195.46	16.49	17.60	-133.851	515.25	900.16	611.06	587.31	23.74	25.738		
4,259.50	3,775.00	4,694.27	4,198.94	16.55	17.82	-133.980	516.04	936.57	611.48	587.64	23.85	25.643		
4,300.00	3,775.91	4,753.80	4,200.64	16.81	18.18	-134.004	517.34	996.05	611.48	587.15	24.33	25.134		
4,350.00	3,777.04	4,803.80	4,201.57	17.15	18.48	-133.991	518.42	1,046.03	611.35	586.50	24.85	24.602		
4,400.00	3,778.17	4,853.80	4,202.51	17.49	18.81	-133.978	519.51	1,096.01	611.21	585.83	25.39	24.075		
4,450.00	3,779.30	4,903.80	4,203.45	17.85	19.14	-133.965	520.59	1,145.99	611.08	585.14	25.94	23.554		
4,500.00	3,780.43	4,953.80	4,204.39	18.21	19.48	-133.952	521.68	1,195.97	610.95	584.43	26.52	23.040		
4,550.00	3,781.55	5,003.80	4,205.33	18.60	19.83	-133.940	522.77	1,245.95	610.82	583.71	27.11	22.535		
4,600.00	3,782.68	5,053.80	4,206.27	18.98	20.20	-133.927	523.85	1,295.93	610.69	582.98	27.71	22.040		
4,650.00	3,783.81	5,103.80	4,207.20	19.37	20.56	-133.914	524.94	1,345.91	610.56	582.23	28.33	21.555		
4,700.00	3,784.94	5,153.80	4,208.14	19.77	20.95	-133.901	526.03	1,395.89	610.42	581.47	28.96	21.081		
4,750.00	3,786.06	5,203.80	4,209.08	20.19	21.33	-133.889	527.11	1,445.87	610.29	580.69	29.60	20.619		
4,800.00	3,787.19	5,253.80	4,210.02	20.60	21.73	-133.876	528.20	1,495.84	610.16	579.91	30.25	20.169		
4,850.00	3,788.32	5,303.80	4,210.96	21.03	22.13	-133.863	529.28	1,545.82	610.03	579.11	30.92	19.731		
4,900.00	3,789.45	5,353.80	4,211.90	21.46	22.54	-133.850	530.37	1,595.80	609.90	578.31	31.59	19.306		
4,950.00	3,790.58	5,403.80	4,212.83	21.89	22.96	-133.837	531.46	1,645.78	609.77	577.49	32.28	18.892		
5,000.00	3,791.70	5,453.80	4,213.77	22.33	23.38	-133.824	532.54	1,695.76	609.63	576.67	32.97	18.491		
5,050.00	3,792.83	5,503.80	4,214.71	22.78	23.81	-133.812	533.63	1,745.74	609.50	575.83	33.67	18.102		

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	3,793.96	5,553.80	4,215.65	23.23	24.24	-133.799	534.72	1,795.72	609.37	574.99	34.38	17.725	
5,150.00	3,795.09	5,603.80	4,216.59	23.69	24.68	-133.786	535.80	1,845.70	609.24	574.14	35.10	17.359	
5,200.00	3,796.22	5,653.80	4,217.53	24.15	25.12	-133.773	536.89	1,895.68	609.11	573.29	35.82	17.005	
5,250.00	3,797.34	5,703.80	4,218.46	24.62	25.57	-133.760	537.97	1,945.66	608.98	572.43	36.55	16.661	
5,300.00	3,798.47	5,753.80	4,219.40	25.09	26.02	-133.747	539.06	1,995.63	608.85	571.56	37.29	16.328	
5,350.00	3,799.60	5,803.80	4,220.34	25.57	26.48	-133.734	540.15	2,045.61	608.71	570.68	38.03	16.006	
5,400.00	3,800.73	5,853.80	4,221.28	26.04	26.94	-133.722	541.23	2,095.59	608.58	569.80	38.78	15.694	
5,450.00	3,801.86	5,903.80	4,222.22	26.52	27.40	-133.709	542.32	2,145.57	608.45	568.92	39.53	15.392	
5,500.00	3,802.98	5,953.80	4,223.16	27.00	27.87	-133.696	543.41	2,195.55	608.32	568.03	40.29	15.099	
5,550.00	3,804.11	6,003.80	4,224.10	27.49	28.34	-133.683	544.49	2,245.53	608.19	567.14	41.05	14.815	
5,600.00	3,805.24	6,053.79	4,225.03	27.98	28.82	-133.670	545.58	2,295.51	608.06	566.24	41.82	14.540	
5,650.00	3,806.37	6,103.79	4,225.97	28.48	29.30	-133.657	546.67	2,345.49	607.93	565.33	42.59	14.273	
5,700.00	3,807.49	6,153.79	4,226.91	28.97	29.78	-133.644	547.75	2,395.47	607.80	564.43	43.37	14.015	
5,750.00	3,808.62	6,203.79	4,227.85	29.47	30.26	-133.631	548.84	2,445.45	607.66	563.52	44.15	13.764	
5,800.00	3,809.75	6,253.79	4,228.79	29.97	30.75	-133.618	549.92	2,495.42	607.53	562.60	44.93	13.521	
5,850.00	3,810.88	6,303.79	4,229.73	30.47	31.24	-133.606	551.01	2,545.40	607.40	561.68	45.72	13.286	
5,900.00	3,812.01	6,353.79	4,230.66	30.97	31.73	-133.593	552.10	2,595.38	607.27	560.76	46.51	13.057	
5,950.00	3,813.13	6,403.79	4,231.60	31.48	32.22	-133.580	553.18	2,645.36	607.14	559.84	47.30	12.835	
6,000.00	3,814.26	6,453.79	4,232.54	31.99	32.72	-133.567	554.27	2,695.34	607.01	558.91	48.10	12.620	
6,050.00	3,815.39	6,503.79	4,233.48	32.50	33.22	-133.554	555.36	2,745.32	606.88	557.98	48.90	12.411	
6,100.00	3,816.52	6,553.79	4,234.42	33.01	33.72	-133.541	556.44	2,795.30	606.75	557.05	49.70	12.208	
6,150.00	3,817.65	6,603.79	4,235.36	33.52	34.22	-133.528	557.53	2,845.28	606.62	556.11	50.51	12.011	
6,200.00	3,818.77	6,653.79	4,236.29	34.03	34.72	-133.515	558.61	2,895.26	606.49	555.17	51.31	11.819	
6,250.00	3,819.90	6,703.79	4,237.23	34.55	35.23	-133.502	559.70	2,945.24	606.36	554.23	52.12	11.633	
6,300.00	3,821.03	6,753.79	4,238.17	35.07	35.74	-133.489	560.79	2,995.22	606.23	553.29	52.94	11.452	
6,350.00	3,822.16	6,803.79	4,239.11	35.59	36.25	-133.476	561.87	3,045.19	606.09	552.34	53.75	11.276	
6,400.00	3,823.29	6,853.79	4,240.05	36.11	36.76	-133.463	562.96	3,095.17	605.96	551.40	54.57	11.105	
6,450.00	3,824.41	6,903.79	4,240.99	36.63	37.27	-133.450	564.05	3,145.15	605.83	550.45	55.39	10.938	
6,500.00	3,825.54	6,953.79	4,241.92	37.15	37.78	-133.437	565.13	3,195.13	605.70	549.50	56.21	10.776	
6,550.00	3,826.67	7,003.79	4,242.86	37.68	38.30	-133.424	566.22	3,245.11	605.57	548.54	57.03	10.618	
6,600.00	3,827.80	7,053.79	4,243.80	38.20	38.82	-133.411	567.30	3,295.09	605.44	547.59	57.85	10.465	
6,650.00	3,828.92	7,103.79	4,244.74	38.73	39.33	-133.398	568.39	3,345.07	605.31	546.63	58.68	10.315	
6,700.00	3,830.05	7,153.79	4,245.68	39.25	39.85	-133.385	569.48	3,395.05	605.18	545.67	59.51	10.170	
6,750.00	3,831.18	7,203.79	4,246.62	39.78	40.37	-133.372	570.56	3,445.03	605.05	544.71	60.34	10.027	
6,800.00	3,832.31	7,253.79	4,247.55	40.31	40.89	-133.359	571.65	3,495.01	604.92	543.75	61.17	9.889	
6,850.00	3,833.44	7,303.79	4,248.49	40.84	41.42	-133.346	572.74	3,544.98	604.79	542.79	62.00	9.754	
6,900.00	3,834.56	7,353.79	4,249.43	41.37	41.94	-133.333	573.82	3,594.96	604.66	541.82	62.84	9.622	
6,950.00	3,835.69	7,403.79	4,250.37	41.90	42.46	-133.320	574.91	3,644.94	604.53	540.85	63.67	9.494	
7,000.00	3,836.82	7,453.78	4,251.31	42.44	42.99	-133.307	575.99	3,694.92	604.40	539.89	64.51	9.369	
7,050.00	3,837.95	7,503.78	4,252.25	42.97	43.51	-133.294	577.08	3,744.90	604.27	538.92	65.35	9.247	
7,100.00	3,839.08	7,553.78	4,253.19	43.50	44.04	-133.281	578.17	3,794.88	604.14	537.95	66.19	9.127	
7,150.00	3,840.20	7,603.78	4,254.12	44.04	44.57	-133.268	579.25	3,844.86	604.01	536.98	67.03	9.011	
7,200.00	3,841.33	7,653.78	4,255.06	44.57	45.10	-133.255	580.34	3,894.84	603.88	536.00	67.88	8.897	
7,250.00	3,842.46	7,703.78	4,256.00	45.11	45.63	-133.241	581.43	3,944.82	603.75	535.03	68.72	8.786	
7,300.00	3,843.59	7,753.78	4,256.94	45.65	46.16	-133.228	582.51	3,994.80	603.62	534.05	69.56	8.677	
7,350.00	3,844.72	7,803.78	4,257.88	46.18	46.69	-133.215	583.60	4,044.77	603.49	533.08	70.41	8.571	
7,400.00	3,845.84	7,853.78	4,258.82	46.72	47.22	-133.202	584.68	4,094.75	603.36	532.10	71.26	8.467	
7,450.00	3,846.97	7,903.78	4,259.75	47.26	47.76	-133.189	585.77	4,144.73	603.23	531.12	72.11	8.366	
7,500.00	3,848.10	7,953.78	4,260.69	47.80	48.29	-133.176	586.86	4,194.71	603.10	530.14	72.96	8.266	
7,550.00	3,849.23	8,003.78	4,261.63	48.34	48.82	-133.163	587.94	4,244.69	602.97	529.16	73.81	8.169	
7,600.00	3,850.35	8,053.78	4,262.57	48.88	49.36	-133.150	589.03	4,294.67	602.84	528.18	74.66	8.074	
7,650.00	3,851.48	8,103.78	4,263.51	49.42	49.89	-133.137	590.12	4,344.65	602.71	527.20	75.51	7.982	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,700.00	3,852.61	8,153.78	4,264.45	49.96	50.43	-133.123	591.20	4,394.63	602.58	526.21	76.37	7.891	
7,750.00	3,853.74	8,203.78	4,265.38	50.50	50.97	-133.110	592.29	4,444.61	602.45	525.23	77.22	7.802	
7,800.00	3,854.87	8,253.78	4,266.32	51.05	51.50	-133.097	593.37	4,494.59	602.32	524.24	78.08	7.714	
7,850.00	3,855.99	8,303.78	4,267.26	51.59	52.04	-133.084	594.46	4,544.57	602.19	523.26	78.93	7.629	
7,900.00	3,857.12	8,353.78	4,268.20	52.13	52.58	-133.071	595.55	4,594.54	602.06	522.27	79.79	7.546	
7,950.00	3,858.25	8,403.78	4,269.14	52.67	53.12	-133.058	596.63	4,644.52	601.93	521.28	80.65	7.464	
8,000.00	3,859.38	8,453.78	4,270.08	53.22	53.66	-133.045	597.72	4,694.50	601.80	520.29	81.51	7.383	
8,050.00	3,860.51	8,503.78	4,271.01	53.76	54.20	-133.031	598.81	4,744.48	601.67	519.30	82.37	7.305	
8,100.00	3,861.63	8,553.78	4,271.95	54.31	54.74	-133.018	599.89	4,794.46	601.54	518.31	83.23	7.228	
8,150.00	3,862.76	8,603.78	4,272.89	54.85	55.28	-133.005	600.98	4,844.44	601.41	517.32	84.09	7.152	
8,200.00	3,863.89	8,653.78	4,273.83	55.40	55.82	-132.992	602.07	4,894.42	601.28	516.33	84.95	7.078	
8,250.00	3,865.02	8,703.78	4,274.77	55.94	56.36	-132.979	603.15	4,944.40	601.15	515.34	85.82	7.005	
8,300.00	3,866.15	8,753.78	4,275.71	56.49	56.90	-132.965	604.24	4,994.38	601.02	514.34	86.68	6.934	
8,350.00	3,867.27	8,803.78	4,276.64	57.04	57.44	-132.952	605.32	5,044.36	600.89	513.35	87.54	6.864	
8,400.00	3,868.40	8,853.78	4,277.58	57.58	57.99	-132.939	606.41	5,094.33	600.76	512.35	88.41	6.795	
8,450.00	3,869.53	8,903.78	4,278.52	58.13	58.53	-132.926	607.50	5,144.31	600.63	511.36	89.28	6.728	
8,500.00	3,870.66	8,953.78	4,279.46	58.68	59.07	-132.913	608.58	5,194.29	600.51	510.36	90.14	6.662	
8,550.00	3,871.78	9,003.78	4,280.40	59.22	59.62	-132.899	609.67	5,244.27	600.38	509.37	91.01	6.597	
8,600.00	3,872.91	9,053.78	4,281.34	59.77	60.16	-132.886	610.76	5,294.25	600.25	508.37	91.88	6.533	
8,650.00	3,874.04	9,103.78	4,282.28	60.32	60.70	-132.873	611.84	5,344.23	600.12	507.37	92.75	6.470	
8,700.00	3,875.17	9,153.78	4,283.21	60.87	61.25	-132.860	612.93	5,394.21	599.99	506.37	93.62	6.409	
8,750.00	3,876.30	9,203.78	4,284.15	61.42	61.79	-132.846	614.01	5,444.19	599.86	505.37	94.49	6.349	
8,800.00	3,877.42	9,253.78	4,285.09	61.97	62.34	-132.833	615.10	5,494.17	599.73	504.37	95.36	6.289	
8,850.00	3,878.55	9,303.78	4,286.03	62.52	62.89	-132.820	616.19	5,544.15	599.60	503.37	96.23	6.231	
8,900.00	3,879.68	9,353.78	4,286.97	63.06	63.43	-132.807	617.27	5,594.12	599.47	502.37	97.10	6.174	
8,950.00	3,880.81	9,403.78	4,287.91	63.61	63.98	-132.793	618.36	5,644.10	599.34	501.37	97.97	6.117	
9,000.00	3,881.94	9,453.78	4,288.84	64.16	64.53	-132.780	619.45	5,694.08	599.21	500.37	98.85	6.062	
9,050.00	3,883.06	9,503.78	4,289.78	64.71	65.07	-132.767	620.53	5,744.06	599.08	499.36	99.72	6.008	
9,100.00	3,884.19	9,553.78	4,290.72	65.26	65.62	-132.754	621.62	5,794.04	598.96	498.36	100.60	5.954	
9,150.00	3,885.32	9,603.78	4,291.66	65.82	66.17	-132.740	622.70	5,844.02	598.83	497.36	101.47	5.902	
9,200.00	3,886.45	9,653.78	4,292.60	66.37	66.71	-132.727	623.79	5,894.00	598.70	496.35	102.35	5.850	
9,250.00	3,887.58	9,703.78	4,293.54	66.92	67.26	-132.714	624.88	5,943.98	598.57	495.35	103.22	5.799	
9,300.00	3,888.70	9,753.78	4,294.47	67.47	67.81	-132.700	625.96	5,993.96	598.44	494.34	104.10	5.749	
9,350.00	3,889.83	9,803.78	4,295.41	68.02	68.36	-132.687	627.05	6,043.94	598.31	493.34	104.98	5.700	
9,400.00	3,890.96	9,853.78	4,296.35	68.57	68.91	-132.674	628.14	6,093.92	598.18	492.33	105.85	5.651	
9,450.00	3,892.09	9,903.78	4,297.29	69.12	69.46	-132.660	629.22	6,143.89	598.05	491.32	106.73	5.603	
9,500.00	3,893.21	9,953.78	4,298.23	69.67	70.01	-132.647	630.31	6,193.87	597.93	490.31	107.61	5.556	
9,550.00	3,894.34	10,003.78	4,299.17	70.23	70.56	-132.634	631.39	6,243.85	597.80	489.31	108.49	5.510	
9,600.00	3,895.47	10,053.78	4,300.10	70.78	71.10	-132.620	632.48	6,293.83	597.67	488.30	109.37	5.465	
9,650.00	3,896.60	10,103.78	4,301.04	71.33	71.65	-132.607	633.57	6,343.81	597.54	487.29	110.25	5.420	
9,700.00	3,897.73	10,153.78	4,301.98	71.88	72.20	-132.594	634.65	6,393.79	597.41	486.28	111.13	5.376	
9,750.00	3,898.85	10,203.78	4,302.92	72.44	72.75	-132.580	635.74	6,443.77	597.28	485.27	112.01	5.332	
9,800.00	3,899.98	10,253.78	4,303.86	72.99	73.30	-132.567	636.83	6,493.75	597.15	484.26	112.90	5.289	
9,850.00	3,901.11	10,303.78	4,304.80	73.54	73.86	-132.554	637.91	6,543.73	597.03	483.25	113.78	5.247	
9,900.00	3,902.24	10,353.78	4,305.73	74.10	74.41	-132.540	639.00	6,593.71	596.90	482.24	114.66	5.206	
9,950.00	3,903.37	10,403.78	4,306.67	74.65	74.96	-132.527	640.08	6,643.68	596.77	481.22	115.54	5.165	
10,000.00	3,904.49	10,453.78	4,307.61	75.20	75.51	-132.513	641.17	6,693.66	596.64	480.21	116.43	5.125	
10,050.00	3,905.62	10,503.78	4,308.55	75.76	76.06	-132.500	642.26	6,743.64	596.51	479.20	117.31	5.085	
10,100.00	3,906.75	10,553.78	4,309.49	76.31	76.61	-132.487	643.34	6,793.62	596.38	478.19	118.20	5.046	
10,150.00	3,907.88	10,603.78	4,310.43	76.86	77.16	-132.473	644.43	6,843.60	596.26	477.17	119.08	5.007	
10,200.00	3,909.01	10,653.78	4,311.36	77.42	77.71	-132.460	645.52	6,893.58	596.13	476.16	119.97	4.969	
10,250.00	3,910.13	10,703.78	4,312.30	77.97	78.27	-132.446	646.60	6,943.56	596.00	475.14	120.86	4.932	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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	Offset	Semi Major Axis			Distance									Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,300.00	3,911.26	10,753.76	4,313.24	78.53	78.82	-132.433	647.69	6,993.54	595.87	474.13	121.74	4.895		
10,350.00	3,912.39	10,803.76	4,314.18	79.08	79.37	-132.419	648.77	7,043.52	595.74	473.11	122.63	4.858		
10,400.00	3,913.52	10,853.76	4,315.12	79.63	79.92	-132.406	649.86	7,093.50	595.61	472.10	123.52	4.822		
10,450.00	3,914.64	10,903.76	4,316.06	80.19	80.48	-132.393	650.95	7,143.47	595.49	471.08	124.41	4.787		
10,500.00	3,915.77	10,953.76	4,317.00	80.74	81.03	-132.379	652.03	7,193.45	595.36	470.06	125.29	4.752		
10,550.00	3,916.90	11,003.76	4,317.93	81.30	81.58	-132.366	653.12	7,243.43	595.23	469.05	126.18	4.717		
10,600.00	3,918.03	11,053.76	4,318.87	81.85	82.13	-132.352	654.21	7,293.41	595.10	468.03	127.07	4.683		
10,650.00	3,919.16	11,103.76	4,319.81	82.41	82.69	-132.339	655.29	7,343.39	594.97	467.01	127.96	4.650		
10,700.00	3,920.28	11,153.76	4,320.75	82.96	83.24	-132.325	656.38	7,393.37	594.85	465.99	128.85	4.616		
10,750.00	3,921.41	11,203.76	4,321.69	83.52	83.79	-132.312	657.46	7,443.35	594.72	464.98	129.74	4.584		
10,800.00	3,922.54	11,253.76	4,322.63	84.07	84.35	-132.298	658.55	7,493.33	594.59	463.96	130.63	4.552		
10,850.00	3,923.67	11,303.76	4,323.56	84.63	84.90	-132.285	659.64	7,543.31	594.46	462.94	131.53	4.520		
10,859.02	3,923.87	11,312.78	4,323.73	84.73	85.00	-132.282	659.83	7,552.33	594.44	462.75	131.69	4.514		
10,900.00	3,924.80	11,353.76	4,324.50	85.19	85.45	-132.271	660.72	7,593.29	594.34	461.92	132.42	4.488		
10,909.06	3,925.00	11,362.82	4,324.67	85.29	85.55	-132.269	660.92	7,602.34	594.31	461.73	132.58	4.483		
10,909.80	3,925.02	11,363.55	4,324.69	85.29	85.56	-132.269	660.94	7,603.08	594.31	461.72	132.59	4.482 SF		

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
150.00	150.00	150.00	150.00	0.32	0.32	179.424	-19.90	0.20	19.90	19.26	0.65	30.842	
200.00	200.00	200.00	200.00	0.50	0.50	179.424	-19.90	0.20	19.90	18.90	1.00	19.827	
250.00	250.00	250.00	250.00	0.68	0.68	179.424	-19.90	0.20	19.90	18.54	1.36	14.610	
300.00	300.00	300.00	300.00	0.86	0.86	179.424	-19.90	0.20	19.90	18.18	1.72	11.566 CC, ES	
350.00	350.00	349.65	349.65	1.04	1.03	133.517	-20.32	0.27	20.63	18.55	2.07	9.955	
379.54	379.53	378.95	378.94	1.14	1.13	134.476	-20.97	0.38	21.74	19.46	2.28	9.530	
400.00	399.98	399.23	399.21	1.22	1.20	135.193	-21.59	0.49	22.77	20.34	2.42	9.393	
450.00	449.96	448.72	448.65	1.40	1.37	136.401	-23.71	0.84	25.88	23.11	2.77	9.338	
500.00	499.94	498.09	497.94	1.57	1.54	136.964	-26.65	1.34	29.83	26.72	3.12	9.567	
550.00	549.92	547.33	547.02	1.75	1.71	137.062	-30.42	1.98	34.63	31.16	3.47	9.982	
600.00	599.90	596.38	595.86	1.93	1.88	136.857	-35.00	2.75	40.25	36.43	3.82	10.539	
650.00	649.89	645.30	644.46	2.11	2.06	136.471	-40.39	3.67	46.70	42.52	4.17	11.189	
700.00	699.87	694.83	693.64	2.29	2.23	136.089	-46.21	4.65	53.51	48.98	4.52	11.828	
750.00	749.85	744.36	742.82	2.47	2.40	135.793	-52.02	5.63	60.32	55.45	4.87	12.377	
800.00	799.83	793.89	792.00	2.64	2.58	135.557	-57.84	6.62	67.13	61.91	5.22	12.852	
850.00	849.81	843.43	841.18	2.82	2.76	135.364	-63.66	7.60	73.95	68.37	5.57	13.265	
900.00	899.79	892.96	890.36	3.00	2.94	135.204	-69.47	8.59	80.76	74.83	5.93	13.627	
950.00	949.77	942.49	939.54	3.18	3.12	135.069	-75.29	9.57	87.57	81.30	6.28	13.947	
1,000.00	999.75	992.03	988.72	3.36	3.30	134.953	-81.11	10.55	94.39	87.76	6.63	14.234	
1,050.00	1,049.73	1,041.56	1,037.90	3.54	3.48	134.853	-86.92	11.54	101.21	94.22	6.98	14.490	
1,100.00	1,099.71	1,091.09	1,087.08	3.72	3.67	134.766	-92.74	12.52	108.02	100.68	7.34	14.721	
1,150.00	1,149.69	1,140.63	1,136.27	3.90	3.85	134.689	-98.56	13.51	114.84	107.15	7.69	14.930	
1,200.00	1,199.67	1,190.16	1,185.45	4.08	4.03	134.620	-104.37	14.49	121.65	113.61	8.05	15.121	
1,250.00	1,249.65	1,239.69	1,234.63	4.26	4.21	134.559	-110.19	15.47	128.47	120.07	8.40	15.294	
1,300.00	1,299.64	1,289.22	1,283.81	4.43	4.40	134.504	-116.01	16.46	135.29	126.53	8.75	15.454	
1,350.00	1,349.62	1,338.76	1,332.99	4.61	4.58	134.455	-121.82	17.44	142.10	132.99	9.11	15.601	
1,400.00	1,399.60	1,388.29	1,382.17	4.79	4.76	134.409	-127.64	18.43	148.92	139.46	9.46	15.737	
1,450.00	1,449.58	1,437.82	1,431.35	4.97	4.94	134.368	-133.46	19.41	155.74	145.92	9.82	15.862	
1,500.00	1,499.56	1,487.36	1,480.53	5.15	5.13	134.331	-139.27	20.39	162.55	152.38	10.17	15.979	
1,550.00	1,549.54	1,536.89	1,529.71	5.33	5.31	134.296	-145.09	21.38	169.37	158.84	10.53	16.088	
1,600.00	1,599.52	1,586.42	1,578.89	5.51	5.49	134.264	-150.90	22.36	176.19	165.30	10.88	16.189	
1,650.00	1,649.50	1,635.96	1,628.07	5.69	5.68	134.234	-156.72	23.34	183.00	171.76	11.24	16.284	
1,700.00	1,699.48	1,685.49	1,677.25	5.87	5.86	134.207	-162.54	24.33	189.82	178.23	11.59	16.373	
1,750.00	1,749.46	1,735.02	1,726.43	6.05	6.04	134.181	-168.35	25.31	196.64	184.69	11.95	16.457	
1,800.00	1,799.44	1,784.56	1,775.61	6.23	6.23	134.157	-174.17	26.30	203.45	191.15	12.30	16.536	
1,850.00	1,849.42	1,834.09	1,824.79	6.41	6.41	134.135	-179.99	27.28	210.27	197.61	12.66	16.610	
1,900.00	1,899.40	1,883.62	1,873.97	6.59	6.59	134.114	-185.80	28.26	217.09	204.07	13.01	16.680	
1,950.00	1,949.38	1,933.15	1,923.15	6.76	6.78	134.094	-191.62	29.25	223.91	210.54	13.37	16.746	
2,000.00	1,999.37	1,982.69	1,972.33	6.94	6.96	134.076	-197.44	30.23	230.72	217.00	13.73	16.809	
2,050.00	2,049.35	2,032.22	2,021.51	7.12	7.14	134.058	-203.25	31.22	237.54	223.46	14.08	16.869	
2,100.00	2,099.33	2,081.75	2,070.69	7.30	7.33	134.042	-209.07	32.20	244.36	229.92	14.44	16.925	
2,150.00	2,149.31	2,131.29	2,119.88	7.48	7.51	134.026	-214.89	33.18	251.17	236.38	14.79	16.979	
2,200.00	2,199.29	2,180.82	2,169.06	7.66	7.69	134.012	-220.70	34.17	257.99	242.84	15.15	17.031	
2,250.00	2,249.27	2,230.35	2,218.24	7.84	7.88	133.998	-226.52	35.15	264.81	249.30	15.50	17.080	
2,300.00	2,299.25	2,279.89	2,267.42	8.02	8.06	133.984	-232.34	36.14	271.63	255.77	15.86	17.126	
2,350.00	2,349.23	2,329.42	2,316.60	8.20	8.25	133.972	-238.15	37.12	278.44	262.23	16.22	17.171	
2,400.00	2,399.21	2,378.95	2,365.78	8.38	8.43	133.960	-243.97	38.10	285.26	268.69	16.57	17.213	
2,450.00	2,449.19	2,428.48	2,414.96	8.56	8.61	133.948	-249.78	39.09	292.08	275.15	16.93	17.254	
2,500.00	2,499.17	2,478.02	2,464.14	8.74	8.80	133.937	-255.60	40.07	298.90	281.61	17.28	17.293	
2,550.00	2,549.15	2,527.55	2,513.32	8.92	8.98	133.927	-261.42	41.06	305.71	288.07	17.64	17.331	
2,600.00	2,599.13	2,577.08	2,562.50	9.10	9.17	133.917	-267.23	42.04	312.53	294.53	18.00	17.367	
2,650.00	2,649.11	2,626.62	2,611.68	9.27	9.35	133.907	-273.05	43.02	319.35	301.00	18.35	17.402	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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 - 61H - Wellbore #1 - PERMIT													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
2,700.00	2,699.10	2,676.15	2,660.86	9.45	9.53	133.898	-278.87	44.01	326.16	307.46	18.71	17.435		
2,750.00	2,749.08	2,725.68	2,710.04	9.63	9.72	133.889	-284.68	44.99	332.98	313.92	19.06	17.467		
2,791.98	2,791.04	2,767.27	2,751.33	9.78	9.87	133.882	-289.57	45.82	338.71	319.34	19.36	17.493		
2,800.00	2,799.06	2,775.22	2,759.22	9.81	9.90	124.276	-290.50	45.98	339.80	320.38	19.42	17.498		
2,850.00	2,848.97	2,824.71	2,808.36	9.99	10.09	103.991	-296.31	46.96	346.65	326.88	19.77	17.531		
2,900.00	2,898.66	2,874.04	2,857.35	10.17	10.27	99.230	-302.11	47.94	353.57	333.44	20.13	17.567		
2,950.00	2,948.01	2,923.08	2,906.03	10.35	10.45	97.641	-307.86	48.91	360.63	340.15	20.48	17.611		
3,000.00	2,996.88	2,971.69	2,954.29	10.53	10.63	97.365	-313.57	49.88	367.95	347.12	20.82	17.669		
3,050.00	3,045.13	3,019.73	3,001.99	10.71	10.81	97.833	-319.21	50.83	375.69	354.52	21.16	17.751		
3,100.00	3,092.63	3,067.07	3,049.00	10.89	10.99	98.786	-324.77	51.77	384.03	362.54	21.49	17.867		
3,150.00	3,139.25	3,113.59	3,095.19	11.07	11.16	100.074	-330.23	52.70	393.20	371.39	21.81	18.028		
3,200.00	3,184.86	3,159.16	3,140.43	11.25	11.33	101.587	-335.58	53.60	403.42	381.31	22.11	18.246		
3,250.00	3,229.33	3,203.64	3,184.60	11.43	11.49	103.239	-340.81	54.49	414.92	392.54	22.39	18.534		
3,300.00	3,272.56	3,250.19	3,230.81	11.61	11.67	105.142	-346.26	55.58	427.87	405.22	22.65	18.894		
3,350.00	3,314.41	3,303.71	3,283.86	11.80	11.86	107.366	-352.30	59.15	441.68	418.79	22.89	19.296		
3,400.00	3,354.77	3,359.20	3,338.60	11.99	12.07	109.522	-358.26	65.98	456.03	432.93	23.10	19.739		
3,450.00	3,393.54	3,416.84	3,394.98	12.19	12.28	111.606	-364.07	76.44	470.78	447.49	23.29	20.217		
3,500.00	3,430.60	3,476.84	3,452.92	12.39	12.49	113.620	-369.71	90.93	485.77	462.33	23.44	20.727		
3,550.00	3,465.85	3,539.39	3,512.27	12.60	12.71	115.563	-375.11	109.87	500.83	477.28	23.55	21.265		
3,600.00	3,499.20	3,604.71	3,572.84	12.81	12.93	117.437	-380.21	133.75	515.81	492.17	23.63	21.824		
3,650.00	3,530.55	3,672.99	3,634.31	13.04	13.16	119.241	-384.92	163.08	530.51	506.83	23.69	22.398		
3,700.00	3,559.83	3,744.44	3,696.27	13.28	13.39	120.976	-389.15	198.37	544.77	521.06	23.71	22.978		
3,750.00	3,586.95	3,819.22	3,758.16	13.52	13.62	122.639	-392.77	240.15	558.38	534.67	23.71	23.554		
3,772.42	3,598.38	3,853.88	3,785.72	13.63	13.73	123.360	-394.17	261.11	564.22	540.52	23.70	23.808		
3,800.00	3,612.17	3,897.70	3,819.46	13.77	13.87	124.557	-395.68	289.03	570.94	547.17	23.76	24.026		
3,850.00	3,637.17	3,980.76	3,879.81	14.05	14.14	126.332	-397.73	346.03	581.10	557.13	23.97	24.239		
3,900.00	3,662.17	4,067.68	3,937.47	14.33	14.44	127.571	-398.74	411.01	588.34	564.04	24.30	24.212		
3,950.00	3,687.17	4,157.19	3,990.52	14.62	14.78	128.251	-398.54	483.08	592.37	567.60	24.77	23.914		
3,972.42	3,698.38	4,197.79	4,012.32	14.75	14.95	128.370	-398.04	517.32	593.08	568.05	25.03	23.698		
4,000.00	3,711.59	4,235.06	4,031.17	14.92	15.11	128.405	-397.37	549.46	593.59	568.56	25.03	23.715		
4,050.00	3,732.51	4,284.83	4,056.05	15.22	15.34	128.525	-396.44	592.56	596.45	571.47	24.97	23.883		
4,100.00	3,749.40	4,334.02	4,080.65	15.54	15.58	128.741	-395.51	635.15	602.06	577.13	24.93	24.149		
4,150.00	3,762.12	4,382.24	4,104.76	15.86	15.83	129.021	-394.60	676.90	610.50	585.59	24.91	24.509		
4,200.00	3,770.57	4,454.19	4,139.81	16.18	16.21	129.955	-393.23	739.70	621.66	596.82	24.84	25.031		
4,250.00	3,774.71	4,635.49	4,193.97	16.49	17.25	132.185	-389.48	911.89	629.11	604.25	24.86	25.309		
4,259.50	3,775.00	4,671.95	4,198.14	16.55	17.47	132.351	-388.70	948.10	629.64	604.68	24.96	25.223		
4,300.00	3,775.91	4,739.63	4,200.58	16.81	17.87	132.413	-387.23	1,015.70	629.75	604.26	25.49	24.705		
4,350.00	3,777.04	4,789.63	4,201.53	17.15	18.18	132.400	-386.14	1,065.68	629.62	603.59	26.03	24.191		
4,400.00	3,778.17	4,839.63	4,202.47	17.49	18.50	132.388	-385.05	1,115.66	629.49	602.91	26.58	23.683		
4,450.00	3,779.30	4,889.63	4,203.41	17.85	18.83	132.376	-383.96	1,165.64	629.37	602.21	27.15	23.178		
4,500.00	3,780.43	4,939.63	4,204.35	18.21	19.18	132.363	-382.87	1,215.62	629.24	601.50	27.74	22.682		
4,550.00	3,781.55	4,989.63	4,205.29	18.60	19.53	132.351	-381.79	1,265.60	629.11	600.76	28.35	22.191		
4,600.00	3,782.68	5,039.63	4,206.23	18.98	19.89	132.338	-380.70	1,315.58	628.99	600.02	28.97	21.712		
4,650.00	3,783.81	5,089.63	4,207.18	19.37	20.26	132.326	-379.61	1,365.55	628.86	599.25	29.61	21.241		
4,700.00	3,784.94	5,139.63	4,208.12	19.77	20.65	132.313	-378.52	1,415.53	628.73	598.48	30.25	20.782		
4,750.00	3,786.06	5,189.63	4,209.06	20.19	21.03	132.301	-377.43	1,465.51	628.61	597.69	30.92	20.332		
4,800.00	3,787.19	5,239.63	4,210.00	20.60	21.43	132.288	-376.35	1,515.49	628.48	596.89	31.59	19.896		
4,850.00	3,788.32	5,289.63	4,210.94	21.03	21.83	132.276	-375.26	1,565.47	628.36	596.08	32.27	19.469		
4,900.00	3,789.45	5,339.63	4,211.88	21.46	22.25	132.263	-374.17	1,615.45	628.23	595.26	32.97	19.055		
4,950.00	3,790.58	5,389.63	4,212.83	21.89	22.66	132.251	-373.08	1,665.43	628.10	594.43	33.67	18.652		
5,000.00	3,791.70	5,439.63	4,213.77	22.33	23.09	132.238	-372.00	1,715.41	627.98	593.59	34.39	18.262		
5,050.00	3,792.83	5,489.63	4,214.71	22.78	23.52	132.226	-370.91	1,765.39	627.85	592.74	35.11	17.882		

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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 - 61H - Wellbore #1 - PERMIT												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance								Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	3,793.96	5,539.63	4,215.65	23.23	23.95	132.213	-369.82	1,815.36	627.73	591.88	35.84	17.514	
5,150.00	3,795.09	5,589.63	4,216.59	23.69	24.39	132.201	-368.73	1,865.34	627.60	591.02	36.58	17.157	
5,200.00	3,796.22	5,639.62	4,217.53	24.15	24.84	132.188	-367.64	1,915.32	627.47	590.15	37.33	16.811	
5,250.00	3,797.34	5,689.62	4,218.48	24.62	25.29	132.176	-366.56	1,965.30	627.35	589.27	38.08	16.475	
5,300.00	3,798.47	5,739.62	4,219.42	25.09	25.74	132.163	-365.47	2,015.28	627.22	588.38	38.84	16.150	
5,350.00	3,799.60	5,789.62	4,220.36	25.57	26.20	132.151	-364.38	2,065.26	627.10	587.49	39.60	15.835	
5,400.00	3,800.73	5,839.62	4,221.30	26.04	26.67	132.138	-363.29	2,115.24	626.97	586.60	40.37	15.529	
5,450.00	3,801.86	5,889.62	4,222.24	26.52	27.13	132.126	-362.21	2,165.22	626.84	585.69	41.15	15.233	
5,500.00	3,802.98	5,939.62	4,223.18	27.00	27.60	132.113	-361.12	2,215.20	626.72	584.79	41.93	14.946	
5,550.00	3,804.11	5,989.62	4,224.13	27.49	28.08	132.100	-360.03	2,265.18	626.59	583.87	42.72	14.668	
5,600.00	3,805.24	6,039.62	4,225.07	27.98	28.55	132.088	-358.94	2,315.15	626.47	582.96	43.51	14.398	
5,650.00	3,806.37	6,089.62	4,226.01	28.48	29.03	132.075	-357.85	2,365.13	626.34	582.04	44.31	14.137	
5,700.00	3,807.49	6,139.62	4,226.95	28.97	29.52	132.063	-356.77	2,415.11	626.21	581.11	45.11	13.883	
5,750.00	3,808.62	6,189.62	4,227.89	29.47	30.00	132.050	-355.68	2,465.09	626.09	580.18	45.91	13.638	
5,800.00	3,809.75	6,239.62	4,228.83	29.97	30.49	132.038	-354.59	2,515.07	625.96	579.25	46.72	13.399	
5,850.00	3,810.88	6,289.62	4,229.78	30.47	30.98	132.025	-353.50	2,565.05	625.84	578.31	47.53	13.168	
5,900.00	3,812.01	6,339.62	4,230.72	30.97	31.48	132.012	-352.41	2,615.03	625.71	577.37	48.34	12.943	
5,950.00	3,813.13	6,389.62	4,231.66	31.48	31.97	132.000	-351.33	2,665.01	625.59	576.43	49.16	12.725	
6,000.00	3,814.26	6,439.62	4,232.60	31.99	32.47	131.987	-350.24	2,714.99	625.46	575.48	49.98	12.514	
6,050.00	3,815.39	6,489.62	4,233.54	32.50	32.97	131.975	-349.15	2,764.96	625.34	574.53	50.81	12.308	
6,100.00	3,816.52	6,539.62	4,234.48	33.01	33.47	131.962	-348.06	2,814.94	625.21	573.58	51.63	12.108	
6,150.00	3,817.65	6,589.62	4,235.43	33.52	33.97	131.949	-346.98	2,864.92	625.09	572.62	52.46	11.914	
6,200.00	3,818.77	6,639.62	4,236.37	34.03	34.48	131.937	-345.89	2,914.90	624.96	571.66	53.30	11.726	
6,250.00	3,819.90	6,689.62	4,237.31	34.55	34.99	131.924	-344.80	2,964.88	624.83	570.70	54.13	11.543	
6,300.00	3,821.03	6,739.62	4,238.25	35.07	35.50	131.911	-343.71	3,014.86	624.71	569.74	54.97	11.364	
6,350.00	3,822.16	6,789.62	4,239.19	35.59	36.01	131.899	-342.62	3,064.84	624.58	568.77	55.81	11.191	
6,400.00	3,823.29	6,839.62	4,240.13	36.11	36.52	131.886	-341.54	3,114.82	624.46	567.81	56.65	11.023	
6,450.00	3,824.41	6,889.62	4,241.08	36.63	37.03	131.874	-340.45	3,164.80	624.33	566.84	57.50	10.858	
6,500.00	3,825.54	6,939.62	4,242.02	37.15	37.55	131.861	-339.36	3,214.78	624.21	565.86	58.34	10.699	
6,550.00	3,826.67	6,989.62	4,242.96	37.68	38.07	131.848	-338.27	3,264.75	624.08	564.89	59.19	10.543	
6,600.00	3,827.80	7,039.62	4,243.90	38.20	38.58	131.836	-337.19	3,314.73	623.96	563.91	60.04	10.392	
6,650.00	3,828.92	7,089.61	4,244.84	38.73	39.10	131.823	-336.10	3,364.71	623.83	562.94	60.90	10.244	
6,700.00	3,830.05	7,139.61	4,245.78	39.25	39.62	131.810	-335.01	3,414.69	623.71	561.96	61.75	10.101	
6,750.00	3,831.18	7,189.61	4,246.73	39.78	40.14	131.798	-333.92	3,464.67	623.58	560.98	62.61	9.961	
6,800.00	3,832.31	7,239.61	4,247.67	40.31	40.67	131.785	-332.83	3,514.65	623.46	559.99	63.46	9.824	
6,850.00	3,833.44	7,289.61	4,248.61	40.84	41.19	131.772	-331.75	3,564.63	623.33	559.01	64.32	9.691	
6,900.00	3,834.56	7,339.61	4,249.55	41.37	41.72	131.759	-330.66	3,614.61	623.21	558.02	65.18	9.561	
6,950.00	3,835.69	7,389.61	4,250.49	41.90	42.24	131.747	-329.57	3,664.59	623.08	557.04	66.05	9.434	
7,000.00	3,836.82	7,439.61	4,251.43	42.44	42.77	131.734	-328.48	3,714.56	622.96	556.05	66.91	9.311	
7,050.00	3,837.95	7,489.61	4,252.38	42.97	43.29	131.721	-327.39	3,764.54	622.83	555.06	67.77	9.190	
7,100.00	3,839.08	7,539.61	4,253.32	43.50	43.82	131.709	-326.31	3,814.52	622.71	554.07	68.64	9.072	
7,150.00	3,840.20	7,589.61	4,254.26	44.04	44.35	131.696	-325.22	3,864.50	622.58	553.07	69.51	8.957	
7,200.00	3,841.33	7,639.61	4,255.20	44.57	44.88	131.683	-324.13	3,914.48	622.46	552.08	70.38	8.845	
7,250.00	3,842.46	7,689.61	4,256.14	45.11	45.41	131.670	-323.04	3,964.46	622.33	551.09	71.25	8.735	
7,300.00	3,843.59	7,739.61	4,257.08	45.65	45.95	131.658	-321.96	4,014.44	622.21	550.09	72.12	8.627	
7,350.00	3,844.72	7,789.61	4,258.03	46.18	46.48	131.645	-320.87	4,064.42	622.08	549.09	72.99	8.523	
7,400.00	3,845.84	7,839.61	4,258.97	46.72	47.01	131.632	-319.78	4,114.40	621.96	548.09	73.87	8.420	
7,450.00	3,846.97	7,889.61	4,259.91	47.26	47.54	131.619	-318.69	4,164.38	621.83	547.09	74.74	8.320	
7,500.00	3,848.10	7,939.61	4,260.85	47.80	48.08	131.607	-317.60	4,214.35	621.71	546.09	75.62	8.222	
7,550.00	3,849.23	7,989.61	4,261.79	48.34	48.61	131.594	-316.52	4,264.33	621.59	545.09	76.50	8.126	
7,600.00	3,850.35	8,039.61	4,262.73	48.88	49.15	131.581	-315.43	4,314.31	621.46	544.09	77.37	8.032	
7,650.00	3,851.48	8,089.61	4,263.68	49.42	49.69	131.568	-314.34	4,364.29	621.34	543.08	78.25	7.940	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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 - 61H - Wellbore #1 - PERMIT												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance								Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,700.00	3,852.61	8,139.61	4,264.62	49.96	50.22	131.556	-313.25	4,414.27	621.21	542.08	79.13	7.850	
7,750.00	3,853.74	8,189.61	4,265.56	50.50	50.76	131.543	-312.17	4,464.25	621.09	541.07	80.02	7.762	
7,800.00	3,854.87	8,239.61	4,266.50	51.05	51.30	131.530	-311.08	4,514.23	620.96	540.07	80.90	7.676	
7,850.00	3,855.99	8,289.61	4,267.44	51.59	51.84	131.517	-309.99	4,564.21	620.84	539.06	81.78	7.592	
7,900.00	3,857.12	8,339.61	4,268.38	52.13	52.38	131.504	-308.90	4,614.19	620.71	538.05	82.66	7.509	
7,950.00	3,858.25	8,389.61	4,269.33	52.67	52.92	131.492	-307.81	4,664.16	620.59	537.04	83.55	7.428	
8,000.00	3,859.38	8,439.61	4,270.27	53.22	53.46	131.479	-306.73	4,714.14	620.47	536.03	84.44	7.348	
8,050.00	3,860.51	8,489.61	4,271.21	53.76	54.00	131.466	-305.64	4,764.12	620.34	535.02	85.32	7.271	
8,100.00	3,861.63	8,539.60	4,272.15	54.31	54.54	131.453	-304.55	4,814.10	620.22	534.01	86.21	7.194	
8,150.00	3,862.76	8,589.60	4,273.09	54.85	55.08	131.440	-303.46	4,864.08	620.09	533.00	87.10	7.119	
8,200.00	3,863.89	8,639.60	4,274.04	55.40	55.62	131.428	-302.37	4,914.06	619.97	531.98	87.99	7.046	
8,250.00	3,865.02	8,689.60	4,274.98	55.94	56.16	131.415	-301.29	4,964.04	619.84	530.97	88.88	6.974	
8,300.00	3,866.15	8,739.60	4,275.92	56.49	56.70	131.402	-300.20	5,014.02	619.72	529.95	89.77	6.904	
8,350.00	3,867.27	8,789.60	4,276.86	57.04	57.25	131.389	-299.11	5,064.00	619.60	528.94	90.66	6.834	
8,400.00	3,868.40	8,839.60	4,277.80	57.58	57.79	131.376	-298.02	5,113.98	619.47	527.92	91.55	6.766	
8,450.00	3,869.53	8,889.60	4,278.74	58.13	58.33	131.363	-296.94	5,163.95	619.35	526.90	92.44	6.700	
8,500.00	3,870.66	8,939.60	4,279.69	58.68	58.88	131.350	-295.85	5,213.93	619.22	525.89	93.34	6.634	
8,550.00	3,871.78	8,989.60	4,280.63	59.22	59.42	131.338	-294.76	5,263.91	619.10	524.87	94.23	6.570	
8,600.00	3,872.91	9,039.60	4,281.57	59.77	59.97	131.325	-293.67	5,313.89	618.98	523.85	95.13	6.507	
8,650.00	3,874.04	9,089.60	4,282.51	60.32	60.51	131.312	-292.58	5,363.87	618.85	522.83	96.02	6.445	
8,700.00	3,875.17	9,139.60	4,283.45	60.87	61.06	131.299	-291.50	5,413.85	618.73	521.81	96.92	6.384	
8,750.00	3,876.30	9,189.60	4,284.39	61.42	61.60	131.286	-290.41	5,463.83	618.61	520.79	97.82	6.324	
8,800.00	3,877.42	9,239.60	4,285.34	61.97	62.15	131.273	-289.32	5,513.81	618.48	519.77	98.71	6.265	
8,850.00	3,878.55	9,289.60	4,286.28	62.52	62.70	131.260	-288.23	5,563.79	618.36	518.75	99.61	6.208	
8,900.00	3,879.68	9,339.60	4,287.22	63.06	63.24	131.247	-287.15	5,613.76	618.23	517.72	100.51	6.151	
8,950.00	3,880.81	9,389.60	4,288.16	63.61	63.79	131.234	-286.06	5,663.74	618.11	516.70	101.41	6.095	
9,000.00	3,881.94	9,439.60	4,289.10	64.16	64.34	131.222	-284.97	5,713.72	617.99	515.68	102.31	6.040	
9,050.00	3,883.06	9,489.60	4,290.04	64.71	64.89	131.209	-283.88	5,763.70	617.86	514.65	103.21	5.986	
9,100.00	3,884.19	9,539.60	4,290.99	65.26	65.43	131.196	-282.79	5,813.68	617.74	513.63	104.11	5.933	
9,150.00	3,885.32	9,589.60	4,291.93	65.82	65.98	131.183	-281.71	5,863.66	617.62	512.60	105.01	5.881	
9,200.00	3,886.45	9,639.60	4,292.87	66.37	66.53	131.170	-280.62	5,913.64	617.49	511.58	105.92	5.830	
9,250.00	3,887.58	9,689.60	4,293.81	66.92	67.08	131.157	-279.53	5,963.62	617.37	510.55	106.82	5.780	
9,300.00	3,888.70	9,739.60	4,294.75	67.47	67.63	131.144	-278.44	6,013.60	617.25	509.52	107.72	5.730	
9,350.00	3,889.83	9,789.60	4,295.69	68.02	68.18	131.131	-277.35	6,063.58	617.12	508.49	108.63	5.681	
9,400.00	3,890.96	9,839.60	4,296.64	68.57	68.73	131.118	-276.27	6,113.55	617.00	507.47	109.53	5.633	
9,450.00	3,892.09	9,889.60	4,297.58	69.12	69.27	131.105	-275.18	6,163.53	616.88	506.44	110.44	5.586	
9,500.00	3,893.21	9,939.60	4,298.52	69.67	69.82	131.092	-274.09	6,213.51	616.75	505.41	111.34	5.539	
9,550.00	3,894.34	9,989.59	4,299.46	70.23	70.37	131.079	-273.00	6,263.49	616.63	504.38	112.25	5.493	
9,600.00	3,895.47	10,039.59	4,300.40	70.78	70.92	131.066	-271.92	6,313.47	616.51	503.35	113.16	5.448	
9,650.00	3,896.60	10,089.59	4,301.34	71.33	71.47	131.053	-270.83	6,363.45	616.38	502.32	114.06	5.404	
9,700.00	3,897.73	10,139.59	4,302.29	71.88	72.03	131.040	-269.74	6,413.43	616.26	501.29	114.97	5.360	
9,750.00	3,898.85	10,189.59	4,303.23	72.44	72.58	131.027	-268.65	6,463.41	616.14	500.26	115.88	5.317	
9,800.00	3,899.98	10,239.59	4,304.17	72.99	73.13	131.014	-267.56	6,513.39	616.01	499.22	116.79	5.275	
9,850.00	3,901.11	10,289.59	4,305.11	73.54	73.68	131.001	-266.48	6,563.36	615.89	498.19	117.70	5.233	
9,900.00	3,902.24	10,339.59	4,306.05	74.10	74.23	130.988	-265.39	6,613.34	615.77	497.16	118.61	5.192	
9,950.00	3,903.37	10,389.59	4,306.99	74.65	74.78	130.975	-264.30	6,663.32	615.64	496.13	119.52	5.151	
10,000.00	3,904.49	10,439.59	4,307.94	75.20	75.33	130.962	-263.21	6,713.30	615.52	495.09	120.43	5.111	
10,050.00	3,905.62	10,489.59	4,308.88	75.76	75.88	130.949	-262.13	6,763.28	615.40	494.06	121.34	5.072	
10,100.00	3,906.75	10,539.59	4,309.82	76.31	76.44	130.936	-261.04	6,813.26	615.27	493.02	122.25	5.033	
10,150.00	3,907.88	10,589.59	4,310.76	76.86	76.99	130.923	-259.95	6,863.24	615.15	491.99	123.16	4.995	
10,200.00	3,909.01	10,639.59	4,311.70	77.42	77.54	130.910	-258.86	6,913.22	615.03	490.95	124.08	4.957	
10,250.00	3,910.13	10,689.59	4,312.64	77.97	78.09	130.897	-257.77	6,963.20	614.91	489.92	124.99	4.920	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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 - 61H - Wellbore #1 - PERMIT													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis			Distance								Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,300.00	3,911.26	10,739.59	4,313.59	78.53	78.64	130.884	-256.69	7,013.18	614.78	488.88	125.90	4.883		
10,350.00	3,912.39	10,789.59	4,314.53	79.08	79.20	130.871	-255.60	7,063.15	614.66	487.84	126.82	4.847		
10,400.00	3,913.52	10,839.59	4,315.47	79.63	79.75	130.858	-254.51	7,113.13	614.54	486.81	127.73	4.811		
10,450.00	3,914.64	10,889.59	4,316.41	80.19	80.30	130.845	-253.42	7,163.11	614.41	485.77	128.65	4.776		
10,500.00	3,915.77	10,939.59	4,317.35	80.74	80.86	130.832	-252.33	7,213.09	614.29	484.73	129.56	4.741		
10,550.00	3,916.90	10,989.59	4,318.29	81.30	81.41	130.819	-251.25	7,263.07	614.17	483.69	130.48	4.707		
10,600.00	3,918.03	11,039.59	4,319.24	81.85	81.96	130.806	-250.16	7,313.05	614.05	482.65	131.39	4.673		
10,650.00	3,919.16	11,089.59	4,320.18	82.41	82.52	130.793	-249.07	7,363.03	613.92	481.62	132.31	4.640		
10,700.00	3,920.28	11,139.59	4,321.12	82.96	83.07	130.779	-247.98	7,413.01	613.80	480.58	133.23	4.607		
10,750.00	3,921.41	11,189.59	4,322.06	83.52	83.62	130.766	-246.90	7,462.99	613.68	479.54	134.14	4.575		
10,800.00	3,922.54	11,239.59	4,323.00	84.07	84.18	130.753	-245.81	7,512.97	613.56	478.50	135.06	4.543		
10,850.00	3,923.67	11,289.59	4,323.94	84.63	84.73	130.740	-244.72	7,562.94	613.43	477.46	135.98	4.511		
10,859.02	3,923.87	11,298.61	4,324.11	84.73	84.83	130.738	-244.52	7,571.96	613.41	477.27	136.14	4.506		
10,900.00	3,924.80	11,339.59	4,324.89	85.19	85.29	130.727	-243.63	7,612.92	613.31	476.41	136.90	4.480		
10,907.58	3,924.97	11,345.67	4,325.00	85.27	85.35	130.725	-243.50	7,619.00	613.29	476.27	137.02	4.476		
10,909.06	3,925.00	11,345.67	4,325.00	85.29	85.35	130.725	-243.50	7,619.00	613.30	476.26	137.03	4.475		
10,909.80	3,925.02	11,345.67	4,325.00	85.29	85.35	130.725	-243.50	7,619.00	613.30	476.26	137.04	4.475 SF		

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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												Offset Site Error:	0.00 usft
Survey Program: 304-INC-ONLY												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
4,250.00	3,774.71	3,887.84	3,774.71	16.49	76.73	64.217	-183.41	5,360.68	4,404.76	4,320.82	83.93	52.479	
4,259.50	3,775.00	3,888.14	3,775.00	16.55	76.73	74.470	-183.41	5,360.68	4,395.30	4,305.46	89.84	48.926	
4,300.00	3,775.91	3,889.05	3,775.91	16.81	76.75	74.607	-183.41	5,360.68	4,354.94	4,264.77	90.16	48.301	
4,350.00	3,777.04	3,890.18	3,777.04	17.15	76.77	74.776	-183.41	5,360.68	4,305.12	4,214.53	90.59	47.525	
4,400.00	3,778.17	3,891.31	3,778.17	17.49	76.79	74.945	-183.41	5,360.68	4,255.30	4,164.29	91.01	46.756	
4,450.00	3,779.30	3,892.43	3,779.30	17.85	76.82	75.114	-183.41	5,360.68	4,205.49	4,114.04	91.45	45.984	
4,500.00	3,780.43	3,893.56	3,780.43	18.21	76.84	75.284	-183.41	5,360.68	4,155.69	4,063.79	91.90	45.220	
4,550.00	3,781.55	3,894.69	3,781.55	18.60	76.86	75.454	-183.41	5,360.68	4,105.89	4,013.52	92.36	44.454	
4,600.00	3,782.68	3,895.82	3,782.68	18.98	76.88	75.625	-183.41	5,360.68	4,056.09	3,963.26	92.83	43.696	
4,650.00	3,783.81	3,896.94	3,783.81	19.37	76.90	75.795	-183.41	5,360.68	4,006.30	3,912.99	93.31	42.937	
4,700.00	3,784.94	3,898.07	3,784.94	19.77	76.93	75.966	-183.41	5,360.68	3,956.51	3,862.72	93.79	42.187	
4,750.00	3,786.06	3,899.20	3,786.06	20.19	76.95	76.137	-183.41	5,360.68	3,906.73	3,812.45	94.28	41.438	
4,800.00	3,787.19	3,900.33	3,787.19	20.60	76.97	76.309	-183.41	5,360.68	3,856.95	3,762.18	94.77	40.696	
4,850.00	3,788.32	3,901.46	3,788.32	21.03	76.99	76.480	-183.41	5,360.68	3,807.18	3,711.90	95.28	39.957	
4,900.00	3,789.45	3,902.58	3,789.45	21.46	77.01	76.652	-183.41	5,360.68	3,757.41	3,661.62	95.79	39.226	
4,950.00	3,790.58	3,903.71	3,790.58	21.89	77.04	76.824	-183.41	5,360.68	3,707.65	3,611.35	96.31	38.498	
5,000.00	3,791.70	3,904.84	3,791.70	22.33	77.06	76.997	-183.41	5,360.68	3,657.90	3,561.07	96.83	37.778	
5,050.00	3,792.83	3,905.97	3,792.83	22.78	77.08	77.169	-183.41	5,360.68	3,608.15	3,510.80	97.35	37.062	
5,100.00	3,793.96	3,907.10	3,793.96	23.23	77.10	77.342	-183.41	5,360.68	3,558.41	3,460.53	97.88	36.354	
5,150.00	3,795.09	3,908.22	3,795.09	23.69	77.13	77.515	-183.41	5,360.68	3,508.68	3,410.26	98.42	35.650	
5,200.00	3,796.22	3,909.35	3,796.22	24.15	77.15	77.688	-183.41	5,360.68	3,458.95	3,360.00	98.96	34.954	
5,250.00	3,797.34	3,910.48	3,797.34	24.62	77.17	77.862	-183.41	5,360.68	3,409.23	3,309.73	99.50	34.263	
5,300.00	3,798.47	3,911.61	3,798.47	25.09	77.19	78.036	-183.41	5,360.68	3,359.52	3,259.48	100.05	33.580	
5,350.00	3,799.60	3,912.74	3,799.60	25.57	77.21	78.210	-183.41	5,360.68	3,309.82	3,209.22	100.60	32.902	
5,400.00	3,800.73	3,913.86	3,800.73	26.04	77.24	78.384	-183.41	5,360.68	3,260.13	3,158.98	101.15	32.231	
5,450.00	3,801.86	3,914.99	3,801.86	26.52	77.26	78.558	-183.41	5,360.68	3,210.44	3,108.74	101.71	31.566	
5,500.00	3,802.98	3,916.12	3,802.98	27.00	77.28	78.733	-183.41	5,360.68	3,160.77	3,058.50	102.26	30.908	
5,550.00	3,804.11	3,917.25	3,804.11	27.49	77.30	78.908	-183.41	5,360.68	3,111.10	3,008.28	102.83	30.256	
5,600.00	3,805.24	3,918.37	3,805.24	27.98	77.33	79.083	-183.41	5,360.68	3,061.45	2,958.06	103.39	29.611	
5,650.00	3,806.37	3,919.50	3,806.37	28.48	77.35	79.258	-183.41	5,360.68	3,011.81	2,907.85	103.96	28.972	
5,700.00	3,807.49	3,920.63	3,807.49	28.97	77.37	79.433	-183.41	5,360.68	2,962.17	2,857.65	104.52	28.340	
5,750.00	3,808.62	3,921.76	3,808.62	29.47	77.39	79.609	-183.41	5,360.68	2,912.55	2,807.46	105.09	27.714	
5,800.00	3,809.75	3,922.89	3,809.75	29.97	77.41	79.785	-183.41	5,360.68	2,862.95	2,757.28	105.67	27.094	
5,850.00	3,810.88	3,924.01	3,810.88	30.47	77.44	79.961	-183.41	5,360.68	2,813.35	2,707.11	106.24	26.481	
5,900.00	3,812.01	3,925.14	3,812.01	30.97	77.46	80.137	-183.41	5,360.68	2,763.78	2,656.96	106.82	25.874	
5,950.00	3,813.13	3,926.27	3,813.13	31.48	77.48	80.314	-183.41	5,360.68	2,714.21	2,606.82	107.39	25.274	
6,000.00	3,814.26	3,927.40	3,814.26	31.99	77.50	80.490	-183.41	5,360.68	2,664.66	2,556.69	107.97	24.679	
6,050.00	3,815.39	3,928.53	3,815.39	32.50	77.52	80.667	-183.41	5,360.68	2,615.13	2,506.58	108.55	24.091	
6,100.00	3,816.52	3,929.65	3,816.52	33.01	77.55	80.844	-183.41	5,360.68	2,565.62	2,456.49	109.13	23.509	
6,150.00	3,817.65	3,930.78	3,817.65	33.52	77.57	81.021	-183.41	5,360.68	2,516.12	2,406.41	109.72	22.933	
6,200.00	3,818.77	3,931.91	3,818.77	34.03	77.59	81.199	-183.41	5,360.68	2,466.65	2,356.35	110.30	22.364	
6,250.00	3,819.90	3,933.04	3,819.90	34.55	77.61	81.376	-183.41	5,360.68	2,417.19	2,306.31	110.88	21.800	
6,300.00	3,821.03	3,934.17	3,821.03	35.07	77.64	81.554	-183.41	5,360.68	2,367.76	2,256.29	111.47	21.242	
6,350.00	3,822.16	3,935.29	3,822.16	35.59	77.66	81.732	-183.41	5,360.68	2,318.35	2,206.30	112.05	20.690	
6,400.00	3,823.29	3,936.42	3,823.29	36.11	77.68	81.910	-183.41	5,360.68	2,268.97	2,156.33	112.64	20.144	
6,450.00	3,824.41	3,937.55	3,824.41	36.63	77.70	82.088	-183.41	5,360.68	2,219.61	2,106.39	113.23	19.603	
6,500.00	3,825.54	3,938.68	3,825.54	37.15	77.72	82.266	-183.41	5,360.68	2,170.29	2,056.47	113.82	19.068	
6,550.00	3,826.67	3,939.80	3,826.67	37.68	77.75	82.445	-183.41	5,360.68	2,120.99	2,006.59	114.40	18.539	
6,600.00	3,827.80	3,940.93	3,827.80	38.20	77.77	82.623	-183.41	5,360.68	2,071.73	1,956.74	114.99	18.016	
6,650.00	3,828.92	3,942.06	3,828.92	38.73	77.79	82.802	-183.41	5,360.68	2,022.50	1,906.92	115.58	17.498	
6,700.00	3,830.05	3,943.19	3,830.05	39.25	77.81	82.981	-183.41	5,360.68	1,973.31	1,857.14	116.17	16.986	
6,750.00	3,831.18	3,944.32	3,831.18	39.78	77.83	83.160	-183.41	5,360.68	1,924.16	1,807.40	116.76	16.479	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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												Offset Site Error:	0.00 usft
Survey Program: 304-INC-ONLY												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
6,800.00	3,832.31	3,945.44	3,832.31	40.31	77.86	83.339	-183.41	5,360.68	1,875.06	1,757.71	117.35	15.978	
6,850.00	3,833.44	3,946.57	3,833.44	40.84	77.88	83.518	-183.41	5,360.68	1,826.01	1,708.06	117.94	15.482	
6,900.00	3,834.56	3,947.70	3,834.56	41.37	77.90	83.698	-183.41	5,360.68	1,777.00	1,658.47	118.53	14.992	
6,950.00	3,835.69	3,948.83	3,835.69	41.90	77.92	83.877	-183.41	5,360.68	1,728.06	1,608.93	119.12	14.506	
7,000.00	3,836.82	3,949.96	3,836.82	42.44	77.95	84.057	-183.41	5,360.68	1,679.17	1,559.45	119.72	14.026	
7,050.00	3,837.95	3,951.08	3,837.95	42.97	77.97	84.237	-183.41	5,360.68	1,630.35	1,510.04	120.31	13.552	
7,100.00	3,839.08	3,952.21	3,839.08	43.50	77.99	84.417	-183.41	5,360.68	1,581.60	1,460.71	120.90	13.082	
7,150.00	3,840.20	3,953.34	3,840.20	44.04	78.01	84.597	-183.41	5,360.68	1,532.94	1,411.45	121.49	12.618	
7,200.00	3,841.33	3,954.47	3,841.33	44.57	78.03	84.777	-183.41	5,360.68	1,484.36	1,362.28	122.08	12.159	
7,250.00	3,842.46	3,955.60	3,842.46	45.11	78.06	84.957	-183.41	5,360.68	1,435.88	1,313.21	122.67	11.705	
7,300.00	3,843.59	3,956.72	3,843.59	45.65	78.08	85.137	-183.41	5,360.68	1,387.50	1,264.25	123.26	11.257	
7,350.00	3,844.72	3,957.85	3,844.72	46.18	78.10	85.318	-183.41	5,360.68	1,339.25	1,215.40	123.85	10.814	
7,400.00	3,845.84	3,958.98	3,845.84	46.72	78.12	85.498	-183.41	5,360.68	1,291.12	1,166.68	124.44	10.376	
7,450.00	3,846.97	3,960.11	3,846.97	47.26	78.14	85.679	-183.41	5,360.68	1,243.15	1,118.12	125.03	9.943	
7,500.00	3,848.10	3,961.23	3,848.10	47.80	78.17	85.860	-183.41	5,360.68	1,195.33	1,069.72	125.62	9.516	
7,550.00	3,849.23	3,962.36	3,849.23	48.34	78.19	86.040	-183.41	5,360.68	1,147.71	1,021.50	126.21	9.094	
7,600.00	3,850.35	3,963.49	3,850.35	48.88	78.21	86.221	-183.41	5,360.68	1,100.29	973.49	126.79	8.678	
7,650.00	3,851.48	3,964.62	3,851.48	49.42	78.23	86.402	-183.41	5,360.68	1,053.11	925.73	127.38	8.267	
7,700.00	3,852.61	3,965.75	3,852.61	49.96	78.26	86.583	-183.41	5,360.68	1,006.20	878.23	127.97	7.863	
7,750.00	3,853.74	3,966.87	3,853.74	50.50	78.28	86.764	-183.41	5,360.68	959.60	831.04	128.56	7.464	
7,800.00	3,854.87	3,968.00	3,854.87	51.05	78.30	86.945	-183.41	5,360.68	913.36	784.22	129.14	7.073	
7,850.00	3,855.99	3,969.13	3,855.99	51.59	78.32	87.126	-183.41	5,360.68	867.53	737.81	129.73	6.687	
7,900.00	3,857.12	3,970.26	3,857.12	52.13	78.34	87.308	-183.41	5,360.68	822.19	691.88	130.31	6.309	
7,950.00	3,858.25	3,971.39	3,858.25	52.67	78.37	87.489	-183.41	5,360.68	777.43	646.53	130.90	5.939	
8,000.00	3,859.38	3,972.51	3,859.38	53.22	78.39	87.670	-183.41	5,360.68	733.33	601.85	131.48	5.578	
8,050.00	3,860.51	3,973.64	3,860.51	53.76	78.41	87.852	-183.41	5,360.68	690.04	557.98	132.06	5.225	
8,100.00	3,861.63	3,974.77	3,861.63	54.31	78.43	88.033	-183.41	5,360.68	647.72	515.07	132.65	4.883	
8,150.00	3,862.76	3,975.90	3,862.76	54.85	78.46	88.215	-183.41	5,360.68	606.56	473.33	133.23	4.553	
8,200.00	3,863.89	3,977.03	3,863.89	55.40	78.48	88.396	-183.41	5,360.68	566.82	433.01	133.81	4.236	
8,250.00	3,865.02	3,978.15	3,865.02	55.94	78.50	88.578	-183.41	5,360.68	528.83	394.44	134.39	3.935	
8,300.00	3,866.15	3,979.28	3,866.15	56.49	78.52	88.759	-183.41	5,360.68	492.98	358.01	134.97	3.653	
8,350.00	3,867.27	3,980.41	3,867.27	57.04	78.54	88.941	-183.41	5,360.68	459.77	324.23	135.55	3.392	
8,400.00	3,868.40	3,981.54	3,868.40	57.58	78.57	89.123	-183.41	5,360.68	429.83	293.71	136.12	3.158	
8,450.00	3,869.53	3,982.66	3,869.53	58.13	78.59	89.304	-183.41	5,360.68	403.88	267.18	136.70	2.954	
8,500.00	3,870.66	3,983.79	3,870.66	58.68	78.61	89.486	-183.41	5,360.68	382.72	245.45	137.28	2.788	
8,550.00	3,871.78	3,984.92	3,871.78	59.22	78.63	89.668	-183.41	5,360.68	367.19	229.34	137.85	2.664	
8,600.00	3,872.91	3,986.05	3,872.91	59.77	78.65	89.849	-183.41	5,360.68	358.03	219.61	138.42	2.586	
8,641.50	3,873.85	3,986.98	3,873.85	60.23	78.67	90.000	-183.41	5,360.68	355.62	216.72	138.90	2.560 CC, ES	
8,650.00	3,874.04	3,987.18	3,874.04	60.32	78.68	90.031	-183.41	5,360.68	355.72	216.72	139.00	2.559 SF	
8,700.00	3,875.17	3,988.30	3,875.17	60.87	78.70	90.213	-183.41	5,360.68	360.40	220.83	139.57	2.582	
8,750.00	3,876.30	3,989.43	3,876.30	61.42	78.72	90.394	-183.41	5,360.68	371.79	231.65	140.14	2.653	
8,800.00	3,877.42	3,990.56	3,877.42	61.97	78.74	90.576	-183.41	5,360.68	389.33	248.62	140.71	2.767	
8,850.00	3,878.55	3,991.69	3,878.55	62.52	78.77	90.758	-183.41	5,360.68	412.21	270.93	141.28	2.918	
8,900.00	3,879.68	3,992.82	3,879.68	63.06	78.79	90.939	-183.41	5,360.68	439.61	297.76	141.85	3.099	
8,950.00	3,880.81	3,993.94	3,880.81	63.61	78.81	91.121	-183.41	5,360.68	470.73	328.32	142.41	3.305	
9,000.00	3,881.94	3,995.07	3,881.94	64.16	78.83	91.302	-183.41	5,360.68	504.90	361.92	142.98	3.531	
9,050.00	3,883.06	3,996.20	3,883.06	64.71	78.85	91.484	-183.41	5,360.68	541.53	397.99	143.54	3.773	
9,100.00	3,884.19	3,997.33	3,884.19	65.26	78.88	91.665	-183.41	5,360.68	580.16	436.05	144.10	4.026	
9,150.00	3,885.32	3,998.46	3,885.32	65.82	78.90	91.847	-183.41	5,360.68	620.41	475.74	144.67	4.289	
9,200.00	3,886.45	3,999.58	3,886.45	66.37	78.92	92.028	-183.41	5,360.68	661.99	516.76	145.23	4.558	
9,250.00	3,887.58	4,000.71	3,887.58	66.92	78.94	92.210	-183.41	5,360.68	704.66	558.88	145.79	4.834	
9,300.00	3,888.70	4,001.84	3,888.70	67.47	78.96	92.391	-183.41	5,360.68	748.24	601.90	146.34	5.113	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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												Offset Site Error:	0.00 usft
Survey Program: 304-INC-ONLY												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,350.00	3,889.83	4,002.97	3,889.83	68.02	78.99	92.573	-183.41	5,360.68	792.58	645.68	146.90	5.395	
9,400.00	3,890.96	4,004.09	3,890.96	68.57	79.01	92.754	-183.41	5,360.68	837.55	690.10	147.46	5.680	
9,450.00	3,892.09	4,005.22	3,892.09	69.12	79.03	92.935	-183.41	5,360.68	883.07	735.06	148.01	5.966	
9,500.00	3,893.21	4,006.35	3,893.21	69.67	79.05	93.116	-183.41	5,360.68	929.04	780.48	148.56	6.253	
9,550.00	3,894.34	4,007.48	3,894.34	70.23	79.08	93.297	-183.41	5,360.68	975.41	826.29	149.12	6.541	
9,600.00	3,895.47	4,008.61	3,895.47	70.78	79.10	93.478	-183.41	5,360.68	1,022.12	872.45	149.67	6.829	
9,650.00	3,896.60	4,009.73	3,896.60	71.33	79.12	93.659	-183.41	5,360.68	1,069.12	918.91	150.22	7.117	
9,700.00	3,897.73	4,010.86	3,897.73	71.88	79.14	93.840	-183.41	5,360.68	1,116.39	965.62	150.76	7.405	
9,750.00	3,898.85	4,011.99	3,898.85	72.44	79.16	94.021	-183.41	5,360.68	1,163.88	1,012.57	151.31	7.692	
9,800.00	3,899.98	4,013.12	3,899.98	72.99	79.19	94.202	-183.41	5,360.68	1,211.57	1,059.72	151.85	7.979	
9,850.00	3,901.11	4,014.25	3,901.11	73.54	79.21	94.383	-183.41	5,360.68	1,259.44	1,107.05	152.40	8.264	
9,900.00	3,902.24	4,015.37	3,902.24	74.10	79.23	94.563	-183.41	5,360.68	1,307.47	1,154.53	152.94	8.549	
9,950.00	3,903.37	4,016.50	3,903.37	74.65	79.25	94.744	-183.41	5,360.68	1,355.64	1,202.16	153.48	8.833	
10,000.00	3,904.49	4,017.63	3,904.49	75.20	79.27	94.924	-183.41	5,360.68	1,403.94	1,249.92	154.02	9.115	
10,050.00	3,905.62	4,018.76	3,905.62	75.76	79.30	95.104	-183.41	5,360.68	1,452.35	1,297.80	154.56	9.397	
10,100.00	3,906.75	4,019.89	3,906.75	76.31	79.32	95.284	-183.41	5,360.68	1,500.87	1,345.78	155.09	9.677	
10,150.00	3,907.88	4,021.01	3,907.88	76.86	79.34	95.465	-183.41	5,360.68	1,549.48	1,393.85	155.63	9.956	
10,200.00	3,909.01	4,022.14	3,909.01	77.42	79.36	95.644	-183.41	5,360.68	1,598.17	1,442.01	156.16	10.234	
10,250.00	3,910.13	4,023.27	3,910.13	77.97	79.39	95.824	-183.41	5,360.68	1,646.94	1,490.25	156.69	10.511	
10,300.00	3,911.26	4,024.40	3,911.26	78.53	79.41	96.004	-183.41	5,360.68	1,695.79	1,538.57	157.22	10.786	
10,350.00	3,912.39	4,025.52	3,912.39	79.08	79.43	96.184	-183.41	5,360.68	1,744.69	1,586.94	157.75	11.060	
10,400.00	3,913.52	4,026.65	3,913.52	79.63	79.45	96.363	-183.41	5,360.68	1,793.66	1,635.38	158.28	11.333	
10,450.00	3,914.64	4,027.78	3,914.64	80.19	79.47	96.543	-183.41	5,360.68	1,842.68	1,683.88	158.80	11.604	
10,500.00	3,915.77	4,028.91	3,915.77	80.74	79.50	96.722	-183.41	5,360.68	1,891.75	1,732.43	159.32	11.874	
10,550.00	3,916.90	4,030.04	3,916.90	81.30	79.52	96.901	-183.41	5,360.68	1,940.87	1,781.03	159.85	12.142	
10,600.00	3,918.03	4,031.16	3,918.03	81.85	79.54	97.080	-183.41	5,360.68	1,990.04	1,829.67	160.37	12.409	
10,650.00	3,919.16	4,032.29	3,919.16	82.41	79.56	97.259	-183.41	5,360.68	2,039.24	1,878.35	160.89	12.675	
10,700.00	3,920.28	4,033.42	3,920.28	82.96	79.59	97.438	-183.41	5,360.68	2,088.48	1,927.07	161.40	12.940	
10,750.00	3,921.41	4,034.55	3,921.41	83.52	79.61	97.616	-183.41	5,360.68	2,137.75	1,975.83	161.92	13.203	
10,800.00	3,922.54	4,035.68	3,922.54	84.07	79.63	97.794	-183.41	5,360.68	2,187.06	2,024.63	162.43	13.464	
10,850.00	3,923.67	4,036.80	3,923.67	84.63	79.65	97.973	-183.41	5,360.68	2,236.39	2,073.45	162.94	13.725	
10,859.02	3,923.87	4,037.01	3,923.87	84.73	79.66	98.005	-183.41	5,360.68	2,245.30	2,082.27	163.04	13.772	
10,900.00	3,924.80	4,037.93	3,924.80	85.19	79.67	98.151	-183.41	5,360.68	2,285.76	2,122.31	163.45	13.984	
10,909.06	3,925.00	4,038.14	3,925.00	85.29	79.68	98.183	-183.41	5,360.68	2,294.71	2,131.16	163.55	14.031	
10,909.80	3,925.02	4,038.15	3,925.02	85.29	79.68	98.186	-183.41	5,360.68	2,295.43	2,131.88	163.55	14.035	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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													Offset Site Error:	0.00 usft
Survey Program: 166-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,400.00	3,800.73	3,895.83	3,800.73	26.04	71.81	83.639	-838.22	7,340.32	5,311.11	5,213.88	97.22	54.627		
5,450.00	3,801.86	3,896.95	3,801.86	26.52	71.83	83.699	-838.22	7,340.32	5,262.12	5,164.39	97.73	53.841		
5,500.00	3,802.98	3,898.08	3,802.98	27.00	71.85	83.760	-838.22	7,340.32	5,213.16	5,114.91	98.24	53.063		
5,550.00	3,804.11	3,899.21	3,804.11	27.49	71.87	83.820	-838.22	7,340.32	5,164.21	5,065.45	98.76	52.290		
5,600.00	3,805.24	3,900.34	3,805.24	27.98	71.89	83.881	-838.22	7,340.32	5,115.28	5,016.01	99.28	51.525		
5,650.00	3,806.37	3,901.47	3,806.37	28.48	71.91	83.942	-838.22	7,340.32	5,066.38	4,966.58	99.80	50.766		
5,700.00	3,807.49	3,902.59	3,807.49	28.97	71.93	84.002	-838.22	7,340.32	5,017.49	4,917.17	100.32	50.014		
5,750.00	3,808.62	3,907.00	3,811.90	29.47	72.00	84.239	-838.22	7,340.32	4,968.63	4,867.70	100.94	49.226		
5,800.00	3,809.75	3,907.00	3,811.90	29.97	72.00	84.239	-838.22	7,340.32	4,919.79	4,818.36	101.43	48.503		
5,850.00	3,810.88	3,907.00	3,811.90	30.47	72.00	84.239	-838.22	7,340.32	4,870.97	4,769.04	101.93	47.786		
5,900.00	3,812.01	3,907.11	3,812.01	30.97	72.01	84.245	-838.22	7,340.32	4,822.18	4,719.75	102.44	47.075		
5,950.00	3,813.13	3,908.23	3,813.13	31.48	72.03	84.306	-838.22	7,340.32	4,773.41	4,670.44	102.97	46.356		
6,000.00	3,814.26	3,909.36	3,814.26	31.99	72.05	84.367	-838.22	7,340.32	4,724.67	4,621.16	103.51	45.645		
6,050.00	3,815.39	3,910.49	3,815.39	32.50	72.07	84.427	-838.22	7,340.32	4,675.96	4,571.91	104.05	44.940		
6,100.00	3,816.52	3,911.62	3,816.52	33.01	72.09	84.488	-838.22	7,340.32	4,627.27	4,522.68	104.59	44.243		
6,150.00	3,817.65	3,912.75	3,817.65	33.52	72.11	84.549	-838.22	7,340.32	4,578.61	4,473.48	105.13	43.552		
6,200.00	3,818.77	3,913.87	3,818.77	34.03	72.13	84.610	-838.22	7,340.32	4,529.97	4,424.30	105.67	42.868		
6,250.00	3,819.90	3,915.00	3,819.90	34.55	72.15	84.671	-838.22	7,340.32	4,481.37	4,375.15	106.22	42.190		
6,300.00	3,821.03	3,916.13	3,821.03	35.07	72.17	84.731	-838.22	7,340.32	4,432.80	4,326.04	106.77	41.519		
6,350.00	3,822.16	3,917.26	3,822.16	35.59	72.19	84.792	-838.22	7,340.32	4,384.26	4,276.95	107.31	40.854		
6,400.00	3,823.29	3,918.39	3,823.29	36.11	72.21	84.853	-838.22	7,340.32	4,335.75	4,227.89	107.86	40.197		
6,450.00	3,824.41	3,919.51	3,824.41	36.63	72.23	84.914	-838.22	7,340.32	4,287.28	4,178.87	108.41	39.545		
6,500.00	3,825.54	3,920.64	3,825.54	37.15	72.26	84.975	-838.22	7,340.32	4,238.84	4,129.88	108.97	38.901		
6,550.00	3,826.67	3,921.77	3,826.67	37.68	72.28	85.036	-838.22	7,340.32	4,190.44	4,080.92	109.52	38.262		
6,600.00	3,827.80	3,922.90	3,827.80	38.20	72.30	85.096	-838.22	7,340.32	4,142.08	4,032.01	110.07	37.631		
6,650.00	3,828.92	3,924.02	3,828.92	38.73	72.32	85.157	-838.22	7,340.32	4,093.76	3,983.13	110.63	37.005		
6,700.00	3,830.05	3,925.15	3,830.05	39.25	72.34	85.218	-838.22	7,340.32	4,045.47	3,934.29	111.18	36.386		
6,750.00	3,831.18	3,926.28	3,831.18	39.78	72.36	85.279	-838.22	7,340.32	3,997.23	3,885.49	111.74	35.772		
6,800.00	3,832.31	3,927.41	3,832.31	40.31	72.38	85.340	-838.22	7,340.32	3,949.03	3,836.73	112.30	35.166		
6,850.00	3,833.44	3,928.54	3,833.44	40.84	72.40	85.401	-838.22	7,340.32	3,900.88	3,788.02	112.86	34.565		
6,900.00	3,834.56	3,929.66	3,834.56	41.37	72.42	85.462	-838.22	7,340.32	3,852.77	3,739.35	113.42	33.970		
6,950.00	3,835.69	3,930.79	3,835.69	41.90	72.44	85.523	-838.22	7,340.32	3,804.71	3,690.74	113.98	33.381		
7,000.00	3,836.82	3,931.92	3,836.82	42.44	72.46	85.584	-838.22	7,340.32	3,756.70	3,642.17	114.54	32.799		
7,050.00	3,837.95	3,933.05	3,837.95	42.97	72.48	85.645	-838.22	7,340.32	3,708.75	3,593.65	115.10	32.222		
7,100.00	3,839.08	3,934.18	3,839.08	43.50	72.50	85.706	-838.22	7,340.32	3,660.85	3,545.19	115.66	31.651		
7,150.00	3,840.20	3,935.30	3,840.20	44.04	72.53	85.767	-838.22	7,340.32	3,613.00	3,496.78	116.23	31.086		
7,200.00	3,841.33	3,936.43	3,841.33	44.57	72.55	85.828	-838.22	7,340.32	3,565.22	3,448.43	116.79	30.527		
7,250.00	3,842.46	3,937.56	3,842.46	45.11	72.57	85.889	-838.22	7,340.32	3,517.49	3,400.14	117.35	29.973		
7,300.00	3,843.59	3,938.69	3,843.59	45.65	72.59	85.950	-838.22	7,340.32	3,469.83	3,351.91	117.92	29.426		
7,350.00	3,844.72	3,939.82	3,844.72	46.18	72.61	86.011	-838.22	7,340.32	3,422.24	3,303.75	118.48	28.883		
7,400.00	3,845.84	3,940.94	3,845.84	46.72	72.63	86.072	-838.22	7,340.32	3,374.71	3,255.66	119.05	28.347		
7,450.00	3,846.97	3,942.07	3,846.97	47.26	72.65	86.133	-838.22	7,340.32	3,327.26	3,207.64	119.62	27.816		
7,500.00	3,848.10	3,943.20	3,848.10	47.80	72.67	86.194	-838.22	7,340.32	3,279.88	3,159.69	120.18	27.290		
7,550.00	3,849.23	3,944.33	3,849.23	48.34	72.69	86.255	-838.22	7,340.32	3,232.58	3,111.83	120.75	26.770		
7,600.00	3,850.35	3,945.45	3,850.35	48.88	72.71	86.316	-838.22	7,340.32	3,185.36	3,064.04	121.32	26.256		
7,650.00	3,851.48	3,946.58	3,851.48	49.42	72.73	86.377	-838.22	7,340.32	3,138.23	3,016.34	121.89	25.747		
7,700.00	3,852.61	3,947.71	3,852.61	49.96	72.75	86.438	-838.22	7,340.32	3,091.19	2,968.73	122.46	25.243		
7,750.00	3,853.74	3,948.84	3,853.74	50.50	72.78	86.500	-838.22	7,340.32	3,044.24	2,921.21	123.03	24.744		
7,800.00	3,854.87	3,949.97	3,854.87	51.05	72.80	86.561	-838.22	7,340.32	2,997.39	2,873.79	123.60	24.251		
7,850.00	3,855.99	3,951.09	3,855.99	51.59	72.82	86.622	-838.22	7,340.32	2,950.64	2,826.47	124.17	23.763		
7,900.00	3,857.12	3,952.22	3,857.12	52.13	72.84	86.683	-838.22	7,340.32	2,904.00	2,779.26	124.74	23.281		
7,950.00	3,858.25	3,953.35	3,858.25	52.67	72.86	86.744	-838.22	7,340.32	2,857.48	2,732.17	125.31	22.803		

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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													Offset Site Error:	0.00 usft
Survey Program: 166-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
8,000.00	3,859.38	3,954.48	3,859.38	53.22	72.88	86.805	-838.22	7,340.32	2,811.07	2,685.19	125.88	22.331		
8,050.00	3,860.51	3,955.61	3,860.51	53.76	72.90	86.866	-838.22	7,340.32	2,764.79	2,638.34	126.45	21.864		
8,100.00	3,861.63	3,956.73	3,861.63	54.31	72.92	86.928	-838.22	7,340.32	2,718.64	2,591.61	127.02	21.402		
8,150.00	3,862.76	3,957.86	3,862.76	54.85	72.94	86.989	-838.22	7,340.32	2,672.62	2,545.03	127.60	20.946		
8,200.00	3,863.89	3,958.99	3,863.89	55.40	72.96	87.050	-838.22	7,340.32	2,626.76	2,498.59	128.17	20.494		
8,250.00	3,865.02	3,960.12	3,865.02	55.94	72.98	87.111	-838.22	7,340.32	2,581.04	2,452.30	128.74	20.048		
8,300.00	3,866.15	3,961.25	3,866.15	56.49	73.00	87.172	-838.22	7,340.32	2,535.49	2,406.17	129.32	19.607		
8,350.00	3,867.27	3,962.37	3,867.27	57.04	73.03	87.233	-838.22	7,340.32	2,490.11	2,360.22	129.89	19.171		
8,400.00	3,868.40	3,963.50	3,868.40	57.58	73.05	87.295	-838.22	7,340.32	2,444.90	2,314.44	130.46	18.740		
8,450.00	3,869.53	3,964.63	3,869.53	58.13	73.07	87.356	-838.22	7,340.32	2,399.89	2,268.85	131.04	18.315		
8,500.00	3,870.66	3,965.76	3,870.66	58.68	73.09	87.417	-838.22	7,340.32	2,355.07	2,223.46	131.61	17.894		
8,550.00	3,871.78	3,966.88	3,871.78	59.22	73.11	87.478	-838.22	7,340.32	2,310.47	2,178.29	132.18	17.479		
8,600.00	3,872.91	3,968.01	3,872.91	59.77	73.13	87.539	-838.22	7,340.32	2,266.10	2,133.34	132.76	17.069		
8,650.00	3,874.04	3,969.14	3,874.04	60.32	73.15	87.601	-838.22	7,340.32	2,221.96	2,088.63	133.33	16.665		
8,700.00	3,875.17	3,970.27	3,875.17	60.87	73.17	87.662	-838.22	7,340.32	2,178.07	2,044.17	133.91	16.265		
8,750.00	3,876.30	3,971.40	3,876.30	61.42	73.19	87.723	-838.22	7,340.32	2,134.46	1,999.97	134.48	15.872		
8,800.00	3,877.42	3,972.52	3,877.42	61.97	73.21	87.784	-838.22	7,340.32	2,091.13	1,956.07	135.06	15.483		
8,850.00	3,878.55	3,973.65	3,878.55	62.52	73.23	87.846	-838.22	7,340.32	2,048.10	1,912.46	135.63	15.100		
8,900.00	3,879.68	3,974.78	3,879.68	63.06	73.25	87.907	-838.22	7,340.32	2,005.39	1,869.18	136.21	14.723		
8,950.00	3,880.81	3,975.91	3,880.81	63.61	73.28	87.968	-838.22	7,340.32	1,963.03	1,826.25	136.79	14.351		
9,000.00	3,881.94	3,977.04	3,881.94	64.16	73.30	88.029	-838.22	7,340.32	1,921.04	1,783.68	137.36	13.985		
9,050.00	3,883.06	3,978.16	3,883.06	64.71	73.32	88.091	-838.22	7,340.32	1,879.43	1,741.50	137.94	13.625		
9,100.00	3,884.19	3,979.29	3,884.19	65.26	73.34	88.152	-838.22	7,340.32	1,838.25	1,699.73	138.51	13.271		
9,150.00	3,885.32	3,980.42	3,885.32	65.82	73.36	88.213	-838.22	7,340.32	1,797.51	1,658.42	139.09	12.923		
9,200.00	3,886.45	3,981.55	3,886.45	66.37	73.38	88.275	-838.22	7,340.32	1,757.25	1,617.58	139.66	12.582		
9,250.00	3,887.58	3,982.68	3,887.58	66.92	73.40	88.336	-838.22	7,340.32	1,717.50	1,577.25	140.24	12.247		
9,300.00	3,888.70	3,983.80	3,888.70	67.47	73.42	88.397	-838.22	7,340.32	1,678.29	1,537.47	140.82	11.918		
9,350.00	3,889.83	3,984.93	3,889.83	68.02	73.44	88.458	-838.22	7,340.32	1,639.68	1,498.28	141.39	11.596		
9,400.00	3,890.96	3,986.06	3,890.96	68.57	73.46	88.520	-838.22	7,340.32	1,601.69	1,459.72	141.97	11.282		
9,450.00	3,892.09	3,987.19	3,892.09	69.12	73.48	88.581	-838.22	7,340.32	1,564.38	1,421.83	142.55	10.974		
9,500.00	3,893.21	3,988.31	3,893.21	69.67	73.50	88.642	-838.22	7,340.32	1,527.79	1,384.66	143.12	10.675		
9,550.00	3,894.34	3,989.44	3,894.34	70.23	73.53	88.704	-838.22	7,340.32	1,491.98	1,348.28	143.70	10.383		
9,600.00	3,895.47	3,990.57	3,895.47	70.78	73.55	88.765	-838.22	7,340.32	1,457.00	1,312.72	144.28	10.099		
9,650.00	3,896.60	3,991.70	3,896.60	71.33	73.57	88.826	-838.22	7,340.32	1,422.92	1,278.07	144.85	9.823		
9,700.00	3,897.73	3,992.83	3,897.73	71.88	73.59	88.888	-838.22	7,340.32	1,389.81	1,244.38	145.43	9.556		
9,750.00	3,898.85	3,993.95	3,898.85	72.44	73.61	88.949	-838.22	7,340.32	1,357.72	1,211.72	146.01	9.299		
9,800.00	3,899.98	3,995.08	3,899.98	72.99	73.63	89.010	-838.22	7,340.32	1,326.75	1,180.16	146.59	9.051		
9,850.00	3,901.11	3,996.21	3,901.11	73.54	73.65	89.072	-838.22	7,340.32	1,296.96	1,149.80	147.16	8.813		
9,900.00	3,902.24	3,997.34	3,902.24	74.10	73.67	89.133	-838.22	7,340.32	1,268.45	1,120.71	147.74	8.586		
9,950.00	3,903.37	3,998.47	3,903.37	74.65	73.69	89.194	-838.22	7,340.32	1,241.29	1,092.97	148.32	8.369		
10,000.00	3,904.49	3,999.59	3,904.49	75.20	73.71	89.255	-838.22	7,340.32	1,215.58	1,066.69	148.89	8.164		
10,050.00	3,905.62	4,000.72	3,905.62	75.76	73.73	89.317	-838.22	7,340.32	1,191.42	1,041.94	149.47	7.971		
10,100.00	3,906.75	4,001.85	3,906.75	76.31	73.75	89.378	-838.22	7,340.32	1,168.89	1,018.84	150.05	7.790		
10,150.00	3,907.88	4,002.98	3,907.88	76.86	73.78	89.439	-838.22	7,340.32	1,148.10	997.48	150.62	7.622		
10,200.00	3,909.01	4,004.11	3,909.01	77.42	73.80	89.501	-838.22	7,340.32	1,129.14	977.94	151.20	7.468		
10,250.00	3,910.13	4,005.23	3,910.13	77.97	73.82	89.562	-838.22	7,340.32	1,112.11	960.33	151.78	7.327		
10,300.00	3,911.26	4,006.36	3,911.26	78.53	73.84	89.623	-838.22	7,340.32	1,097.09	944.74	152.36	7.201		
10,350.00	3,912.39	4,007.49	3,912.39	79.08	73.86	89.685	-838.22	7,340.32	1,084.17	931.24	152.93	7.089		
10,400.00	3,913.52	4,008.62	3,913.52	79.63	73.88	89.746	-838.22	7,340.32	1,073.43	919.92	153.51	6.993		
10,450.00	3,914.64	4,009.74	3,914.64	80.19	73.90	89.807	-838.22	7,340.32	1,064.92	910.84	154.09	6.911		
10,500.00	3,915.77	4,010.87	3,915.77	80.74	73.92	89.869	-838.22	7,340.32	1,058.72	904.05	154.66	6.845		
10,550.00	3,916.90	4,012.00	3,916.90	81.30	73.94	89.930	-838.22	7,340.32	1,054.84	899.60	155.24	6.795		

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,600.00	3,918.03	4,013.13	3,918.03	81.85	73.96	89.991	-838.22	7,340.32	1,053.33	897.51	155.82	6.760	
10,606.94	3,918.18	4,013.28	3,918.18	81.93	73.97	90.000	-838.22	7,340.32	1,053.30	897.41	155.90	6.756	CC, ES
10,650.00	3,919.16	4,014.26	3,919.16	82.41	73.98	90.053	-838.22	7,340.32	1,054.18	897.79	156.39	6.741	
10,700.00	3,920.28	4,015.38	3,920.28	82.96	74.00	90.114	-838.22	7,340.32	1,057.40	900.43	156.97	6.736	SF
10,750.00	3,921.41	4,016.51	3,921.41	83.52	74.03	90.175	-838.22	7,340.32	1,062.97	905.42	157.55	6.747	
10,800.00	3,922.54	4,017.64	3,922.54	84.07	74.05	90.237	-838.22	7,340.32	1,070.84	912.72	158.12	6.772	
10,850.00	3,923.67	4,018.77	3,923.67	84.63	74.07	90.298	-838.22	7,340.32	1,080.97	922.27	158.70	6.811	
10,859.02	3,923.87	4,018.97	3,923.87	84.73	74.07	90.309	-838.22	7,340.32	1,083.03	924.23	158.80	6.820	
10,900.00	3,924.80	4,019.90	3,924.80	85.19	74.09	90.360	-838.22	7,340.32	1,093.29	934.02	159.28	6.864	
10,909.06	3,925.00	4,020.10	3,925.00	85.29	74.09	90.371	-838.22	7,340.32	1,095.76	936.38	159.38	6.875	
10,909.80	3,925.02	4,020.12	3,925.02	85.29	74.09	90.372	-838.22	7,340.32	1,095.96	936.57	159.39	6.876	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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													Offset Site Error:	0.00 usft
Survey Program: 335-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,350.00	3,799.60	3,907.79	3,799.60	25.57	79.45	-65.908	482.10	7,342.04	5,292.74	5,196.45	96.29	54.965		
5,400.00	3,800.73	3,908.91	3,800.73	26.04	79.47	-66.110	482.10	7,342.04	5,242.82	5,145.91	96.91	54.102		
5,450.00	3,801.86	3,910.04	3,801.86	26.52	79.50	-66.313	482.10	7,342.04	5,192.90	5,095.37	97.52	53.247		
5,500.00	3,802.98	3,911.17	3,802.98	27.00	79.52	-66.517	482.10	7,342.04	5,142.97	5,044.83	98.14	52.403		
5,550.00	3,804.11	3,912.30	3,804.11	27.49	79.55	-66.721	482.10	7,342.04	5,093.06	4,994.29	98.77	51.566		
5,600.00	3,805.24	3,913.43	3,805.24	27.98	79.57	-66.925	482.10	7,342.04	5,043.14	4,943.74	99.39	50.739		
5,650.00	3,806.37	3,914.55	3,806.37	28.48	79.60	-67.131	482.10	7,342.04	4,993.22	4,893.20	100.02	49.920		
5,700.00	3,807.49	3,915.68	3,807.49	28.97	79.62	-67.337	482.10	7,342.04	4,943.31	4,842.65	100.66	49.111		
5,750.00	3,808.62	3,916.81	3,808.62	29.47	79.65	-67.543	482.10	7,342.04	4,893.39	4,792.10	101.29	48.310		
5,800.00	3,809.75	3,917.94	3,809.75	29.97	79.67	-67.751	482.10	7,342.04	4,843.48	4,741.55	101.93	47.518		
5,850.00	3,810.88	3,919.06	3,810.88	30.47	79.70	-67.958	482.10	7,342.04	4,793.57	4,691.00	102.57	46.735		
5,900.00	3,812.01	3,920.19	3,812.01	30.97	79.72	-68.167	482.10	7,342.04	4,743.66	4,640.45	103.21	45.961		
5,950.00	3,813.13	3,921.32	3,813.13	31.48	79.75	-68.376	482.10	7,342.04	4,693.75	4,589.90	103.86	45.195		
6,000.00	3,814.26	3,922.45	3,814.26	31.99	79.77	-68.586	482.10	7,342.04	4,643.85	4,539.35	104.50	44.438		
6,050.00	3,815.39	3,923.58	3,815.39	32.50	79.80	-68.796	482.10	7,342.04	4,593.94	4,488.79	105.15	43.690		
6,100.00	3,816.52	3,924.70	3,816.52	33.01	79.82	-69.007	482.10	7,342.04	4,544.04	4,438.24	105.80	42.950		
6,150.00	3,817.65	3,925.83	3,817.65	33.52	79.85	-69.218	482.10	7,342.04	4,494.14	4,387.69	106.45	42.218		
6,200.00	3,818.77	3,926.96	3,818.77	34.03	79.87	-69.430	482.10	7,342.04	4,444.24	4,337.14	107.10	41.495		
6,250.00	3,819.90	3,928.09	3,819.90	34.55	79.90	-69.643	482.10	7,342.04	4,394.35	4,286.59	107.76	40.779		
6,300.00	3,821.03	3,929.22	3,821.03	35.07	79.92	-69.856	482.10	7,342.04	4,344.45	4,236.04	108.41	40.073		
6,350.00	3,822.16	3,930.34	3,822.16	35.59	79.95	-70.070	482.10	7,342.04	4,294.56	4,185.49	109.07	39.373		
6,400.00	3,823.29	3,931.47	3,823.29	36.11	79.97	-70.285	482.10	7,342.04	4,244.67	4,134.94	109.73	38.683		
6,450.00	3,824.41	3,932.60	3,824.41	36.63	80.00	-70.500	482.10	7,342.04	4,194.78	4,084.39	110.39	37.999		
6,500.00	3,825.54	3,933.73	3,825.54	37.15	80.02	-70.715	482.10	7,342.04	4,144.90	4,033.85	111.05	37.324		
6,550.00	3,826.67	3,934.85	3,826.67	37.68	80.05	-70.931	482.10	7,342.04	4,095.02	3,983.30	111.72	36.656		
6,600.00	3,827.80	3,935.98	3,827.80	38.20	80.07	-71.148	482.10	7,342.04	4,045.14	3,932.76	112.38	35.996		
6,650.00	3,828.92	3,937.11	3,828.92	38.73	80.10	-71.365	482.10	7,342.04	3,995.26	3,882.22	113.04	35.343		
6,700.00	3,830.05	3,938.24	3,830.05	39.25	80.12	-71.583	482.10	7,342.04	3,945.38	3,831.68	113.71	34.698		
6,750.00	3,831.18	3,939.37	3,831.18	39.78	80.15	-71.801	482.10	7,342.04	3,895.51	3,781.14	114.37	34.060		
6,800.00	3,832.31	3,940.49	3,832.31	40.31	80.17	-72.020	482.10	7,342.04	3,845.64	3,730.61	115.04	33.429		
6,850.00	3,833.44	3,941.62	3,833.44	40.84	80.20	-72.240	482.10	7,342.04	3,795.78	3,680.07	115.71	32.805		
6,900.00	3,834.56	3,942.75	3,834.56	41.37	80.22	-72.460	482.10	7,342.04	3,745.92	3,629.54	116.37	32.189		
6,950.00	3,835.69	3,943.88	3,835.69	41.90	80.25	-72.680	482.10	7,342.04	3,696.06	3,579.02	117.04	31.579		
7,000.00	3,836.82	3,945.01	3,836.82	42.44	80.27	-72.901	482.10	7,342.04	3,646.20	3,528.49	117.71	30.976		
7,050.00	3,837.95	3,946.13	3,837.95	42.97	80.30	-73.123	482.10	7,342.04	3,596.35	3,477.97	118.38	30.379		
7,100.00	3,839.08	3,947.26	3,839.08	43.50	80.32	-73.345	482.10	7,342.04	3,546.50	3,427.45	119.05	29.790		
7,150.00	3,840.20	3,948.39	3,840.20	44.04	80.35	-73.568	482.10	7,342.04	3,496.66	3,376.94	119.72	29.207		
7,200.00	3,841.33	3,949.52	3,841.33	44.57	80.37	-73.791	482.10	7,342.04	3,446.82	3,326.43	120.39	28.630		
7,250.00	3,842.46	3,950.65	3,842.46	45.11	80.40	-74.015	482.10	7,342.04	3,396.99	3,275.92	121.06	28.060		
7,300.00	3,843.59	3,951.77	3,843.59	45.65	80.42	-74.239	482.10	7,342.04	3,347.15	3,225.42	121.73	27.496		
7,350.00	3,844.72	3,952.90	3,844.72	46.18	80.45	-74.463	482.10	7,342.04	3,297.33	3,174.93	122.40	26.939		
7,400.00	3,845.84	3,954.03	3,845.84	46.72	80.47	-74.688	482.10	7,342.04	3,247.51	3,124.44	123.07	26.387		
7,450.00	3,846.97	3,955.16	3,846.97	47.26	80.50	-74.914	482.10	7,342.04	3,197.69	3,073.95	123.74	25.841		
7,500.00	3,848.10	3,956.28	3,848.10	47.80	80.52	-75.140	482.10	7,342.04	3,147.88	3,023.47	124.41	25.302		
7,550.00	3,849.23	3,957.41	3,849.23	48.34	80.55	-75.367	482.10	7,342.04	3,098.08	2,972.99	125.08	24.768		
7,600.00	3,850.35	3,958.54	3,850.35	48.88	80.57	-75.594	482.10	7,342.04	3,048.28	2,922.52	125.75	24.240		
7,650.00	3,851.48	3,959.67	3,851.48	49.42	80.60	-75.821	482.10	7,342.04	2,998.49	2,872.06	126.42	23.718		
7,700.00	3,852.61	3,960.80	3,852.61	49.96	80.62	-76.049	482.10	7,342.04	2,948.70	2,821.61	127.09	23.201		
7,750.00	3,853.74	3,961.92	3,853.74	50.50	80.65	-76.278	482.10	7,342.04	2,898.92	2,771.16	127.76	22.690		
7,800.00	3,854.87	3,963.05	3,854.87	51.05	80.67	-76.507	482.10	7,342.04	2,849.15	2,720.72	128.43	22.184		
7,850.00	3,855.99	3,964.18	3,855.99	51.59	80.70	-76.736	482.10	7,342.04	2,799.38	2,670.28	129.10	21.684		
7,900.00	3,857.12	3,965.31	3,857.12	52.13	80.72	-76.966	482.10	7,342.04	2,749.63	2,619.86	129.77	21.189		

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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													Offset Site Error:	0.00 usft
Survey Program: 335-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
7,950.00	3,858.25	3,966.44	3,858.25	52.67	80.75	-77.196	482.10	7,342.04	2,699.88	2,569.45	130.44	20.699		
8,000.00	3,859.38	3,967.56	3,859.38	53.22	80.77	-77.426	482.10	7,342.04	2,650.14	2,519.04	131.10	20.214		
8,050.00	3,860.51	3,968.69	3,860.51	53.76	80.80	-77.657	482.10	7,342.04	2,600.41	2,468.65	131.77	19.735		
8,100.00	3,861.63	3,969.82	3,861.63	54.31	80.82	-77.889	482.10	7,342.04	2,550.70	2,418.26	132.43	19.260		
8,150.00	3,862.76	3,970.95	3,862.76	54.85	80.85	-78.121	482.10	7,342.04	2,500.99	2,367.89	133.10	18.790		
8,200.00	3,863.89	3,972.08	3,863.89	55.40	80.87	-78.353	482.10	7,342.04	2,451.29	2,317.53	133.76	18.326		
8,250.00	3,865.02	3,973.20	3,865.02	55.94	80.90	-78.585	482.10	7,342.04	2,401.61	2,267.18	134.43	17.866		
8,300.00	3,866.15	3,974.33	3,866.15	56.49	80.92	-78.818	482.10	7,342.04	2,351.94	2,216.85	135.09	17.410		
8,350.00	3,867.27	3,975.46	3,867.27	57.04	80.95	-79.052	482.10	7,342.04	2,302.28	2,166.53	135.75	16.960		
8,400.00	3,868.40	3,976.59	3,868.40	57.58	80.97	-79.285	482.10	7,342.04	2,252.63	2,116.22	136.41	16.513		
8,450.00	3,869.53	3,977.71	3,869.53	58.13	81.00	-79.520	482.10	7,342.04	2,203.01	2,065.93	137.07	16.072		
8,500.00	3,870.66	3,978.84	3,870.66	58.68	81.02	-79.754	482.10	7,342.04	2,153.40	2,015.67	137.73	15.635		
8,550.00	3,871.78	3,979.97	3,871.78	59.22	81.05	-79.989	482.10	7,342.04	2,103.80	1,965.41	138.39	15.202		
8,600.00	3,872.91	3,981.10	3,872.91	59.77	81.07	-80.224	482.10	7,342.04	2,054.23	1,915.18	139.04	14.774		
8,650.00	3,874.04	3,982.23	3,874.04	60.32	81.10	-80.459	482.10	7,342.04	2,004.67	1,864.97	139.70	14.350		
8,700.00	3,875.17	3,983.35	3,875.17	60.87	81.12	-80.695	482.10	7,342.04	1,955.14	1,814.79	140.35	13.930		
8,750.00	3,876.30	3,984.48	3,876.30	61.42	81.15	-80.931	482.10	7,342.04	1,905.63	1,764.63	141.01	13.514		
8,800.00	3,877.42	3,985.61	3,877.42	61.97	81.17	-81.168	482.10	7,342.04	1,856.15	1,714.49	141.66	13.103		
8,850.00	3,878.55	3,986.74	3,878.55	62.52	81.20	-81.404	482.10	7,342.04	1,806.70	1,664.39	142.31	12.696		
8,900.00	3,879.68	3,987.87	3,879.68	63.06	81.22	-81.641	482.10	7,342.04	1,757.27	1,614.32	142.96	12.292		
8,950.00	3,880.81	3,988.99	3,880.81	63.61	81.25	-81.879	482.10	7,342.04	1,707.88	1,564.28	143.61	11.893		
9,000.00	3,881.94	3,990.12	3,881.94	64.16	81.27	-82.116	482.10	7,342.04	1,658.53	1,514.27	144.25	11.497		
9,050.00	3,883.06	3,991.25	3,883.06	64.71	81.30	-82.354	482.10	7,342.04	1,609.21	1,464.31	144.90	11.106		
9,100.00	3,884.19	3,992.38	3,884.19	65.26	81.32	-82.592	482.10	7,342.04	1,559.93	1,414.40	145.54	10.718		
9,150.00	3,885.32	3,993.51	3,885.32	65.82	81.35	-82.831	482.10	7,342.04	1,510.71	1,364.53	146.18	10.335		
9,200.00	3,886.45	3,994.63	3,886.45	66.37	81.37	-83.069	482.10	7,342.04	1,461.53	1,314.71	146.82	9.955		
9,250.00	3,887.58	3,995.76	3,887.58	66.92	81.40	-83.308	482.10	7,342.04	1,412.41	1,264.95	147.46	9.578		
9,300.00	3,888.70	3,996.89	3,888.70	67.47	81.42	-83.547	482.10	7,342.04	1,363.36	1,215.26	148.10	9.206		
9,350.00	3,889.83	3,998.02	3,889.83	68.02	81.45	-83.787	482.10	7,342.04	1,314.37	1,165.64	148.73	8.837		
9,400.00	3,890.96	3,999.14	3,890.96	68.57	81.47	-84.026	482.10	7,342.04	1,265.47	1,116.10	149.36	8.472		
9,450.00	3,892.09	4,000.27	3,892.09	69.12	81.50	-84.266	482.10	7,342.04	1,216.65	1,066.65	149.99	8.111		
9,500.00	3,893.21	4,001.40	3,893.21	69.67	81.52	-84.506	482.10	7,342.04	1,167.93	1,017.30	150.62	7.754		
9,550.00	3,894.34	4,002.53	3,894.34	70.23	81.55	-84.746	482.10	7,342.04	1,119.32	968.07	151.25	7.400		
9,600.00	3,895.47	4,003.66	3,895.47	70.78	81.57	-84.986	482.10	7,342.04	1,070.84	918.96	151.88	7.051		
9,650.00	3,896.60	4,004.78	3,896.60	71.33	81.60	-85.227	482.10	7,342.04	1,022.50	870.00	152.50	6.705		
9,700.00	3,897.73	4,005.91	3,897.73	71.88	81.62	-85.467	482.10	7,342.04	974.33	821.21	153.12	6.363		
9,750.00	3,898.85	4,007.04	3,898.85	72.44	81.65	-85.708	482.10	7,342.04	926.35	772.61	153.74	6.025		
9,800.00	3,899.98	4,008.17	3,899.98	72.99	81.67	-85.949	482.10	7,342.04	878.60	724.24	154.36	5.692		
9,850.00	3,901.11	4,009.30	3,901.11	73.54	81.70	-86.190	482.10	7,342.04	831.11	676.13	154.97	5.363		
9,900.00	3,902.24	4,010.42	3,902.24	74.10	81.72	-86.432	482.10	7,342.04	783.93	628.34	155.59	5.038		
9,950.00	3,903.37	4,011.55	3,903.37	74.65	81.75	-86.673	482.10	7,342.04	737.12	580.92	156.20	4.719		
10,000.00	3,904.49	4,012.68	3,904.49	75.20	81.77	-86.915	482.10	7,342.04	690.75	533.94	156.81	4.405		
10,050.00	3,905.62	4,013.81	3,905.62	75.76	81.80	-87.156	482.10	7,342.04	644.93	487.51	157.41	4.097		
10,100.00	3,906.75	4,014.94	3,906.75	76.31	81.82	-87.398	482.10	7,342.04	599.77	441.75	158.02	3.796		
10,150.00	3,907.88	4,016.06	3,907.88	76.86	81.85	-87.640	482.10	7,342.04	555.44	396.82	158.62	3.502		
10,200.00	3,909.01	4,017.19	3,909.01	77.42	81.87	-87.882	482.10	7,342.04	512.15	352.93	159.22	3.217		
10,250.00	3,910.13	4,018.32	3,910.13	77.97	81.90	-88.124	482.10	7,342.04	470.20	310.38	159.82	2.942		
10,300.00	3,911.26	4,019.45	3,911.26	78.53	81.92	-88.366	482.10	7,342.04	429.96	269.55	160.41	2.680		
10,350.00	3,912.39	4,020.57	3,912.39	79.08	81.95	-88.608	482.10	7,342.04	391.98	230.97	161.00	2.435		
10,400.00	3,913.52	4,021.70	3,913.52	79.63	81.97	-88.850	482.10	7,342.04	356.97	195.37	161.59	2.209		
10,450.00	3,914.64	4,022.83	3,914.64	80.19	82.00	-89.092	482.10	7,342.04	325.88	163.70	162.18	2.009		
10,500.00	3,915.77	4,023.96	3,915.77	80.74	82.02	-89.334	482.10	7,342.04	299.95	137.18	162.77	1.843		

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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	Offset	Semi Major Axis			Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,550.00	3,916.90	4,025.09	3,916.90	81.30	82.05	-89.577	482.10	7,342.04	280.61	117.26	163.35	1.718	
10,600.00	3,918.03	4,026.21	3,918.03	81.85	82.07	-89.819	482.10	7,342.04	269.27	105.34	163.93	1.643	
10,637.36	3,918.87	4,027.06	3,918.87	82.27	82.09	-90.000	482.10	7,342.04	266.67	102.31	164.36	1.622	CC, ES, SF
10,650.00	3,919.16	4,027.34	3,919.16	82.41	82.10	-90.061	482.10	7,342.04	266.97	102.46	164.51	1.623	
10,700.00	3,920.28	4,028.47	3,920.28	82.96	82.12	-90.303	482.10	7,342.04	273.92	108.84	165.08	1.659	
10,750.00	3,921.41	4,029.60	3,921.41	83.52	82.15	-90.546	482.10	7,342.04	289.47	123.82	165.65	1.747	
10,800.00	3,922.54	4,030.73	3,922.54	84.07	82.17	-90.788	482.10	7,342.04	312.33	146.11	166.22	1.879	
10,850.00	3,923.67	4,031.85	3,923.67	84.63	82.20	-91.030	482.10	7,342.04	341.03	174.24	166.79	2.045	
10,859.02	3,923.87	4,032.06	3,923.87	84.73	82.20	-91.074	482.10	7,342.04	346.73	179.84	166.89	2.078	
10,900.00	3,924.80	4,032.98	3,924.80	85.19	82.22	-91.272	482.10	7,342.04	374.24	206.89	167.35	2.236	
10,909.06	3,925.00	4,033.19	3,925.00	85.29	82.23	-91.316	482.10	7,342.04	380.65	213.20	167.45	2.273	
10,909.80	3,925.02	4,033.20	3,925.02	85.29	82.23	-91.320	482.10	7,342.04	381.17	213.71	167.46	2.276	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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													Offset Site Error:	0.00 usft
Survey Program: 821-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,250.00	3,774.71	3,875.81	3,774.71	16.49	67.73	-79.831	1,136.86	5,362.38	4,524.73	4,441.75	82.98	54.528		
4,259.50	3,775.00	3,876.10	3,775.00	16.55	67.74	-84.108	1,136.86	5,362.38	4,515.45	4,431.57	83.89	53.829		
4,300.00	3,775.91	3,877.01	3,775.91	16.81	67.75	-84.162	1,136.86	5,362.38	4,475.90	4,391.73	84.17	53.178		
4,350.00	3,777.04	3,878.14	3,777.04	17.15	67.77	-84.228	1,136.86	5,362.38	4,427.10	4,342.57	84.54	52.370		
4,400.00	3,778.17	3,879.27	3,778.17	17.49	67.80	-84.295	1,136.86	5,362.38	4,378.33	4,293.42	84.90	51.568		
4,450.00	3,779.30	3,880.40	3,779.30	17.85	67.82	-84.361	1,136.86	5,362.38	4,329.58	4,244.29	85.29	50.761		
4,500.00	3,780.43	3,881.53	3,780.43	18.21	67.84	-84.427	1,136.86	5,362.38	4,280.86	4,195.18	85.68	49.961		
4,550.00	3,781.55	3,882.65	3,781.55	18.60	67.86	-84.494	1,136.86	5,362.38	4,232.18	4,146.08	86.09	49.158		
4,600.00	3,782.68	3,883.78	3,782.68	18.98	67.88	-84.560	1,136.86	5,362.38	4,183.52	4,097.02	86.50	48.363		
4,650.00	3,783.81	3,884.91	3,783.81	19.37	67.90	-84.627	1,136.86	5,362.38	4,134.90	4,047.97	86.93	47.566		
4,700.00	3,784.94	3,886.04	3,784.94	19.77	67.92	-84.693	1,136.86	5,362.38	4,086.30	3,998.95	87.36	46.777		
4,750.00	3,786.06	3,887.16	3,786.06	20.19	67.94	-84.759	1,136.86	5,362.38	4,037.74	3,949.95	87.80	45.989		
4,800.00	3,787.19	3,888.29	3,787.19	20.60	67.96	-84.826	1,136.86	5,362.38	3,989.22	3,900.98	88.24	45.209		
4,850.00	3,788.32	3,889.42	3,788.32	21.03	67.98	-84.892	1,136.86	5,362.38	3,940.74	3,852.04	88.70	44.430		
4,900.00	3,789.45	3,890.55	3,789.45	21.46	68.00	-84.959	1,136.86	5,362.38	3,892.29	3,803.14	89.15	43.659		
4,950.00	3,790.58	3,891.68	3,790.58	21.89	68.02	-85.025	1,136.86	5,362.38	3,843.88	3,754.26	89.62	42.892		
5,000.00	3,791.70	3,892.80	3,791.70	22.33	68.04	-85.092	1,136.86	5,362.38	3,795.51	3,705.42	90.09	42.132		
5,050.00	3,792.83	3,893.93	3,792.83	22.78	68.06	-85.158	1,136.86	5,362.38	3,747.18	3,656.62	90.56	41.376		
5,100.00	3,793.96	3,895.06	3,793.96	23.23	68.08	-85.225	1,136.86	5,362.38	3,698.90	3,607.86	91.04	40.629		
5,150.00	3,795.09	3,896.19	3,795.09	23.69	68.11	-85.291	1,136.86	5,362.38	3,650.67	3,559.14	91.53	39.885		
5,200.00	3,796.22	3,897.32	3,796.22	24.15	68.13	-85.358	1,136.86	5,362.38	3,602.48	3,510.46	92.02	39.150		
5,250.00	3,797.34	3,898.44	3,797.34	24.62	68.15	-85.424	1,136.86	5,362.38	3,554.34	3,461.83	92.51	38.420		
5,300.00	3,798.47	3,899.57	3,798.47	25.09	68.17	-85.491	1,136.86	5,362.38	3,506.26	3,413.25	93.01	37.699		
5,350.00	3,799.60	3,900.70	3,799.60	25.57	68.19	-85.558	1,136.86	5,362.38	3,458.22	3,364.71	93.51	36.982		
5,400.00	3,800.73	3,901.83	3,800.73	26.04	68.21	-85.624	1,136.86	5,362.38	3,410.25	3,316.23	94.01	36.274		
5,450.00	3,801.86	3,902.96	3,801.86	26.52	68.23	-85.691	1,136.86	5,362.38	3,362.33	3,267.81	94.52	35.572		
5,500.00	3,802.98	3,904.08	3,802.98	27.00	68.25	-85.757	1,136.86	5,362.38	3,314.47	3,219.44	95.03	34.877		
5,550.00	3,804.11	3,905.21	3,804.11	27.49	68.27	-85.824	1,136.86	5,362.38	3,266.68	3,171.13	95.55	34.189		
5,600.00	3,805.24	3,906.34	3,805.24	27.98	68.29	-85.891	1,136.86	5,362.38	3,218.95	3,122.89	96.06	33.509		
5,650.00	3,806.37	3,907.47	3,806.37	28.48	68.31	-85.957	1,136.86	5,362.38	3,171.30	3,074.71	96.58	32.835		
5,700.00	3,807.49	3,908.59	3,807.49	28.97	68.33	-86.024	1,136.86	5,362.38	3,123.72	3,026.61	97.10	32.169		
5,750.00	3,808.62	3,909.72	3,808.62	29.47	68.35	-86.091	1,136.86	5,362.38	3,076.21	2,978.58	97.63	31.509		
5,800.00	3,809.75	3,910.85	3,809.75	29.97	68.37	-86.157	1,136.86	5,362.38	3,028.78	2,930.63	98.16	30.857		
5,850.00	3,810.88	3,911.98	3,810.88	30.47	68.40	-86.224	1,136.86	5,362.38	2,981.44	2,882.75	98.69	30.212		
5,900.00	3,812.01	3,913.11	3,812.01	30.97	68.42	-86.291	1,136.86	5,362.38	2,934.18	2,834.97	99.22	29.574		
5,950.00	3,813.13	3,914.23	3,813.13	31.48	68.44	-86.358	1,136.86	5,362.38	2,887.02	2,787.27	99.75	28.943		
6,000.00	3,814.26	3,915.36	3,814.26	31.99	68.46	-86.424	1,136.86	5,362.38	2,839.95	2,739.67	100.28	28.320		
6,050.00	3,815.39	3,916.49	3,815.39	32.50	68.48	-86.491	1,136.86	5,362.38	2,792.98	2,692.16	100.82	27.703		
6,100.00	3,816.52	3,917.62	3,816.52	33.01	68.50	-86.558	1,136.86	5,362.38	2,746.12	2,644.77	101.36	27.094		
6,150.00	3,817.65	3,918.75	3,817.65	33.52	68.52	-86.625	1,136.86	5,362.38	2,699.38	2,597.48	101.90	26.491		
6,200.00	3,818.77	3,919.87	3,818.77	34.03	68.54	-86.691	1,136.86	5,362.38	2,652.75	2,550.31	102.44	25.896		
6,250.00	3,819.90	3,921.00	3,819.90	34.55	68.56	-86.758	1,136.86	5,362.38	2,606.24	2,503.26	102.98	25.308		
6,300.00	3,821.03	3,922.13	3,821.03	35.07	68.58	-86.825	1,136.86	5,362.38	2,559.87	2,456.35	103.52	24.728		
6,350.00	3,822.16	3,923.26	3,822.16	35.59	68.60	-86.892	1,136.86	5,362.38	2,513.64	2,409.57	104.07	24.154		
6,400.00	3,823.29	3,924.39	3,823.29	36.11	68.62	-86.959	1,136.86	5,362.38	2,467.55	2,362.93	104.61	23.587		
6,450.00	3,824.41	3,925.51	3,824.41	36.63	68.64	-87.025	1,136.86	5,362.38	2,421.62	2,316.45	105.16	23.027		
6,500.00	3,825.54	3,926.64	3,825.54	37.15	68.66	-87.092	1,136.86	5,362.38	2,375.85	2,270.14	105.71	22.475		
6,550.00	3,826.67	3,927.77	3,826.67	37.68	68.68	-87.159	1,136.86	5,362.38	2,330.25	2,223.99	106.26	21.930		
6,600.00	3,827.80	3,928.90	3,827.80	38.20	68.71	-87.226	1,136.86	5,362.38	2,284.84	2,178.03	106.81	21.391		
6,650.00	3,828.92	3,930.02	3,828.92	38.73	68.73	-87.293	1,136.86	5,362.38	2,239.62	2,132.26	107.36	20.860		
6,700.00	3,830.05	3,931.15	3,830.05	39.25	68.75	-87.360	1,136.86	5,362.38	2,194.61	2,086.69	107.91	20.336		
6,750.00	3,831.18	3,932.28	3,831.18	39.78	68.77	-87.426	1,136.86	5,362.38	2,149.82	2,041.35	108.47	19.820		

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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													Offset Site Error:	0.00 usft
Survey Program: 821-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
6,800.00	3,832.31	3,933.41	3,832.31	40.31	68.79	-87.493	1,136.86	5,362.38	2,105.26	1,996.24	109.02	19.310		
6,850.00	3,833.44	3,934.54	3,833.44	40.84	68.81	-87.560	1,136.86	5,362.38	2,060.95	1,951.37	109.58	18.808		
6,900.00	3,834.56	3,935.66	3,834.56	41.37	68.83	-87.627	1,136.86	5,362.38	2,016.91	1,906.78	110.13	18.313		
6,950.00	3,835.69	3,936.79	3,835.69	41.90	68.85	-87.694	1,136.86	5,362.38	1,973.15	1,862.46	110.69	17.826		
7,000.00	3,836.82	3,937.92	3,836.82	42.44	68.87	-87.761	1,136.86	5,362.38	1,929.69	1,818.45	111.25	17.346		
7,050.00	3,837.95	3,939.05	3,837.95	42.97	68.89	-87.828	1,136.86	5,362.38	1,886.56	1,774.76	111.81	16.874		
7,100.00	3,839.08	3,940.18	3,839.08	43.50	68.91	-87.895	1,136.86	5,362.38	1,843.77	1,731.41	112.36	16.409		
7,150.00	3,840.20	3,941.30	3,840.20	44.04	68.93	-87.962	1,136.86	5,362.38	1,801.36	1,688.44	112.92	15.952		
7,200.00	3,841.33	3,942.43	3,841.33	44.57	68.95	-88.028	1,136.86	5,362.38	1,759.34	1,645.86	113.48	15.503		
7,250.00	3,842.46	3,943.56	3,842.46	45.11	68.97	-88.095	1,136.86	5,362.38	1,717.75	1,603.71	114.04	15.062		
7,300.00	3,843.59	3,944.69	3,843.59	45.65	68.99	-88.162	1,136.86	5,362.38	1,676.62	1,562.01	114.60	14.630		
7,350.00	3,844.72	3,945.82	3,844.72	46.18	69.02	-88.229	1,136.86	5,362.38	1,635.98	1,520.81	115.17	14.205		
7,400.00	3,845.84	3,946.94	3,845.84	46.72	69.04	-88.296	1,136.86	5,362.38	1,595.87	1,480.14	115.73	13.790		
7,450.00	3,846.97	3,948.07	3,846.97	47.26	69.06	-88.363	1,136.86	5,362.38	1,556.33	1,440.04	116.29	13.383		
7,500.00	3,848.10	3,949.20	3,848.10	47.80	69.08	-88.430	1,136.86	5,362.38	1,517.41	1,400.56	116.85	12.986		
7,550.00	3,849.23	3,950.33	3,849.23	48.34	69.10	-88.497	1,136.86	5,362.38	1,479.16	1,361.74	117.41	12.598		
7,600.00	3,850.35	3,951.45	3,850.35	48.88	69.12	-88.564	1,136.86	5,362.38	1,441.62	1,323.64	117.98	12.219		
7,650.00	3,851.48	3,952.58	3,851.48	49.42	69.14	-88.631	1,136.86	5,362.38	1,404.86	1,286.32	118.54	11.851		
7,700.00	3,852.61	3,953.71	3,852.61	49.96	69.16	-88.698	1,136.86	5,362.38	1,368.94	1,249.83	119.11	11.493		
7,750.00	3,853.74	3,954.84	3,853.74	50.50	69.18	-88.765	1,136.86	5,362.38	1,333.92	1,214.25	119.67	11.147		
7,800.00	3,854.87	3,955.97	3,854.87	51.05	69.20	-88.832	1,136.86	5,362.38	1,299.89	1,179.65	120.24	10.811		
7,850.00	3,855.99	3,957.09	3,855.99	51.59	69.22	-88.899	1,136.86	5,362.38	1,266.91	1,146.11	120.80	10.488		
7,900.00	3,857.12	3,958.22	3,857.12	52.13	69.24	-88.966	1,136.86	5,362.38	1,235.08	1,113.71	121.37	10.176		
7,950.00	3,858.25	3,959.35	3,858.25	52.67	69.26	-89.033	1,136.86	5,362.38	1,204.47	1,082.54	121.93	9.878		
8,000.00	3,859.38	3,960.48	3,859.38	53.22	69.28	-89.100	1,136.86	5,362.38	1,175.20	1,052.71	122.50	9.594		
8,050.00	3,860.51	3,961.61	3,860.51	53.76	69.30	-89.167	1,136.86	5,362.38	1,147.37	1,024.30	123.06	9.323		
8,100.00	3,861.63	3,962.73	3,861.63	54.31	69.33	-89.234	1,136.86	5,362.38	1,121.07	997.43	123.63	9.068		
8,150.00	3,862.76	3,963.86	3,862.76	54.85	69.35	-89.301	1,136.86	5,362.38	1,096.41	972.22	124.20	8.828		
8,200.00	3,863.89	3,964.99	3,863.89	55.40	69.37	-89.368	1,136.86	5,362.38	1,073.53	948.76	124.76	8.604		
8,250.00	3,865.02	3,966.12	3,865.02	55.94	69.39	-89.435	1,136.86	5,362.38	1,052.52	927.19	125.33	8.398		
8,300.00	3,866.15	3,967.25	3,866.15	56.49	69.41	-89.502	1,136.86	5,362.38	1,033.50	907.60	125.90	8.209		
8,350.00	3,867.27	3,968.37	3,867.27	57.04	69.43	-89.569	1,136.86	5,362.38	1,016.59	890.12	126.47	8.038		
8,400.00	3,868.40	3,969.50	3,868.40	57.58	69.45	-89.636	1,136.86	5,362.38	1,001.89	874.85	127.03	7.887		
8,450.00	3,869.53	3,970.63	3,869.53	58.13	69.47	-89.703	1,136.86	5,362.38	989.49	861.89	127.60	7.755		
8,500.00	3,870.66	3,971.76	3,870.66	58.68	69.49	-89.770	1,136.86	5,362.38	979.50	851.33	128.17	7.642		
8,550.00	3,871.78	3,972.88	3,871.78	59.22	69.51	-89.837	1,136.86	5,362.38	971.97	843.24	128.74	7.550		
8,600.00	3,872.91	3,974.01	3,872.91	59.77	69.53	-89.904	1,136.86	5,362.38	966.98	837.67	129.31	7.478		
8,650.00	3,874.04	3,975.14	3,874.04	60.32	69.55	-89.971	1,136.86	5,362.38	964.55	834.68	129.87	7.427		
8,671.90	3,874.53	3,975.63	3,874.53	60.56	69.56	-90.000	1,136.86	5,362.38	964.30	834.18	130.12	7.411 CC, ES		
8,700.00	3,875.17	3,976.27	3,875.17	60.87	69.57	-90.038	1,136.86	5,362.38	964.71	834.27	130.44	7.396		
8,750.00	3,876.30	3,977.40	3,876.30	61.42	69.59	-90.105	1,136.86	5,362.38	967.46	836.45	131.01	7.385 SF		
8,800.00	3,877.42	3,978.52	3,877.42	61.97	69.62	-90.172	1,136.86	5,362.38	972.77	841.19	131.58	7.393		
8,850.00	3,878.55	3,979.65	3,878.55	62.52	69.64	-90.239	1,136.86	5,362.38	980.60	848.46	132.15	7.421		
8,900.00	3,879.68	3,980.78	3,879.68	63.06	69.66	-90.306	1,136.86	5,362.38	990.90	858.18	132.72	7.466		
8,950.00	3,880.81	3,981.91	3,880.81	63.61	69.68	-90.373	1,136.86	5,362.38	1,003.58	870.30	133.28	7.530		
9,000.00	3,881.94	3,983.04	3,881.94	64.16	69.70	-90.440	1,136.86	5,362.38	1,018.56	884.71	133.85	7.610		
9,050.00	3,883.06	3,984.16	3,883.06	64.71	69.72	-90.507	1,136.86	5,362.38	1,035.74	901.32	134.42	7.705		
9,100.00	3,884.19	3,985.29	3,884.19	65.26	69.74	-90.574	1,136.86	5,362.38	1,055.01	920.02	134.99	7.815		
9,150.00	3,885.32	3,986.42	3,885.32	65.82	69.76	-90.641	1,136.86	5,362.38	1,076.26	940.70	135.56	7.939		
9,200.00	3,886.45	3,987.55	3,886.45	66.37	69.78	-90.708	1,136.86	5,362.38	1,099.37	963.25	136.13	8.076		
9,250.00	3,887.58	3,988.68	3,887.58	66.92	69.80	-90.775	1,136.86	5,362.38	1,124.24	987.54	136.70	8.224		
9,300.00	3,888.70	3,989.80	3,888.70	67.47	69.82	-90.842	1,136.86	5,362.38	1,150.73	1,013.47	137.27	8.383		

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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													Offset Site Error:	0.00 usft
Survey Program: 821-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,350.00	3,889.83	3,990.93	3,889.83	68.02	69.84	-90.909	1,136.86	5,362.38	1,178.75	1,040.92	137.83	8.552		
9,400.00	3,890.96	3,992.06	3,890.96	68.57	69.86	-90.976	1,136.86	5,362.38	1,208.19	1,069.79	138.40	8.730		
9,450.00	3,892.09	3,993.19	3,892.09	69.12	69.88	-91.043	1,136.86	5,362.38	1,238.95	1,099.98	138.97	8.915		
9,500.00	3,893.21	3,994.31	3,893.21	69.67	69.90	-91.109	1,136.86	5,362.38	1,270.93	1,131.39	139.54	9.108		
9,550.00	3,894.34	3,995.44	3,894.34	70.23	69.93	-91.176	1,136.86	5,362.38	1,304.05	1,163.94	140.11	9.307		
9,600.00	3,895.47	3,996.57	3,895.47	70.78	69.95	-91.243	1,136.86	5,362.38	1,338.21	1,197.53	140.68	9.513		
9,650.00	3,896.60	3,997.70	3,896.60	71.33	69.97	-91.310	1,136.86	5,362.38	1,373.34	1,232.10	141.25	9.723		
9,700.00	3,897.73	3,998.83	3,897.73	71.88	69.99	-91.377	1,136.86	5,362.38	1,409.37	1,267.56	141.81	9.938		
9,750.00	3,898.85	3,999.95	3,898.85	72.44	70.01	-91.444	1,136.86	5,362.38	1,446.23	1,303.85	142.38	10.157		
9,800.00	3,899.98	4,001.08	3,899.98	72.99	70.03	-91.511	1,136.86	5,362.38	1,483.86	1,340.91	142.95	10.380		
9,850.00	3,901.11	4,002.21	3,901.11	73.54	70.05	-91.578	1,136.86	5,362.38	1,522.20	1,378.68	143.52	10.606		
9,900.00	3,902.24	4,003.34	3,902.24	74.10	70.07	-91.645	1,136.86	5,362.38	1,561.20	1,417.11	144.09	10.835		
9,950.00	3,903.37	4,004.47	3,903.37	74.65	70.09	-91.712	1,136.86	5,362.38	1,600.81	1,456.15	144.66	11.066		
10,000.00	3,904.49	4,005.59	3,904.49	75.20	70.11	-91.779	1,136.86	5,362.38	1,640.98	1,495.76	145.22	11.300		
10,050.00	3,905.62	4,006.72	3,905.62	75.76	70.13	-91.846	1,136.86	5,362.38	1,681.68	1,535.89	145.79	11.535		
10,100.00	3,906.75	4,007.85	3,906.75	76.31	70.15	-91.913	1,136.86	5,362.38	1,722.88	1,576.52	146.36	11.771		
10,150.00	3,907.88	4,008.98	3,907.88	76.86	70.17	-91.980	1,136.86	5,362.38	1,764.52	1,617.59	146.93	12.009		
10,200.00	3,909.01	4,010.11	3,909.01	77.42	70.19	-92.047	1,136.86	5,362.38	1,806.59	1,659.09	147.50	12.248		
10,250.00	3,910.13	4,011.23	3,910.13	77.97	70.21	-92.114	1,136.86	5,362.38	1,849.05	1,700.99	148.06	12.488		
10,300.00	3,911.26	4,012.36	3,911.26	78.53	70.24	-92.181	1,136.86	5,362.38	1,891.89	1,743.25	148.63	12.729		
10,350.00	3,912.39	4,013.49	3,912.39	79.08	70.26	-92.247	1,136.86	5,362.38	1,935.06	1,785.86	149.20	12.970		
10,400.00	3,913.52	4,014.62	3,913.52	79.63	70.28	-92.314	1,136.86	5,362.38	1,978.55	1,828.79	149.77	13.211		
10,450.00	3,914.64	4,015.74	3,914.64	80.19	70.30	-92.381	1,136.86	5,362.38	2,022.35	1,872.02	150.33	13.452		
10,500.00	3,915.77	4,016.87	3,915.77	80.74	70.32	-92.448	1,136.86	5,362.38	2,066.43	1,915.53	150.90	13.694		
10,550.00	3,916.90	4,018.00	3,916.90	81.30	70.34	-92.515	1,136.86	5,362.38	2,110.77	1,959.30	151.47	13.935		
10,600.00	3,918.03	4,019.13	3,918.03	81.85	70.36	-92.582	1,136.86	5,362.38	2,155.35	2,003.32	152.03	14.177		
10,650.00	3,919.16	4,020.26	3,919.16	82.41	70.38	-92.649	1,136.86	5,362.38	2,200.17	2,047.57	152.60	14.418		
10,700.00	3,920.28	4,021.38	3,920.28	82.96	70.40	-92.716	1,136.86	5,362.38	2,245.21	2,092.04	153.17	14.659		
10,750.00	3,921.41	4,022.51	3,921.41	83.52	70.42	-92.782	1,136.86	5,362.38	2,290.45	2,136.72	153.73	14.899		
10,800.00	3,922.54	4,023.64	3,922.54	84.07	70.44	-92.849	1,136.86	5,362.38	2,335.89	2,181.59	154.30	15.139		
10,850.00	3,923.67	4,024.77	3,923.67	84.63	70.46	-92.916	1,136.86	5,362.38	2,381.51	2,226.64	154.86	15.378		
10,859.02	3,923.87	4,024.97	3,923.87	84.73	70.47	-92.928	1,136.86	5,362.38	2,389.76	2,234.79	154.97	15.421		
10,900.00	3,924.80	4,025.90	3,924.80	85.19	70.48	-92.983	1,136.86	5,362.38	2,427.30	2,271.87	155.43	15.617		
10,909.06	3,925.00	4,026.10	3,925.00	85.29	70.49	-92.995	1,136.86	5,362.38	2,435.61	2,280.08	155.53	15.660		
10,909.80	3,925.02	4,026.12	3,925.02	85.29	70.49	-92.996	1,136.86	5,362.38	2,436.29	2,280.75	155.54	15.664		

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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												Offset Site Error:	0.00 usft
Survey Program: 209-INC-ONLY												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
650.00	649.89	638.89	649.89	2.11	10.96	-14.423	607.20	384.52	710.37	697.30	13.07	54.357	
700.00	699.87	688.87	699.87	2.29	12.02	-14.451	607.20	384.52	709.02	694.71	14.31	49.552	
750.00	749.85	738.86	749.85	2.47	13.09	-14.479	607.20	384.52	707.68	692.13	15.55	45.513	
800.00	799.83	788.84	799.83	2.64	14.15	-14.507	607.20	384.52	706.34	689.55	16.79	42.070	
850.00	849.81	838.82	849.81	2.82	15.21	-14.536	607.20	384.52	704.99	686.96	18.03	39.101	
900.00	899.79	888.80	899.79	3.00	16.27	-14.564	607.20	384.52	703.65	684.38	19.27	36.514	
950.00	949.77	938.80	949.77	3.18	17.34	-14.592	607.20	384.52	702.30	681.79	20.51	34.238	
1,000.00	999.75	988.78	999.75	3.36	18.40	-14.621	607.20	384.52	700.96	679.21	21.75	32.222	
1,050.00	1,049.73	1,038.76	1,049.73	3.54	19.46	-14.650	607.20	384.52	699.62	676.62	23.00	30.424	
1,100.00	1,099.71	1,088.74	1,099.71	3.72	20.53	-14.678	607.20	384.52	698.27	674.04	24.24	28.809	
1,150.00	1,149.69	1,138.72	1,149.69	3.90	21.59	-14.707	607.20	384.52	696.93	671.45	25.48	27.352	
1,200.00	1,199.67	1,188.70	1,199.67	4.08	22.65	-14.736	607.20	384.52	695.59	668.87	26.72	26.031	
1,250.00	1,249.65	1,238.68	1,249.65	4.26	23.72	-14.766	607.20	384.52	694.25	666.28	27.96	24.827	
1,300.00	1,299.64	1,288.66	1,299.64	4.43	24.78	-14.795	607.20	384.52	692.90	663.70	29.21	23.725	
1,350.00	1,349.62	1,338.64	1,349.62	4.61	25.84	-14.824	607.20	384.52	691.56	661.12	30.45	22.713	
1,400.00	1,399.60	1,388.65	1,399.60	4.79	26.91	-14.854	607.20	384.52	690.22	658.53	31.69	21.780	
1,450.00	1,449.58	1,438.63	1,449.58	4.97	27.97	-14.883	607.20	384.52	688.88	655.95	32.93	20.918	
1,500.00	1,499.56	1,488.61	1,499.56	5.15	29.03	-14.913	607.20	384.52	687.54	653.36	34.18	20.118	
1,550.00	1,549.54	1,538.59	1,549.54	5.33	30.10	-14.943	607.20	384.52	686.20	650.78	35.42	19.375	
1,600.00	1,599.52	1,588.57	1,599.52	5.51	31.16	-14.973	607.20	384.52	684.86	648.20	36.66	18.681	
1,650.00	1,649.50	1,638.55	1,649.50	5.69	32.22	-15.003	607.20	384.52	683.51	645.61	37.90	18.034	
1,700.00	1,699.48	1,688.53	1,699.48	5.87	33.29	-15.033	607.20	384.52	682.17	643.03	39.14	17.427	
1,750.00	1,749.46	1,738.51	1,749.46	6.05	34.35	-15.063	607.20	384.52	680.83	640.45	40.39	16.858	
1,800.00	1,799.44	1,788.50	1,799.44	6.23	35.41	-15.094	607.20	384.52	679.49	637.86	41.63	16.322	
1,850.00	1,849.42	1,838.48	1,849.42	6.41	36.48	-15.124	607.20	384.52	678.15	635.28	42.87	15.818	
1,900.00	1,899.40	1,888.48	1,899.40	6.59	37.61	-15.155	607.20	384.52	676.81	632.63	44.18	15.320	
1,950.00	1,949.38	1,938.46	1,949.38	6.76	38.76	-15.186	607.20	384.52	675.47	629.96	45.51	14.843	
2,000.00	1,999.37	1,988.44	1,999.37	6.94	39.91	-15.217	607.20	384.52	674.13	627.30	46.84	14.393	
2,050.00	2,049.35	2,038.42	2,049.35	7.12	41.06	-15.248	607.20	384.52	672.79	624.63	48.17	13.968	
2,100.00	2,099.33	2,088.40	2,099.33	7.30	42.21	-15.279	607.20	384.52	671.45	621.96	49.49	13.566	
2,150.00	2,149.31	2,138.38	2,149.31	7.48	43.36	-15.310	607.20	384.52	670.12	619.29	50.82	13.185	
2,200.00	2,199.29	2,188.38	2,199.29	7.66	44.46	-15.341	607.20	384.52	668.78	616.67	52.10	12.836	
2,250.00	2,249.27	2,238.36	2,249.27	7.84	45.52	-15.373	607.20	384.52	667.44	614.09	53.34	12.512	
2,300.00	2,299.25	2,288.34	2,299.25	8.02	46.58	-15.405	607.20	384.52	666.10	611.51	54.59	12.202	
2,350.00	2,349.23	2,338.32	2,349.23	8.20	47.65	-15.436	607.20	384.52	664.76	608.93	55.83	11.907	
2,400.00	2,399.21	2,388.30	2,399.21	8.38	48.71	-15.468	607.20	384.52	663.42	606.35	57.07	11.624	
2,450.00	2,449.19	2,438.31	2,449.19	8.56	49.68	-15.500	607.20	384.52	662.09	603.86	58.22	11.371	
2,500.00	2,499.17	2,488.29	2,499.17	8.74	50.62	-15.533	607.20	384.52	660.75	601.41	59.34	11.135	
2,550.00	2,549.15	2,538.27	2,549.15	8.92	51.56	-15.565	607.20	384.52	659.41	598.95	60.46	10.907	
2,600.00	2,599.13	2,588.25	2,599.13	9.10	52.49	-15.597	607.20	384.52	658.07	596.50	61.57	10.688	
2,650.00	2,649.11	2,638.24	2,649.11	9.27	53.43	-15.630	607.20	384.52	656.74	594.05	62.69	10.476	
2,700.00	2,699.10	2,688.22	2,699.10	9.45	54.37	-15.663	607.20	384.52	655.40	591.60	63.80	10.272	
2,750.00	2,749.08	2,738.20	2,749.08	9.63	55.31	-15.695	607.20	384.52	654.06	589.14	64.92	10.075	
2,791.98	2,791.04	2,780.16	2,791.04	9.78	56.09	-15.723	607.20	384.52	652.94	587.08	65.86	9.914	
2,800.00	2,799.06	2,788.18	2,799.06	9.81	56.24	-25.287	607.20	384.52	652.71	586.68	66.03	9.885	
2,850.00	2,848.97	2,838.09	2,848.97	9.99	57.18	-45.714	607.20	384.52	650.48	583.41	67.07	9.698	
2,900.00	2,898.66	2,887.78	2,898.66	10.17	58.11	-51.297	607.20	384.52	646.90	578.84	68.06	9.505	
2,950.00	2,948.01	2,937.13	2,948.01	10.35	59.04	-54.351	607.20	384.52	642.05	573.04	69.01	9.304	
3,000.00	2,996.88	2,986.00	2,996.88	10.53	59.95	-56.698	607.20	384.52	635.99	566.07	69.92	9.096	
3,050.00	3,045.13	3,034.25	3,045.13	10.71	60.86	-58.864	607.20	384.52	628.83	558.02	70.81	8.880	
3,100.00	3,092.63	3,081.75	3,092.63	10.89	61.75	-61.053	607.20	384.52	620.73	549.01	71.71	8.656	
3,150.00	3,139.25	3,128.37	3,139.25	11.07	62.62	-63.358	607.20	384.52	611.84	539.21	72.63	8.424	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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												Offset Site Error:	0.00 usft
Survey Program: 209-INC-ONLY												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toelface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
3,200.00	3,184.86	3,173.98	3,184.86	11.25	63.48	-65.821	607.20	384.52	602.39	528.79	73.59	8.185	
3,250.00	3,229.33	3,218.45	3,229.33	11.43	64.31	-68.452	607.20	384.52	592.61	518.00	74.61	7.943	
3,300.00	3,272.56	3,261.69	3,272.56	11.61	65.13	-71.244	607.20	384.52	582.80	507.11	75.69	7.700	
3,350.00	3,314.41	3,303.54	3,314.41	11.80	65.91	-74.171	607.20	384.52	573.28	496.45	76.82	7.462	
3,400.00	3,354.77	3,343.90	3,354.77	11.99	66.67	-77.192	607.20	384.52	564.39	486.41	77.98	7.237	
3,450.00	3,393.54	3,382.67	3,393.54	12.19	67.41	-80.257	607.20	384.52	556.55	477.41	79.14	7.032	
3,500.00	3,430.60	3,419.73	3,430.60	12.39	68.10	-83.305	607.20	384.52	550.15	469.89	80.26	6.855	
3,550.00	3,465.85	3,454.98	3,465.85	12.60	68.77	-86.270	607.20	384.52	545.63	464.34	81.29	6.712	
3,600.00	3,499.20	3,488.33	3,499.20	12.81	69.40	-89.086	607.20	384.52	543.41	461.20	82.21	6.610	
3,617.03	3,510.11	3,499.24	3,510.11	12.89	69.60	-90.000	607.20	384.52	543.25	460.75	82.49	6.585 CC, ES	
3,650.00	3,530.55	3,519.69	3,530.55	13.04	69.99	-91.691	607.20	384.52	543.88	460.88	83.00	6.553	
3,700.00	3,559.83	3,548.96	3,559.83	13.28	70.54	-94.027	607.20	384.52	547.38	463.72	83.66	6.543 SF	
3,750.00	3,586.95	3,576.08	3,586.95	13.52	71.05	-96.045	607.20	384.52	554.18	469.97	84.21	6.581	
3,772.42	3,598.38	3,587.51	3,598.38	13.63	71.27	-96.835	607.20	384.52	558.35	473.92	84.43	6.614	
3,800.00	3,612.17	3,601.30	3,612.17	13.77	71.53	-98.073	607.20	384.52	564.40	479.75	84.64	6.668	
3,850.00	3,637.17	3,626.30	3,637.17	14.05	72.00	-100.299	607.20	384.52	577.72	492.74	84.98	6.798	
3,900.00	3,662.17	3,651.30	3,662.17	14.33	72.47	-102.495	607.20	384.52	593.90	508.68	85.23	6.969	
3,950.00	3,687.17	3,676.30	3,687.17	14.62	72.94	-104.653	607.20	384.52	612.73	527.33	85.40	7.175	
3,972.42	3,698.38	3,687.51	3,698.38	14.75	73.15	-105.608	607.20	384.52	621.97	536.52	85.45	7.279	
4,000.00	3,711.59	3,699.00	3,709.86	14.92	73.37	-105.286	607.20	384.52	634.13	548.33	85.79	7.391	
4,050.00	3,732.51	3,721.66	3,732.51	15.22	73.83	-104.575	607.20	384.52	658.72	572.15	86.57	7.609	
4,100.00	3,749.40	3,738.54	3,749.40	15.54	74.18	-102.914	607.20	384.52	686.45	598.84	87.61	7.835	
4,150.00	3,762.12	3,751.26	3,762.12	15.86	74.44	-100.365	607.20	384.52	717.05	628.20	88.85	8.070	
4,200.00	3,770.57	3,759.72	3,770.57	16.18	74.61	-96.853	607.20	384.52	750.15	660.04	90.12	8.324	
4,250.00	3,774.71	3,763.85	3,774.71	16.49	74.69	-92.341	607.20	384.52	785.35	694.25	91.10	8.621	
4,259.50	3,775.00	3,764.14	3,775.00	16.55	74.70	-91.373	607.20	384.52	792.24	701.02	91.22	8.685	
4,300.00	3,775.91	3,765.06	3,775.91	16.81	74.72	-91.469	607.20	384.52	822.19	730.70	91.49	8.986	
4,350.00	3,777.04	3,766.19	3,777.04	17.15	74.74	-91.588	607.20	384.52	860.37	768.52	91.85	9.367	
4,400.00	3,778.17	3,767.31	3,778.17	17.49	74.76	-91.707	607.20	384.52	899.69	807.49	92.21	9.757	
4,450.00	3,779.30	3,768.44	3,779.30	17.85	74.79	-91.826	607.20	384.52	940.04	847.45	92.58	10.153	
4,500.00	3,780.43	3,769.57	3,780.43	18.21	74.81	-91.945	607.20	384.52	981.27	888.31	92.96	10.556	
4,550.00	3,781.55	3,770.70	3,781.55	18.60	74.83	-92.064	607.20	384.52	1,023.28	929.92	93.36	10.961	
4,600.00	3,782.68	3,771.83	3,782.68	18.98	74.86	-92.183	607.20	384.52	1,065.98	972.22	93.75	11.370	
4,650.00	3,783.81	3,772.95	3,783.81	19.37	74.88	-92.301	607.20	384.52	1,109.29	1,015.12	94.17	11.780	
4,700.00	3,784.94	3,774.08	3,784.94	19.77	74.90	-92.420	607.20	384.52	1,153.14	1,058.56	94.58	12.192	
4,750.00	3,786.06	3,775.21	3,786.06	20.19	74.93	-92.539	607.20	384.52	1,197.47	1,102.46	95.01	12.604	
4,800.00	3,787.19	3,776.34	3,787.19	20.60	74.95	-92.658	607.20	384.52	1,242.23	1,146.79	95.43	13.017	
4,850.00	3,788.32	3,777.46	3,788.32	21.03	74.97	-92.776	607.20	384.52	1,287.37	1,191.50	95.87	13.428	
4,900.00	3,789.45	3,778.59	3,789.45	21.46	75.00	-92.895	607.20	384.52	1,332.86	1,236.55	96.31	13.839	
4,950.00	3,790.58	3,779.72	3,790.58	21.89	75.02	-93.014	607.20	384.52	1,378.66	1,281.90	96.76	14.248	
5,000.00	3,791.70	3,780.85	3,791.70	22.33	75.04	-93.132	607.20	384.52	1,424.75	1,327.53	97.21	14.656	
5,050.00	3,792.83	3,781.98	3,792.83	22.78	75.06	-93.251	607.20	384.52	1,471.08	1,373.41	97.67	15.061	
5,100.00	3,793.96	3,783.10	3,793.96	23.23	75.09	-93.370	607.20	384.52	1,517.65	1,419.52	98.13	15.465	
5,150.00	3,795.09	3,784.23	3,795.09	23.69	75.11	-93.488	607.20	384.52	1,564.44	1,465.83	98.60	15.866	
5,200.00	3,796.22	3,785.36	3,796.22	24.15	75.13	-93.607	607.20	384.52	1,611.41	1,512.34	99.07	16.265	
5,250.00	3,797.34	3,786.49	3,797.34	24.62	75.16	-93.725	607.20	384.52	1,658.56	1,559.01	99.55	16.661	
5,300.00	3,798.47	3,787.62	3,798.47	25.09	75.18	-93.844	607.20	384.52	1,705.87	1,605.85	100.02	17.054	
5,350.00	3,799.60	3,788.74	3,799.60	25.57	75.20	-93.962	607.20	384.52	1,753.33	1,652.82	100.51	17.445	
5,400.00	3,800.73	3,789.87	3,800.73	26.04	75.23	-94.080	607.20	384.52	1,800.93	1,699.94	100.99	17.833	
5,450.00	3,801.86	3,791.00	3,801.86	26.52	75.25	-94.199	607.20	384.52	1,848.65	1,747.17	101.48	18.217	
5,500.00	3,802.98	3,792.13	3,802.98	27.00	75.27	-94.317	607.20	384.52	1,896.49	1,794.52	101.97	18.599	
5,550.00	3,804.11	3,793.26	3,804.11	27.49	75.30	-94.435	607.20	384.52	1,944.44	1,841.98	102.46	18.978	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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													Offset Site Error:	0.00 usft
Survey Program: 209-INC-ONLY													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis					Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,600.00	3,805.24	3,794.38	3,805.24	27.98	75.32	-94.554	607.20	384.52	1,992.48	1,889.53	102.95	19.353		
5,650.00	3,806.37	3,795.51	3,806.37	28.48	75.34	-94.672	607.20	384.52	2,040.62	1,937.17	103.45	19.726		
5,700.00	3,807.49	3,796.64	3,807.49	28.97	75.36	-94.790	607.20	384.52	2,088.85	1,984.90	103.95	20.095		
5,750.00	3,808.62	3,797.77	3,808.62	29.47	75.39	-94.908	607.20	384.52	2,137.16	2,032.71	104.45	20.461		
5,800.00	3,809.75	3,798.89	3,809.75	29.97	75.41	-95.026	607.20	384.52	2,185.54	2,080.60	104.95	20.825		
5,850.00	3,810.88	3,800.02	3,810.88	30.47	75.43	-95.144	607.20	384.52	2,234.00	2,128.55	105.45	21.185		
5,900.00	3,812.01	3,801.15	3,812.01	30.97	75.46	-95.262	607.20	384.52	2,282.52	2,176.56	105.96	21.542		
5,950.00	3,813.13	3,802.28	3,813.13	31.48	75.48	-95.380	607.20	384.52	2,331.10	2,224.64	106.47	21.895		
6,000.00	3,814.26	3,803.41	3,814.26	31.99	75.50	-95.498	607.20	384.52	2,379.74	2,272.77	106.97	22.246		
6,050.00	3,815.39	3,804.53	3,815.39	32.50	75.53	-95.616	607.20	384.52	2,428.44	2,320.96	107.48	22.594		
6,100.00	3,816.52	3,805.66	3,816.52	33.01	75.55	-95.734	607.20	384.52	2,477.19	2,369.20	107.99	22.939		
6,150.00	3,817.65	3,806.79	3,817.65	33.52	75.57	-95.852	607.20	384.52	2,525.98	2,417.48	108.50	23.280		
6,200.00	3,818.77	3,807.92	3,818.77	34.03	75.59	-95.970	607.20	384.52	2,574.82	2,465.81	109.01	23.619		
6,250.00	3,819.90	3,809.05	3,819.90	34.55	75.62	-96.087	607.20	384.52	2,623.71	2,514.18	109.53	23.955		
6,300.00	3,821.03	3,810.17	3,821.03	35.07	75.64	-96.205	607.20	384.52	2,672.63	2,562.59	110.04	24.288		
6,350.00	3,822.16	3,811.30	3,822.16	35.59	75.66	-96.322	607.20	384.52	2,721.60	2,611.04	110.55	24.618		
6,400.00	3,823.29	3,812.43	3,823.29	36.11	75.69	-96.440	607.20	384.52	2,770.60	2,659.53	111.07	24.945		
6,450.00	3,824.41	3,813.56	3,824.41	36.63	75.71	-96.557	607.20	384.52	2,819.63	2,708.05	111.59	25.269		
6,500.00	3,825.54	3,814.69	3,825.54	37.15	75.73	-96.675	607.20	384.52	2,868.70	2,756.60	112.10	25.590		
6,550.00	3,826.67	3,815.81	3,826.67	37.68	75.76	-96.792	607.20	384.52	2,917.80	2,805.18	112.62	25.909		
6,600.00	3,827.80	3,816.94	3,827.80	38.20	75.78	-96.909	607.20	384.52	2,966.93	2,853.79	113.13	26.225		
6,650.00	3,828.92	3,818.07	3,828.92	38.73	75.80	-97.027	607.20	384.52	3,016.08	2,902.43	113.65	26.538		
6,700.00	3,830.05	3,819.20	3,830.05	39.25	75.83	-97.144	607.20	384.52	3,065.27	2,951.10	114.17	26.848		
6,750.00	3,831.18	3,820.32	3,831.18	39.78	75.85	-97.261	607.20	384.52	3,114.48	2,999.79	114.69	27.156		
6,800.00	3,832.31	3,821.45	3,832.31	40.31	75.87	-97.378	607.20	384.52	3,163.71	3,048.51	115.21	27.461		
6,850.00	3,833.44	3,822.58	3,833.44	40.84	75.89	-97.495	607.20	384.52	3,212.97	3,097.24	115.72	27.764		
6,900.00	3,834.56	3,823.71	3,834.56	41.37	75.92	-97.612	607.20	384.52	3,262.25	3,146.01	116.24	28.064		
6,950.00	3,835.69	3,824.84	3,835.69	41.90	75.94	-97.729	607.20	384.52	3,311.55	3,194.79	116.76	28.362		
7,000.00	3,836.82	3,825.96	3,836.82	42.44	75.96	-97.846	607.20	384.52	3,360.87	3,243.59	117.28	28.657		
7,050.00	3,837.95	3,827.09	3,837.95	42.97	75.99	-97.962	607.20	384.52	3,410.21	3,292.41	117.80	28.949		
7,100.00	3,839.08	3,828.22	3,839.08	43.50	76.01	-98.079	607.20	384.52	3,459.57	3,341.25	118.32	29.240		
7,150.00	3,840.20	3,829.35	3,840.20	44.04	76.03	-98.196	607.20	384.52	3,508.94	3,390.11	118.84	29.528		
7,200.00	3,841.33	3,830.48	3,841.33	44.57	76.06	-98.312	607.20	384.52	3,558.34	3,438.98	119.35	29.813		
7,250.00	3,842.46	3,831.60	3,842.46	45.11	76.08	-98.429	607.20	384.52	3,607.75	3,487.87	119.87	30.096		
7,300.00	3,843.59	3,832.73	3,843.59	45.65	76.10	-98.545	607.20	384.52	3,657.17	3,536.78	120.39	30.377		
7,350.00	3,844.72	3,833.86	3,844.72	46.18	76.13	-98.661	607.20	384.52	3,706.61	3,585.70	120.91	30.656		
7,400.00	3,845.84	3,834.99	3,845.84	46.72	76.15	-98.778	607.20	384.52	3,756.07	3,634.64	121.43	30.932		
7,450.00	3,846.97	3,836.12	3,846.97	47.26	76.17	-98.894	607.20	384.52	3,805.54	3,683.59	121.95	31.206		
7,500.00	3,848.10	3,837.24	3,848.10	47.80	76.19	-99.010	607.20	384.52	3,855.02	3,732.56	122.46	31.479		
7,550.00	3,849.23	3,838.37	3,849.23	48.34	76.22	-99.126	607.20	384.52	3,904.52	3,781.53	122.98	31.749		
7,600.00	3,850.35	3,839.50	3,850.35	48.88	76.24	-99.242	607.20	384.52	3,954.02	3,830.52	123.50	32.016		
7,650.00	3,851.48	3,840.63	3,851.48	49.42	76.26	-99.358	607.20	384.52	4,003.54	3,879.53	124.02	32.282		
7,700.00	3,852.61	3,841.75	3,852.61	49.96	76.29	-99.474	607.20	384.52	4,053.07	3,928.54	124.53	32.546		
7,750.00	3,853.74	3,842.88	3,853.74	50.50	76.31	-99.589	607.20	384.52	4,102.62	3,977.57	125.05	32.808		
7,800.00	3,854.87	3,844.01	3,854.87	51.05	76.33	-99.705	607.20	384.52	4,152.17	4,026.60	125.57	33.068		
7,850.00	3,855.99	3,845.14	3,855.99	51.59	76.36	-99.821	607.20	384.52	4,201.73	4,075.65	126.08	33.325		
7,900.00	3,857.12	3,846.27	3,857.12	52.13	76.38	-99.936	607.20	384.52	4,251.31	4,124.71	126.60	33.581		
7,950.00	3,858.25	3,847.39	3,858.25	52.67	76.40	-100.051	607.20	384.52	4,300.89	4,173.78	127.11	33.835		
8,000.00	3,859.38	3,848.52	3,859.38	53.22	76.43	-100.167	607.20	384.52	4,350.48	4,222.85	127.63	34.087		
8,050.00	3,860.51	3,849.65	3,860.51	53.76	76.45	-100.282	607.20	384.52	4,400.08	4,271.94	128.14	34.338		
8,100.00	3,861.63	3,850.78	3,861.63	54.31	76.47	-100.397	607.20	384.52	4,449.69	4,321.03	128.66	34.586		
8,150.00	3,862.76	3,851.91	3,862.76	54.85	76.49	-100.512	607.20	384.52	4,499.31	4,370.14	129.17	34.833		

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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												Offset Site Error:	0.00 usft
Survey Program: 209-INC-ONLY												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
8,200.00	3,863.89	3,853.03	3,863.89	55.40	76.52	-100.627	607.20	384.52	4,548.93	4,419.25	129.68	35.078	
8,250.00	3,865.02	3,854.16	3,865.02	55.94	76.54	-100.742	607.20	384.52	4,598.57	4,468.37	130.19	35.321	
8,300.00	3,866.15	3,855.29	3,866.15	56.49	76.56	-100.857	607.20	384.52	4,648.21	4,517.50	130.71	35.562	
8,350.00	3,867.27	3,856.42	3,867.27	57.04	76.59	-100.972	607.20	384.52	4,697.86	4,566.64	131.22	35.802	
8,400.00	3,868.40	3,857.55	3,868.40	57.58	76.61	-101.086	607.20	384.52	4,747.51	4,615.79	131.73	36.040	
8,450.00	3,869.53	3,858.67	3,869.53	58.13	76.63	-101.201	607.20	384.52	4,797.18	4,664.94	132.24	36.277	
8,500.00	3,870.66	3,859.80	3,870.66	58.68	76.66	-101.315	607.20	384.52	4,846.85	4,714.10	132.75	36.511	
8,550.00	3,871.78	3,860.93	3,871.78	59.22	76.68	-101.430	607.20	384.52	4,896.52	4,763.26	133.26	36.745	
8,600.00	3,872.91	3,862.06	3,872.91	59.77	76.70	-101.544	607.20	384.52	4,946.20	4,812.44	133.77	36.976	
8,650.00	3,874.04	3,863.18	3,874.04	60.32	76.73	-101.658	607.20	384.52	4,995.89	4,861.62	134.28	37.206	
8,700.00	3,875.17	3,864.31	3,875.17	60.87	76.75	-101.772	607.20	384.52	5,045.59	4,910.80	134.78	37.435	
8,750.00	3,876.30	3,865.44	3,876.30	61.42	76.77	-101.886	607.20	384.52	5,095.29	4,960.00	135.29	37.662	
8,800.00	3,877.42	3,866.57	3,877.42	61.97	76.79	-102.000	607.20	384.52	5,144.99	5,009.20	135.80	37.888	
8,850.00	3,878.55	3,867.70	3,878.55	62.52	76.82	-102.114	607.20	384.52	5,194.70	5,058.40	136.30	38.112	
8,900.00	3,879.68	3,868.82	3,879.68	63.06	76.84	-102.228	607.20	384.52	5,244.42	5,107.61	136.81	38.335	
8,950.00	3,880.81	3,869.95	3,880.81	63.61	76.86	-102.341	607.20	384.52	5,294.14	5,156.83	137.31	38.556	
9,000.00	3,881.94	3,871.08	3,881.94	64.16	76.89	-102.455	607.20	384.52	5,343.87	5,206.05	137.81	38.776	
9,050.00	3,883.06	3,872.21	3,883.06	64.71	76.91	-102.568	607.20	384.52	5,393.60	5,255.28	138.32	38.994	
9,100.00	3,884.19	3,873.34	3,884.19	65.26	76.93	-102.681	607.20	384.52	5,443.33	5,304.51	138.82	39.211	
9,150.00	3,885.32	3,874.46	3,885.32	65.82	76.96	-102.795	607.20	384.52	5,493.07	5,353.75	139.32	39.427	
9,200.00	3,886.45	3,875.59	3,886.45	66.37	76.98	-102.908	607.20	384.52	5,542.82	5,402.99	139.82	39.642	
9,250.00	3,887.58	3,876.72	3,887.58	66.92	77.00	-103.021	607.20	384.52	5,592.57	5,452.24	140.32	39.855	
9,300.00	3,888.70	3,877.85	3,888.70	67.47	77.02	-103.134	607.20	384.52	5,642.32	5,501.50	140.82	40.067	
9,350.00	3,889.83	3,878.98	3,889.83	68.02	77.05	-103.246	607.20	384.52	5,692.08	5,550.75	141.32	40.277	
9,400.00	3,890.96	3,880.10	3,890.96	68.57	77.07	-103.359	607.20	384.52	5,741.84	5,600.02	141.82	40.487	
9,450.00	3,892.09	3,881.23	3,892.09	69.12	77.09	-103.472	607.20	384.52	5,791.60	5,649.28	142.32	40.695	
9,500.00	3,893.21	3,882.36	3,893.21	69.67	77.12	-103.584	607.20	384.52	5,841.37	5,698.56	142.82	40.902	
9,550.00	3,894.34	3,883.49	3,894.34	70.23	77.14	-103.696	607.20	384.52	5,891.15	5,747.83	143.31	41.107	
9,600.00	3,895.47	3,884.61	3,895.47	70.78	77.16	-103.809	607.20	384.52	5,940.92	5,797.11	143.81	41.312	
9,650.00	3,896.60	3,885.74	3,896.60	71.33	77.19	-103.921	607.20	384.52	5,990.70	5,846.40	144.30	41.515	
9,700.00	3,897.73	3,886.87	3,897.73	71.88	77.21	-104.033	607.20	384.52	6,040.48	5,895.69	144.80	41.717	
9,750.00	3,898.85	3,888.00	3,898.85	72.44	77.23	-104.145	607.20	384.52	6,090.27	5,944.98	145.29	41.919	
9,800.00	3,899.98	3,889.13	3,899.98	72.99	77.26	-104.257	607.20	384.52	6,140.06	5,994.28	145.78	42.118	
9,850.00	3,901.11	3,890.25	3,901.11	73.54	77.28	-104.368	607.20	384.52	6,189.85	6,043.58	146.27	42.317	
9,900.00	3,902.24	3,891.38	3,902.24	74.10	77.30	-104.480	607.20	384.52	6,239.65	6,092.89	146.76	42.515	
9,950.00	3,903.37	3,892.51	3,903.37	74.65	77.32	-104.592	607.20	384.52	6,289.45	6,142.20	147.25	42.712	
10,000.00	3,904.49	3,893.64	3,904.49	75.20	77.35	-104.703	607.20	384.52	6,339.25	6,191.51	147.74	42.908	
10,050.00	3,905.62	3,894.77	3,905.62	75.76	77.37	-104.814	607.20	384.52	6,389.06	6,240.83	148.23	43.102	
10,100.00	3,906.75	3,895.89	3,906.75	76.31	77.39	-104.925	607.20	384.52	6,438.86	6,290.15	148.72	43.296	
10,150.00	3,907.88	3,897.02	3,907.88	76.86	77.42	-105.036	607.20	384.52	6,488.67	6,339.47	149.21	43.488	
10,200.00	3,909.01	3,898.15	3,909.01	77.42	77.44	-105.147	607.20	384.52	6,538.49	6,388.80	149.69	43.680	
10,250.00	3,910.13	3,899.28	3,910.13	77.97	77.46	-105.258	607.20	384.52	6,588.30	6,438.13	150.18	43.871	
10,300.00	3,911.26	3,900.41	3,911.26	78.53	77.49	-105.369	607.20	384.52	6,638.12	6,487.46	150.66	44.060	
10,350.00	3,912.39	3,901.53	3,912.39	79.08	77.51	-105.479	607.20	384.52	6,687.94	6,536.80	151.14	44.249	
10,400.00	3,913.52	3,902.66	3,913.52	79.63	77.53	-105.590	607.20	384.52	6,737.77	6,586.14	151.63	44.437	
10,450.00	3,914.64	3,903.79	3,914.64	80.19	77.56	-105.700	607.20	384.52	6,787.59	6,635.48	152.11	44.623	
10,500.00	3,915.77	3,904.92	3,915.77	80.74	77.58	-105.810	607.20	384.52	6,837.42	6,684.83	152.59	44.809	
10,550.00	3,916.90	3,906.04	3,916.90	81.30	77.60	-105.920	607.20	384.52	6,887.25	6,734.18	153.07	44.994	
10,600.00	3,918.03	3,907.17	3,918.03	81.85	77.62	-106.030	607.20	384.52	6,937.08	6,783.54	153.55	45.178	
10,650.00	3,919.16	3,908.30	3,919.16	82.41	77.65	-106.140	607.20	384.52	6,986.92	6,832.89	154.03	45.361	
10,700.00	3,920.28	3,909.43	3,920.28	82.96	77.67	-106.250	607.20	384.52	7,036.76	6,882.25	154.51	45.544	
10,750.00	3,921.41	3,910.56	3,921.41	83.52	77.69	-106.360	607.20	384.52	7,086.60	6,931.61	154.98	45.725	

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



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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	Offset	Semi Major Axis			Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,800.00	3,922.54	3,911.68	3,922.54	84.07	77.72	-106.469	607.20	384.52	7,136.44	6,980.98	155.46	45.906	
10,850.00	3,923.67	3,912.81	3,923.67	84.63	77.74	-106.578	607.20	384.52	7,186.28	7,030.35	155.93	46.086	
10,859.02	3,923.87	3,913.02	3,923.87	84.73	77.74	-106.598	607.20	384.52	7,195.28	7,039.26	156.02	46.118	
10,900.00	3,924.80	3,913.94	3,924.80	85.19	77.76	-106.688	607.20	384.52	7,236.13	7,079.72	156.41	46.265	
10,909.06	3,925.00	3,914.14	3,925.00	85.29	77.77	-106.707	607.20	384.52	7,245.16	7,088.67	156.49	46.297	
10,909.80	3,925.02	3,914.16	3,925.02	85.29	77.77	-106.709	607.20	384.52	7,245.89	7,089.40	156.50	46.301	

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



Anticollision Report

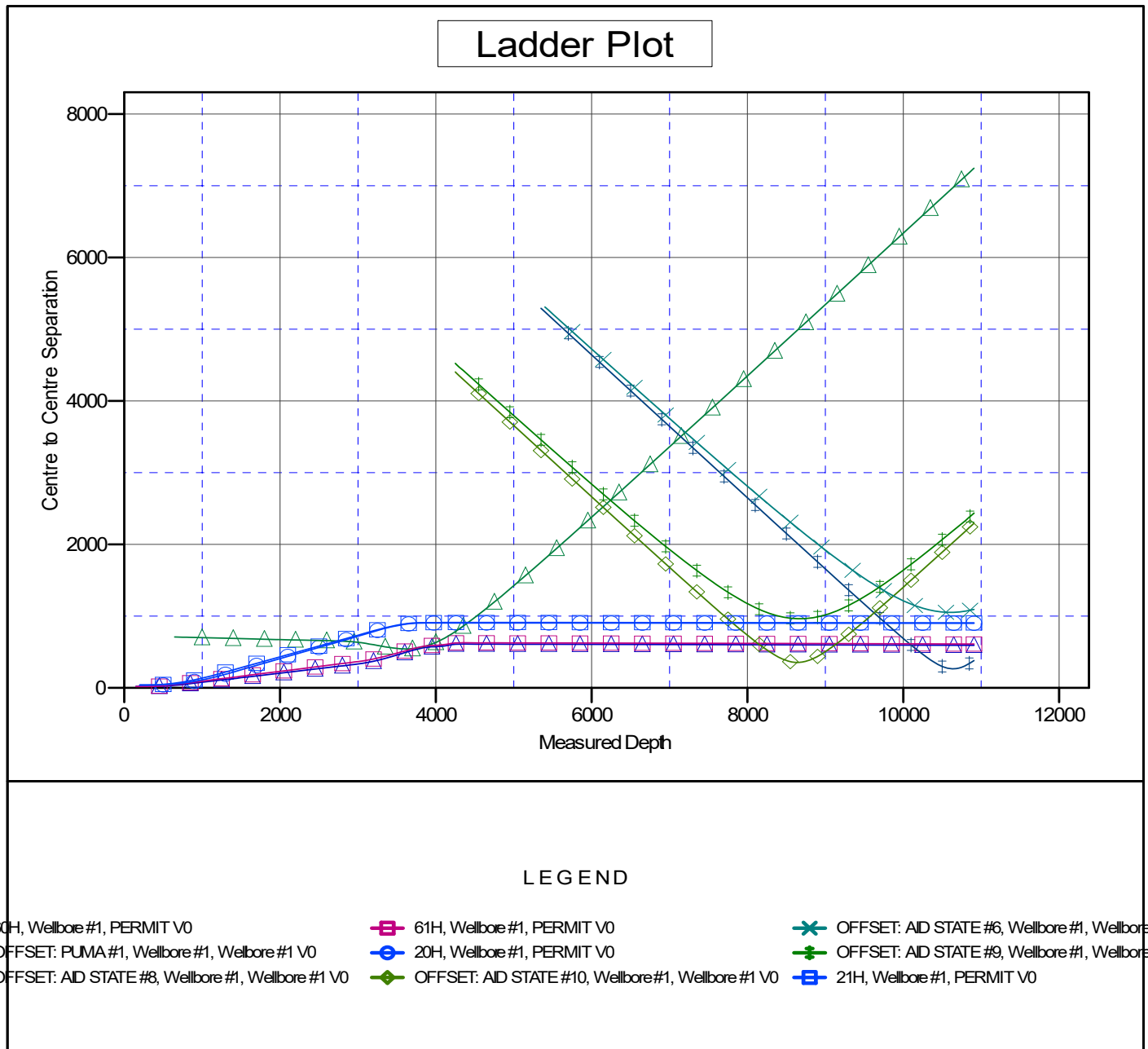
Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3620.00usft (AKITA 57)
Reference Site:	AID NORTH 14-13 STATE COM	MD Reference:	RKB = 20' @ 3620.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	10H	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: 10H

Offset Depths are relative to Offset Datum

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

Grid Convergence at Surface is: 0.101°



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

08/01/23 4:37:38PM

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COMPASS 5000.1 Build 74



Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 10H
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:	10H	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: 10H

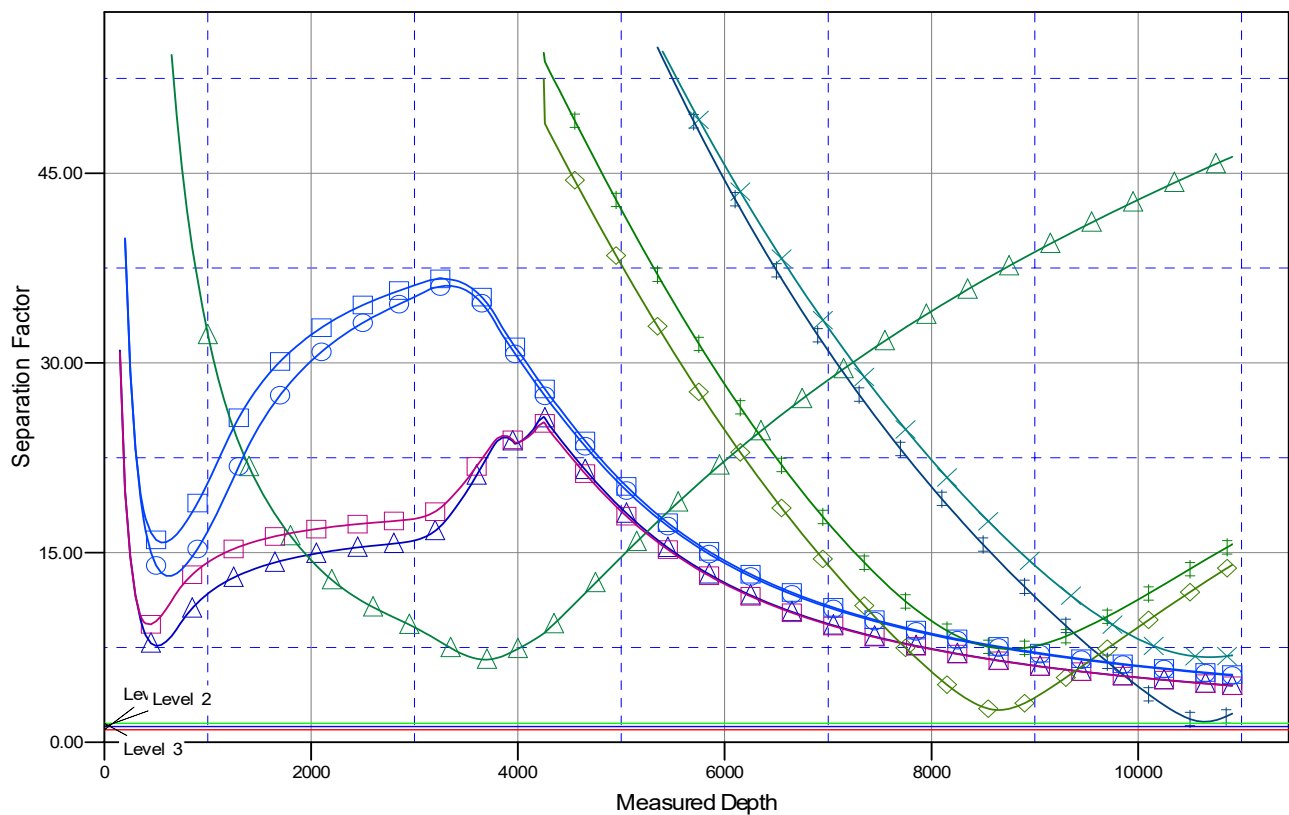
Offset Depths are relative to Offset Datum

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

Central Meridian is -104.333333

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

61H, Wellbore #1, PERMIT 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 #1 V0

21H, Wellbore #1, PERMIT V0

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



SPUR ENERGY PARTNERS, LLC

EDDY COUNTY, NM (NAD 83 - NME)

AID NORTH 14-13 STATE COM

10H

Wellbore #1

Plan: PERMIT

Standard Planning Report

01 August, 2023



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well 10H
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:	10H	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:			Easting:			598,767.90 usft			Longitude:			-104.1463439		
Position Uncertainty:			Slot Radius:			13-3/16 "			Grid Convergence:			0.101 °		
Map														

Well	10H					
Well Position	+N/-S	0.00 usft	Northing:	669,070.00 usft	Latitude:	32.8391593
	+E/-W	0.00 usft	Easting:	598,767.90 usft	Longitude:	-104.1463439
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	47,575

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	
379.54	1.59	46.59	379.53	0.76	0.80	2.00	2.00	0.00	46.592	
2,791.98	1.59	46.59	2,791.04	46.78	49.46	0.00	0.00	0.00	0.000	
3,772.42	60.00	88.75	3,598.38	67.19	526.45	6.00	5.96	4.30	42.798	
3,972.42	60.00	88.75	3,698.38	70.95	699.61	0.00	0.00	0.00	0.000	
4,259.50	88.71	88.75	3,775.00	76.90	973.10	10.00	10.00	0.00	0.000	AID NORTH 10H F
10,859.02	88.71	88.75	3,923.87	220.31	7,569.39	0.00	0.00	0.00	0.000	AID NORTH 10H L
10,909.06	88.71	88.75	3,925.00	221.40	7,619.40	0.00	0.00	0.00	0.000	AID NORTH 10H B



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well 10H
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:	10H	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 10H SHL: 1228' FNL, 2382' 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
379.54	1.59	46.59	379.53	0.76	0.80	0.82	2.00	2.00	0.00
400.00	1.59	46.59	399.98	1.15	1.21	1.24	0.00	0.00	0.00
500.00	1.59	46.59	499.94	3.06	3.23	3.30	0.00	0.00	0.00
600.00	1.59	46.59	599.90	4.96	5.25	5.36	0.00	0.00	0.00
700.00	1.59	46.59	699.87	6.87	7.27	7.41	0.00	0.00	0.00
800.00	1.59	46.59	799.83	8.78	9.28	9.47	0.00	0.00	0.00
900.00	1.59	46.59	899.79	10.69	11.30	11.53	0.00	0.00	0.00
1,000.00	1.59	46.59	999.75	12.60	13.32	13.59	0.00	0.00	0.00
1,100.00	1.59	46.59	1,099.71	14.50	15.33	15.65	0.00	0.00	0.00
1,200.00	1.59	46.59	1,199.67	16.41	17.35	17.70	0.00	0.00	0.00
1,300.00	1.59	46.59	1,299.64	18.32	19.37	19.76	0.00	0.00	0.00
1,400.00	1.59	46.59	1,399.60	20.23	21.38	21.82	0.00	0.00	0.00
1,500.00	1.59	46.59	1,499.56	22.14	23.40	23.88	0.00	0.00	0.00
1,600.00	1.59	46.59	1,599.52	24.04	25.42	25.94	0.00	0.00	0.00
1,700.00	1.59	46.59	1,699.48	25.95	27.43	27.99	0.00	0.00	0.00
1,800.00	1.59	46.59	1,799.44	27.86	29.45	30.05	0.00	0.00	0.00
1,900.00	1.59	46.59	1,899.40	29.77	31.47	32.11	0.00	0.00	0.00
2,000.00	1.59	46.59	1,999.37	31.67	33.48	34.17	0.00	0.00	0.00
2,100.00	1.59	46.59	2,099.33	33.58	35.50	36.23	0.00	0.00	0.00
2,200.00	1.59	46.59	2,199.29	35.49	37.52	38.28	0.00	0.00	0.00
2,300.00	1.59	46.59	2,299.25	37.40	39.54	40.34	0.00	0.00	0.00
2,400.00	1.59	46.59	2,399.21	39.31	41.55	42.40	0.00	0.00	0.00
2,500.00	1.59	46.59	2,499.17	41.21	43.57	44.46	0.00	0.00	0.00
2,600.00	1.59	46.59	2,599.13	43.12	45.59	46.52	0.00	0.00	0.00
2,700.00	1.59	46.59	2,699.10	45.03	47.60	48.57	0.00	0.00	0.00
2,791.98	1.59	46.59	2,791.04	46.78	49.46	50.47	0.00	0.00	0.00
AID NORTH 10H KOP: 2791.98' MD									
2,800.00	1.97	56.14	2,799.06	46.94	49.65	50.67	6.00	4.74	119.06
2,850.00	4.77	76.32	2,848.97	47.91	52.39	53.42	6.00	5.60	40.36
2,900.00	7.72	81.38	2,898.66	48.90	57.73	58.79	6.00	5.90	10.13
2,950.00	10.70	83.65	2,948.01	49.92	65.67	66.75	6.00	5.96	4.53
3,000.00	13.69	84.94	2,996.88	50.96	76.18	77.28	6.00	5.98	2.57
3,050.00	16.68	85.77	3,045.13	52.01	89.24	90.35	6.00	5.98	1.66
3,100.00	19.68	86.35	3,092.63	53.07	104.80	105.93	6.00	5.99	1.17
3,150.00	22.67	86.79	3,139.25	54.15	122.83	123.98	6.00	5.99	0.87
3,200.00	25.67	87.13	3,184.86	55.23	143.27	144.44	6.00	5.99	0.68
3,250.00	28.67	87.40	3,229.33	56.32	166.07	167.26	6.00	5.99	0.54
3,300.00	31.67	87.63	3,272.56	57.41	191.17	192.38	6.00	6.00	0.45
3,350.00	34.66	87.82	3,314.41	58.49	218.50	219.72	6.00	6.00	0.38
3,400.00	37.66	87.98	3,354.77	59.57	247.98	249.22	6.00	6.00	0.33
3,450.00	40.66	88.12	3,393.54	60.65	279.53	280.79	6.00	6.00	0.28
3,500.00	43.66	88.25	3,430.60	61.71	313.07	314.34	6.00	6.00	0.25
3,550.00	46.66	88.36	3,465.85	62.76	348.50	349.79	6.00	6.00	0.23
3,600.00	49.66	88.46	3,499.20	63.79	385.73	387.03	6.00	6.00	0.20
3,650.00	52.66	88.55	3,530.55	64.81	424.66	425.97	6.00	6.00	0.19
3,700.00	55.66	88.64	3,559.83	65.80	465.17	466.50	6.00	6.00	0.17
3,750.00	58.65	88.72	3,586.95	66.76	507.16	508.50	6.00	6.00	0.16
3,772.42	60.00	88.75	3,598.38	67.19	526.45	527.79	6.00	6.00	0.15
3,800.00	60.00	88.75	3,612.17	67.71	550.32	551.67	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well 10H
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:	10H	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)
3,900.00	60.00	88.75	3,662.17	69.59	636.90	638.27	0.00	0.00	0.00
3,972.42	60.00	88.75	3,698.38	70.95	699.61	700.99	0.00	0.00	0.00
4,000.00	62.76	88.75	3,711.59	71.48	723.81	725.20	10.00	10.00	0.00
4,050.00	67.76	88.75	3,732.51	72.47	769.19	770.59	10.00	10.00	0.00
4,100.00	72.76	88.75	3,749.40	73.49	816.23	817.64	10.00	10.00	0.00
4,150.00	77.76	88.75	3,762.12	74.54	864.56	865.98	10.00	10.00	0.00
4,200.00	82.76	88.75	3,770.57	75.61	913.81	915.24	10.00	10.00	0.00
4,250.00	87.76	88.75	3,774.71	76.69	963.61	965.05	10.00	10.00	0.00
4,259.50	88.71	88.75	3,775.00	76.90	973.10	974.55	10.00	10.00	0.00
AID NORTH 10H FTP: 1244' FNL, 1405' FEL									
4,300.00	88.71	88.75	3,775.91	77.78	1,013.58	1,015.04	0.00	0.00	0.00
4,400.00	88.71	88.75	3,778.17	79.95	1,113.53	1,115.01	0.00	0.00	0.00
4,500.00	88.71	88.75	3,780.43	82.13	1,213.48	1,214.99	0.00	0.00	0.00
4,600.00	88.71	88.75	3,782.68	84.30	1,313.43	1,314.96	0.00	0.00	0.00
4,700.00	88.71	88.75	3,784.94	86.47	1,413.39	1,414.94	0.00	0.00	0.00
4,800.00	88.71	88.75	3,787.19	88.65	1,513.34	1,514.91	0.00	0.00	0.00
4,900.00	88.71	88.75	3,789.45	90.82	1,613.29	1,614.88	0.00	0.00	0.00
5,000.00	88.71	88.75	3,791.70	92.99	1,713.24	1,714.86	0.00	0.00	0.00
5,100.00	88.71	88.75	3,793.96	95.16	1,813.19	1,814.83	0.00	0.00	0.00
5,200.00	88.71	88.75	3,796.22	97.34	1,913.14	1,914.81	0.00	0.00	0.00
5,300.00	88.71	88.75	3,798.47	99.51	2,013.09	2,014.78	0.00	0.00	0.00
5,400.00	88.71	88.75	3,800.73	101.68	2,113.04	2,114.76	0.00	0.00	0.00
5,500.00	88.71	88.75	3,802.98	103.86	2,212.99	2,214.73	0.00	0.00	0.00
5,600.00	88.71	88.75	3,805.24	106.03	2,312.94	2,314.71	0.00	0.00	0.00
5,700.00	88.71	88.75	3,807.49	108.20	2,412.90	2,414.68	0.00	0.00	0.00
5,800.00	88.71	88.75	3,809.75	110.38	2,512.85	2,514.66	0.00	0.00	0.00
5,900.00	88.71	88.75	3,812.01	112.55	2,612.80	2,614.63	0.00	0.00	0.00
6,000.00	88.71	88.75	3,814.26	114.72	2,712.75	2,714.60	0.00	0.00	0.00
6,100.00	88.71	88.75	3,816.52	116.90	2,812.70	2,814.58	0.00	0.00	0.00
6,200.00	88.71	88.75	3,818.77	119.07	2,912.65	2,914.55	0.00	0.00	0.00
6,300.00	88.71	88.75	3,821.03	121.24	3,012.60	3,014.53	0.00	0.00	0.00
6,400.00	88.71	88.75	3,823.29	123.41	3,112.55	3,114.50	0.00	0.00	0.00
6,500.00	88.71	88.75	3,825.54	125.59	3,212.50	3,214.48	0.00	0.00	0.00
6,600.00	88.71	88.75	3,827.80	127.76	3,312.45	3,314.45	0.00	0.00	0.00
6,700.00	88.71	88.75	3,830.05	129.93	3,412.40	3,414.43	0.00	0.00	0.00
6,800.00	88.71	88.75	3,832.31	132.11	3,512.36	3,514.40	0.00	0.00	0.00
6,900.00	88.71	88.75	3,834.56	134.28	3,612.31	3,614.38	0.00	0.00	0.00
7,000.00	88.71	88.75	3,836.82	136.45	3,712.26	3,714.35	0.00	0.00	0.00
7,100.00	88.71	88.75	3,839.08	138.63	3,812.21	3,814.33	0.00	0.00	0.00
7,200.00	88.71	88.75	3,841.33	140.80	3,912.16	3,914.30	0.00	0.00	0.00
7,300.00	88.71	88.75	3,843.59	142.97	4,012.11	4,014.27	0.00	0.00	0.00
7,400.00	88.71	88.75	3,845.84	145.15	4,112.06	4,114.25	0.00	0.00	0.00
7,500.00	88.71	88.75	3,848.10	147.32	4,212.01	4,214.22	0.00	0.00	0.00
7,600.00	88.71	88.75	3,850.35	149.49	4,311.96	4,314.20	0.00	0.00	0.00
7,700.00	88.71	88.75	3,852.61	151.66	4,411.91	4,414.17	0.00	0.00	0.00
7,800.00	88.71	88.75	3,854.87	153.84	4,511.86	4,514.15	0.00	0.00	0.00
7,900.00	88.71	88.75	3,857.12	156.01	4,611.82	4,614.12	0.00	0.00	0.00
8,000.00	88.71	88.75	3,859.38	158.18	4,711.77	4,714.10	0.00	0.00	0.00
8,100.00	88.71	88.75	3,861.63	160.36	4,811.72	4,814.07	0.00	0.00	0.00
8,200.00	88.71	88.75	3,863.89	162.53	4,911.67	4,914.05	0.00	0.00	0.00
8,300.00	88.71	88.75	3,866.15	164.70	5,011.62	5,014.02	0.00	0.00	0.00
8,400.00	88.71	88.75	3,868.40	166.88	5,111.57	5,113.99	0.00	0.00	0.00
8,500.00	88.71	88.75	3,870.66	169.05	5,211.52	5,213.97	0.00	0.00	0.00
8,600.00	88.71	88.75	3,872.91	171.22	5,311.47	5,313.94	0.00	0.00	0.00



Planning Report

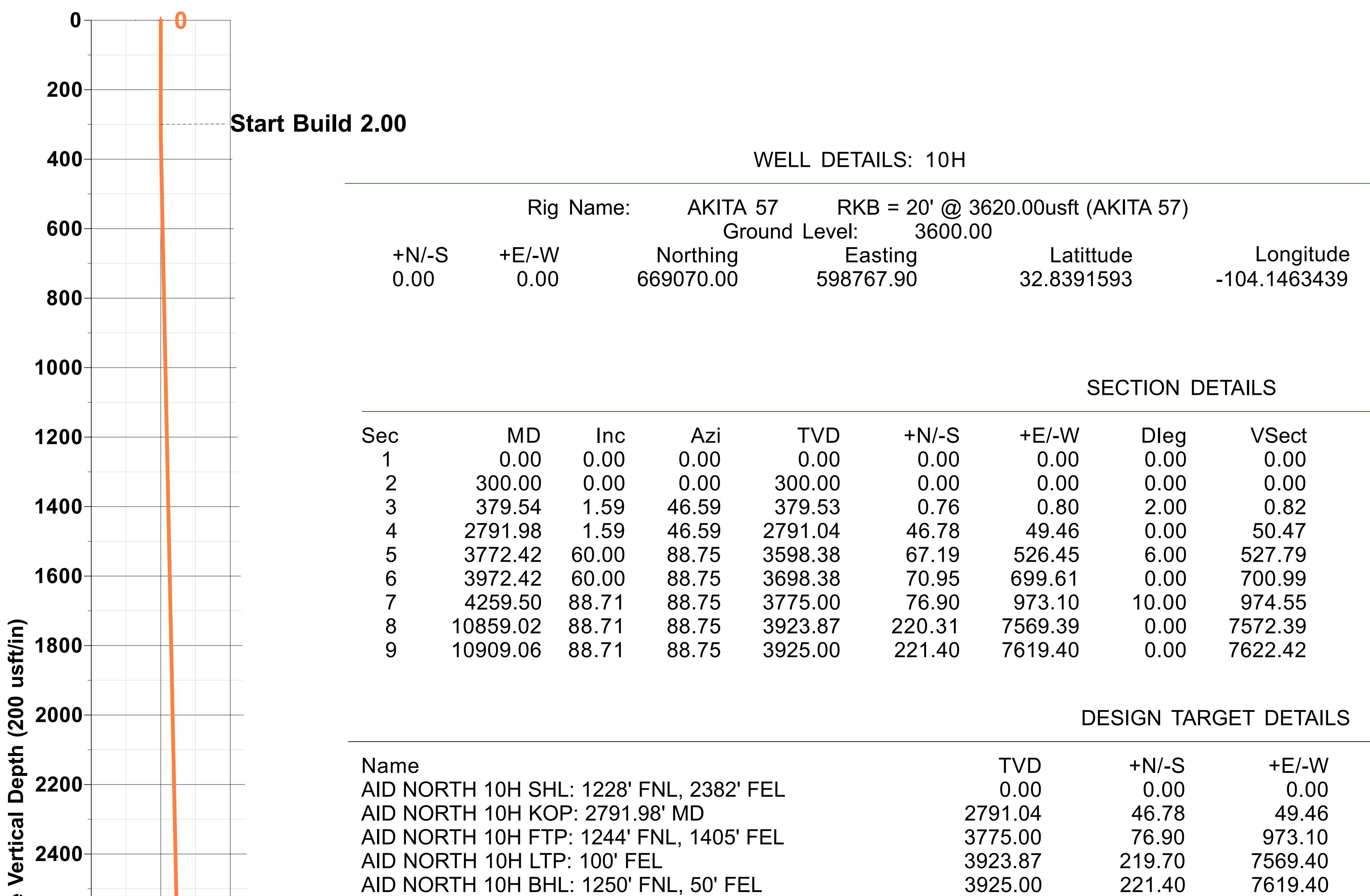
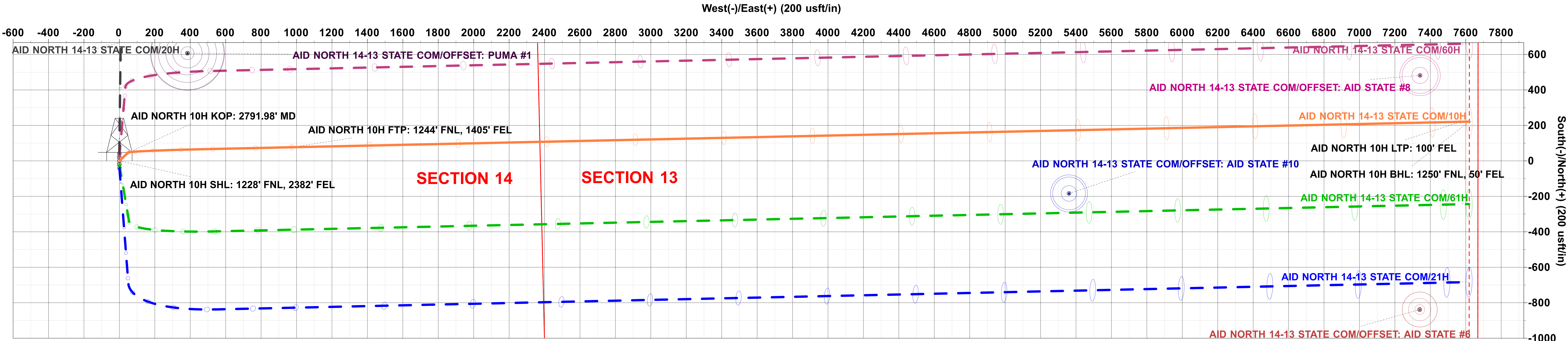
Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well 10H
Company:	SPUR ENERGY PARTNERS, LLC	TVD Reference:	RKB = 20' @ 3620.00usft (AKITA 57)
Project:	EDDY COUNTY, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3620.00usft (AKITA 57)
Site:	AID NORTH 14-13 STATE COM	North Reference:	Grid
Well:	10H	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	88.71	88.75	3,875.17	173.40	5,411.42	5,413.92	0.00	0.00	0.00
8,800.00	88.71	88.75	3,877.42	175.57	5,511.37	5,513.89	0.00	0.00	0.00
8,900.00	88.71	88.75	3,879.68	177.74	5,611.33	5,613.87	0.00	0.00	0.00
9,000.00	88.71	88.75	3,881.94	179.91	5,711.28	5,713.84	0.00	0.00	0.00
9,100.00	88.71	88.75	3,884.19	182.09	5,811.23	5,813.82	0.00	0.00	0.00
9,200.00	88.71	88.75	3,886.45	184.26	5,911.18	5,913.79	0.00	0.00	0.00
9,300.00	88.71	88.75	3,888.70	186.43	6,011.13	6,013.77	0.00	0.00	0.00
9,400.00	88.71	88.75	3,890.96	188.61	6,111.08	6,113.74	0.00	0.00	0.00
9,500.00	88.71	88.75	3,893.21	190.78	6,211.03	6,213.71	0.00	0.00	0.00
9,600.00	88.71	88.75	3,895.47	192.95	6,310.98	6,313.69	0.00	0.00	0.00
9,700.00	88.71	88.75	3,897.73	195.13	6,410.93	6,413.66	0.00	0.00	0.00
9,800.00	88.71	88.75	3,899.98	197.30	6,510.88	6,513.64	0.00	0.00	0.00
9,900.00	88.71	88.75	3,902.24	199.47	6,610.83	6,613.61	0.00	0.00	0.00
10,000.00	88.71	88.75	3,904.49	201.65	6,710.79	6,713.59	0.00	0.00	0.00
10,100.00	88.71	88.75	3,906.75	203.82	6,810.74	6,813.56	0.00	0.00	0.00
10,200.00	88.71	88.75	3,909.01	205.99	6,910.69	6,913.54	0.00	0.00	0.00
10,300.00	88.71	88.75	3,911.26	208.16	7,010.64	7,013.51	0.00	0.00	0.00
10,400.00	88.71	88.75	3,913.52	210.34	7,110.59	7,113.49	0.00	0.00	0.00
10,500.00	88.71	88.75	3,915.77	212.51	7,210.54	7,213.46	0.00	0.00	0.00
10,600.00	88.71	88.75	3,918.03	214.68	7,310.49	7,313.43	0.00	0.00	0.00
10,700.00	88.71	88.75	3,920.28	216.86	7,410.44	7,413.41	0.00	0.00	0.00
10,800.00	88.71	88.75	3,922.54	219.03	7,510.39	7,513.38	0.00	0.00	0.00
10,859.02	88.71	88.75	3,923.87	220.31	7,569.39	7,572.39	0.00	0.00	0.00
AID NORTH 10H LTP: 100' FEL									
10,909.06	88.71	88.75	3,925.00	221.40	7,619.40	7,622.42	0.00	0.00	0.00
AID NORTH 10H BHL: 1250' FNL, 50' FEL									

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 10H SHL - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	669,070.00	598,767.90	32.8391593	-104.1463439
AID NORTH 10H KOF - plan hits target center - Point	0.00	0.00	2,791.04	46.78	49.46	669,116.79	598,817.36	32.8392876	-104.1461826
AID NORTH 10H FTP - plan hits target center - Point	0.00	0.00	3,775.00	76.90	973.10	669,146.90	599,741.00	32.8393659	-104.1431751
AID NORTH 10H LTP - plan misses target center by 0.61usft at 10859.02usft MD (3923.87 TVD, 220.31 N, 7569.39 E) - Point	0.00	0.00	3,923.87	219.70	7,569.40	669,289.70	606,337.30	32.8397239	-104.1216972
AID NORTH 10H BHL - plan hits target center - Point	0.00	0.00	3,925.00	221.40	7,619.40	669,291.40	606,387.30	32.8397283	-104.1215344

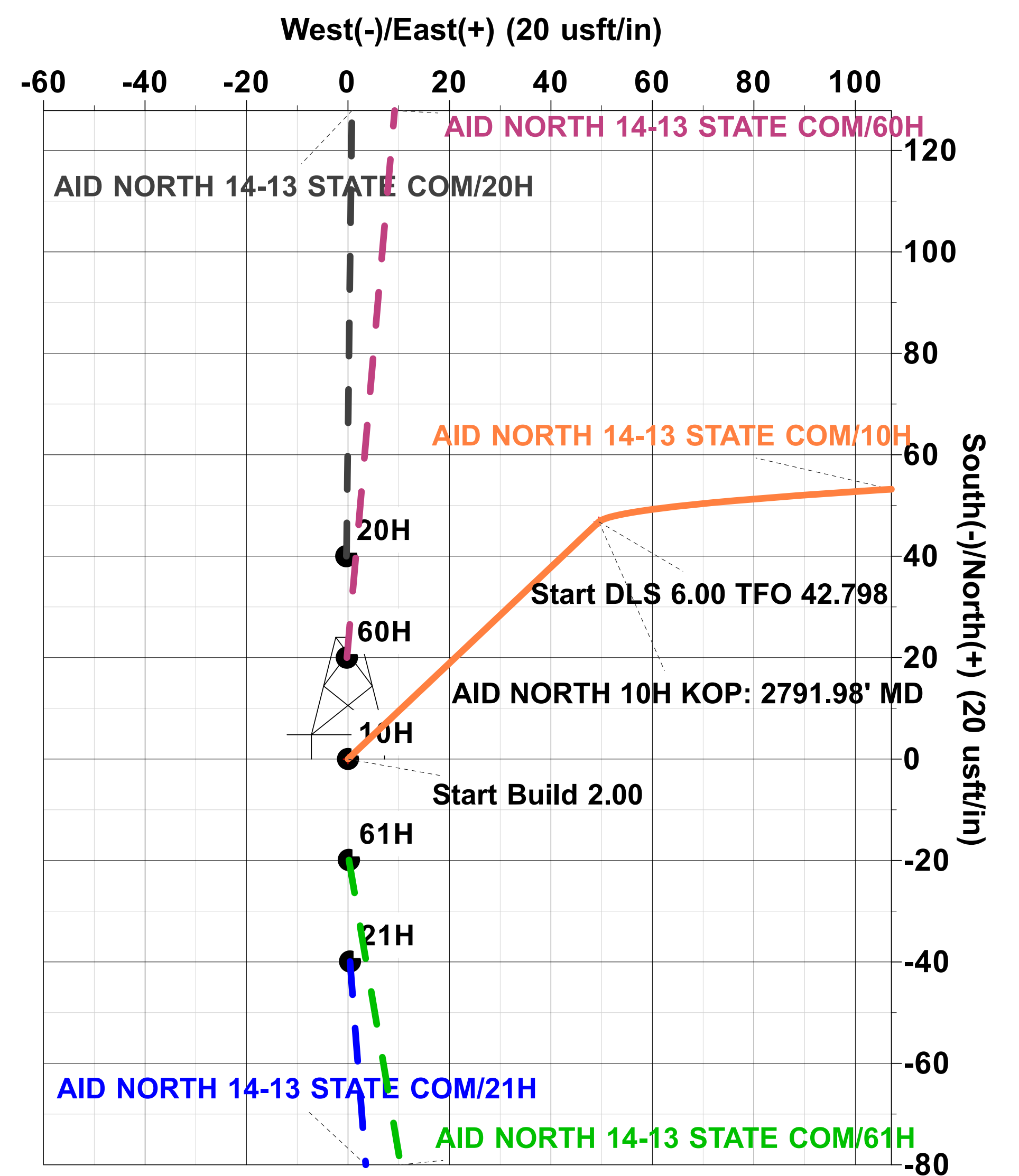
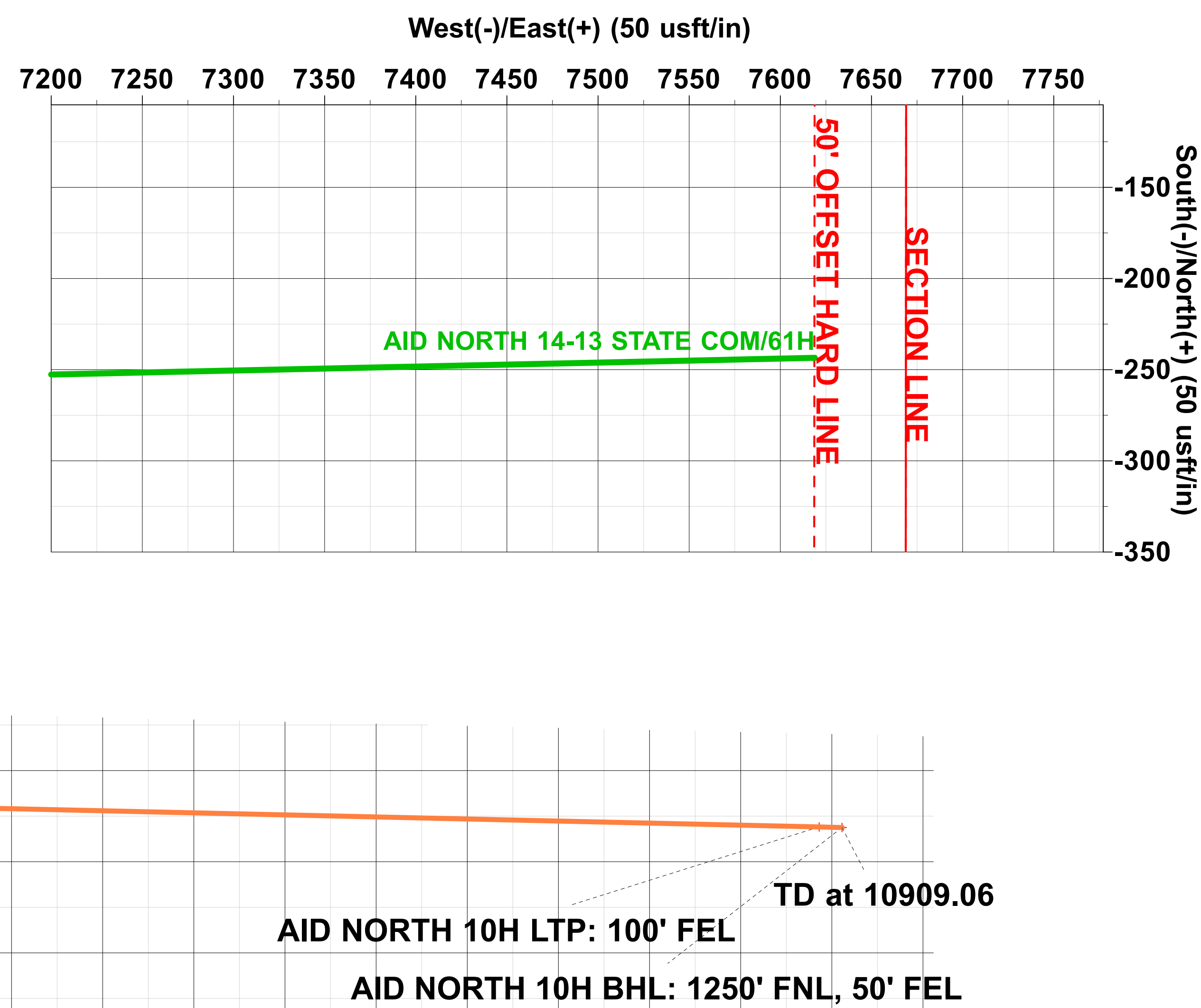
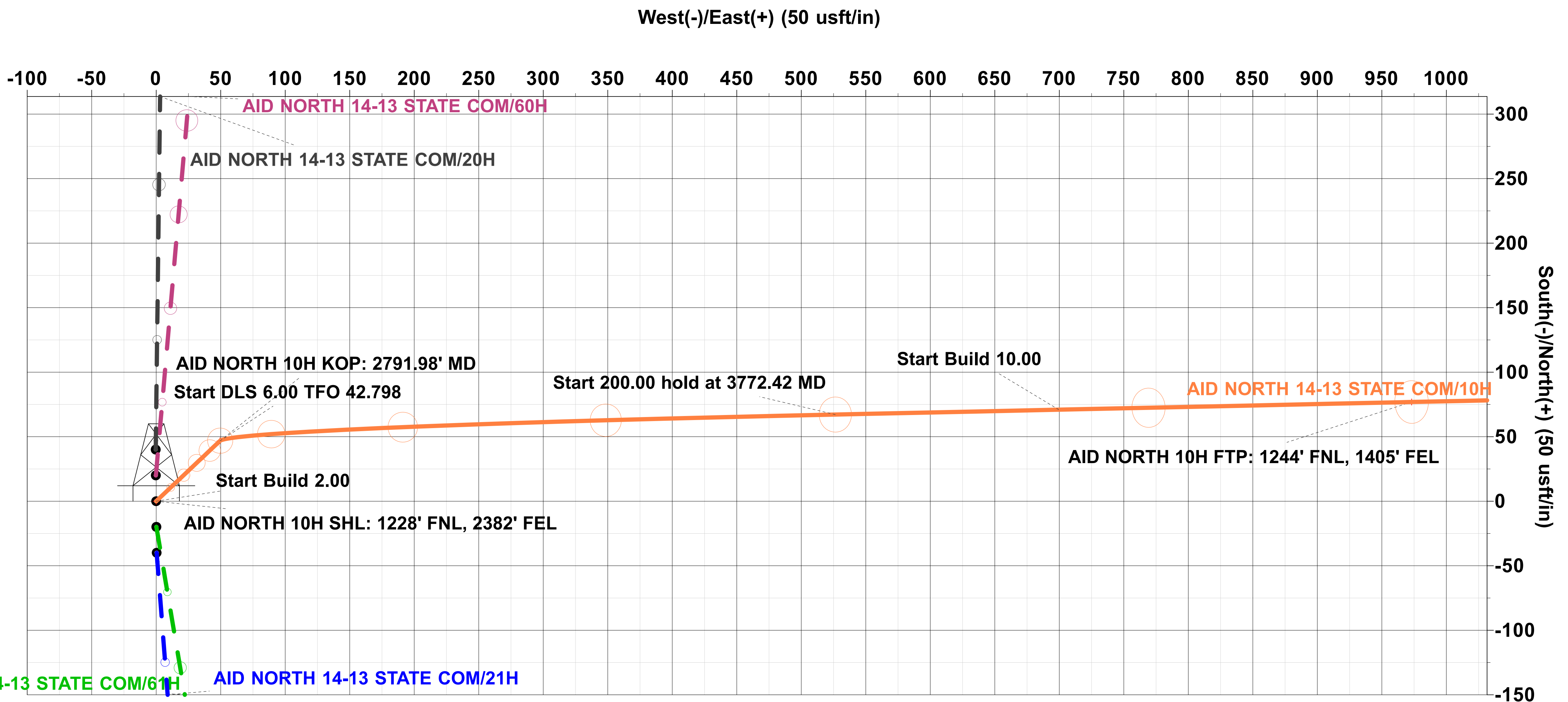


Project: EDDY COUNTY, NM (NAD 83 - NME)
Site: AID NORTH 14-13 STATE COM
Well: 10H
Wellbore: Wellbore #1
Design: PERMIT



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



Vertical Section at 88.75° (200 usft/in)

Plan: PERMIT (10H/Wellbore #1)

Created By: PROTOTYPE WELL PLANNING / Date: 16:39, August 01 2023

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Spur Energy Partners LLC – Aid North 14-13 State Com 10H

1. Geologic Formations

TVD of Target	3,925'
MD at TD	10,909'

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
Blinberry	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 (lbs)	Grade	Conn.	SF	SF Burst	Body SF	Joint SF
		From (ft)	To (ft)					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	4000	7	32	L-80	BK-HT	1.125	1.2	1.4	1.4
Yeso	8.75	4000	10909	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 10H

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
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	3000	100%
Production (Tail)	3000	10909	25%

Casing String	# Sks	Wt. (lb/gal)	Yld (ft3/sack)	H2O (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)	303	11.4	2.42	15.29	N/A	Clas C Premium Plus Cement
Production (Tail)	1523	13.2	1.56	9.81	N/A	Clas C Premium Plus Cement

Spur Energy Partners LLC – Aid North 14-13 State Com 10H

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	1817 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	112°F

*Specify if additional ram is utilized.

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

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

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

Spur Energy Partners LLC – Aid North 14-13 State Com 10H

	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	10909	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 10H

7. Logging and Testing Procedures

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

8. Drilling Conditions

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

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

Total estimated cuttings volume: 997.2 bbls.

Spur Energy Partners LLC – Aid North 14-13 State Com 10H**9. Other facets of operation**

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

Attachments

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

10. Company Personnel

Name	Title	Office Phone	Mobile Phone
Christopher Hollis	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
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description Effective May 25, 2021

I. Operator: SPUR ENERGY PARTNERS LLC **OGRID:** 328947 **Date:** 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:	<i>Sarah Chapman</i>
Printed Name:	SARAH CHAPMAN
Title:	REGULATORY DIRECTOR
E-mail Address:	SCHAPMAN@SPUREENERGY.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 igniter 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



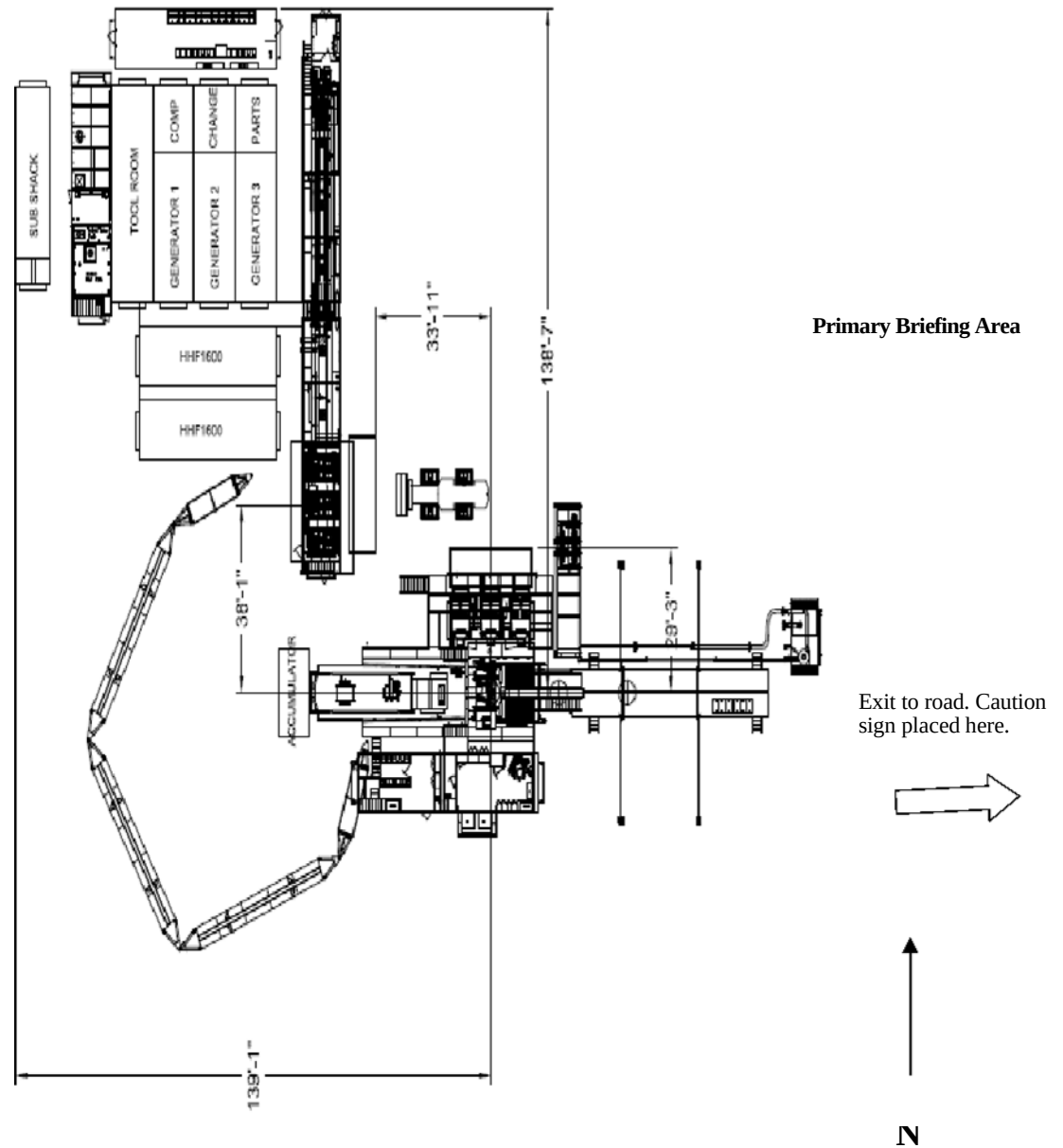
that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing equipment.

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



WIND: Prevailing winds are from the Southwest

Secondary Egress

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 H₂S 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 (H₂S).

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. H₂S 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 H₂S 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 H₂S 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 H₂S gas

If a spill or leak releases H₂S 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 H₂S 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 H₂S 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 Sherri's Department	Eunice	575-384-2020
Lea County Sherri's Department	Hobbs	575-393-2515
Lea County Sherri'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	CHASER 8 STATE 2 TANK BATTERY
ARABIAN 6 FEE TANK BATTERY	CHEYENNE FEDERAL TNK BTY
ARCO 26 A STATE OIL BATTERY	CLYDESDALE 1 FEE #1H BAT
ARCO B FEDERAL COM NO. 001	CLYDESDALE 1 FEE 6H - BATTERY
ARKANSAS STATE 23 TANK BATTERY	COAL TRAIN FEDERAL COM #1
AVALON FEDERAL #001	COFFIN STATE #1
B&B/ROSS RANCH OIL TANK BATTERY	COLLIER 22 STATE COM #43H
BC FEDERAL 10 (9-13) TNK BTY	COLLIER STATE OIL BATTERY
BC FEDERAL 1-8 &14 TNK BTY	CONOCO 8 STATE 4 TB
BC FEDERAL 42 TNK BTY	CONTINENTAL A STATE TNK BTY
BEE FED OIL BATTERY	CONTINENTAL B YESO TANK BTY
BEECH 25 FEDERAL #9H BATTERY	CONTINENTAL STATE 15A TNK BTY
BEECH FEDERAL 1	CRYPT 30 STATE #1H
BEECH FEDERAL 2 BATTERY	DAGGER DRAW FED/FOSTER FED TANK BATTERY
BERRY A FEDERAL #005 SWB	DARNER 9 STATE 1 TANK BATTERY
BERRY A FEDERAL PADD BATTERY	DARNER 9 STATE 2
BIG BOY STATE TB	DARTER 9 STATE 8 TANK BATTERY
BLUETAIL 8 FEDERAL 2 TANK BATTERY	DARNER 9 STATE CTB
BONE YARD 11 FEE TANK BATTERY	DEXTER FEDERAL PAD TNK BTY
BOOT HILL 25 1H SWB	DODD 10A OIL BATTERY
BOSE IKARD 4 ST COM 18H BATTERY	DODD 10B TK BTTY
BRANTLEY FEDERAL #001	DODD FED #14C TK BATT
BR-549 STATE BATTERY	DODD FED 11A BATTERY
BRADLEY 8 FEE #3H-BATTERY	DODD FED UNIT 980H BATTERY
BRADLEY 8 FEE BATTERY	DODD FEDERAL 14A-TB
BRAGG 10 FEE 1 BATTERY	DODD FEDERAL UNIT 15A BTTY
BRIGHAM H 2	DODD FEDERAL UNIT NORTH BTTY
BRIGHAM H FED (NORTH) BATTERY	DODD FEDERAL UNIT SOUTH BTTY
BURCH KEELY 13C TK BTY	DOGWOOD FEDERAL TNK BTY
BURCH KEELY 18A TK BATT	DORAMI 33 FEDERAL COM 2H.4H.9H TANK BATTERY
BURCH KEELY 19A OIL BATT	EBONY STATE TB
BURCH KEELY 23A TK BATT	EDWARD STATE TNK BTY
BURCH KEELY EAST 18B TANK BAT	ELECTRA FEDERAL 33 (NORTH) BATTERY
BURCH KEELY SEC 13A NORTH BTTY	ELECTRA FEDERAL 5 (SWEET) TNK BTY
BURCH KEELY SEC 13B SOUTH BTTY	ELECTRA FEDERAL SOUR TNK BTY
BURCH KEELY UNIT CTB BTTY	EMPIRE SOUTH DEEP UNIT 21
BURCH KEELY UNIT E BATTERY	FALABELLA 31 FEE #1H TK BATT
BURKETT 16 STATE	FALABELLA 31 FEE 8H TK BTY
CADDO FEDERAL BATTERY	FAT TIRE 12 COM FEDERAL CTB
CADILLAC ST 4 BATTERY	FEDERAL BA COM NO. 001
CALIFORNIA 29 FEE 1	FEDERAL BB NO. 001
CARMEN 3 FEDERAL BATTERY	FLAT HEAD FED COM 6H TANK BATTERY
CARRINGTON 12 ST 3,4,7 BATTERY	FLAT HEAD FED COM 27H TANK BATTERY

ATTACHMENT 1: SPUR FACILITIES WITH ROE REVIEW

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

ATTACHMENT 1: SPUR FACILITIES WITH ROE REVIEW

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