

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

General Information
Phone: (505) 629-6116

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

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

Form C-101
August 1, 2011

Permit 387280

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 30-015-56711
4. Property Code 337324	5. Property Name ABACO STATE COM	6. Well No. 110H

7. Surface Location

UL - Lot K	Section 19	Township 17S	Range 29E	Lot Idn K	Feet From 1641	N/S Line S	Feet From 2152	E/W Line W	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot K	Section 20	Township 17S	Range 29E	Lot Idn K	Feet From 2080	N/S Line S	Feet From 2598	E/W Line W	County Eddy
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9. Pool Information

GRAYBURG JACKSON;SR-Q-G-SA	28509
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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 3667
16. Multiple N	17. Proposed Depth 8580	18. Formation San Andres	19. Contractor	20. Spud Date 7/25/2025
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

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

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	300	188	0
Int1	12.25	9.625	36	1150	298	0
Prod	8.75	7	32	3400	1560	0
Prod	8.75	5.5	20	8580	1560	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:	Jeffrey Harrison
Title:	Regulatory Director	Title:	Petroleum Specialist III
Email Address:	schapman@spurenergy.com	Approved Date:	6/12/2025
Date:	4/10/2025	Expiration Date:	6/12/2027
Phone:	832-930-8613	Conditions of Approval Attached	

30-015-56711

Surface Location

Bottom Hole Location

Kick Off Point (KOP)

First Take Point (FTP)Last Take Point (LTP)

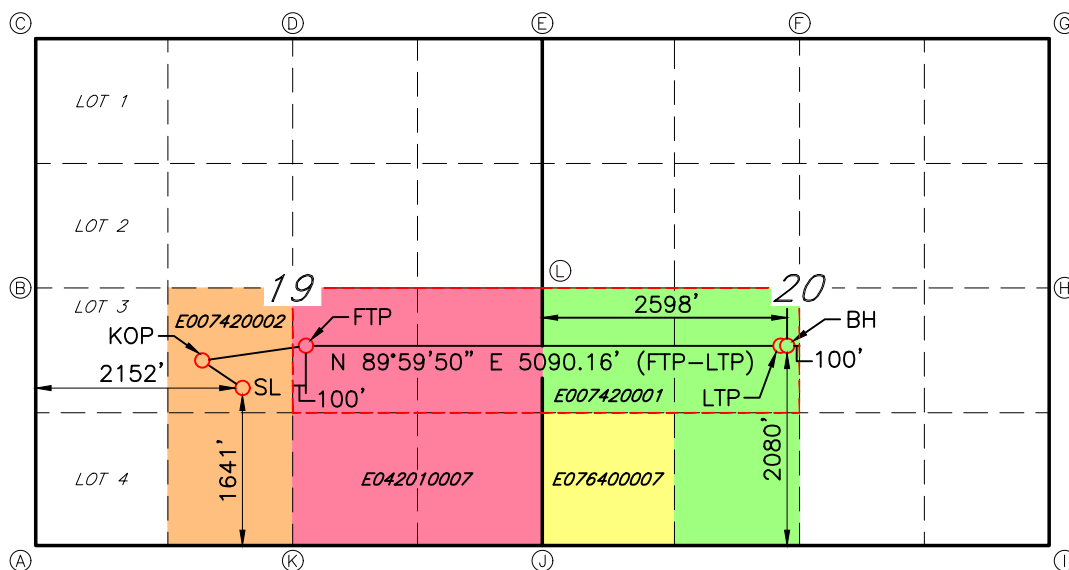
Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

ACREAGE DEDICATION PLATS

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

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

ABACO STATE COM #110H



GEODETTIC DATA

NAD 83 GRID - NM EAST

SURFACE LOCATION (SL)

1641' FSL - 2152' FWL SEC.19
N: 661159.7 - E: 608582.1

LAT: 32.8173649° N
LONG: 104.1144432° W

KICK OFF POINT (KOP)

1926' FSL - 1731' FWL SEC.19
N: 661443.4 - E: 608161.5

LAT: 32.8181471° N
LONG: 104.1158103° W

FIRST TAKE POINT (FTP)

2080' FSL - 2542' FWL SEC.19
N: 661599.2 - E: 608753.3

LAT: 32.8185720° N
LONG: 104.1138829° W

LAST TAKE POINT (LTP)

2080' FSL - 2548' FWL SEC.20
N: 661599.4 - E: 613842.2

LAT: 32.8185426° N
LONG: 104.0973178° W

BOTTOM HOLE (BH)

2080' FSL - 2548' FWL SEC.20
N: 661599.3 - E: 613892.2

LAT: 32.8185419° N
LONG: 104.0971550° W

CORNER DATA

NAD 83 GRID - NM EAST

A: FOUND BRASS CAP "1914"
N: 659511.6 - E: 606429.6

B: FOUND 1/2" REBAR
N: 662148.9 - E: 606431.6

C: FOUND PIPE
N: 664785.2 - E: 606433.0

D: FOUND BRASS CAP "1914"
N: 664789.6 - E: 608641.2

E: FOUND BRASS CAP "1914"
N: 664783.6 - E: 611289.3

F: FOUND BRASS CAP "1914"
N: 664777.4 - E: 613935.4

G: FOUND BRASS CAP "1914"
N: 664793.0 - E: 616577.9

H: FOUND BRASS CAP "1914"
N: 662152.0 - E: 616584.3

I: FOUND BRASS CAP "1914"
N: 659511.8 - E: 616591.5

J: FOUND BRASS CAP "1914"
N: 659527.6 - E: 611301.7

K: FOUND BRASS CAP "1914"
N: 659519.4 - E: 608661.2

L: FOUND BRASS CAP "1914"
N: 662146.7 - E: 611293.2



JOB #: LS25020191D1

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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 387280

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: Spur Energy Partners LLC [328947] 9655 Katy Freeway Houston, TX 77024	API Number: 30-015-56711
	Well: ABACO STATE COM #110H

OCD Reviewer	Condition
jeffrey.harrison	Notify the OCD 24 hours prior to casing & cement.
jeffrey.harrison	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.
jeffrey.harrison	File As Drilled C-102 and a directional Survey with C-104 completion packet.
jeffrey.harrison	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.
jeffrey.harrison	Cement is required to circulate on both surface and intermediate1 strings of casing.
jeffrey.harrison	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.
jeffrey.harrison	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.
jeffrey.harrison	Surface casing shall be set a minimum of 25' into the Rustler Anhydrite, above the salt, and below usable fresh water and cemented to the surface. If salt is encountered set casing at least 25 ft. above the salt.

Released to Imaging: 6/12/2025 11:15:37 AM

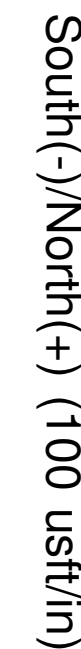
3667+20 (copy) @ 3687.00usft (AKITA)
North American Datum 1983

Well: ABACO STATE COM 110H

Design: Plan #2



SPUR
ENERGY
PARTNERS



SPUR ENERGY PARTNERS LLC.
Eddy County, NM (NAD83) NMEZ Grid
ABACO STATE COM
ABACO STATE COM 110H
110H OH
Plan #2
Created By: Mekka Williams
eSomina Well Design
mekka@esominawelldesign.com

SPUR ENERGY PARTNERS LLC.

Eddy County, NM (NAD83) NMEZ Grid

ABACO STATE COM

ABACO STATE COM 110H

110H OH

Plan: Plan #2

Standard Planning Report

12 March, 2025

Planning Report

Database:	PRIME_EDM	Local Co-ordinate Reference:	Site ABACO STATE COM
Company:	SPUR ENERGY PARTNERS LLC.	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Project:	Eddy County, NM (NAD83) NMEZ Grid	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site:	ABACO STATE COM	North Reference:	Grid
Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Wellbore:	110H OH		
Design:	Plan #2		

Project	Eddy County, NM (NAD83) NMEZ Grid		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		ABACO STATE COM			
Site Position:		Northing:	661,159.700 usft	Latitude:	32.8173650
From:	Map	Easting:	608,582.100 usft	Longitude:	-104.1144431
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.12 °

Well	ABACO STATE COM 110H					
Well Position	+N/-S	0.00 usft	Northing:	661,159.700 usft	Latitude:	32.8173650
	+E/-W	0.00 usft	Easting:	608,582.100 usft	Longitude:	-104.1144431
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,667.00 usft

Wellbore	110H OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	03/03/25	6.57	60.22	47,351.40000000

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	90.00

Plan Survey Tool Program	Date	03/12/25		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	8,579.89 Plan #2 (110H OH)	MWD+IFR1+SAG+FDIR	
			OWSG MWD + IFR1 + Sag + F	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,615.00	26.30	304.00	1,569.31	165.83	-245.85	2.00	2.00	0.00	304.00	
2,090.71	26.30	304.00	1,995.77	283.69	-420.59	0.00	0.00	0.00	0.00	
3,122.24	60.00	90.00	2,873.24	439.37	-107.23	8.00	3.27	14.15	150.76	
3,322.24	60.00	90.00	2,973.24	439.37	65.97	0.00	0.00	0.00	0.00	
3,622.24	90.00	90.00	3,050.00	439.37	352.45	10.00	10.00	0.00	-0.01	
8,579.89	90.00	90.00	3,050.00	439.60	5,310.10	0.00	0.00	0.00	0.00	ABACO 110H PBHL 2

Planning Report

Database:	PRIME_EDM	Local Co-ordinate Reference:	Site ABACO STATE COM
Company:	SPUR ENERGY PARTNERS LLC.	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Project:	Eddy County, NM (NAD83) NMEZ Grid	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site:	ABACO STATE COM	North Reference:	Grid
Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Wellbore:	110H OH		
Design:	Plan #2		

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
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	2.00	304.00	399.98	0.98	-1.45	-1.45	2.00	2.00	0.00
500.00	4.00	304.00	499.84	3.90	-5.79	-5.79	2.00	2.00	0.00
600.00	6.00	304.00	599.45	8.78	-13.01	-13.01	2.00	2.00	0.00
700.00	8.00	304.00	698.70	15.59	-23.11	-23.11	2.00	2.00	0.00
800.00	10.00	304.00	797.47	24.34	-36.08	-36.08	2.00	2.00	0.00
900.00	12.00	304.00	895.62	35.01	-51.90	-51.90	2.00	2.00	0.00
1,000.00	14.00	304.00	993.06	47.59	-70.55	-70.55	2.00	2.00	0.00
1,100.00	16.00	304.00	1,089.64	62.06	-92.00	-92.00	2.00	2.00	0.00
1,200.00	18.00	304.00	1,185.27	78.41	-116.24	-116.24	2.00	2.00	0.00
1,300.00	20.00	304.00	1,279.82	96.61	-143.23	-143.23	2.00	2.00	0.00
1,400.00	22.00	304.00	1,373.17	116.65	-172.94	-172.94	2.00	2.00	0.00
1,500.00	24.00	304.00	1,465.21	138.50	-205.33	-205.33	2.00	2.00	0.00
1,600.00	26.00	304.00	1,555.84	162.13	-240.37	-240.37	2.00	2.00	0.00
1,615.00	26.30	304.00	1,569.31	165.83	-245.85	-245.85	2.00	2.00	0.00
1,700.00	26.30	304.00	1,645.51	186.89	-277.07	-277.07	0.00	0.00	0.00
1,800.00	26.30	304.00	1,735.16	211.66	-313.80	-313.80	0.00	0.00	0.00
1,900.00	26.30	304.00	1,824.80	236.44	-350.53	-350.53	0.00	0.00	0.00
2,000.00	26.30	304.00	1,914.45	261.21	-387.27	-387.27	0.00	0.00	0.00
2,090.71	26.30	304.00	1,995.77	283.69	-420.59	-420.59	0.00	0.00	0.00
2,100.00	25.65	304.84	2,004.12	285.99	-423.94	-423.94	8.00	-6.96	9.03
2,150.00	22.27	310.12	2,049.81	298.28	-440.08	-440.08	8.00	-6.76	10.56
2,200.00	19.12	317.10	2,096.59	310.39	-452.90	-452.90	8.00	-6.31	13.97
2,250.00	16.32	326.54	2,144.22	322.26	-462.36	-462.36	8.00	-5.59	18.88
2,300.00	14.10	339.27	2,192.48	333.82	-468.39	-468.39	8.00	-4.44	25.47
2,350.00	12.76	355.57	2,241.13	345.03	-470.97	-470.97	8.00	-2.69	32.58
2,400.00	12.58	13.86	2,289.93	355.82	-470.10	-470.10	8.00	-0.36	36.59
2,450.00	13.60	31.00	2,338.65	366.15	-465.76	-465.76	8.00	2.05	34.29
2,500.00	15.60	44.81	2,387.05	375.96	-457.99	-457.99	8.00	4.00	27.61
2,550.00	18.26	55.13	2,434.89	385.22	-446.82	-446.82	8.00	5.31	20.64
2,600.00	21.32	62.75	2,481.94	393.86	-432.31	-432.31	8.00	6.13	15.23
2,650.00	24.65	68.46	2,527.97	401.85	-414.52	-414.52	8.00	6.65	11.43
2,700.00	28.14	72.87	2,572.75	409.15	-393.55	-393.55	8.00	6.98	8.81
2,750.00	31.74	76.35	2,616.08	415.73	-369.50	-369.50	8.00	7.21	6.98
2,800.00	35.42	79.19	2,657.73	421.56	-342.47	-342.47	8.00	7.36	5.68
2,850.00	39.15	81.56	2,697.50	426.59	-312.61	-312.61	8.00	7.47	4.73
2,900.00	42.93	83.57	2,735.21	430.82	-280.07	-280.07	8.00	7.55	4.02
2,950.00	46.74	85.31	2,770.66	434.22	-244.99	-244.99	8.00	7.61	3.49
3,000.00	50.57	86.85	2,803.69	436.77	-207.55	-207.55	8.00	7.66	3.08
3,050.00	54.42	88.23	2,834.13	438.46	-167.93	-167.93	8.00	7.70	2.75
3,100.00	58.28	89.48	2,861.83	439.28	-126.32	-126.32	8.00	7.72	2.50
3,122.24	60.00	90.00	2,873.24	439.37	-107.23	-107.23	8.00	7.74	2.35
3,200.00	60.00	90.00	2,912.12	439.37	-39.89	-39.89	0.00	0.00	0.00
3,300.00	60.00	90.00	2,962.12	439.37	46.71	46.71	0.00	0.00	0.00
3,322.24	60.00	90.00	2,973.24	439.37	65.97	65.97	0.00	0.00	0.00
3,350.00	62.78	90.00	2,986.53	439.37	90.34	90.34	10.00	10.00	0.00
3,400.00	67.78	90.00	3,007.44	439.37	135.74	135.74	10.00	10.00	0.00
3,450.00	72.78	90.00	3,024.31	439.37	182.79	182.79	10.00	10.00	0.00
3,500.00	77.78	90.00	3,037.01	439.37	231.13	231.13	10.00	10.00	0.00
3,550.00	82.78	90.00	3,045.45	439.37	280.40	280.40	10.00	10.00	0.00
3,600.00	87.78	90.00	3,049.57	439.37	330.21	330.21	10.00	10.00	0.00

Planning Report

Database:	PRIME_EDM	Local Co-ordinate Reference:	Site ABACO STATE COM
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Site:	ABACO STATE COM	North Reference:	Grid
Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Wellbore:	110H OH		
Design:	Plan #2		

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)	
3,622.24	90.00	90.00	3,050.00	439.37	352.45	352.45	10.00	10.00	0.00	
3,700.00	90.00	90.00	3,050.00	439.38	430.21	430.21	0.00	0.00	0.00	
3,800.00	90.00	90.00	3,050.00	439.38	530.21	530.21	0.00	0.00	0.00	
3,900.00	90.00	90.00	3,050.00	439.39	630.21	630.21	0.00	0.00	0.00	
4,000.00	90.00	90.00	3,050.00	439.39	730.21	730.21	0.00	0.00	0.00	
4,100.00	90.00	90.00	3,050.00	439.40	830.21	830.21	0.00	0.00	0.00	
4,200.00	90.00	90.00	3,050.00	439.40	930.21	930.21	0.00	0.00	0.00	
4,300.00	90.00	90.00	3,050.00	439.41	1,030.21	1,030.21	0.00	0.00	0.00	
4,400.00	90.00	90.00	3,050.00	439.41	1,130.21	1,130.21	0.00	0.00	0.00	
4,500.00	90.00	90.00	3,050.00	439.41	1,230.21	1,230.21	0.00	0.00	0.00	
4,600.00	90.00	90.00	3,050.00	439.42	1,330.21	1,330.21	0.00	0.00	0.00	
4,700.00	90.00	90.00	3,050.00	439.42	1,430.21	1,430.21	0.00	0.00	0.00	
4,800.00	90.00	90.00	3,050.00	439.43	1,530.21	1,530.21	0.00	0.00	0.00	
4,900.00	90.00	90.00	3,050.00	439.43	1,630.21	1,630.21	0.00	0.00	0.00	
5,000.00	90.00	90.00	3,050.00	439.44	1,730.21	1,730.21	0.00	0.00	0.00	
5,100.00	90.00	90.00	3,050.00	439.44	1,830.21	1,830.21	0.00	0.00	0.00	
5,200.00	90.00	90.00	3,050.00	439.45	1,930.21	1,930.21	0.00	0.00	0.00	
5,300.00	90.00	90.00	3,050.00	439.45	2,030.21	2,030.21	0.00	0.00	0.00	
5,400.00	90.00	90.00	3,050.00	439.46	2,130.21	2,130.21	0.00	0.00	0.00	
5,500.00	90.00	90.00	3,050.00	439.46	2,230.21	2,230.21	0.00	0.00	0.00	
5,600.00	90.00	90.00	3,050.00	439.46	2,330.21	2,330.21	0.00	0.00	0.00	
5,700.00	90.00	90.00	3,050.00	439.47	2,430.21	2,430.21	0.00	0.00	0.00	
5,800.00	90.00	90.00	3,050.00	439.47	2,530.21	2,530.21	0.00	0.00	0.00	
5,900.00	90.00	90.00	3,050.00	439.48	2,630.21	2,630.21	0.00	0.00	0.00	
6,000.00	90.00	90.00	3,050.00	439.48	2,730.21	2,730.21	0.00	0.00	0.00	
6,100.00	90.00	90.00	3,050.00	439.49	2,830.21	2,830.21	0.00	0.00	0.00	
6,200.00	90.00	90.00	3,050.00	439.49	2,930.21	2,930.21	0.00	0.00	0.00	
6,300.00	90.00	90.00	3,050.00	439.50	3,030.21	3,030.21	0.00	0.00	0.00	
6,400.00	90.00	90.00	3,050.00	439.50	3,130.21	3,130.21	0.00	0.00	0.00	
6,500.00	90.00	90.00	3,050.00	439.51	3,230.21	3,230.21	0.00	0.00	0.00	
6,600.00	90.00	90.00	3,050.00	439.51	3,330.21	3,330.21	0.00	0.00	0.00	
6,700.00	90.00	90.00	3,050.00	439.51	3,430.21	3,430.21	0.00	0.00	0.00	
6,800.00	90.00	90.00	3,050.00	439.52	3,530.21	3,530.21	0.00	0.00	0.00	
6,900.00	90.00	90.00	3,050.00	439.52	3,630.21	3,630.21	0.00	0.00	0.00	
7,000.00	90.00	90.00	3,050.00	439.53	3,730.21	3,730.21	0.00	0.00	0.00	
7,100.00	90.00	90.00	3,050.00	439.53	3,830.21	3,830.21	0.00	0.00	0.00	
7,200.00	90.00	90.00	3,050.00	439.54	3,930.21	3,930.21	0.00	0.00	0.00	
7,300.00	90.00	90.00	3,050.00	439.54	4,030.21	4,030.21	0.00	0.00	0.00	
7,400.00	90.00	90.00	3,050.00	439.55	4,130.21	4,130.21	0.00	0.00	0.00	
7,500.00	90.00	90.00	3,050.00	439.55	4,230.21	4,230.21	0.00	0.00	0.00	
7,600.00	90.00	90.00	3,050.00	439.56	4,330.21	4,330.21	0.00	0.00	0.00	
7,700.00	90.00	90.00	3,050.00	439.56	4,430.21	4,430.21	0.00	0.00	0.00	
7,800.00	90.00	90.00	3,050.00	439.56	4,530.21	4,530.21	0.00	0.00	0.00	
7,900.00	90.00	90.00	3,050.00	439.57	4,630.21	4,630.21	0.00	0.00	0.00	
8,000.00	90.00	90.00	3,050.00	439.57	4,730.21	4,730.21	0.00	0.00	0.00	
8,100.00	90.00	90.00	3,050.00	439.58	4,830.21	4,830.21	0.00	0.00	0.00	
8,200.00	90.00	90.00	3,050.00	439.58	4,930.21	4,930.21	0.00	0.00	0.00	
8,300.00	90.00	90.00	3,050.00	439.59	5,030.21	5,030.21	0.00	0.00	0.00	
8,400.00	90.00	90.00	3,050.00	439.59	5,130.21	5,130.21	0.00	0.00	0.00	
8,500.00	90.00	90.00	3,050.00	439.60	5,230.21	5,230.21	0.00	0.00	0.00	
8,579.89	90.00	90.00	3,050.00	439.60	5,310.10	5,310.10	0.00	0.00	0.00	

Planning Report

Database:	PRIME_EDM	Local Co-ordinate Reference:	Site ABACO STATE COM
Company:	SPUR ENERGY PARTNERS LLC.	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Project:	Eddy County, NM (NAD83) NMEZ Grid	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site:	ABACO STATE COM	North Reference:	Grid
Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Wellbore:	110H OH		
Design:	Plan #2		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
ABACO 110H SHL 1641	0.00	0.00	0.00	0.00	0.00	661,159.700	608,582.100	32.8173650	-104.1144431
- plan hits target center									
- Point									
ABACO 110H KOP p2	0.00	0.00	1,995.77	283.69	-420.59	661,443.390	608,161.510	32.8181472	-104.1158102
- plan misses target center by 0.01usft at 2090.71usft MD (1995.77 TVD, 283.69 N, -420.59 E)									
- Point									
ABACO 110H LP p2	0.00	0.00	3,050.00	439.37	352.45	661,599.070	608,934.550	32.8185707	-104.1132928
- plan misses target center by 0.01usft at 3622.24usft MD (3050.00 TVD, 439.37 N, 352.45 E)									
- Point									
ABACO 110H LTP 2080I	0.00	0.00	3,050.00	439.70	5,260.10	661,599.400	613,842.200	32.8185425	-104.0973177
- plan misses target center by 29.89usft at 8500.00usft MD (3050.00 TVD, 439.60 N, 5230.21 E)									
- Point									
ABACO 110H PBHL 208	0.00	0.00	3,050.00	439.60	5,310.10	661,599.300	613,892.200	32.8185419	-104.0971549
- plan hits target center									
- Point									
ABACO 110H FTP 2080	0.00	0.00	3,050.00	439.50	171.20	661,599.200	608,753.300	32.8185721	-104.1138828
- plan misses target center by 28.00usft at 3447.76usft MD (3023.64 TVD, 439.37 N, 180.65 E)									
- Point									

SPUR ENERGY PARTNERS LLC.

**Eddy County, NM (NAD83) NMEZ Grid
ABACO STATE COM
ABACO STATE COM 110H**

**110H OH
Plan #2**

Anticollision Report

12 March, 2025

Anticollision Report

Company:	SPUR ENERGY PARTNERS LLC.	Local Co-ordinate Reference:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Reference	Plan #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 100.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Unknown AC limit!	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	03/12/25		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	8,579.89	Plan #2 (110H OH)	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						
ABACO STATE COM						
ABACO STATE COM 111H - 111H OH - 111H OH AsDrille						Out of range
ABACO STATE COM 111H - 111H OH - Plan #1						Out of range
ABACO STATE COM OFFSETS						
CP STATE COM 1 534120 AGW - 1 534120 - 1 534120 A	5,323.37	3,048.20	763.64	678.97	9.019	CC, ES
CP STATE COM 1 534120 AGW - 1 534120 - 1 534120 A	5,400.00	3,048.20	767.48	682.20	9.000	SF
HUMBLE-STATE 2 503014 AOW - 2 503014 - 2 503014 A	6,606.39	3,006.00	72.30	-22.96	0.759	Level 1, CC, ES, SF
HUMBLE-STATE 3 503007 OW - 3 503007 - 3 503007 AS						Out of range
HUMBLE-STATE 4 503008 OW - 4 503008 - 4 503008 As						Out of range
HUMBLE-STATE 6 503016 DHOS - 6-503016 - 6-503016	7,926.76	2,332.00	993.29	953.89	25.213	CC, ES
HUMBLE-STATE 6 503016 DHOS - 6-503016 - 6-503016	8,000.00	2,332.00	995.98	955.94	24.873	SF
MESQUITE SATE 2 530912 OW - 2 530912 - 2 530912 A	6,961.50	3,013.73	211.64	160.66	4.152	CC, ES, SF
MESQUITE STATE 11 11 531799 OW - 11 531799 - 11 53						Out of range
MESQUITE STATE 12 532159 OW - 12 532159 - 12 5321						Out of range
MESQUITE STATE 13 13 533692 OW - 13 533692 - 13 5	7,610.89	3,003.12	359.57	301.59	6.202	CC, ES, SF
MESQUITE STATE 14 14 534495 OW - 14 534495 - 14 5	8,291.78	2,999.43	232.61	111.67	1.923	CC, ES
MESQUITE STATE 14 14 534495 OW - 14 534495 - 14 5	8,300.00	2,999.43	232.76	111.73	1.923	SF
MESQUITE STATE 15 534496 OW - 15 534496 - 15 5344	6,972.75	3,015.00	323.64	218.31	3.073	CC, ES, SF
MESQUITE STATE 16 16 534497 OW - 16 534497 - 16 5	6,311.20	3,024.71	236.92	131.11	2.239	CC, ES, SF
MESQUITE STATE 3 530726 OW - 3 530726 - 3 530726						Out of range
MESQUITE STATE 4 530913 OW - 4 530913 - 4 530913						Out of range
MESQUITE STATE 5 530727 OW - 5 530727 - 5 530727	8,264.43	2,996.62	408.62	343.42	6.268	CC, ES, SF
MESQUITE STATE 6 530914 OW - 6 530914 - 6 530914	7,631.58	3,009.36	235.21	121.22	2.063	CC, ES, SF
MESQUITE STATE1 1 530037 OW - 1 530037 - 1 530037	6,312.82	3,021.51	423.21	321.41	4.157	CC, ES, SF
STATE S19 1 503002 AOW - 1 503002 - 1 503002 ASDR	798.07	776.57	782.17	765.97	48.284	CC
STATE S19 1 503002 AOW - 1 503002 - 1 503002 ASDR	1,000.00	974.06	783.29	762.90	38.404	ES
STATE S19 1 503002 AOW - 1 503002 - 1 503002 ASDR	1,100.00	1,005.00	787.84	766.59	37.071	SF
STATE S19 10 531108 OW - 10 531108 - 10 531108 AsDr	0.00	0.00	904.77			
STATE S19 10 531108 OW - 10 531108 - 10 531108 AsDr	300.00	277.00	904.48	900.75	242.880	CC, ES
STATE S19 11 530915 OW - 11 530915 - 11 530915 AsDr						Out of range
STATE S19 12 530729 OW - 12 530729 - 12 530729 AsD						Out of range
STATE S19 13 530916 OW - 13 530916 - 13 530916 AsD	5,652.67	3,031.62	296.41	204.12	3.212	CC, ES, SF
STATE S19 14 530944 OW - 14 530944 - 14 530944 AsD	4,978.80	3,050.63	218.47	188.64	7.324	CC, ES
STATE S19 14 530944 OW - 14 530944 - 14 530944 AsD	5,000.00	3,050.32	219.49	189.50	7.318	SF
STATE S19 15-15 530917 OW - 15 230917 - 15 230917 A	4,331.95	3,041.39	259.16	186.54	3.569	CC, ES, SF
STATE S19 16 531279 OW - 16 531279 - 16 531279 AsD	3,792.31	3,058.72	225.34	206.11	11.716	CC, ES
STATE S19 16 531279 OW - 16 531279 - 16 531279 AsD	3,800.00	3,058.84	225.47	206.20	11.696	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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

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						
ABACO STATE COM OFFSETS						
STATE S19 17 531503 - 17 531503 - 17 531503 AsDrilled	2,444.80	2,335.40	514.58	462.78	9.934	CC
STATE S19 17 531503 - 17 531503 - 17 531503 AsDrilled	2,450.00	2,340.50	514.60	462.67	9.910	ES
STATE S19 17 531503 - 17 531503 - 17 531503 AsDrilled	2,600.00	2,482.20	532.13	476.54	9.573	SF
STATE S19 18 531504 OW - 18 531504 - 18 531504 AsD	1,483.94	1,442.66	108.11	75.76	3.342	CC, ES
STATE S19 18 531504 OW - 18 531504 - 18 531504 AsD	1,500.00	1,457.30	108.54	75.81	3.316	SF
STATE S19 2 503001 AGW - 2 503001 - 2 503001 ASDR	5,651.09	2,450.00	627.52	591.48	17.412	CC, ES
STATE S19 2 503001 AGW - 2 503001 - 2 503001 ASDR	6,000.00	2,450.00	717.99	673.32	16.072	SF
STATE S19 21 532062 OW - 21 532062 - 21 532062 AsD						Out of range
STATE S19 22 532226 - 22 532226 - 22 532226 AsDrilled	5,142.67	3,036.27	423.86	339.47	5.023	CC, ES, SF
STATE S19 23 534825 OW - 23 534825 - 23 534825 AsD						Out of range
STATE S19 24 24 534826 OW - 24 534826 - 24 534826 A	5,551.33	3,034.82	121.92	20.48	1.202	Level 2, CC, ES, SF
STATE S19 25 25 534827 OW - 25 534827 - 25 534827 A						Out of range
STATE S19 26 534828 OW - 26 534828 - 26 534828 AsD	4,331.00	3,049.82	136.20	57.40	1.728	CC, ES, SF
STATE S19 27 534829 OW - 27 534829 - 27 534829 AsD						Out of range
STATE S19 28 534830 OW - 28 534830 - 28 534830 AsD	2,956.33	2,781.98	238.54	169.42	3.451	CC, ES, SF
STATE S19 29 535261 OW - 29 535261 - 29 535261 AsD	2,063.50	1,944.17	881.44	834.88	18.930	CC
STATE S19 29 535261 OW - 29 535261 - 29 535261 AsD	2,100.00	1,975.86	881.64	834.23	18.596	ES
STATE S19 29 535261 OW - 29 535261 - 29 535261 AsD	2,650.00	2,505.25	985.22	925.96	16.624	SF
STATE S19 32 535743 OW - 32 535743 - 32 535743 AsD						Out of range
STATE S19 33 535922 OW - 33 535922 - 33 535922 AsD	0.00	0.00	902.43			
STATE S19 33 535922 OW - 33 535922 - 33 535922 AsD	2,242.53	2,126.15	538.92	492.52	11.615	CC
STATE S19 33 535922 OW - 33 535922 - 33 535922 AsD	2,250.00	2,133.30	538.96	492.38	11.572	ES
STATE S19 4 524273 OW - 4 524273 - 4 524273 AsDrilled						Out of range
STATE S19 6 532502 OW - 6 532502 - 6 532502 AsDrilled	0.00	0.00	402.90			
STATE S19 6 532502 OW - 6 532502 - 6 532502 AsDrilled	321.48	307.93	402.32	401.03	311.061	CC, ES
STATE S19 7 529965 OW - 7 529965 - 7 529965 AsDrilled						Out of range
STATE S19 8 8 532241 OW - 8 532241 - 8 532241 AsDrill	0.00	0.00	735.04			
STATE S19 8 8 532241 OW - 8 532241 - 8 532241 AsDrill	114.88	102.88	734.93	734.67	2,798.717	CC
STATE S19 8 8 532241 OW - 8 532241 - 8 532241 AsDrill	200.00	183.90	735.17	734.48	1,078.294	ES
STATE S19 9 530728 OW - 9 530728 - 9 530728 AsDrilled						Out of range
STATE S19-1-1 522743 GW - 1-1 522743 - 1-1 522743 As						Out of range
STATE S19-3 524143 AOW - 3 524143 - 3 524143 AsDrill	4,001.64	3,047.29	95.67	20.50	1.273	Level 3, CC, ES, SF
TENNECO STATE 1 1 530603 OW - 1 530603 - 1 530603						Out of range
TENNECO STATE 2 530861 OW - 2 530861 - 2 530861 A						Out of range
TENNECO STATE 3 531480 OW - 3 531480 - 3 531480 A						Out of range
TENNECO STATE 4 532242 OW - 4 532242 - 4 532242						Out of range

Offset Design ABACO STATE COM OFFSETS - CP STATE COM 1 534120 AGW - 1 534120 - 1 534120 AsDrilled												Offset Site Error:	0.00 usft
Survey Program: 231-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
4,700.00	3,050.00	3,048.20	3,050.00	22.90	55.52	90.00	-324.19	2,053.61	985.77	911.04	74.73	13.192	
4,800.00	3,050.00	3,048.20	3,050.00	23.87	55.52	90.00	-324.19	2,053.61	925.78	849.43	76.35	12.126	
4,900.00	3,050.00	3,048.20	3,050.00	24.86	55.52	90.00	-324.19	2,053.61	873.15	795.06	78.09	11.181	
5,000.00	3,050.00	3,048.20	3,050.00	25.86	55.52	90.00	-324.19	2,053.61	829.29	749.40	79.89	10.381	
5,100.00	3,050.00	3,048.20	3,050.00	26.87	55.52	90.00	-324.19	2,053.61	795.64	714.01	81.63	9.747	
5,200.00	3,050.00	3,048.20	3,050.00	27.89	55.52	90.00	-324.19	2,053.61	773.54	690.35	83.19	9.298	
5,300.00	3,050.00	3,048.20	3,050.00	28.92	55.52	90.00	-324.19	2,053.61	764.00	679.56	84.44	9.048	
5,323.37	3,050.00	3,048.20	3,050.00	29.16	55.52	90.00	-324.19	2,053.61	763.64	678.97	84.67	9.019	CC, ES

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design		ABACO STATE COM OFFSETS - CP STATE COM 1 534120 AGW - 1 534120 - 1 534120 AsDrilled										Offset Site Error:	0.00 usft
Survey Program:		231-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
5,400.00	3,050.00	3,048.20	3,050.00	29.95	55.52	90.00	-324.19	2,053.61	767.48	682.20	85.27	9.000 SF	
5,500.00	3,050.00	3,048.20	3,050.00	30.99	55.52	90.00	-324.19	2,053.61	783.80	698.14	85.67	9.150	
5,600.00	3,050.00	3,048.20	3,050.00	32.04	55.52	90.00	-324.19	2,053.61	812.20	726.56	85.64	9.484	
5,700.00	3,050.00	3,048.20	3,050.00	33.09	55.52	90.00	-324.19	2,053.61	851.47	766.18	85.29	9.984	
5,800.00	3,050.00	3,048.20	3,050.00	34.15	55.52	90.00	-324.19	2,053.61	900.18	815.49	84.70	10.628	
5,900.00	3,050.00	3,048.20	3,050.00	35.21	55.52	90.00	-324.19	2,053.61	956.90	872.93	83.96	11.397	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 100-INC-ONLY												Offset Well Error:	0.00 usft
ABACO STATE COM OFFSETS - HUMBLE-STATE 2 503014 AOW - 2 503014 - 2 503014 AsDrilled													
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	
5,700.00	3,050.00	3,006.00	3,050.00	33.09	52.46	90.00	367.21	3,336.61	909.28	845.51	63.76	14.260	
5,800.00	3,050.00	3,006.00	3,050.00	34.15	52.46	90.00	367.21	3,336.61	809.63	745.71	63.92	12.666	
5,900.00	3,050.00	3,006.00	3,050.00	35.21	52.46	90.00	367.21	3,336.61	710.09	645.96	64.13	11.073	
6,000.00	3,050.00	3,006.00	3,050.00	36.28	52.46	90.00	367.21	3,336.61	610.69	546.27	64.43	9.479	
6,100.00	3,050.00	3,006.00	3,050.00	37.35	52.46	90.00	367.21	3,336.61	511.53	446.65	64.88	7.884	
6,200.00	3,050.00	3,006.00	3,050.00	38.42	52.46	90.00	367.21	3,336.61	412.78	347.15	65.63	6.290	
6,300.00	3,050.00	3,006.00	3,050.00	39.50	52.46	90.00	367.21	3,336.61	314.81	247.79	67.02	4.697	
6,400.00	3,050.00	3,006.00	3,050.00	40.57	52.46	90.00	367.21	3,336.61	218.69	148.64	70.05	3.122	
6,500.00	3,050.00	3,006.00	3,050.00	41.66	52.46	90.00	367.21	3,336.61	128.64	50.43	78.21	1.645	
6,600.00	3,050.00	3,006.00	3,050.00	42.74	52.46	90.00	367.21	3,336.61	72.58	-22.53	95.11	0.763 Level 1	
6,606.39	3,050.00	3,006.00	3,050.00	42.81	52.46	90.00	367.21	3,336.61	72.30	-22.96	95.27	0.759 Level 1, CC, ES, SF	
6,700.00	3,050.00	3,006.00	3,050.00	43.82	52.46	90.00	367.21	3,336.61	118.27	38.18	80.10	1.477 Level 3	
6,800.00	3,050.00	3,006.00	3,050.00	44.91	52.46	90.00	367.21	3,336.61	206.66	135.88	70.78	2.920	
6,900.00	3,050.00	3,006.00	3,050.00	46.00	52.46	90.00	367.21	3,336.61	302.37	234.90	67.48	4.481	
7,000.00	3,050.00	3,006.00	3,050.00	47.09	52.46	90.00	367.21	3,336.61	400.19	334.14	66.05	6.059	
7,100.00	3,050.00	3,006.00	3,050.00	48.19	52.46	90.00	367.21	3,336.61	498.87	433.53	65.34	7.635	
7,200.00	3,050.00	3,006.00	3,050.00	49.28	52.46	90.00	367.21	3,336.61	597.99	533.03	64.96	9.206	
7,300.00	3,050.00	3,006.00	3,050.00	50.38	52.46	90.00	367.21	3,336.61	697.36	632.62	64.74	10.772	
7,400.00	3,050.00	3,006.00	3,050.00	51.48	52.46	90.00	367.21	3,336.61	796.89	732.28	64.61	12.333	
7,500.00	3,050.00	3,006.00	3,050.00	52.58	52.46	90.00	367.21	3,336.61	896.52	831.98	64.54	13.890	
7,600.00	3,050.00	3,006.00	3,050.00	53.68	52.46	90.00	367.21	3,336.61	996.23	931.72	64.51	15.444	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design	ABACO STATE COM OFFSETS - HUMBLE-STATE 6 503016 DHOS - 6-503016 - 6-503016 AsDrilled											Offset Site Error:	0.00 usft
Survey Program:	100-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	
7,900.00	3,050.00	2,332.00	2,090.00	56.98	33.72	-14.88	694.56	4,656.96	993.65	954.40	39.25	25.317	
7,926.76	3,050.00	2,332.00	2,090.00	57.28	33.72	-14.88	694.56	4,656.96	993.29	953.89	39.40	25.213 CC, ES	
8,000.00	3,050.00	2,332.00	2,090.00	58.09	33.72	-14.88	694.56	4,656.96	995.98	955.94	40.04	24.873 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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 100-Gyrodata New 2-16-16												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	
6,000.00	3,050.00	3,017.25	3,055.11	36.28	4.37	-91.38	651.13	3,691.69	984.52	967.46	17.06	57.721	
6,100.00	3,050.00	3,016.89	3,054.74	37.35	4.37	-91.28	651.13	3,691.69	887.11	869.43	17.68	50.166	
6,200.00	3,050.00	3,016.53	3,054.38	38.42	4.37	-91.19	651.14	3,691.69	790.36	771.83	18.53	42.649	
6,300.00	3,050.00	3,016.16	3,054.02	39.50	4.37	-91.09	651.14	3,691.70	694.53	674.83	19.70	35.247	
6,400.00	3,050.00	3,015.80	3,053.65	40.57	4.36	-90.99	651.14	3,691.70	600.06	578.70	21.36	28.089	
6,500.00	3,050.00	3,015.43	3,053.29	41.66	4.36	-90.89	651.14	3,691.70	507.72	483.95	23.76	21.365	
6,600.00	3,050.00	3,015.06	3,052.92	42.74	4.36	-90.79	651.15	3,691.70	418.90	391.57	27.32	15.332	
6,700.00	3,050.00	3,014.70	3,052.55	43.82	4.36	-90.69	651.15	3,691.70	336.41	303.77	32.64	10.306	
6,800.00	3,050.00	3,014.33	3,052.18	44.91	4.36	-90.59	651.15	3,691.70	266.22	226.01	40.22	6.620	
6,900.00	3,050.00	3,013.96	3,051.81	46.00	4.36	-90.49	651.16	3,691.70	220.39	171.99	48.40	4.553	
6,961.50	3,050.00	3,013.73	3,051.58	46.67	4.36	-90.43	651.16	3,691.71	211.64	160.66	50.98	4.152 CC, ES, SF	
7,000.00	3,050.00	3,013.58	3,051.44	47.09	4.36	-90.39	651.16	3,691.71	215.11	164.32	50.79	4.235	
7,100.00	3,050.00	3,013.21	3,051.07	48.19	4.36	-90.29	651.16	3,691.71	252.92	207.50	45.43	5.568	
7,200.00	3,050.00	3,012.84	3,050.69	49.28	4.36	-90.19	651.16	3,691.71	318.86	280.30	38.55	8.270	
7,300.00	3,050.00	3,012.46	3,050.32	50.38	4.36	-90.09	651.17	3,691.71	399.21	365.98	33.23	12.014	
7,400.00	3,050.00	3,012.08	3,049.94	51.48	4.36	-89.98	651.17	3,691.71	486.89	457.40	29.50	16.507	
7,500.00	3,050.00	3,011.70	3,049.56	52.58	4.36	-89.88	651.17	3,691.71	578.59	551.70	26.88	21.522	
7,600.00	3,050.00	3,011.32	3,049.18	53.68	4.36	-89.78	651.18	3,691.71	672.65	647.64	25.01	26.892	
7,700.00	3,050.00	3,010.94	3,048.80	54.78	4.36	-89.67	651.18	3,691.72	768.22	744.57	23.64	32.494	
7,800.00	3,050.00	3,010.56	3,048.42	55.88	4.36	-89.57	651.18	3,691.72	864.78	842.17	22.61	38.245	
7,900.00	3,050.00	3,010.18	3,048.03	56.98	4.36	-89.47	651.18	3,691.72	962.05	940.23	21.82	44.085	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design		ABACO STATE COM OFFSETS - MESQUITE STATE 13 13 533692 OW - 13 533692 - 13 533692 AsDril										Offset Site Error:	0.00 usft
Survey Program:		100-Gyrodata New 2-16-16										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
6,700.00	3,050.00	3,008.95	3,056.71	43.82	4.29	91.07	80.01	4,341.08	979.27	955.19	24.08	40.662	
6,800.00	3,050.00	3,008.32	3,056.08	44.91	4.29	90.97	80.00	4,341.08	887.02	861.18	25.84	34.327	
6,900.00	3,050.00	3,007.68	3,055.44	46.00	4.29	90.87	80.00	4,341.09	796.64	768.61	28.02	28.428	
7,000.00	3,050.00	3,007.05	3,054.81	47.09	4.28	90.77	80.00	4,341.09	708.84	678.09	30.76	23.047	
7,100.00	3,050.00	3,006.41	3,054.17	48.19	4.28	90.66	80.00	4,341.09	624.73	590.54	34.19	18.273	
7,200.00	3,050.00	3,005.77	3,053.53	49.28	4.28	90.56	80.00	4,341.10	546.00	507.52	38.47	14.192	
7,300.00	3,050.00	3,005.13	3,052.89	50.38	4.28	90.46	80.00	4,341.10	475.33	431.66	43.66	10.886	
7,400.00	3,050.00	3,004.48	3,052.24	51.48	4.28	90.36	80.00	4,341.11	416.85	367.37	49.47	8.426	
7,500.00	3,050.00	3,003.84	3,051.60	52.58	4.28	90.25	79.99	4,341.11	376.28	321.44	54.84	6.862	
7,600.00	3,050.00	3,003.19	3,050.95	53.68	4.28	90.15	79.99	4,341.12	359.73	301.86	57.87	6.217	
7,610.89	3,050.00	3,003.12	3,050.88	53.80	4.28	90.14	79.99	4,341.12	359.57	301.59	57.98	6.202 CC, ES, SF	
7,700.00	3,050.00	3,002.54	3,050.30	54.78	4.28	90.05	79.99	4,341.12	370.44	313.26	57.18	6.478	
7,800.00	3,050.00	3,001.88	3,049.64	55.88	4.28	89.94	79.99	4,341.12	406.26	352.78	53.48	7.596	
7,900.00	3,050.00	3,001.23	3,048.99	56.98	4.28	89.84	79.99	4,341.13	461.38	412.78	48.60	9.494	
8,000.00	3,050.00	3,000.57	3,048.33	58.09	4.27	89.73	79.99	4,341.13	529.80	485.93	43.87	12.077	
8,100.00	3,050.00	2,999.91	3,047.67	59.19	4.27	89.63	79.98	4,341.14	607.05	567.25	39.80	15.253	
8,200.00	3,050.00	2,999.26	3,047.02	60.30	4.27	89.52	79.98	4,341.14	690.16	653.70	36.46	18.929	
8,300.00	3,050.00	2,998.60	3,046.36	61.41	4.27	89.42	79.98	4,341.15	777.26	743.50	33.76	23.024	
8,400.00	3,050.00	2,997.95	3,045.71	62.51	4.27	89.32	79.98	4,341.15	867.15	835.58	31.58	27.462	
8,500.00	3,050.00	2,997.29	3,045.05	63.62	4.27	89.21	79.98	4,341.15	959.05	929.24	29.80	32.181	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design		ABACO STATE COM OFFSETS - MESQUITE STATE 14 14 534495 OW - 14 534495 - 14 534495 AsDri										Offset Site Error:	0.00 usft
Survey Program:		152-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	
7,400.00	3,050.00	2,999.43	3,050.00	51.48	59.63	-90.00	672.20	5,021.98	921.62	845.44	76.18	12.098	
7,500.00	3,050.00	2,999.43	3,050.00	52.58	59.63	-90.00	672.20	5,021.98	825.24	747.70	77.54	10.643	
7,600.00	3,050.00	2,999.43	3,050.00	53.68	59.63	-90.00	672.20	5,021.98	729.84	650.50	79.34	9.199	
7,700.00	3,050.00	2,999.43	3,050.00	54.78	59.63	-90.00	672.20	5,021.98	635.86	554.10	81.76	7.777	
7,800.00	3,050.00	2,999.43	3,050.00	55.88	59.63	-90.00	672.20	5,021.98	544.02	458.93	85.09	6.394	
7,900.00	3,050.00	2,999.43	3,050.00	56.98	59.63	-90.00	672.20	5,021.98	455.63	365.88	89.75	5.076	
8,000.00	3,050.00	2,999.43	3,050.00	58.09	59.63	-90.00	672.20	5,021.98	373.16	276.80	96.36	3.873	
8,100.00	3,050.00	2,999.43	3,050.00	59.19	59.63	-90.00	672.20	5,021.98	301.48	196.10	105.38	2.861	
8,200.00	3,050.00	2,999.43	3,050.00	60.30	59.63	-90.00	672.20	5,021.98	250.07	134.50	115.57	2.164	
8,291.78	3,050.00	2,999.43	3,050.00	61.31	59.63	-90.00	672.20	5,021.98	232.61	111.67	120.94	1.923 CC, ES	
8,300.00	3,050.00	2,999.43	3,050.00	61.41	59.63	-90.00	672.20	5,021.98	232.76	111.73	121.03	1.923 SF	
8,400.00	3,050.00	2,999.43	3,050.00	62.51	59.63	-90.00	672.20	5,021.98	256.55	139.64	116.91	2.194	
8,500.00	3,050.00	2,999.43	3,050.00	63.62	59.63	-90.00	672.20	5,021.98	312.19	203.88	108.31	2.882	
8,579.89	3,050.00	2,999.43	3,050.00	64.51	59.63	-90.00	672.20	5,021.98	370.29	268.35	101.94	3.633	
8,580.29	3,050.00	2,999.43	3,050.00	64.51	59.63	-90.00	672.20	5,021.98	370.60	268.14	102.46	3.617	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design		ABACO STATE COM OFFSETS - MESQUITE STATE 15 534496 OW - 15 534496 - 15 534496 AsDrilled										Offset Site Error:	0.00 usft
Survey Program:		482-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	
6,100.00	3,050.00	3,015.00	3,048.61	37.35	58.55	89.75	115.89	3,702.97	930.82	855.17	75.65	12.304	
6,200.00	3,050.00	3,015.00	3,048.61	38.42	58.55	89.75	115.89	3,702.97	837.78	760.69	77.10	10.867	
6,300.00	3,050.00	3,015.00	3,048.61	39.50	58.55	89.75	115.89	3,702.97	746.55	667.61	78.94	9.457	
6,400.00	3,050.00	3,015.00	3,048.61	40.57	58.55	89.75	115.89	3,702.97	657.86	576.55	81.31	8.090	
6,500.00	3,050.00	3,015.00	3,048.61	41.66	58.55	89.75	115.89	3,702.97	572.92	488.52	84.39	6.789	
6,600.00	3,050.00	3,015.00	3,048.61	42.74	58.55	89.75	115.89	3,702.97	493.64	405.28	88.37	5.586	
6,700.00	3,050.00	3,015.00	3,048.61	43.82	58.55	89.75	115.89	3,702.97	423.24	329.93	93.32	4.536	
6,800.00	3,050.00	3,015.00	3,048.61	44.91	58.55	89.75	115.89	3,702.97	366.86	267.98	98.88	3.710	
6,900.00	3,050.00	3,015.00	3,048.61	46.00	58.55	89.75	115.89	3,702.97	331.72	228.06	103.66	3.200	
6,972.75	3,050.00	3,015.00	3,048.61	46.80	58.55	89.75	115.89	3,702.97	323.64	218.31	105.33	3.073 CC, ES, SF	
7,000.00	3,050.00	3,015.00	3,048.61	47.09	58.55	89.75	115.89	3,702.97	324.79	219.38	105.40	3.081	
7,100.00	3,050.00	3,015.00	3,048.61	48.19	58.55	89.75	115.89	3,702.97	347.76	244.48	103.28	3.367	
7,200.00	3,050.00	3,015.00	3,048.61	49.28	58.55	89.75	115.89	3,702.97	395.46	296.52	98.94	3.997	
7,300.00	3,050.00	3,015.00	3,048.61	50.38	58.55	89.75	115.89	3,702.97	460.26	365.94	94.32	4.880	
7,400.00	3,050.00	3,015.00	3,048.61	51.48	58.55	89.75	115.89	3,702.97	535.99	445.67	90.32	5.934	
7,500.00	3,050.00	3,015.00	3,048.61	52.58	58.55	89.75	115.89	3,702.97	618.66	531.56	87.10	7.103	
7,600.00	3,050.00	3,015.00	3,048.61	53.68	58.55	89.75	115.89	3,702.97	705.83	621.26	84.56	8.347	
7,700.00	3,050.00	3,015.00	3,048.61	54.78	58.55	89.75	115.89	3,702.97	796.02	713.45	82.56	9.641	
7,800.00	3,050.00	3,015.00	3,048.61	55.88	58.55	89.75	115.89	3,702.97	888.31	807.33	80.98	10.970	
7,900.00	3,050.00	3,015.00	3,048.61	56.98	58.55	89.75	115.89	3,702.97	982.11	902.40	79.71	12.321	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design		ABACO STATE COM OFFSETS - MESQUITE STATE 16 16 534497 OW - 16 534497 - 16 534497 AsDril										Offset Site Error:	0.00 usft
Survey Program:		157-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	3,050.00	3,024.71	3,050.00	29.95	66.21	-90.00	676.42	3,041.45	941.55	862.83	78.71	11.962	
5,500.00	3,050.00	3,024.71	3,050.00	30.99	66.21	-90.00	676.42	3,041.45	845.14	765.81	79.33	10.653	
5,600.00	3,050.00	3,024.71	3,050.00	32.04	66.21	-90.00	676.42	3,041.45	749.67	669.48	80.19	9.349	
5,700.00	3,050.00	3,024.71	3,050.00	33.09	66.21	-90.00	676.42	3,041.45	655.56	574.17	81.40	8.054	
5,800.00	3,050.00	3,024.71	3,050.00	34.15	66.21	-90.00	676.42	3,041.45	563.48	480.36	83.12	6.779	
5,900.00	3,050.00	3,024.71	3,050.00	35.21	66.21	-90.00	676.42	3,041.45	474.62	388.98	85.63	5.542	
6,000.00	3,050.00	3,024.71	3,050.00	36.28	66.21	-90.00	676.42	3,041.45	391.17	301.85	89.31	4.380	
6,100.00	3,050.00	3,024.71	3,050.00	37.35	66.21	-90.00	676.42	3,041.45	317.43	222.87	94.55	3.357	
6,200.00	3,050.00	3,024.71	3,050.00	38.42	66.21	-90.00	676.42	3,041.45	261.74	160.76	100.98	2.592	
6,300.00	3,050.00	3,024.71	3,050.00	39.50	66.21	-90.00	676.42	3,041.45	237.19	131.57	105.62	2.246	
6,311.20	3,050.00	3,024.71	3,050.00	39.62	66.21	-90.00	676.42	3,041.45	236.92	131.11	105.82	2.239 CC, ES, SF	
6,400.00	3,050.00	3,024.71	3,050.00	40.57	66.21	-90.00	676.42	3,041.45	253.00	148.34	104.66	2.417	
6,500.00	3,050.00	3,024.71	3,050.00	41.66	66.21	-90.00	676.42	3,041.45	302.92	202.93	99.98	3.030	
6,600.00	3,050.00	3,024.71	3,050.00	42.74	66.21	-90.00	676.42	3,041.45	373.51	278.28	95.23	3.922	
6,700.00	3,050.00	3,024.71	3,050.00	43.82	66.21	-90.00	676.42	3,041.45	455.26	363.69	91.57	4.972	
6,800.00	3,050.00	3,024.71	3,050.00	44.91	66.21	-90.00	676.42	3,041.45	543.15	454.24	88.90	6.109	
6,900.00	3,050.00	3,024.71	3,050.00	46.00	66.21	-90.00	676.42	3,041.45	634.63	547.66	86.98	7.297	
7,000.00	3,050.00	3,024.71	3,050.00	47.09	66.21	-90.00	676.42	3,041.45	728.36	642.81	85.55	8.513	
7,100.00	3,050.00	3,024.71	3,050.00	48.19	66.21	-90.00	676.42	3,041.45	823.56	739.08	84.48	9.748	
7,200.00	3,050.00	3,024.71	3,050.00	49.28	66.21	-90.00	676.42	3,041.45	919.79	836.12	83.67	10.994	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 100-Gyrodata New 2-16-16												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
7,400.00	3,050.00	3,010.02	3,063.65	51.48	4.29	91.91	30.98	4,994.44	956.04	926.69	29.35	32.572	
7,500.00	3,050.00	3,008.49	3,062.12	52.58	4.29	91.70	30.98	4,994.46	866.70	834.88	31.82	27.240	
7,600.00	3,050.00	3,006.96	3,060.59	53.68	4.29	91.48	30.98	4,994.49	779.95	745.13	34.82	22.402	
7,700.00	3,050.00	3,005.42	3,059.05	54.78	4.29	91.27	30.98	4,994.51	696.75	658.28	38.47	18.112	
7,800.00	3,050.00	3,003.88	3,057.51	55.88	4.28	91.05	30.97	4,994.54	618.55	575.66	42.89	14.422	
7,900.00	3,050.00	3,002.33	3,055.96	56.98	4.28	90.84	30.97	4,994.56	547.48	499.37	48.11	11.379	
8,000.00	3,050.00	3,000.77	3,054.40	58.09	4.28	90.62	30.97	4,994.59	486.69	432.75	53.94	9.022	
8,100.00	3,050.00	2,999.20	3,052.83	59.19	4.28	90.40	30.97	4,994.61	440.45	380.78	59.67	7.381	
8,200.00	3,050.00	2,997.63	3,051.26	60.30	4.27	90.18	30.97	4,994.63	413.66	349.72	63.94	6.470	
8,264.43	3,050.00	2,996.62	3,050.25	61.01	4.27	90.04	30.97	4,994.65	408.62	343.42	65.19	6.268	CC, ES, SF
8,300.00	3,050.00	2,996.06	3,049.69	61.41	4.27	89.96	30.97	4,994.66	410.16	344.89	65.27	6.284	
8,400.00	3,050.00	2,994.49	3,048.13	62.51	4.27	89.74	30.97	4,994.68	430.52	367.22	63.30	6.801	
8,500.00	3,050.00	2,992.93	3,046.56	63.62	4.27	89.52	30.97	4,994.71	471.65	412.54	59.11	7.979	
8,579.89	3,050.00	2,991.68	3,045.31	64.51	4.27	89.34	30.97	4,994.73	516.20	461.04	55.16	9.359	
8,580.29	3,050.00	2,991.67	3,045.30	64.51	4.27	89.34	30.97	4,994.73	516.44	461.10	55.34	9.332	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design		ABACO STATE COM OFFSETS - MESQUITE STATE 6 530914 OW - 6 530914 - 6 530914 AsDrilled										Offset Site Error:	0.00 usft
Survey Program:		380-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	
6,700.00	3,050.00	3,009.36	3,050.96	43.82	59.98	-90.23	674.76	4,361.78	960.82	886.07	74.74	12.855	
6,800.00	3,050.00	3,009.36	3,050.96	44.91	59.98	-90.23	674.76	4,361.78	864.21	788.44	75.76	11.407	
6,900.00	3,050.00	3,009.36	3,050.96	46.00	59.98	-90.23	674.76	4,361.78	768.46	691.35	77.11	9.965	
7,000.00	3,050.00	3,009.36	3,050.96	47.09	59.98	-90.23	674.76	4,361.78	673.96	595.02	78.93	8.538	
7,100.00	3,050.00	3,009.36	3,050.96	48.19	59.98	-90.23	674.76	4,361.78	581.29	499.85	81.44	7.138	
7,200.00	3,050.00	3,009.36	3,050.96	49.28	59.98	-90.23	674.76	4,361.78	491.51	406.56	84.96	5.785	
7,300.00	3,050.00	3,009.36	3,050.96	50.38	59.98	-90.23	674.76	4,361.78	406.53	316.58	89.96	4.519	
7,400.00	3,050.00	3,009.36	3,050.96	51.48	59.98	-90.23	674.76	4,361.78	330.08	233.11	96.97	3.404	
7,500.00	3,050.00	3,009.36	3,050.96	52.58	59.98	-90.23	674.76	4,361.78	269.51	163.72	105.80	2.547	
7,600.00	3,050.00	3,009.36	3,050.96	53.68	59.98	-90.23	674.76	4,361.78	237.32	124.24	113.08	2.099	
7,631.58	3,050.00	3,009.36	3,050.96	54.02	59.98	-90.23	674.76	4,361.78	235.21	121.22	113.99	2.063 CC, ES, SF	
7,700.00	3,050.00	3,009.36	3,050.96	54.78	59.98	-90.23	674.76	4,361.78	244.96	132.05	112.90	2.170	
7,800.00	3,050.00	3,009.36	3,050.96	55.88	59.98	-90.23	674.76	4,361.78	289.29	182.88	106.41	2.719	
7,900.00	3,050.00	3,009.35	3,050.96	56.98	59.98	-90.23	674.76	4,361.78	356.89	257.69	99.20	3.598	
8,000.00	3,050.00	3,009.35	3,050.96	58.09	59.98	-90.23	674.76	4,361.78	437.10	343.60	93.50	4.675	
8,100.00	3,050.00	3,009.35	3,050.96	59.19	59.98	-90.23	674.76	4,361.78	524.16	434.82	89.33	5.867	
8,200.00	3,050.00	3,009.35	3,050.96	60.30	59.98	-90.23	674.76	4,361.78	615.16	528.86	86.30	7.128	
8,300.00	3,050.00	3,009.35	3,050.96	61.41	59.98	-90.23	674.76	4,361.78	708.59	624.53	84.06	8.429	
8,400.00	3,050.00	3,009.35	3,050.96	62.51	59.98	-90.23	674.76	4,361.78	803.61	721.24	82.37	9.756	
8,500.00	3,050.00	3,009.35	3,050.96	63.62	59.98	-90.23	674.76	4,361.78	899.71	818.64	81.07	11.098	
8,579.89	3,050.00	3,009.35	3,050.96	64.51	59.98	-90.23	674.76	4,361.78	977.04	896.80	80.24	12.177	
8,580.29	3,050.00	3,009.35	3,050.96	64.51	59.98	-90.23	674.76	4,361.78	977.43	895.56	81.86	11.940	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design		ABACO STATE COM OFFSETS - MESQUITE STATE1 1 530037 OW - 1 530037 - 1 530037 AsDrilled										Offset Site Error:	0.00 usft
Survey Program:		328-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
5,500.00	3,050.00	3,021.51	3,050.00	30.99	62.17	90.00	16.29	3,043.04	916.39	836.54	79.85	11.476	
5,600.00	3,050.00	3,021.51	3,050.00	32.04	62.17	90.00	16.29	3,043.04	828.98	747.51	81.47	10.175	
5,700.00	3,050.00	3,021.51	3,050.00	33.09	62.17	90.00	16.29	3,043.04	744.74	661.26	83.48	8.921	
5,800.00	3,050.00	3,021.51	3,050.00	34.15	62.17	90.00	16.29	3,043.04	664.89	578.93	85.96	7.735	
5,900.00	3,050.00	3,021.51	3,050.00	35.21	62.17	90.00	16.29	3,043.04	591.20	502.23	88.97	6.645	
6,000.00	3,050.00	3,021.51	3,050.00	36.28	62.17	90.00	16.29	3,043.04	526.27	433.80	92.47	5.691	
6,100.00	3,050.00	3,021.51	3,050.00	37.35	62.17	90.00	16.29	3,043.04	473.70	377.49	96.22	4.923	
6,200.00	3,050.00	3,021.51	3,050.00	38.42	62.17	90.00	16.29	3,043.04	437.98	338.40	99.59	4.398	
6,300.00	3,050.00	3,021.51	3,050.00	39.50	62.17	90.00	16.29	3,043.04	423.40	321.73	101.67	4.165	
6,312.82	3,050.00	3,021.51	3,050.00	39.63	62.17	90.00	16.29	3,043.04	423.21	321.41	101.80	4.157 CC, ES, SF	
6,400.00	3,050.00	3,021.51	3,050.00	40.57	62.17	90.00	16.29	3,043.04	432.09	330.28	101.81	4.244	
6,500.00	3,050.00	3,021.51	3,050.00	41.66	62.17	90.00	16.29	3,043.04	462.76	362.54	100.22	4.617	
6,600.00	3,050.00	3,021.51	3,050.00	42.74	62.17	90.00	16.29	3,043.04	511.45	413.79	97.66	5.237	
6,700.00	3,050.00	3,021.51	3,050.00	43.82	62.17	90.00	16.29	3,043.04	573.60	478.74	94.86	6.047	
6,800.00	3,050.00	3,021.51	3,050.00	44.91	62.17	90.00	16.29	3,043.04	645.33	553.08	92.25	6.995	
6,900.00	3,050.00	3,021.51	3,050.00	46.00	62.17	90.00	16.29	3,043.04	723.81	633.83	89.98	8.044	
7,000.00	3,050.00	3,021.51	3,050.00	47.09	62.17	90.00	16.29	3,043.04	807.05	719.00	88.05	9.165	
7,100.00	3,050.00	3,021.51	3,050.00	48.19	62.17	90.00	16.29	3,043.04	893.74	807.29	86.45	10.338	
7,200.00	3,050.00	3,021.51	3,050.00	49.28	62.17	90.00	16.29	3,043.04	982.96	897.85	85.11	11.549	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design		ABACO STATE COM OFFSETS - STATE S19 1 503002 AOW - 1 503002 - 1 503002 ASDRILLED										Offset Site Error:	0.00 usft
Survey Program:		100-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	
0.00	0.00	0.00	19.00	0.00	0.00	30.84	672.60	401.58	783.59				
100.00	100.00	81.00	100.00	0.14	1.41	30.84	672.60	401.58	783.36	781.81	1.56	503.077	
200.00	200.00	181.00	200.00	0.50	3.16	30.84	672.60	401.58	783.36	779.70	3.66	213.981	
300.00	300.00	281.00	300.00	0.86	4.90	30.84	672.60	401.58	783.36	777.60	5.76	135.889	
400.00	399.98	380.98	399.98	1.22	6.65	86.97	672.60	401.58	783.27	775.40	7.86	99.591	
500.00	499.84	480.84	499.84	1.58	8.39	87.36	672.60	401.58	783.01	773.05	9.96	78.596	
600.00	599.45	580.45	599.45	1.94	10.13	88.00	672.60	401.58	782.65	770.60	12.06	64.904	
700.00	698.70	679.70	698.70	2.30	11.86	88.89	672.60	401.58	782.32	768.17	14.15	55.282	
798.07	795.57	776.57	795.57	2.65	13.55	90.00	672.60	401.58	782.17	765.97	16.20	48.284	CC
800.00	797.47	778.47	797.47	2.66	13.59	90.02	672.60	401.58	782.17	765.93	16.24	48.164	
900.00	895.62	876.62	895.62	3.03	15.30	91.39	672.60	401.58	782.41	764.09	18.32	42.704	
1,000.00	993.06	974.06	993.06	3.40	17.00	92.98	672.60	401.58	783.29	762.90	20.40	38.404	ES
1,100.00	1,089.64	1,005.00	1,024.00	3.78	17.54	93.44	672.60	401.58	787.84	766.59	21.25	37.071	SF
1,200.00	1,185.27	1,005.00	1,024.00	4.17	17.54	93.11	672.60	401.58	804.50	783.18	21.31	37.744	
1,300.00	1,279.82	1,005.00	1,024.00	4.58	17.54	92.51	672.60	401.58	833.08	811.94	21.15	39.397	
1,400.00	1,373.17	1,005.00	1,024.00	4.99	17.54	91.65	672.60	401.58	872.39	851.59	20.81	41.924	
1,500.00	1,465.21	1,005.00	1,024.00	5.41	17.54	90.54	672.60	401.58	921.02	900.64	20.37	45.204	
1,600.00	1,555.84	1,005.00	1,024.00	5.85	17.54	89.17	672.60	401.58	977.51	957.61	19.90	49.109	
1,615.00	1,569.31	1,005.00	1,024.00	5.92	17.54	88.94	672.60	401.58	986.58	966.75	19.83	49.742	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design		ABACO STATE COM OFFSETS - STATE S19 10 531108 OW - 10 531108 - 10 531108 AsDrilled										Offset Site Error:	0.00 usft
Survey Program:		420-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
0.00	0.00	0.00	23.00	0.00	0.00	153.44	-809.05	404.37	904.77				
100.00	100.00	77.00	100.00	0.14	0.80	153.44	-809.05	404.37	904.48	903.54	0.94	962.805	
200.00	200.00	177.00	200.00	0.50	1.83	153.44	-809.05	404.37	904.48	902.14	2.33	387.905	
300.00	300.00	277.00	300.00	0.86	2.86	153.44	-809.05	404.37	904.48	900.75	3.72	242.880 CC, ES	
400.00	399.98	376.98	399.98	1.22	3.90	-150.60	-809.05	404.37	906.00	900.88	5.11	177.172	
500.00	499.84	476.86	499.84	1.58	5.50	-150.71	-809.05	404.37	910.56	903.48	7.08	128.629	
600.00	599.45	576.47	599.45	1.94	7.54	-150.90	-809.05	404.37	918.18	908.70	9.48	96.895	
700.00	698.70	674.13	697.10	2.30	9.54	-151.18	-808.19	404.37	928.09	916.26	11.83	78.422	
800.00	797.47	769.57	792.53	2.66	11.49	-151.48	-808.56	404.37	942.20	928.05	14.15	66.593	
900.00	895.62	872.69	895.62	3.03	13.54	-151.87	-809.05	404.37	959.49	942.92	16.56	57.930	
1,000.00	993.06	970.13	993.06	3.40	15.38	-152.30	-809.05	404.37	979.48	960.71	18.77	52.188	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design		ABACO STATE COM OFFSETS - STATE S19 13 530916 OW - 13 530916 - 13 530916 AsDrilled										Offset Site Error:	0.00 usft
Survey Program:		375-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	
4,700.00	3,050.00	3,031.62	3,047.21	22.90	59.72	89.46	143.07	2,382.90	997.72	925.60	72.13	13.833	
4,800.00	3,050.00	3,031.62	3,047.21	23.87	59.72	89.46	143.07	2,382.90	902.73	830.03	72.70	12.417	
4,900.00	3,050.00	3,031.62	3,047.21	24.86	59.72	89.46	143.07	2,382.90	808.94	735.47	73.47	11.011	
5,000.00	3,050.00	3,031.62	3,047.21	25.86	59.72	89.46	143.07	2,382.90	716.83	642.33	74.50	9.622	
5,100.00	3,050.00	3,031.62	3,047.21	26.87	59.72	89.46	143.07	2,382.90	627.15	551.25	75.90	8.263	
5,200.00	3,050.00	3,031.62	3,047.21	27.89	59.72	89.46	143.07	2,382.90	541.09	463.26	77.83	6.953	
5,300.00	3,050.00	3,031.62	3,047.21	28.92	59.72	89.46	143.07	2,382.90	460.70	380.24	80.46	5.726	
5,400.00	3,050.00	3,031.62	3,047.21	29.95	59.72	89.46	143.07	2,382.90	389.49	305.57	83.92	4.641	
5,500.00	3,050.00	3,031.62	3,047.21	30.99	59.72	89.46	143.07	2,382.90	333.42	245.45	87.98	3.790	
5,600.00	3,050.00	3,031.62	3,047.21	32.04	59.72	89.46	143.07	2,382.90	301.05	209.64	91.41	3.293	
5,652.67	3,050.00	3,031.62	3,047.21	32.60	59.72	89.46	143.07	2,382.90	296.41	204.12	92.29	3.212 CC, ES, SF	
5,700.00	3,050.00	3,031.62	3,047.21	33.09	59.72	89.46	143.07	2,382.90	300.16	207.85	92.32	3.252	
5,800.00	3,050.00	3,031.62	3,047.21	34.15	59.72	89.46	143.07	2,382.90	331.00	240.64	90.36	3.663	
5,900.00	3,050.00	3,031.62	3,047.21	35.21	59.72	89.46	143.07	2,382.90	386.04	298.84	87.20	4.427	
6,000.00	3,050.00	3,031.62	3,047.21	36.28	59.72	89.46	143.07	2,382.90	456.61	372.43	84.18	5.424	
6,100.00	3,050.00	3,031.62	3,047.21	37.35	59.72	89.46	143.07	2,382.90	536.62	454.89	81.73	6.566	
6,200.00	3,050.00	3,031.62	3,047.21	38.42	59.72	89.46	143.07	2,382.90	622.43	542.58	79.85	7.795	
6,300.00	3,050.00	3,031.62	3,047.21	39.50	59.72	89.46	143.07	2,382.90	711.96	633.55	78.41	9.080	
6,400.00	3,050.00	3,031.62	3,047.21	40.57	59.72	89.46	143.07	2,382.90	803.96	726.65	77.31	10.399	
6,500.00	3,050.00	3,031.61	3,047.21	41.66	59.72	89.46	143.07	2,382.90	897.67	821.21	76.46	11.740	
6,600.00	3,050.00	3,031.61	3,047.21	42.74	59.72	89.46	143.07	2,382.90	992.61	916.82	75.79	13.096	

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

Anticollision Report

Company:	SPUR ENERGY PARTNERS LLC.	Local Co-ordinate Reference:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design		ABACO STATE COM OFFSETS - STATE S19 14 530944 OW - 14 530944 - 14 530944 AsDrilled										Offset Site Error:	0.00 usft
Survey Program:		100-Gyrodata New 2-16-16										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	
4,100.00	3,050.00	3,063.32	3,066.98	17.43	4.24	-94.45	657.61	1,708.81	905.45	890.29	15.16	59.727	
4,200.00	3,050.00	3,061.90	3,065.55	18.28	4.24	-94.08	657.64	1,708.83	808.78	793.42	15.36	52.645	
4,300.00	3,050.00	3,060.47	3,064.12	19.16	4.23	-93.70	657.67	1,708.85	713.02	697.35	15.67	45.494	
4,400.00	3,050.00	3,059.04	3,062.69	20.07	4.23	-93.33	657.70	1,708.87	618.60	602.44	16.16	38.289	
4,500.00	3,050.00	3,057.60	3,061.25	20.99	4.23	-92.95	657.72	1,708.89	526.24	509.31	16.93	31.085	
4,600.00	3,050.00	3,056.15	3,059.81	21.94	4.23	-92.57	657.75	1,708.91	437.25	419.05	18.19	24.033	
4,700.00	3,050.00	3,054.70	3,058.36	22.90	4.23	-92.19	657.78	1,708.94	354.17	333.90	20.28	17.467	
4,800.00	3,050.00	3,053.25	3,056.90	23.87	4.22	-91.81	657.81	1,708.96	282.29	258.74	23.55	11.987	
4,900.00	3,050.00	3,051.79	3,055.44	24.86	4.22	-91.43	657.84	1,708.98	232.24	204.57	27.67	8.393	
4,978.80	3,050.00	3,050.63	3,054.29	25.65	4.22	-91.12	657.86	1,709.00	218.47	188.64	29.83	7.324 CC, ES	
5,000.00	3,050.00	3,050.32	3,053.98	25.86	4.22	-91.04	657.87	1,709.00	219.49	189.50	29.99	7.318 SF	
5,100.00	3,050.00	3,048.85	3,052.51	26.87	4.22	-90.66	657.90	1,709.02	249.83	221.32	28.51	8.763	
5,200.00	3,050.00	3,047.37	3,051.03	27.89	4.21	-90.27	657.92	1,709.04	310.88	285.29	25.60	12.146	
5,300.00	3,050.00	3,045.89	3,049.55	28.92	4.21	-89.88	657.95	1,709.07	388.43	365.28	23.15	16.780	
5,400.00	3,050.00	3,044.41	3,048.07	29.95	4.21	-89.49	657.98	1,709.09	474.45	453.03	21.42	22.155	
5,500.00	3,050.00	3,042.91	3,046.57	30.99	4.21	-89.10	658.01	1,709.11	565.09	544.87	20.22	27.953	
5,600.00	3,050.00	3,041.41	3,045.08	32.04	4.21	-88.71	658.04	1,709.13	658.44	639.06	19.37	33.988	
5,700.00	3,050.00	3,039.91	3,043.57	33.09	4.20	-88.32	658.07	1,709.15	753.49	734.73	18.77	40.154	
5,800.00	3,050.00	3,038.40	3,042.06	34.15	4.20	-87.92	658.10	1,709.18	849.68	831.36	18.32	46.386	
5,900.00	3,050.00	3,036.89	3,040.55	35.21	4.20	-87.52	658.13	1,709.20	946.66	928.68	17.98	52.648	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design ABACO STATE COM OFFSETS - STATE S19 15-15 530917 OW - 15 230917 - 15 230917 AsDrilled												Offset Site Error:	0.00 usft
Survey Program: 510-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	
3,400.00	3,007.44	2,999.18	3,007.02	12.62	52.26	36.44	180.35	1,062.17	961.96	899.30	62.66	15.352	CC, ES, SF
3,450.00	3,024.31	3,015.91	3,023.74	12.91	52.62	44.79	180.32	1,062.17	916.74	853.64	63.10	14.528	
3,500.00	3,037.01	3,028.51	3,036.34	13.21	52.89	55.72	180.29	1,062.17	870.49	807.03	63.46	13.718	
3,550.00	3,045.45	3,036.88	3,044.71	13.51	53.07	69.08	180.26	1,062.17	823.59	759.86	63.73	12.924	
3,600.00	3,049.57	3,040.96	3,048.79	13.81	53.16	83.57	180.25	1,062.17	776.47	712.55	63.92	12.148	
3,622.24	3,050.00	3,041.39	3,049.22	13.94	53.17	89.83	180.25	1,062.17	755.54	691.56	63.98	11.809	
3,700.00	3,050.00	3,041.39	3,049.22	14.43	53.17	89.83	180.25	1,062.17	683.02	618.83	64.20	10.639	
3,800.00	3,050.00	3,041.39	3,049.22	15.11	53.17	89.83	180.25	1,062.17	591.72	527.10	64.62	9.157	
3,900.00	3,050.00	3,041.39	3,049.22	15.84	53.17	89.83	180.25	1,062.17	503.73	438.44	65.29	7.716	
4,000.00	3,050.00	3,041.39	3,049.22	16.62	53.17	89.83	180.25	1,062.17	421.13	354.78	66.35	6.347	
4,100.00	3,050.00	3,041.39	3,049.22	17.43	53.17	89.83	180.25	1,062.17	347.80	279.80	68.00	5.115	
4,200.00	3,050.00	3,041.39	3,049.22	18.28	53.17	89.83	180.25	1,062.17	290.81	220.59	70.23	4.141	
4,300.00	3,050.00	3,041.39	3,049.22	19.16	53.17	89.83	180.25	1,062.17	261.12	188.86	72.26	3.614	
4,331.95	3,050.00	3,041.39	3,049.22	19.45	53.17	89.83	180.25	1,062.17	259.16	186.54	72.61	3.569	
4,400.00	3,050.00	3,041.39	3,049.22	20.07	53.17	89.83	180.25	1,062.17	267.94	195.26	72.68	3.687	
4,500.00	3,050.00	3,041.39	3,049.22	20.99	53.17	89.83	180.25	1,062.17	308.87	237.37	71.51	4.319	
4,600.00	3,050.00	3,041.39	3,049.22	21.94	53.17	89.83	180.25	1,062.17	372.84	302.90	69.95	5.330	
4,700.00	3,050.00	3,041.39	3,049.22	22.90	53.17	89.83	180.25	1,062.17	450.14	381.49	68.64	6.558	
4,800.00	3,050.00	3,041.39	3,049.22	23.87	53.17	89.83	180.25	1,062.17	535.01	467.33	67.68	7.905	
4,900.00	3,050.00	3,041.39	3,049.22	24.86	53.17	89.83	180.25	1,062.17	624.37	557.39	66.98	9.321	
5,000.00	3,050.00	3,041.39	3,049.22	25.86	53.17	89.83	180.25	1,062.17	716.56	650.08	66.48	10.779	
5,100.00	3,050.00	3,041.39	3,049.22	26.87	53.17	89.83	180.25	1,062.17	810.59	744.49	66.11	12.262	
5,200.00	3,050.00	3,041.39	3,049.22	27.89	53.17	89.83	180.25	1,062.17	905.91	840.08	65.83	13.762	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-Gyrodata New 2-16-16													Offset Well Error:	0.00 usft
Reference				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		
0.00	0.00	4.72	-0.28	0.00	0.00	37.99	673.45	525.90	854.46					
100.00	100.00	100.00	95.00	0.14	0.07	37.95	674.02	525.73	854.82	854.61	0.21	4,120.632		
200.00	200.00	199.84	194.82	0.50	0.22	37.86	675.38	525.04	855.47	854.76	0.71	1,209.204		
300.00	300.00	302.16	297.13	0.86	0.37	37.73	677.00	523.73	855.94	854.73	1.21	707.760		
400.00	399.98	403.07	398.02	1.22	0.52	93.73	678.23	522.60	856.33	854.63	1.71	502.138		
500.00	499.84	502.44	497.39	1.58	0.67	93.98	679.13	521.86	856.94	854.74	2.20	389.727		
600.00	599.45	601.76	596.70	1.94	0.82	94.47	680.06	521.17	857.89	855.20	2.70	318.301		
700.00	698.70	701.90	696.83	2.30	0.97	95.19	680.91	520.54	859.19	856.00	3.20	268.878		
800.00	797.47	800.00	794.93	2.66	1.11	96.11	681.72	520.03	861.06	857.36	3.70	232.936		
900.00	895.62	896.90	891.82	3.03	1.26	97.22	682.60	519.63	863.73	859.53	4.20	205.620		
1,000.00	993.06	995.55	990.47	3.40	1.41	98.55	683.40	519.28	867.28	862.57	4.71	184.060		
1,100.00	1,089.64	1,092.12	1,087.03	3.78	1.55	100.05	684.03	519.04	871.91	866.69	5.23	166.839		
1,200.00	1,185.27	1,189.98	1,184.89	4.17	1.69	101.76	684.35	518.97	877.87	872.12	5.75	152.687		
1,300.00	1,279.82	1,287.87	1,282.78	4.58	1.81	103.64	684.26	518.86	885.27	879.00	6.28	141.044		
1,400.00	1,373.17	1,381.85	1,376.76	4.99	1.93	105.57	683.93	518.66	894.50	887.70	6.80	131.474		
1,500.00	1,465.21	1,475.32	1,470.23	5.41	2.05	107.61	683.38	518.55	906.05	898.71	7.34	123.459		
1,600.00	1,555.84	1,567.26	1,562.17	5.85	2.17	109.70	682.70	518.33	920.13	912.25	7.88	116.773		
1,615.00	1,569.31	1,580.89	1,575.80	5.92	2.18	110.02	682.58	518.29	922.49	914.53	7.96	115.872		
1,700.00	1,645.51	1,658.21	1,653.12	6.30	2.28	112.05	681.81	518.09	936.64	928.21	8.42	111.220		
1,800.00	1,735.16	1,749.08	1,743.97	6.76	2.40	114.38	680.61	517.88	954.82	945.86	8.96	106.551		
1,900.00	1,824.80	1,839.62	1,834.51	7.23	2.53	116.63	679.35	517.56	974.60	965.11	9.50	102.628		
2,000.00	1,914.45	1,928.81	1,923.69	7.69	2.65	118.77	677.93	517.27	995.95	985.93	10.02	99.356		
2,600.00	2,481.94	2,487.86	2,482.68	9.91	3.42	11.79	670.57	517.02	988.84	975.98	12.86	76.920		
2,650.00	2,527.97	2,532.17	2,526.99	10.04	3.48	6.01	670.20	517.13	969.53	956.49	13.05	74.307		
2,700.00	2,572.75	2,575.07	2,569.89	10.16	3.54	1.32	669.88	517.31	947.45	934.22	13.23	71.610		
2,750.00	2,616.08	2,617.09	2,611.91	10.28	3.60	-2.73	669.61	517.56	922.68	909.28	13.41	68.826		
2,800.00	2,657.73	2,658.17	2,652.98	10.39	3.65	-6.42	669.35	517.85	895.31	881.73	13.57	65.961		
2,850.00	2,697.50	2,697.47	2,692.29	10.51	3.71	-10.01	669.10	518.15	865.45	851.72	13.73	63.028		
2,900.00	2,735.21	2,735.00	2,729.81	10.63	3.76	-13.68	668.83	518.47	833.27	819.39	13.88	60.033		
2,950.00	2,770.66	2,770.38	2,765.19	10.76	3.81	-17.62	668.53	518.81	798.95	784.93	14.02	56.985		
3,000.00	2,803.69	2,803.47	2,798.28	10.89	3.85	-22.00	668.20	519.16	762.69	748.53	14.15	53.892		
3,050.00	2,834.13	2,834.21	2,829.01	11.05	3.90	-27.01	667.86	519.50	724.71	710.43	14.28	50.759		
3,100.00	2,861.83	2,862.28	2,857.08	11.21	3.93	-32.81	667.53	519.82	685.29	670.89	14.40	47.598		
3,122.24	2,873.24	2,873.88	2,868.68	11.29	3.95	-35.68	667.39	519.95	667.36	652.91	14.45	46.175		
3,200.00	2,912.12	2,913.39	2,908.18	11.61	4.01	-38.74	666.87	520.43	604.76	590.13	14.64	41.319		
3,300.00	2,962.12	2,964.14	2,958.93	12.09	4.08	-43.38	666.16	521.10	525.82	510.89	14.93	35.215		
3,322.24	2,973.24	2,975.46	2,970.24	12.20	4.09	-44.55	665.99	521.26	508.58	493.57	15.01	33.882		
3,350.00	2,986.53	2,989.02	2,983.80	12.35	4.11	-48.59	665.78	521.45	486.96	471.84	15.12	32.209		
3,400.00	3,007.44	3,010.45	3,005.22	12.62	4.14	-56.78	665.45	521.77	447.36	432.02	15.34	29.164		
3,450.00	3,024.31	3,027.89	3,022.66	12.91	4.17	-65.68	665.17	522.03	407.52	391.92	15.60	26.120		
3,500.00	3,037.01	3,041.24	3,036.01	13.21	4.19	-74.49	664.97	522.23	368.29	352.36	15.93	23.126		
3,550.00	3,045.45	3,050.39	3,045.16	13.51	4.20	-82.24	664.83	522.38	330.73	314.40	16.33	20.249		
3,600.00	3,049.57	3,055.27	3,050.03	13.81	4.21	-88.22	664.75	522.45	296.23	279.38	16.85	17.581		
3,622.24	3,050.00	3,056.04	3,050.80	13.94	4.21	-90.20	664.74	522.46	282.30	265.19	17.11	16.495		
3,700.00	3,050.00	3,057.26	3,052.02	14.43	4.21	-90.51	664.72	522.48	243.51	225.33	18.18	13.392		
3,792.31	3,050.00	3,058.72	3,053.48	15.05	4.21	-90.88	664.70	522.51	225.34	206.11	19.23	11.716 CC, ES		
3,800.00	3,050.00	3,058.84	3,053.60	15.11	4.21	-90.91	664.70	522.51	225.47	206.20	19.28	11.696 SF		
3,900.00	3,050.00	3,060.42	3,055.18	15.84	4.21	-91.32	664.67	522.53	249.75	230.60	19.15	13.042		
4,000.00	3,050.00	3,062.01	3,056.77	16.62	4.21	-91.72	664.65	522.56	306.44	288.10	18.33	16.715		
4,100.00	3,050.00	3,063.60	3,058.36	17.43	4.22	-92.12	664.62	522.58	381.35	363.77	17.58	21.693		
4,200.00	3,050.00	3,065.20	3,059.96	18.28	4.22	-92.53	664.60	522.61	465.78	448.74	17.04	27.330		
4,300.00	3,050.00	3,066.80	3,061.56	19.16	4.22	-92.94	664.57	522.63	555.40	538.72	16.68	33.300		

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design	ABACO STATE COM OFFSETS - STATE S19 16 531279 OW - 16 531279 - 16 531279 AsDrilled											Offset Site Error:	0.00 usft
Survey Program:	100-Gyrodata New 2-16-16											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	
4,400.00	3,050.00	3,068.41	3,063.17	20.07	4.22	-93.35	664.55	522.66	648.06	631.63	16.43	39.445	
4,500.00	3,050.00	3,070.03	3,064.79	20.99	4.23	-93.76	664.52	522.69	742.62	726.36	16.26	45.684	
4,600.00	3,050.00	3,071.65	3,066.41	21.94	4.23	-94.17	664.50	522.71	838.44	822.31	16.13	51.973	
4,700.00	3,050.00	3,073.28	3,068.04	22.90	4.23	-94.58	664.47	522.74	935.13	919.09	16.04	58.288	

Anticollision Report

Company:	SPUR ENERGY PARTNERS LLC.	Local Co-ordinate Reference:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 414-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		
1,100.00	1,089.64	1,089.70	1,089.64	3.78	17.39	-0.41	611.04	-918.10	991.88	970.76	21.12	46.968		
1,200.00	1,185.27	1,185.67	1,185.61	4.17	19.35	-0.38	611.84	-918.10	963.08	939.65	23.43	41.104		
1,300.00	1,279.82	1,281.52	1,281.46	4.58	21.31	-0.41	611.66	-918.10	930.43	904.69	25.74	36.151		
1,400.00	1,373.17	1,376.06	1,375.99	4.99	23.24	-0.46	611.24	-918.10	894.37	866.35	28.01	31.926		
1,500.00	1,465.21	1,465.33	1,465.21	5.41	25.11	-0.50	611.04	-918.10	855.18	824.96	30.22	28.295		
1,600.00	1,555.84	1,555.95	1,555.84	5.85	27.03	-0.53	611.04	-918.10	812.92	780.44	32.48	25.025		
1,615.00	1,569.31	1,569.42	1,569.31	5.92	27.31	-0.54	611.04	-918.10	806.31	773.49	32.83	24.563		
1,700.00	1,645.51	1,645.62	1,645.51	6.30	28.93	-0.57	611.04	-918.10	768.65	733.94	34.72	22.140		
1,800.00	1,735.16	1,736.37	1,736.25	6.76	30.85	-0.53	612.02	-918.10	724.89	687.92	36.97	19.609		
1,900.00	1,824.80	1,827.17	1,827.03	7.23	32.78	-0.60	611.63	-918.10	680.37	641.15	39.22	17.349		
2,000.00	1,914.45	1,914.64	1,914.45	7.69	34.64	-0.69	611.04	-918.10	635.74	594.33	41.41	15.354		
2,090.71	1,995.77	1,995.96	1,995.77	8.12	36.36	-0.73	611.04	-918.10	595.55	552.12	43.43	13.712		
2,100.00	2,004.12	2,004.31	2,004.12	8.17	36.54	-1.67	611.04	-918.10	591.48	547.84	43.64	13.553		
2,150.00	2,049.81	2,050.00	2,049.81	8.39	37.51	-7.47	611.04	-918.10	571.25	526.48	44.77	12.760		
2,200.00	2,096.59	2,096.78	2,096.59	8.61	38.51	-15.02	611.04	-918.10	553.89	507.97	45.92	12.062		
2,250.00	2,144.22	2,144.41	2,144.22	8.81	39.52	-25.07	611.04	-918.10	539.54	492.44	47.10	11.456		
2,300.00	2,192.48	2,193.06	2,192.86	9.00	40.55	-38.38	612.09	-918.10	528.84	480.55	48.29	10.951		
2,350.00	2,241.13	2,242.17	2,241.96	9.18	41.59	-55.42	611.98	-918.10	520.75	471.25	49.50	10.520		
2,400.00	2,289.93	2,291.39	2,291.19	9.35	42.64	-74.51	611.78	-918.10	515.97	465.25	50.71	10.174		
2,444.80	2,333.59	2,335.40	2,335.20	9.49	43.57	-90.76	611.53	-918.10	514.58	462.78	51.80	9.934 CC		
2,450.00	2,338.65	2,340.50	2,340.29	9.50	43.68	-92.50	611.50	-918.10	514.60	462.67	51.93	9.910 ES		
2,500.00	2,387.05	2,389.26	2,389.04	9.65	44.72	-107.18	611.13	-918.10	516.73	463.60	53.13	9.726		
2,550.00	2,434.89	2,435.15	2,434.89	9.78	45.75	-118.28	611.04	-918.10	522.59	468.25	54.34	9.617		
2,600.00	2,481.94	2,482.20	2,481.94	9.91	46.83	-126.70	611.04	-918.10	532.13	476.54	55.59	9.573 SF		
2,650.00	2,527.97	2,528.23	2,527.97	10.04	47.89	-133.17	611.04	-918.10	545.30	488.49	56.81	9.599		
2,700.00	2,572.75	2,573.02	2,572.75	10.16	48.91	-138.27	611.04	-918.10	562.06	504.07	57.99	9.692		
2,750.00	2,616.08	2,616.34	2,616.08	10.28	49.91	-142.38	611.04	-918.10	582.33	523.20	59.14	9.847		
2,800.00	2,657.73	2,658.04	2,657.77	10.39	50.86	-145.64	612.13	-918.10	606.36	546.12	60.24	10.066		
2,850.00	2,697.50	2,698.08	2,697.81	10.51	51.78	-148.44	612.09	-918.10	633.26	571.98	61.29	10.333		
2,900.00	2,735.21	2,736.03	2,735.75	10.63	52.65	-150.78	612.01	-918.10	663.26	600.98	62.28	10.649		
2,950.00	2,770.66	2,771.70	2,771.42	10.76	53.47	-152.74	611.88	-918.10	696.17	632.95	63.21	11.013		
3,000.00	2,803.69	2,804.92	2,804.64	10.89	54.23	-154.36	611.72	-918.10	731.78	667.70	64.07	11.421		
3,050.00	2,834.13	2,835.55	2,835.26	11.05	54.93	-155.68	611.54	-918.10	769.88	705.01	64.87	11.869		
3,100.00	2,861.83	2,863.42	2,863.14	11.21	55.57	-156.72	611.34	-918.10	810.26	744.67	65.58	12.355		
3,122.24	2,873.24	2,874.90	2,874.62	11.29	55.83	-157.09	611.26	-918.10	828.89	763.01	65.88	12.582		
3,200.00	2,912.12	2,912.50	2,912.12	11.61	56.70	-158.65	611.04	-918.10	894.83	828.00	66.83	13.390		
3,300.00	2,962.12	2,962.50	2,962.12	12.09	57.85	-160.41	611.04	-918.10	979.96	911.89	68.08	14.395		
3,322.24	2,973.24	2,973.63	2,973.24	12.20	58.10	-160.77	611.04	-918.10	998.94	930.58	68.35	14.614		

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	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		
0.00	0.00	0.00	8.00	0.00	0.00	-80.72	42.02	-257.12	260.65					
100.00	100.00	92.00	100.00	0.14	0.94	-80.72	42.02	-257.12	260.53	259.44	1.09	239.602		
200.00	200.00	192.00	200.00	0.50	1.97	-80.72	42.02	-257.12	260.53	258.06	2.47	105.398		
300.00	300.00	292.00	300.00	0.86	3.00	-80.72	42.02	-257.12	260.53	256.67	3.86	67.558		
400.00	399.98	392.00	399.98	1.22	4.65	-24.89	42.02	-257.12	258.95	253.08	5.87	44.141		
500.00	499.84	491.85	499.84	1.58	6.78	-25.43	42.02	-257.12	254.21	245.86	8.35	30.447		
600.00	599.45	591.51	599.49	1.94	8.90	-26.15	42.99	-257.12	246.50	235.67	10.83	22.761		
700.00	698.70	690.88	698.85	2.30	11.01	-27.63	42.68	-257.12	235.57	222.27	13.30	17.707		
800.00	797.47	789.55	797.47	2.66	13.11	-29.80	42.02	-257.12	221.74	205.98	15.76	14.068		
900.00	895.62	887.71	895.62	3.03	15.20	-32.61	42.02	-257.12	205.34	187.13	18.21	11.276		
1,000.00	993.06	985.14	993.05	3.40	17.27	-36.28	42.83	-257.12	186.63	165.99	20.64	9.040		
1,100.00	1,089.64	1,081.65	1,089.55	3.78	19.33	-41.85	42.55	-257.12	166.26	143.20	23.06	7.209		
1,200.00	1,185.27	1,177.34	1,185.20	4.17	21.37	-49.87	42.08	-257.12	145.49	120.01	25.48	5.711		
1,300.00	1,279.82	1,271.96	1,279.82	4.58	23.38	-61.14	42.02	-257.12	126.30	98.40	27.89	4.528		
1,400.00	1,373.17	1,365.32	1,373.17	4.99	25.37	-76.57	42.02	-257.12	112.50	82.18	30.32	3.710		
1,483.94	1,450.52	1,442.66	1,450.50	5.34	27.01	-91.90	43.11	-257.12	108.11	75.76	32.35	3.342 CC, ES		
1,500.00	1,465.21	1,457.30	1,465.15	5.41	27.32	-95.01	43.10	-257.12	108.54	75.81	32.74	3.316 SF		
1,600.00	1,555.84	1,547.55	1,555.39	5.85	29.24	-113.58	42.90	-257.12	120.40	85.35	35.05	3.435		
1,615.00	1,569.31	1,560.95	1,568.79	5.92	29.53	-116.10	42.85	-257.12	123.49	88.10	35.39	3.490		
1,700.00	1,645.51	1,636.70	1,644.53	6.30	31.14	-128.64	42.43	-257.12	145.83	108.57	37.26	3.913		
1,800.00	1,735.16	1,727.38	1,735.16	6.76	33.18	-139.41	42.02	-257.12	178.86	139.27	39.59	4.518		
1,900.00	1,824.80	1,817.03	1,824.80	7.23	35.32	-146.86	42.02	-257.12	215.70	173.66	42.03	5.132		
2,000.00	1,914.45	1,906.68	1,914.45	7.69	37.47	-152.20	42.02	-257.12	254.92	210.44	44.48	5.731		
2,090.71	1,995.77	1,987.72	1,995.49	8.12	39.42	-155.94	43.15	-257.12	290.82	244.13	46.70	6.228		
2,100.00	2,004.12	1,996.01	2,003.77	8.17	39.62	-157.27	43.14	-257.12	294.63	247.70	46.92	6.279		
2,150.00	2,049.81	2,041.30	2,049.07	8.39	40.70	-164.64	43.04	-257.12	314.04	265.88	48.16	6.521		
2,200.00	2,096.59	2,087.64	2,095.40	8.61	41.81	-172.90	42.87	-257.12	331.51	282.08	49.43	6.707		
2,250.00	2,144.22	2,134.80	2,142.56	8.81	42.94	-177.06	42.62	-257.12	346.87	296.15	50.72	6.839		
2,300.00	2,192.48	2,182.54	2,190.30	9.00	44.09	-164.32	42.30	-257.12	360.03	308.00	52.03	6.920		
2,350.00	2,241.13	2,233.51	2,241.13	9.18	45.33	-148.59	42.02	-257.12	370.87	317.42	53.45	6.939		
2,400.00	2,289.93	2,282.31	2,289.93	9.35	46.55	-131.28	42.02	-257.12	379.25	324.40	54.84	6.915		
2,450.00	2,338.65	2,328.59	2,336.19	9.50	47.70	-115.47	42.45	-257.12	385.12	328.96	56.17	6.857		
2,500.00	2,387.05	2,379.48	2,387.05	9.65	48.96	-103.66	42.02	-257.12	389.70	332.08	57.62	6.763		
2,550.00	2,434.89	2,427.32	2,434.89	9.78	50.12	-95.64	42.02	-257.12	392.13	333.18	58.96	6.651		
2,600.00	2,481.94	2,474.37	2,481.94	9.91	51.25	-90.73	42.02	-257.12	393.04	332.76	60.28	6.520		
2,650.00	2,527.97	2,520.40	2,527.97	10.04	52.36	-88.10	42.02	-257.12	392.75	331.17	61.58	6.377		
2,700.00	2,572.75	2,565.18	2,572.75	10.16	53.44	-87.13	42.02	-257.12	391.66	328.80	62.87	6.230		
2,750.00	2,616.08	2,608.51	2,616.08	10.28	54.48	-87.37	42.02	-257.12	390.24	326.12	64.12	6.086		
2,800.00	2,657.73	2,649.68	2,657.23	10.39	55.47	-88.40	43.39	-257.12	387.68	322.35	65.34	5.934		
2,841.88	2,691.18	2,682.59	2,690.14	10.49	56.27	-89.76	43.32	-257.12	387.27	320.95	66.32	5.839		
2,850.00	2,697.50	2,688.82	2,696.37	10.51	56.42	-90.05	43.30	-257.12	387.29	320.78	66.51	5.823		
2,900.00	2,735.21	2,725.90	2,733.45	10.63	57.31	-92.05	43.16	-257.12	388.34	320.70	67.64	5.741		
2,950.00	2,770.66	2,760.77	2,768.31	10.76	58.15	-94.19	42.98	-257.12	391.43	322.72	68.71	5.697		
3,000.00	2,803.69	2,793.24	2,800.78	10.89	58.93	-96.27	42.76	-257.12	397.12	327.40	69.73	5.695		
3,050.00	2,834.13	2,823.17	2,830.71	11.05	59.65	-98.14	42.52	-257.12	405.88	335.21	70.66	5.744		
3,100.00	2,861.83	2,850.42	2,857.95	11.21	60.31	-99.66	42.26	-257.12	418.03	346.52	71.51	5.846		
3,122.24	2,873.24	2,861.64	2,869.17	11.29	60.58	-100.19	42.15	-257.12	424.58	352.72	71.85	5.909		
3,200.00	2,912.12	2,904.70	2,912.12	11.61	61.62	-105.29	42.02	-257.12	452.85	379.73	73.12	6.193		
3,300.00	2,962.12	2,954.70	2,962.12	12.09	62.82	-110.92	42.02	-257.12	500.20	425.68	74.51	6.713		
3,322.24	2,973.24	2,965.82	2,973.24	12.20	63.09	-112.12	42.02	-257.12	512.13	437.32	74.81	6.846		
3,350.00	2,986.53	2,979.11	2,986.53	12.35	63.41	-111.80	42.02	-257.12	527.84	452.67	75.16	7.022		
3,400.00	3,007.44	3,000.01	3,007.44	12.62	63.92	-110.50	42.02	-257.12	558.77	483.06	75.71	7.381		

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	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						
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
3,450.00	3,024.31	3,016.88	3,024.31	12.91	64.32	108.15	42.02	-257.12	592.80	516.66	76.13	7.786	
3,500.00	3,037.01	3,029.59	3,037.01	13.21	64.63	104.58	42.02	-257.12	629.51	553.07	76.44	8.236	
3,550.00	3,045.45	3,038.03	3,045.45	13.51	64.83	99.66	42.02	-257.12	668.44	591.82	76.62	8.724	
3,600.00	3,049.57	3,042.15	3,049.57	13.81	64.93	93.28	42.02	-257.12	709.12	632.43	76.69	9.247	
3,622.24	3,050.00	3,042.58	3,050.00	13.94	64.94	90.00	42.02	-257.12	727.65	650.97	76.68	9.489	
3,700.00	3,050.00	3,042.58	3,050.00	14.43	64.94	90.00	42.02	-257.12	793.92	717.31	76.61	10.363	
3,800.00	3,050.00	3,042.58	3,050.00	15.11	64.94	90.00	42.02	-257.12	881.92	805.38	76.54	11.522	
3,900.00	3,050.00	3,042.58	3,050.00	15.84	64.94	90.00	42.02	-257.12	972.24	895.75	76.49	12.711	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design ABACO STATE COM OFFSETS - STATE S19 2 503001 AGW - 2 503001 - 2 503001 ASDRILLED												Offset Site Error:	0.00 usft
Survey Program: 100-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	
4,900.00	3,050.00	2,450.00	2,469.00	24.86	41.80	-22.20	676.56	2,381.29	978.73	932.88	45.85	21.345	
5,000.00	3,050.00	2,450.00	2,469.00	25.86	41.80	-22.20	676.56	2,381.29	904.27	859.38	44.88	20.147	
5,100.00	3,050.00	2,450.00	2,469.00	26.87	41.80	-22.20	676.56	2,381.29	835.15	791.46	43.69	19.115	
5,200.00	3,050.00	2,450.00	2,469.00	27.89	41.80	-22.20	676.56	2,381.29	772.83	730.60	42.23	18.301	
5,300.00	3,050.00	2,450.00	2,469.00	28.92	41.80	-22.20	676.56	2,381.29	719.06	678.57	40.49	17.761	
5,400.00	3,050.00	2,450.00	2,469.00	29.95	41.80	-22.20	676.56	2,381.29	675.89	637.33	38.56	17.528	
5,500.00	3,050.00	2,450.00	2,469.00	30.99	41.80	-22.20	676.56	2,381.29	645.45	608.65	36.80	17.540	
5,600.00	3,050.00	2,450.00	2,469.00	32.04	41.80	-22.20	676.56	2,381.29	629.59	593.69	35.90	17.536	
5,651.09	3,050.00	2,450.00	2,469.00	32.58	41.80	-22.20	676.56	2,381.29	627.52	591.48	36.04	17.412 CC, ES	
5,700.00	3,050.00	2,450.00	2,469.00	33.09	41.80	-22.20	676.56	2,381.29	629.42	592.81	36.60	17.195	
5,800.00	3,050.00	2,450.00	2,469.00	34.15	41.80	-22.20	676.56	2,381.29	644.94	606.09	38.85	16.601	
5,900.00	3,050.00	2,450.00	2,469.00	35.21	41.80	-22.20	676.56	2,381.29	675.08	633.28	41.79	16.152	
6,000.00	3,050.00	2,450.00	2,469.00	36.28	41.80	-22.20	676.56	2,381.29	717.99	673.32	44.67	16.072 SF	
6,100.00	3,050.00	2,450.00	2,469.00	37.35	41.80	-22.20	676.56	2,381.29	771.55	724.43	47.12	16.374	
6,200.00	3,050.00	2,450.00	2,469.00	38.42	41.80	-22.20	676.56	2,381.29	833.71	784.65	49.06	16.992	
6,300.00	3,050.00	2,450.00	2,469.00	39.50	41.80	-22.20	676.56	2,381.29	902.69	852.14	50.56	17.855	
6,400.00	3,050.00	2,450.00	2,469.00	40.57	41.80	-22.20	676.56	2,381.29	977.06	925.37	51.68	18.904	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design		ABACO STATE COM OFFSETS - STATE S19 22 532226 - 22 532226 - 22 532226 AsDrilled										Offset Site Error:	0.00 usft
Survey Program:		342-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
4,300.00	3,050.00	3,036.27	3,050.00	19.16	57.09	90.00	15.58	1,872.90	943.27	873.28	69.98	13.478	
4,400.00	3,050.00	3,036.27	3,050.00	20.07	57.09	90.00	15.58	1,872.90	855.12	784.32	70.79	12.079	
4,500.00	3,050.00	3,036.27	3,050.00	20.99	57.09	90.00	15.58	1,872.90	769.86	698.01	71.85	10.715	
4,600.00	3,050.00	3,036.27	3,050.00	21.94	57.09	90.00	15.58	1,872.90	688.59	615.38	73.21	9.405	
4,700.00	3,050.00	3,036.27	3,050.00	22.90	57.09	90.00	15.58	1,872.90	612.88	537.93	74.95	8.177	
4,800.00	3,050.00	3,036.27	3,050.00	23.87	57.09	90.00	15.58	1,872.90	545.05	467.97	77.08	7.071	
4,900.00	3,050.00	3,036.27	3,050.00	24.86	57.09	90.00	15.58	1,872.90	488.42	408.88	79.54	6.141	
5,000.00	3,050.00	3,036.27	3,050.00	25.86	57.09	90.00	15.58	1,872.90	447.23	365.24	81.99	5.454	
5,100.00	3,050.00	3,036.27	3,050.00	26.87	57.09	90.00	15.58	1,872.90	426.01	342.11	83.90	5.078	
5,142.67	3,050.00	3,036.27	3,050.00	27.31	57.09	90.00	15.58	1,872.90	423.86	339.47	84.39	5.023 CC, ES, SF	
5,200.00	3,050.00	3,036.27	3,050.00	27.89	57.09	90.00	15.58	1,872.90	427.72	343.04	84.68	5.051	
5,300.00	3,050.00	3,036.27	3,050.00	28.92	57.09	90.00	15.58	1,872.90	452.12	367.87	84.25	5.367	
5,400.00	3,050.00	3,036.27	3,050.00	29.95	57.09	90.00	15.58	1,872.90	495.86	412.88	82.98	5.976	
5,500.00	3,050.00	3,036.27	3,050.00	30.99	57.09	90.00	15.58	1,872.90	554.39	473.00	81.39	6.812	
5,600.00	3,050.00	3,036.27	3,050.00	32.04	57.09	90.00	15.58	1,872.90	623.55	543.73	79.82	7.812	
5,700.00	3,050.00	3,036.27	3,050.00	33.09	57.09	90.00	15.58	1,872.90	700.20	621.78	78.41	8.930	
5,800.00	3,050.00	3,036.27	3,050.00	34.15	57.09	90.00	15.58	1,872.90	782.14	704.92	77.21	10.129	
5,900.00	3,050.00	3,036.27	3,050.00	35.21	57.09	90.00	15.58	1,872.90	867.87	791.66	76.21	11.387	
6,000.00	3,050.00	3,036.27	3,050.00	36.28	57.09	90.00	15.58	1,872.90	956.38	881.00	75.38	12.687	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 157-INC-ONLY												Offset Well Error:	0.00 usft
ABACO STATE COM OFFSETS - STATE S19 24 24 534826 OW - 24 534826 - 24 534826 AsDrilled													
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
4,600.00	3,050.00	3,034.82	3,050.00	21.94	69.91	-90.00	561.38	2,281.54	959.12	878.46	80.66	11.891	
4,700.00	3,050.00	3,034.82	3,050.00	22.90	69.91	-90.00	561.38	2,281.54	860.02	779.27	80.76	10.650	
4,800.00	3,050.00	3,034.82	3,050.00	23.87	69.91	-90.00	561.38	2,281.54	761.16	680.26	80.90	9.409	
4,900.00	3,050.00	3,034.82	3,050.00	24.86	69.91	-90.00	561.38	2,281.54	662.65	581.53	81.12	8.169	
5,000.00	3,050.00	3,034.82	3,050.00	25.86	69.91	-90.00	561.38	2,281.54	564.66	483.18	81.47	6.930	
5,100.00	3,050.00	3,034.82	3,050.00	26.87	69.91	-90.00	561.38	2,281.54	467.51	385.44	82.08	5.696	
5,200.00	3,050.00	3,034.82	3,050.00	27.89	69.91	-90.00	561.38	2,281.54	371.89	288.71	83.18	4.471	
5,300.00	3,050.00	3,034.82	3,050.00	28.92	69.91	-90.00	561.38	2,281.54	279.35	193.98	85.37	3.272	
5,400.00	3,050.00	3,034.82	3,050.00	29.95	69.91	-90.00	561.38	2,281.54	194.34	104.30	90.04	2.158	
5,500.00	3,050.00	3,034.82	3,050.00	30.99	69.91	-90.00	561.38	2,281.54	132.29	33.76	98.53	1.343	Level 3
5,551.33	3,050.00	3,034.82	3,050.00	31.53	69.91	-90.00	561.38	2,281.54	121.92	20.48	101.43	1.202	Level 2, CC, ES, SF
5,600.00	3,050.00	3,034.82	3,050.00	32.04	69.91	-90.00	561.38	2,281.54	131.27	31.10	100.17	1.310	Level 3
5,700.00	3,050.00	3,034.82	3,050.00	33.09	69.91	-90.00	561.38	2,281.54	192.26	99.28	92.98	2.068	
5,800.00	3,050.00	3,034.82	3,050.00	34.15	69.91	-90.00	561.38	2,281.54	276.94	188.59	88.35	3.135	
5,900.00	3,050.00	3,034.82	3,050.00	35.21	69.91	-90.00	561.38	2,281.54	369.36	283.43	85.93	4.298	
6,000.00	3,050.00	3,034.82	3,050.00	36.28	69.91	-90.00	561.38	2,281.54	464.93	380.34	84.59	5.496	
6,100.00	3,050.00	3,034.82	3,050.00	37.35	69.91	-90.00	561.38	2,281.54	562.05	478.26	83.78	6.708	
6,200.00	3,050.00	3,034.82	3,050.00	38.42	69.91	-90.00	561.38	2,281.54	660.02	576.75	83.27	7.927	
6,300.00	3,050.00	3,034.82	3,050.00	39.50	69.91	-90.00	561.38	2,281.54	758.53	675.60	82.92	9.147	
6,400.00	3,050.00	3,034.82	3,050.00	40.57	69.91	-90.00	561.38	2,281.54	857.38	774.69	82.68	10.369	
6,500.00	3,050.00	3,034.82	3,050.00	41.66	69.91	-90.00	561.38	2,281.54	956.47	873.95	82.52	11.591	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design		ABACO STATE COM OFFSETS - STATE S19 26 534828 OW - 26 534828 - 26 534828 AsDrilled										Offset Site Error:	0.00 usft
Survey Program:		325-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
3,350.00	2,986.53	2,986.12	2,986.80	12.35	58.06	-17.08	575.79	1,061.21	980.41	911.91	68.50	14.312	
3,400.00	3,007.44	3,007.10	3,007.78	12.62	58.49	-21.30	575.74	1,061.21	935.46	866.48	68.98	13.561	
3,450.00	3,024.31	3,024.03	3,024.71	12.91	58.84	-27.69	575.69	1,061.21	888.93	819.56	69.37	12.814	
3,500.00	3,037.01	3,036.78	3,037.46	13.21	59.10	-37.85	575.65	1,061.21	841.19	771.52	69.67	12.074	
3,550.00	3,045.45	3,045.26	3,045.93	13.51	59.27	-54.35	575.62	1,061.21	792.61	722.73	69.88	11.343	
3,600.00	3,049.57	3,049.39	3,050.06	13.81	59.36	-78.43	575.61	1,061.21	743.58	673.59	69.99	10.624	
3,622.24	3,050.00	3,049.82	3,050.49	13.94	59.36	-90.21	575.61	1,061.21	721.73	651.72	70.02	10.308	
3,700.00	3,050.00	3,049.82	3,050.49	14.43	59.36	-90.21	575.61	1,061.21	645.54	575.47	70.07	9.212	
3,800.00	3,050.00	3,049.82	3,050.49	15.11	59.36	-90.21	575.61	1,061.21	548.20	478.00	70.20	7.809	
3,900.00	3,050.00	3,049.82	3,050.49	15.84	59.36	-90.21	575.61	1,061.21	452.02	381.59	70.43	6.418	
4,000.00	3,050.00	3,049.82	3,050.49	16.62	59.36	-90.21	575.61	1,061.21	357.93	287.03	70.90	5.048	
4,100.00	3,050.00	3,049.82	3,050.49	17.43	59.36	-90.21	575.61	1,061.21	268.17	196.24	71.93	3.728	
4,200.00	3,050.00	3,049.82	3,050.49	18.28	59.36	-90.21	575.61	1,061.21	188.98	114.69	74.30	2.544	
4,300.00	3,050.00	3,049.82	3,050.49	19.16	59.36	-90.21	575.61	1,061.21	139.69	61.56	78.13	1.788	
4,331.00	3,050.00	3,049.82	3,050.49	19.44	59.36	-90.21	575.61	1,061.21	136.20	57.40	78.80	1.728	CC, ES, SF
4,400.00	3,050.00	3,049.82	3,050.49	20.07	59.36	-90.21	575.61	1,061.21	152.68	74.67	78.01	1.957	
4,500.00	3,050.00	3,049.82	3,050.49	20.99	59.36	-90.21	575.61	1,061.21	217.05	141.94	75.11	2.890	
4,600.00	3,050.00	3,049.82	3,050.49	21.94	59.36	-90.21	575.61	1,061.21	301.51	228.22	73.29	4.114	
4,700.00	3,050.00	3,049.82	3,050.49	22.90	59.36	-90.21	575.61	1,061.21	393.33	321.01	72.32	5.439	
4,800.00	3,050.00	3,049.82	3,050.49	23.87	59.36	-90.21	575.61	1,061.21	488.37	416.60	71.77	6.804	
4,900.00	3,050.00	3,049.82	3,050.49	24.86	59.36	-90.21	575.61	1,061.21	585.07	513.62	71.44	8.189	
5,000.00	3,050.00	3,049.82	3,050.49	25.86	59.36	-90.21	575.61	1,061.21	682.72	611.48	71.23	9.584	
5,100.00	3,050.00	3,049.82	3,050.49	26.87	59.36	-90.21	575.61	1,061.21	780.96	709.87	71.10	10.985	
5,200.00	3,050.00	3,049.82	3,050.49	27.89	59.36	-90.21	575.61	1,061.21	879.60	808.60	71.00	12.388	
5,300.00	3,050.00	3,049.82	3,050.49	28.92	59.36	-90.21	575.61	1,061.21	978.52	907.58	70.94	13.794	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 175-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		
0.00	0.00	4.00	0.00	0.00	0.04	-21.25	672.13	-261.32	721.14					
100.00	100.00	104.00	100.00	0.14	0.95	-21.25	672.13	-261.32	721.14	720.05	1.09	660.493		
200.00	200.00	204.01	200.00	0.50	2.19	-21.25	672.13	-261.32	721.14	718.45	2.69	268.019		
300.00	300.00	304.01	300.00	0.86	4.23	-21.25	672.13	-261.32	721.14	716.05	5.09	141.593		
400.00	399.98	407.02	403.01	1.22	6.34	34.86	672.37	-261.32	719.94	712.38	7.55	95.294		
500.00	499.84	503.87	499.84	1.58	8.36	35.14	672.13	-261.32	715.42	705.48	9.94	72.002		
600.00	599.45	604.76	600.72	1.94	10.51	35.65	672.66	-261.32	708.80	696.36	12.44	56.973		
700.00	698.70	708.72	704.66	2.30	12.71	36.36	672.09	-261.32	698.40	683.39	15.01	46.520		
800.00	797.47	801.54	797.47	2.66	14.61	37.25	672.13	-261.32	685.83	668.56	17.27	39.712		
900.00	895.62	901.99	897.90	3.03	16.66	38.46	672.64	-261.32	671.15	651.46	19.69	34.085		
1,000.00	993.06	997.16	993.06	3.40	18.62	39.86	672.13	-261.32	653.03	631.02	22.01	29.665		
1,100.00	1,089.64	1,093.75	1,089.64	3.78	20.67	41.61	672.13	-261.32	633.13	608.69	24.44	25.907		
1,200.00	1,185.27	1,189.38	1,185.27	4.17	22.71	43.70	672.13	-261.32	611.19	584.34	26.85	22.764		
1,300.00	1,279.82	1,285.41	1,281.29	4.58	24.75	46.23	672.73	-261.32	588.10	558.82	29.27	20.090		
1,400.00	1,373.17	1,380.32	1,376.20	4.99	26.77	49.21	672.35	-261.32	562.69	531.01	31.68	17.759		
1,500.00	1,465.21	1,469.39	1,465.21	5.41	28.75	52.54	672.13	-261.32	536.56	502.48	34.08	15.745		
1,600.00	1,555.84	1,560.02	1,555.84	5.85	30.84	56.52	672.13	-261.32	510.43	473.84	36.59	13.950		
1,615.00	1,569.31	1,573.48	1,569.31	5.92	31.15	57.16	672.13	-261.32	506.54	469.57	36.97	13.702		
1,700.00	1,645.51	1,649.68	1,645.51	6.30	32.90	60.61	672.13	-261.32	485.50	446.40	39.10	12.417		
1,800.00	1,735.16	1,740.46	1,736.26	6.76	34.99	65.02	673.50	-261.32	464.82	423.16	41.66	11.159		
1,900.00	1,824.80	1,831.72	1,827.51	7.23	37.09	69.82	673.11	-261.32	445.70	401.47	44.24	10.075		
2,000.00	1,914.45	1,922.80	1,918.58	7.69	39.18	74.94	672.38	-261.32	430.04	383.21	46.83	9.183		
2,090.71	1,995.77	2,000.08	1,995.77	8.12	40.96	79.48	672.13	-261.32	419.82	370.76	49.07	8.556		
2,100.00	2,004.12	2,008.43	2,004.12	8.17	41.16	79.15	672.13	-261.32	418.99	369.68	49.31	8.498		
2,150.00	2,049.81	2,054.12	2,049.81	8.39	42.21	76.48	672.13	-261.32	414.39	363.79	50.60	8.190		
2,200.00	2,096.59	2,100.89	2,096.59	8.61	43.29	71.79	672.13	-261.32	409.34	357.44	51.90	7.887		
2,250.00	2,144.22	2,148.52	2,144.22	8.81	44.39	64.28	672.13	-261.32	403.52	350.32	53.20	7.585		
2,300.00	2,192.48	2,197.34	2,193.02	9.00	45.51	52.97	673.29	-261.32	397.64	343.12	54.52	7.294		
2,350.00	2,241.13	2,246.79	2,242.47	9.18	46.66	37.73	673.15	-261.32	389.39	333.55	55.84	6.974		
2,400.00	2,289.93	2,296.36	2,292.03	9.35	47.80	19.97	672.89	-261.32	379.63	322.49	57.14	6.643		
2,450.00	2,338.65	2,345.79	2,341.46	9.50	48.94	2.80	672.50	-261.32	368.31	309.87	58.44	6.303		
2,500.00	2,387.05	2,391.45	2,387.05	9.65	49.99	-11.64	672.13	-261.32	355.52	295.89	59.63	5.962		
2,550.00	2,434.89	2,439.29	2,434.89	9.78	51.05	-23.30	672.13	-261.32	341.66	280.83	60.83	5.617		
2,600.00	2,481.94	2,486.34	2,481.94	9.91	52.09	-33.01	672.13	-261.32	326.61	264.60	62.00	5.268		
2,650.00	2,527.97	2,532.37	2,527.97	10.04	53.11	-41.61	672.13	-261.32	310.68	247.54	63.14	4.920		
2,700.00	2,572.75	2,577.16	2,572.75	10.16	54.11	-49.75	672.13	-261.32	294.35	230.10	64.25	4.581		
2,750.00	2,616.08	2,620.98	2,616.56	10.28	55.08	-57.92	673.20	-261.32	279.27	213.95	65.32	4.276		
2,800.00	2,657.73	2,663.21	2,658.78	10.39	56.01	-66.09	673.07	-261.32	264.29	197.95	66.34	3.984		
2,850.00	2,697.50	2,703.51	2,699.08	10.51	56.91	-74.29	672.86	-261.32	251.56	184.26	67.30	3.738		
2,900.00	2,735.21	2,741.70	2,737.27	10.63	57.76	-82.33	672.58	-261.32	242.49	174.30	68.19	3.556		
2,950.00	2,770.66	2,777.61	2,773.17	10.76	58.55	-89.92	672.24	-261.32	238.60	169.57	69.02	3.457		
2,956.33	2,774.98	2,781.98	2,777.54	10.77	58.65	-90.83	672.19	-261.32	238.54	169.42	69.12	3.451	CC, ES, SF	
3,000.00	2,803.69	2,808.17	2,803.69	10.89	59.16	-96.21	672.13	-261.32	241.43	171.76	69.67	3.465		
3,050.00	2,834.13	2,838.61	2,834.13	11.05	59.72	-101.97	672.13	-261.32	251.64	181.39	70.26	3.582		
3,100.00	2,861.83	2,866.32	2,861.83	11.21	60.24	-106.62	672.13	-261.32	269.15	198.36	70.79	3.802		
3,122.24	2,873.24	2,877.73	2,873.24	11.29	60.45	-108.31	672.13	-261.32	279.14	208.13	71.02	3.931		
3,200.00	2,912.12	2,916.60	2,912.12	11.61	61.17	-115.44	672.13	-261.32	321.26	249.48	71.78	4.476		
3,300.00	2,962.12	2,966.60	2,962.12	12.09	62.10	-123.49	672.13	-261.32	386.08	313.31	72.77	5.305		
3,322.24	2,973.24	2,977.73	2,973.24	12.20	62.31	-125.11	672.13	-261.32	401.62	328.63	72.99	5.502		
3,350.00	2,986.53	2,991.02	2,986.53	12.35	62.56	-124.65	672.13	-261.32	421.71	348.45	73.26	5.756		
3,400.00	3,007.44	3,011.99	3,007.50	12.62	62.95	-122.73	673.08	-261.32	460.73	387.04	73.69	6.252		
3,450.00	3,024.31	3,029.02	3,024.53	12.91	63.26	-119.41	673.07	-261.32	501.85	427.80	74.04	6.778		

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design		ABACO STATE COM OFFSETS - STATE S19 28 534830 OW - 28 534830 - 28 534830 AsDrilled										Offset Site Error:		0.00 usft
Survey Program:		175-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)	Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
3,500.00	3,037.01	3,041.85	3,037.35	13.21	63.50	-114.11	673.05	-261.32	545.08	470.78	74.31	7.336		
3,550.00	3,045.45	3,050.37	3,045.88	13.51	63.66	-106.35	673.04	-261.32	589.97	515.48	74.48	7.921		
3,600.00	3,049.57	3,054.53	3,050.03	13.81	63.74	-95.72	673.03	-261.32	636.01	561.44	74.57	8.529		
3,622.24	3,050.00	3,054.96	3,050.47	13.94	63.75	-90.11	673.03	-261.32	656.74	582.16	74.59	8.805		
3,700.00	3,050.00	3,054.96	3,050.47	14.43	63.75	-90.11	673.03	-261.32	729.93	655.34	74.60	9.785		
3,800.00	3,050.00	3,054.96	3,050.47	15.11	63.75	-90.11	673.03	-261.32	825.29	750.68	74.62	11.061		
3,900.00	3,050.00	3,054.96	3,050.47	15.84	63.75	-90.11	673.03	-261.32	921.63	847.00	74.63	12.349		

Anticollision Report

Company:	SPUR ENERGY PARTNERS LLC.	Local Co-ordinate Reference:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design ABACO STATE COM OFFSETS - STATE S19 29 535261 OW - 29 535261 - 29 535261 AsDrilled												Offset Site Error:	0.00 usft
Survey Program: 129-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
800.00	797.47	774.54	797.47	2.66	14.56	-62.79	-449.20	-910.88	994.74	977.54	17.20	57.821	
900.00	895.62	871.28	894.19	3.03	16.69	-63.86	-448.45	-910.88	985.69	965.98	19.71	50.022	
1,000.00	993.06	965.30	988.20	3.40	18.77	-65.18	-449.05	-910.88	976.13	953.98	22.15	44.068	
1,100.00	1,089.64	1,066.78	1,089.64	3.78	20.79	-66.81	-449.20	-910.88	965.37	940.82	24.55	39.317	
1,200.00	1,185.27	1,158.16	1,181.02	4.17	22.59	-68.50	-449.14	-910.88	953.82	927.09	26.73	35.685	
1,300.00	1,279.82	1,256.97	1,279.82	4.58	24.53	-70.56	-449.20	-910.88	941.91	912.85	29.06	32.408	
1,400.00	1,373.17	1,350.32	1,373.17	4.99	26.36	-72.75	-449.20	-910.88	929.91	898.61	31.30	29.705	
1,500.00	1,465.21	1,441.68	1,464.52	5.41	28.16	-75.09	-448.76	-910.88	917.97	884.45	33.52	27.384	
1,600.00	1,555.84	1,531.19	1,554.03	5.85	29.91	-77.63	-448.94	-910.88	907.20	871.47	35.72	25.397	
1,615.00	1,569.31	1,544.48	1,567.32	5.92	30.17	-78.03	-448.99	-910.88	905.69	869.64	36.05	25.124	
1,700.00	1,645.51	1,622.70	1,645.51	6.30	31.75	-80.21	-449.20	-910.88	897.95	859.95	38.01	23.625	
1,800.00	1,735.16	1,712.34	1,735.16	6.76	33.65	-82.73	-449.20	-910.88	890.64	850.26	40.38	22.057	
1,900.00	1,824.80	1,801.99	1,824.80	7.23	35.56	-85.28	-449.20	-910.88	885.49	842.73	42.76	20.709	
2,000.00	1,914.45	1,889.02	1,911.82	7.69	37.41	-87.75	-448.48	-910.88	881.95	836.87	45.09	19.561	
2,063.50	1,971.38	1,944.17	1,966.97	7.99	38.58	-89.35	-448.75	-910.88	881.44	834.88	46.56	18.930 CC	
2,090.71	1,995.77	1,967.78	1,990.58	8.12	39.08	-90.04	-448.91	-910.88	881.54	834.34	47.20	18.678	
2,100.00	2,004.12	1,975.86	1,998.66	8.17	39.25	-91.03	-448.96	-910.88	881.64	834.23	47.41	18.596 ES	
2,150.00	2,049.81	2,027.06	2,049.81	8.39	40.29	-97.33	-449.20	-910.88	883.39	834.71	48.68	18.147	
2,200.00	2,096.59	2,073.84	2,096.59	8.61	41.17	-105.17	-449.20	-910.88	886.97	837.19	49.78	17.818	
2,250.00	2,144.22	2,121.47	2,144.22	8.81	42.07	-115.44	-449.20	-910.88	892.37	841.48	50.88	17.538	
2,300.00	2,192.48	2,169.73	2,192.48	9.00	42.98	-128.94	-449.20	-910.88	899.40	847.42	51.98	17.302	
2,350.00	2,241.13	2,218.38	2,241.13	9.18	43.90	-145.92	-449.20	-910.88	907.92	854.84	53.08	17.106	
2,400.00	2,289.93	2,266.28	2,289.02	9.35	44.80	-164.78	-448.21	-910.88	916.93	862.78	54.14	16.935	
2,450.00	2,338.65	2,313.55	2,336.28	9.50	45.69	-177.58	-448.30	-910.88	928.15	872.97	55.19	16.818	
2,500.00	2,387.05	2,360.47	2,383.20	9.65	46.58	-163.37	-448.48	-910.88	940.66	884.44	56.22	16.733	
2,550.00	2,434.89	2,406.82	2,429.55	9.78	47.45	-152.73	-448.74	-910.88	954.39	897.16	57.23	16.677	
2,600.00	2,481.94	2,452.38	2,475.11	9.91	48.31	-144.86	-449.07	-910.88	969.33	911.11	58.22	16.651	
2,650.00	2,527.97	2,505.25	2,527.97	10.04	49.23	-139.10	-449.20	-910.88	985.22	925.96	59.26	16.624 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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 160-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		
0.00	0.00	0.00	11.00	0.00	0.00	-89.31	10.93	-902.30	902.43					
100.00	100.00	89.00	100.00	0.14	0.78	-89.31	10.93	-902.30	902.37	901.44	0.92	975.679		
200.00	200.00	189.00	200.00	0.50	1.94	-89.31	10.93	-902.30	902.37	899.92	2.44	369.388		
300.00	300.00	289.01	300.00	0.86	3.79	-89.31	10.93	-902.30	902.37	897.72	4.65	194.059		
400.00	399.98	389.00	399.99	1.22	5.64	-33.37	11.13	-902.30	900.91	894.06	6.85	131.444		
500.00	499.84	488.85	499.84	1.58	7.48	-33.62	10.93	-902.30	896.54	887.49	9.06	98.992		
600.00	599.45	588.47	599.45	1.94	9.33	-33.99	11.20	-902.30	889.29	878.04	11.26	79.001		
700.00	698.70	687.70	698.69	2.30	11.16	-34.56	11.02	-902.30	879.20	865.75	13.45	65.365		
800.00	797.47	786.49	797.47	2.66	12.95	-35.30	10.93	-902.30	866.32	850.72	15.60	55.534		
900.00	895.62	884.65	895.62	3.03	14.72	-36.22	10.93	-902.30	850.74	833.01	17.73	47.992		
1,000.00	993.06	981.99	992.97	3.40	16.47	-37.33	11.19	-902.30	832.55	812.71	19.84	41.963		
1,100.00	1,089.64	1,078.67	1,089.64	3.78	18.23	-38.71	10.93	-902.30	811.91	789.95	21.96	36.972		
1,200.00	1,185.27	1,174.29	1,185.26	4.17	20.04	-40.31	11.05	-902.30	788.94	764.80	24.14	32.686		
1,300.00	1,279.82	1,268.67	1,279.64	4.58	21.83	-42.20	10.94	-902.30	763.89	737.59	26.30	29.051		
1,400.00	1,373.17	1,362.21	1,373.17	4.99	23.61	-44.41	10.93	-902.30	736.98	708.54	28.45	25.908		
1,500.00	1,465.21	1,453.74	1,464.69	5.41	25.34	-46.92	11.34	-902.30	708.47	677.90	30.57	23.176		
1,600.00	1,555.84	1,544.90	1,555.84	5.85	27.05	-49.90	10.93	-902.30	678.98	646.31	32.67	20.782		
1,615.00	1,569.31	1,558.37	1,569.31	5.92	27.29	-50.38	10.93	-902.30	674.48	641.50	32.98	20.453		
1,700.00	1,645.51	1,634.57	1,645.51	6.30	28.66	-52.77	10.93	-902.30	649.52	614.82	34.70	18.718		
1,800.00	1,735.16	1,724.09	1,735.03	6.76	30.27	-55.78	11.09	-902.30	621.74	584.99	36.74	16.920		
1,900.00	1,824.80	1,813.45	1,824.39	7.23	31.88	-59.04	10.98	-902.30	596.05	557.24	38.81	15.359		
2,000.00	1,914.45	1,903.52	1,914.45	7.69	33.56	-62.56	10.93	-902.30	572.63	531.66	40.97	13.976		
2,090.71	1,995.77	1,984.57	1,995.50	8.12	35.10	-65.90	11.18	-902.30	553.45	510.49	42.96	12.882		
2,100.00	2,004.12	1,992.84	2,003.77	8.17	35.26	-66.92	11.17	-902.30	551.68	508.52	43.17	12.781		
2,150.00	2,049.81	2,038.04	2,048.97	8.39	36.12	-73.21	11.07	-902.30	544.19	499.92	44.27	12.293		
2,200.00	2,096.59	2,085.67	2,096.59	8.61	37.02	-81.28	10.93	-902.30	540.03	494.62	45.42	11.891		
2,242.53	2,137.06	2,126.15	2,137.06	8.78	37.81	-90.00	10.93	-902.30	538.92	492.52	46.40	11.615 CC		
2,250.00	2,144.22	2,133.30	2,144.22	8.81	37.95	-91.75	10.93	-902.30	538.96	492.38	46.57	11.572 ES		
2,300.00	2,192.48	2,181.56	2,192.48	9.00	38.90	-105.47	10.93	-902.30	540.87	493.14	47.73	11.332		
2,350.00	2,241.13	2,229.33	2,240.25	9.18	39.83	-122.63	11.23	-902.30	545.40	496.54	48.86	11.162		
2,400.00	2,289.93	2,277.12	2,288.03	9.35	40.76	-141.74	11.03	-902.30	552.89	502.91	49.98	11.063		
2,450.00	2,338.65	2,327.75	2,338.65	9.50	41.77	-159.61	10.93	-902.30	562.80	511.65	51.15	11.002		
2,500.00	2,387.05	2,376.15	2,387.05	9.65	42.74	-174.00	10.93	-902.30	575.03	522.75	52.28	10.999		
2,550.00	2,434.89	2,423.87	2,434.77	9.78	43.70	-175.25	11.33	-902.30	589.28	535.89	53.38	11.039		
2,600.00	2,481.94	2,469.99	2,480.89	9.91	44.63	-167.25	11.26	-902.30	606.03	551.59	54.44	11.131		
2,650.00	2,527.97	2,515.08	2,525.97	10.04	45.53	-161.21	11.09	-902.30	625.00	569.53	55.47	11.267		
2,700.00	2,572.75	2,561.88	2,572.75	10.16	46.52	-156.57	10.93	-902.30	646.07	589.50	56.57	11.420		
2,750.00	2,616.08	2,605.21	2,616.08	10.28	47.50	-152.83	10.93	-902.30	669.14	611.48	57.66	11.605		
2,800.00	2,657.73	2,646.86	2,657.73	10.39	48.44	-149.71	10.93	-902.30	694.28	635.58	58.69	11.829		
2,850.00	2,697.50	2,686.08	2,696.95	10.51	49.33	-147.01	11.46	-902.30	721.15	661.49	59.67	12.086		
2,900.00	2,735.21	2,722.72	2,733.58	10.63	50.15	-144.47	11.37	-902.30	750.41	689.84	60.58	12.388		
2,950.00	2,770.66	2,757.15	2,768.01	10.76	50.93	-141.99	11.19	-902.30	781.68	720.25	61.43	12.726		
3,000.00	2,803.69	2,792.89	2,803.69	10.89	51.74	-139.65	10.93	-902.30	814.87	752.58	62.30	13.080		
3,050.00	2,834.13	2,823.33	2,834.13	11.05	52.43	-137.06	10.93	-902.30	849.75	786.71	63.05	13.478		
3,100.00	2,861.83	2,851.04	2,861.83	11.21	53.06	-134.23	10.93	-902.30	886.35	822.62	63.73	13.908		
3,122.24	2,873.24	2,861.69	2,872.48	11.29	53.31	-132.84	11.40	-902.30	902.93	838.94	63.99	14.110		
3,200.00	2,912.12	2,896.91	2,907.69	11.61	54.11	-134.95	11.19	-902.30	962.86	898.01	64.85	14.847		

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 100-Gyrodata New 2-16-16												Offset Well Error:	0.00 usft
Reference				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
0.00	0.00	0.00	16.00	0.00	0.00	88.13	13.12	402.37	402.90				
100.00	100.00	82.93	98.93	0.14	0.06	88.17	12.88	402.49	402.70	402.50	0.20	2,043.607	
200.00	200.00	184.77	200.77	0.50	0.18	88.21	12.58	402.60	402.80	402.12	0.68	588.586	
300.00	300.00	286.40	302.39	0.86	0.33	88.18	12.80	402.18	402.39	401.21	1.19	339.194	
321.48	321.48	307.93	323.93	0.94	0.36	144.19	12.76	402.05	402.32	401.03	1.29	311.061	CC, ES
400.00	399.98	385.02	401.01	1.22	0.47	144.32	12.70	401.72	403.33	401.65	1.68	239.406	
500.00	499.84	485.94	501.93	1.58	0.62	144.69	12.83	401.38	407.27	405.08	2.19	186.048	
600.00	599.45	585.59	601.59	1.94	0.76	145.30	12.86	400.84	413.87	411.18	2.69	153.667	
700.00	698.70	683.01	699.00	2.30	0.90	146.13	12.74	400.53	423.65	420.46	3.19	132.760	
800.00	797.47	780.87	796.86	2.66	1.03	147.07	13.11	400.59	436.82	433.13	3.68	118.568	
900.00	895.62	879.91	895.90	3.03	1.17	148.17	13.44	400.67	453.09	448.90	4.18	108.351	
1,000.00	993.06	977.79	993.78	3.40	1.31	149.41	13.38	400.54	472.33	467.65	4.68	100.896	
1,100.00	1,089.64	1,074.89	1,090.88	3.78	1.45	150.74	13.13	400.33	494.76	489.59	5.18	95.533	
1,200.00	1,185.27	1,170.37	1,186.36	4.17	1.59	152.06	13.01	400.08	520.45	514.77	5.67	91.729	
1,300.00	1,279.82	1,264.76	1,280.75	4.58	1.73	153.35	13.12	399.92	549.53	543.37	6.17	89.130	
1,400.00	1,373.17	1,358.71	1,374.70	4.99	1.87	154.63	13.21	399.75	581.96	575.30	6.65	87.449	
1,500.00	1,465.21	1,450.79	1,466.78	5.41	2.00	155.85	13.20	399.47	617.65	610.51	7.14	86.533	
1,600.00	1,555.84	1,541.15	1,557.14	5.85	2.13	157.00	13.32	399.31	656.76	649.14	7.61	86.258	
1,615.00	1,569.31	1,554.66	1,570.65	5.92	2.15	157.16	13.34	399.29	662.91	655.22	7.69	86.207	
1,700.00	1,645.51	1,631.62	1,647.61	6.30	2.27	158.35	13.43	399.13	698.09	690.01	8.08	86.345	
1,800.00	1,735.16	1,722.92	1,738.90	6.76	2.40	159.63	13.48	398.74	739.60	731.05	8.55	86.479	
1,900.00	1,824.80	1,813.44	1,829.42	7.23	2.54	160.77	13.40	398.20	781.26	772.24	9.02	86.626	
2,000.00	1,914.45	1,903.18	1,919.16	7.69	2.67	161.79	13.36	397.65	823.13	813.64	9.48	86.793	
2,090.71	1,995.77	1,988.48	2,004.46	8.12	2.79	162.68	13.24	396.90	861.10	851.18	9.92	86.827	
2,100.00	2,004.12	1,997.25	2,013.23	8.17	2.81	161.95	13.22	396.79	864.93	854.97	9.96	86.838	
2,150.00	2,049.81	2,043.50	2,059.48	8.39	2.88	157.27	13.06	396.22	883.65	873.46	10.19	86.728	
2,200.00	2,096.59	2,090.71	2,106.68	8.61	2.95	150.96	12.89	395.60	899.21	888.79	10.42	86.313	
2,250.00	2,144.22	2,138.35	2,154.32	8.81	3.02	142.29	12.69	394.96	911.56	900.90	10.65	85.582	
2,300.00	2,192.48	2,186.45	2,202.41	9.00	3.09	130.41	12.39	394.30	920.67	909.79	10.89	84.564	
2,350.00	2,241.13	2,234.94	2,250.90	9.18	3.16	115.07	12.03	393.60	926.54	915.42	11.12	83.292	
2,400.00	2,289.93	2,283.58	2,299.53	9.35	3.23	97.82	11.67	392.92	929.15	917.79	11.36	81.796	
2,450.00	2,338.65	2,329.32	2,345.26	9.50	3.29	81.79	11.31	392.31	928.57	916.99	11.58	80.182	
2,500.00	2,387.05	2,373.30	2,389.24	9.65	3.36	69.20	10.83	391.89	925.00	913.20	11.79	78.444	
2,550.00	2,434.89	2,418.15	2,434.08	9.78	3.42	60.24	10.21	391.60	918.47	906.47	12.00	76.537	
2,600.00	2,481.94	2,464.42	2,480.35	9.91	3.48	54.18	9.52	391.36	908.92	896.71	12.21	74.443	
2,650.00	2,527.97	2,509.31	2,525.23	10.04	3.55	50.19	8.82	391.13	896.41	884.00	12.41	72.215	
2,700.00	2,572.75	2,551.67	2,567.59	10.16	3.60	47.68	8.14	391.00	881.11	868.51	12.60	69.907	
2,750.00	2,616.08	2,592.76	2,608.67	10.28	3.66	46.31	7.47	390.99	863.17	850.38	12.79	67.497	
2,800.00	2,657.73	2,632.53	2,648.44	10.39	3.71	45.84	6.81	391.07	842.72	829.75	12.97	64.985	
2,850.00	2,697.50	2,670.66	2,686.56	10.51	3.77	46.14	6.15	391.22	819.92	806.78	13.14	62.381	
2,900.00	2,735.21	2,707.44	2,723.33	10.63	3.82	47.16	5.49	391.44	794.96	781.64	13.32	59.683	
2,950.00	2,770.66	2,743.98	2,759.86	10.76	3.86	48.90	4.83	391.64	767.97	754.47	13.50	56.873	
3,000.00	2,803.69	2,777.94	2,793.82	10.89	3.91	51.28	4.20	391.77	739.18	725.49	13.69	53.999	
3,050.00	2,834.13	2,809.02	2,824.90	11.05	3.95	54.26	3.63	391.85	708.88	695.00	13.88	51.073	
3,100.00	2,861.83	2,836.98	2,852.85	11.21	3.99	57.76	3.11	391.90	677.41	663.33	14.08	48.109	
3,122.24	2,873.24	2,848.49	2,864.36	11.29	4.01	59.48	2.89	391.92	663.13	648.95	14.18	46.771	
3,200.00	2,912.12	2,887.67	2,903.53	11.61	4.06	62.94	2.16	391.96	614.59	600.05	14.54	42.274	
3,300.00	2,962.12	2,935.99	2,951.84	12.09	4.13	67.50	1.18	392.00	557.98	542.85	15.13	36.872	
3,322.24	2,973.24	2,946.61	2,962.46	12.20	4.14	68.54	0.94	392.02	546.48	531.19	15.29	35.747	
3,350.00	2,986.53	2,959.30	2,975.15	12.35	4.16	71.34	0.63	392.03	532.58	517.09	15.50	34.371	
3,400.00	3,007.44	2,979.30	2,995.14	12.62	4.19	76.15	0.11	392.07	508.73	492.82	15.91	31.981	
3,450.00	3,024.31	2,995.47	3,011.30	12.91	4.21	80.40	-0.34	392.10	487.16	470.80	16.36	29.774	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 100-Gyrodata New 2-16-16												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
3,500.00	3,037.01	3,007.95	3,023.78	13.21	4.23	83.90	-0.70	392.12	468.78	451.94	16.85	27.827	
3,550.00	3,045.45	3,016.38	3,032.20	13.51	4.24	86.47	-0.95	392.14	454.47	437.14	17.34	26.215	
3,600.00	3,049.57	3,020.55	3,036.37	13.81	4.24	87.97	-1.07	392.15	444.98	427.18	17.80	25.005	
3,622.24	3,050.00	3,021.02	3,036.84	13.94	4.25	88.29	-1.09	392.15	442.44	424.46	17.98	24.608	
3,661.92	3,050.00	3,021.10	3,036.92	14.19	4.25	88.30	-1.09	392.15	440.66	422.38	18.28	24.105	
3,700.00	3,050.00	3,021.17	3,036.99	14.43	4.25	88.31	-1.09	392.15	442.30	423.79	18.52	23.886	
3,800.00	3,050.00	3,021.37	3,037.19	15.11	4.25	88.33	-1.10	392.15	461.79	442.88	18.90	24.428	
3,900.00	3,050.00	3,021.57	3,037.39	15.84	4.25	88.36	-1.10	392.15	500.86	481.91	18.96	26.423	
4,000.00	3,050.00	3,021.77	3,037.59	16.62	4.25	88.39	-1.11	392.15	555.41	536.62	18.79	29.563	
4,100.00	3,050.00	3,021.97	3,037.79	17.43	4.25	88.41	-1.12	392.15	621.36	602.84	18.52	33.548	
4,200.00	3,050.00	3,022.17	3,037.99	18.28	4.25	88.44	-1.12	392.15	695.49	677.26	18.24	38.139	
4,300.00	3,050.00	3,022.37	3,038.19	19.16	4.25	88.46	-1.13	392.15	775.45	757.48	17.97	43.161	
4,400.00	3,050.00	3,022.57	3,038.39	20.07	4.25	88.49	-1.13	392.15	859.61	841.89	17.73	48.489	
4,500.00	3,050.00	3,022.77	3,038.59	20.99	4.25	88.52	-1.14	392.15	946.86	929.34	17.52	54.036	

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:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 100-Gyrodata New 2-16-16												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
0.00	0.00	0.00	12.00	0.00	0.00	-159.45	-688.15	-258.04	735.04				
100.00	100.00	88.13	100.13	0.14	0.06	-159.44	-688.13	-258.07	734.93	734.73	0.20	3,716.091	
114.88	114.88	102.88	114.88	0.20	0.07	-159.44	-688.12	-258.08	734.93	734.67	0.26	2,798.717	CC
200.00	200.00	183.90	195.90	0.50	0.18	-159.44	-688.34	-258.15	735.17	734.48	0.68	1,078.294	ES
300.00	300.00	283.82	295.82	0.86	0.33	-159.45	-688.97	-258.22	735.78	734.60	1.18	621.243	
400.00	399.98	386.80	398.79	1.22	0.47	-103.60	-689.45	-258.08	736.58	734.89	1.69	436.437	
500.00	499.84	488.07	500.06	1.58	0.61	-104.01	-689.65	-257.69	737.88	735.69	2.18	337.935	
600.00	599.45	588.10	600.09	1.94	0.76	-104.66	-689.77	-257.15	739.98	737.30	2.68	276.192	
700.00	698.70	687.21	699.20	2.30	0.90	-105.56	-689.94	-256.40	743.10	739.92	3.18	233.830	
800.00	797.47	786.35	798.33	2.66	1.05	-106.69	-690.12	-255.54	747.41	743.73	3.68	203.040	
900.00	895.62	884.65	896.63	3.03	1.19	-108.01	-690.22	-254.75	753.07	748.88	4.19	179.821	
1,000.00	993.06	980.27	992.26	3.40	1.33	-109.47	-690.37	-254.08	760.43	755.74	4.70	161.890	
1,100.00	1,089.64	1,075.81	1,087.79	3.78	1.47	-111.07	-690.65	-253.68	769.87	764.66	5.21	147.653	
1,200.00	1,185.27	1,170.59	1,182.57	4.17	1.61	-112.78	-690.95	-253.58	781.52	775.78	5.74	136.193	
1,300.00	1,279.82	1,265.63	1,277.61	4.58	1.74	-114.59	-691.26	-253.68	795.57	789.30	6.27	126.862	
1,400.00	1,373.17	1,359.60	1,371.58	4.99	1.88	-116.48	-691.47	-253.71	812.14	805.33	6.81	119.268	
1,500.00	1,465.21	1,452.47	1,464.45	5.41	2.01	-118.42	-691.61	-253.70	831.52	824.17	7.35	113.143	
1,600.00	1,555.84	1,544.08	1,556.06	5.85	2.14	-120.38	-691.64	-253.63	853.87	845.99	7.89	108.280	
1,615.00	1,569.31	1,557.68	1,569.65	5.92	2.16	-120.67	-691.64	-253.62	857.50	849.53	7.97	107.634	
1,700.00	1,645.51	1,634.13	1,646.10	6.30	2.26	-122.64	-691.58	-253.64	878.78	870.37	8.41	104.449	
1,800.00	1,735.16	1,723.97	1,735.95	6.76	2.38	-124.85	-691.54	-253.60	905.20	896.27	8.93	101.314	
1,900.00	1,824.80	1,815.57	1,827.55	7.23	2.50	-126.98	-691.35	-253.62	932.84	923.38	9.45	98.661	
2,000.00	1,914.45	1,905.31	1,917.29	7.69	2.62	-128.95	-691.10	-253.76	961.63	951.66	9.97	96.491	
2,090.71	1,995.77	1,986.09	1,998.07	8.12	2.72	-130.64	-690.91	-253.95	988.75	978.32	10.43	94.843	
2,100.00	2,004.12	1,994.39	2,006.36	8.17	2.73	-131.79	-690.89	-253.96	991.56	981.09	10.47	94.693	

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

Anticollision Report

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Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
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Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design		ABACO STATE COM OFFSETS - STATE S19-3 524143 AOW - 3 524143 - 3 524143 AsDrilled											Offset Site Error: 0.00 usft	
Survey Program: 200-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		
0.00	0.00	0.00	3.00	0.00	0.00	64.84	343.72	731.90	808.60					
100.00	100.00	97.00	100.00	0.14	0.82	64.84	343.72	731.90	808.59	807.63	0.96	838.791		
200.00	200.00	197.00	200.00	0.50	1.67	64.84	343.72	731.90	808.59	806.42	2.17	372.888		
300.00	300.00	297.00	300.00	0.86	3.58	64.84	343.72	731.90	808.59	804.16	4.44	182.292		
400.00	399.98	397.71	400.71	1.22	5.53	120.94	343.72	731.90	809.49	802.74	6.75	119.990		
500.00	499.84	496.86	499.84	1.58	7.76	121.20	343.72	731.90	812.19	802.86	9.33	87.023		
600.00	599.45	598.10	601.07	1.94	10.05	121.62	344.32	731.90	817.00	805.02	11.98	68.217		
700.00	698.70	695.79	698.70	2.30	12.23	122.26	343.72	731.90	823.23	808.72	14.51	56.718		
800.00	797.47	795.26	798.17	2.66	14.34	122.99	344.24	731.90	831.95	814.96	16.99	48.963		
900.00	895.62	892.74	895.62	3.03	16.39	123.91	343.72	731.90	842.40	823.01	19.40	43.426		
1,000.00	993.06	990.80	993.68	3.40	18.31	124.92	343.98	731.90	855.44	833.75	21.69	39.441		
1,100.00	1,089.64	1,086.77	1,089.64	3.78	20.20	126.04	343.72	731.90	870.72	846.78	23.94	36.368		
1,200.00	1,185.27	1,182.98	1,185.84	4.17	22.09	127.23	344.01	731.90	888.76	862.56	26.20	33.919		
1,300.00	1,279.82	1,276.96	1,279.82	4.58	23.95	128.48	343.72	731.90	909.35	880.91	28.44	31.971		
1,400.00	1,373.17	1,370.63	1,373.48	4.99	25.87	129.76	344.03	731.90	932.97	902.24	30.73	30.358		
1,500.00	1,465.21	1,462.39	1,465.21	5.41	27.75	131.07	343.72	731.90	959.44	926.45	32.98	29.089		
1,600.00	1,555.84	1,553.06	1,555.89	5.85	29.60	132.34	344.16	731.90	989.16	953.95	35.21	28.093		
1,615.00	1,569.31	1,566.74	1,569.56	5.92	29.88	132.54	344.14	731.90	993.87	958.33	35.55	27.958		
2,950.00	2,770.66	2,767.53	2,770.27	10.76	52.94	14.38	343.90	731.90	981.05	918.27	62.79	15.625		
3,000.00	2,803.69	2,800.96	2,803.69	10.89	53.60	13.71	343.72	731.90	944.04	880.52	63.52	14.861		
3,050.00	2,834.13	2,831.40	2,834.13	11.05	54.20	13.22	343.72	731.90	904.80	840.61	64.19	14.095		
3,100.00	2,861.83	2,859.10	2,861.83	11.21	54.74	12.92	343.72	731.90	863.53	798.73	64.80	13.327		
3,122.24	2,873.24	2,870.51	2,873.24	11.29	54.97	12.84	343.72	731.90	844.56	779.51	65.05	12.983		
3,200.00	2,912.12	2,909.36	2,912.08	11.61	55.73	13.87	344.06	731.90	777.66	711.78	65.88	11.805		
3,300.00	2,962.12	2,959.07	2,961.79	12.09	56.71	15.55	343.96	731.90	691.80	624.86	66.94	10.335		
3,322.24	2,973.24	2,970.12	2,972.85	12.20	56.93	15.98	343.92	731.90	672.73	605.55	67.18	10.014		
3,350.00	2,986.53	2,983.34	2,986.06	12.35	57.19	18.00	343.86	731.90	648.63	581.16	67.47	9.614		
3,400.00	3,007.44	3,004.12	3,006.84	12.62	57.60	22.93	343.74	731.90	603.78	535.85	67.93	8.888		
3,450.00	3,024.31	3,021.60	3,024.31	12.91	57.97	30.47	343.72	731.90	557.38	489.02	68.36	8.153		
3,500.00	3,037.01	3,034.30	3,037.01	13.21	58.25	42.06	343.72	731.90	509.82	441.13	68.69	7.422		
3,550.00	3,045.45	3,042.75	3,045.45	13.51	58.44	59.31	343.72	731.90	461.52	392.59	68.94	6.695		
3,600.00	3,049.57	3,046.86	3,049.57	13.81	58.53	80.74	343.72	731.90	412.92	343.82	69.10	5.976		
3,622.24	3,050.00	3,047.29	3,050.00	13.94	58.54	90.00	343.72	731.90	391.32	322.17	69.14	5.659		
3,700.00	3,050.00	3,047.29	3,050.00	14.43	58.54	90.00	343.72	731.90	316.49	247.15	69.34	4.564		
3,800.00	3,050.00	3,047.29	3,050.00	15.11	58.54	90.00	343.72	731.90	223.23	153.28	69.95	3.191		
3,900.00	3,050.00	3,047.29	3,050.00	15.84	58.54	90.00	343.72	731.90	139.62	67.82	71.80	1.945		
4,000.00	3,050.00	3,047.29	3,050.00	16.62	58.54	90.00	343.72	731.90	95.69	20.53	75.15	1.273	Level 3	
4,001.64	3,050.00	3,047.29	3,050.00	16.63	58.54	90.00	343.72	731.90	95.67	20.50	75.17	1.273	Level 3, CC, ES, SF	
4,100.00	3,050.00	3,047.29	3,050.00	17.43	58.54	90.00	343.72	731.90	137.18	64.43	72.75	1.886		
4,200.00	3,050.00	3,047.29	3,050.00	18.28	58.54	90.00	343.72	731.90	220.18	149.41	70.77	3.111		
4,300.00	3,050.00	3,047.29	3,050.00	19.16	58.54	90.00	343.72	731.90	313.28	243.27	70.01	4.475		
4,400.00	3,050.00	3,047.29	3,050.00	20.07	58.54	90.00	343.72	731.90	409.64	339.97	69.68	5.879		
4,500.00	3,050.00	3,047.29	3,050.00	20.99	58.54	90.00	343.72	731.90	507.41	437.91	69.51	7.300		
4,600.00	3,050.00	3,047.29	3,050.00	21.94	58.54	90.00	343.72	731.90	605.91	536.50	69.41	8.729		
4,700.00	3,050.00	3,047.29	3,050.00	22.90	58.54	90.00	343.72	731.90	704.84	635.48	69.36	10.162		
4,800.00	3,050.00	3,047.29	3,050.00	23.87	58.54	90.00	343.72	731.90	804.03	734.70	69.33	11.597		
4,900.00	3,050.00	3,047.29	3,050.00	24.86	58.54	90.00	343.72	731.90	903.39	834.08	69.31	13.033		

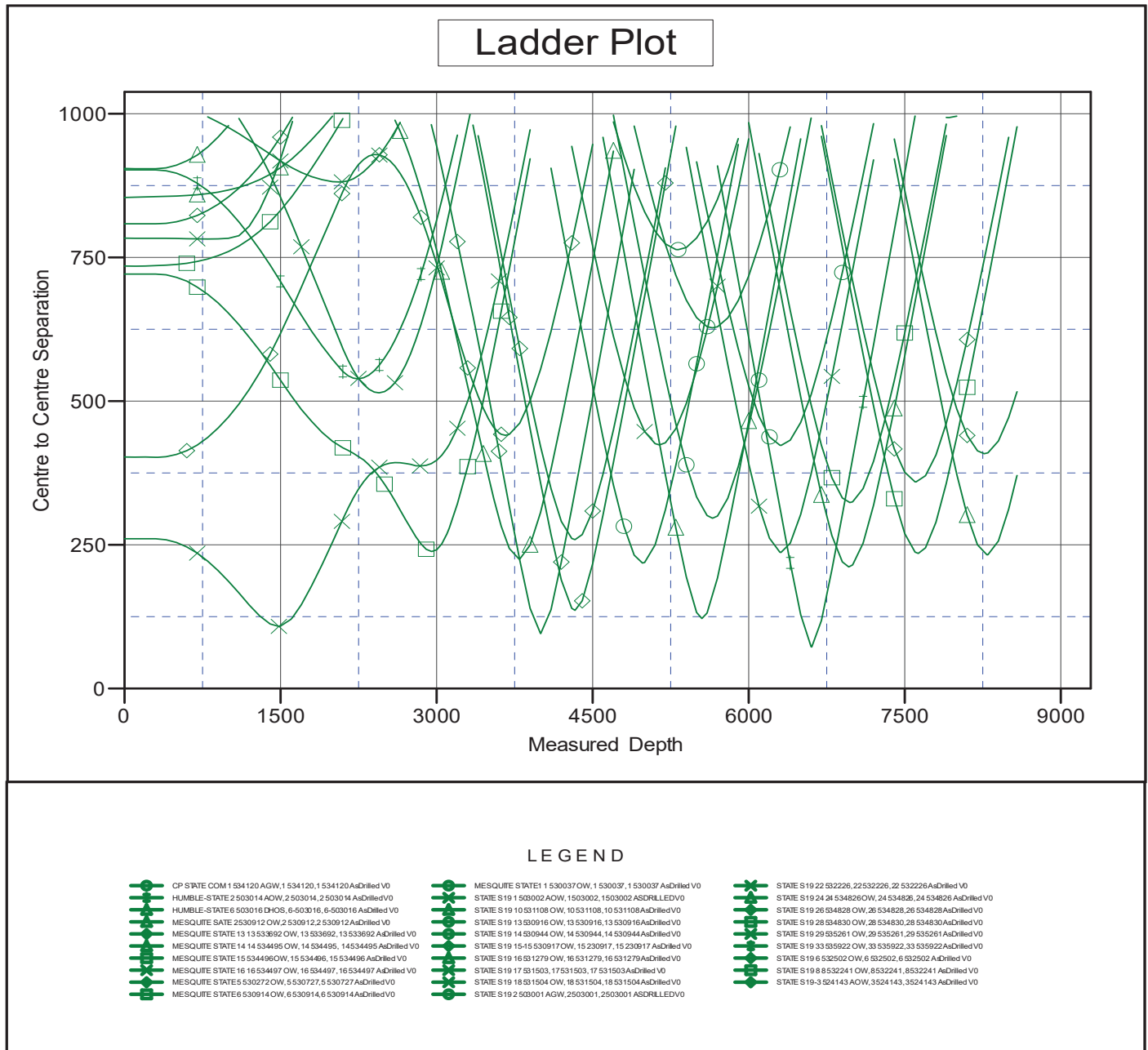
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS LLC.	Local Co-ordinate Reference:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Reference Depths are relative to 3667+20 (copy) @ 3687.00usft (AKITA)
Offset Depths are relative to Offset Datum
Central Meridian is -104.3333333

Coordinates are relative to: ABACO STATE COM
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.12°



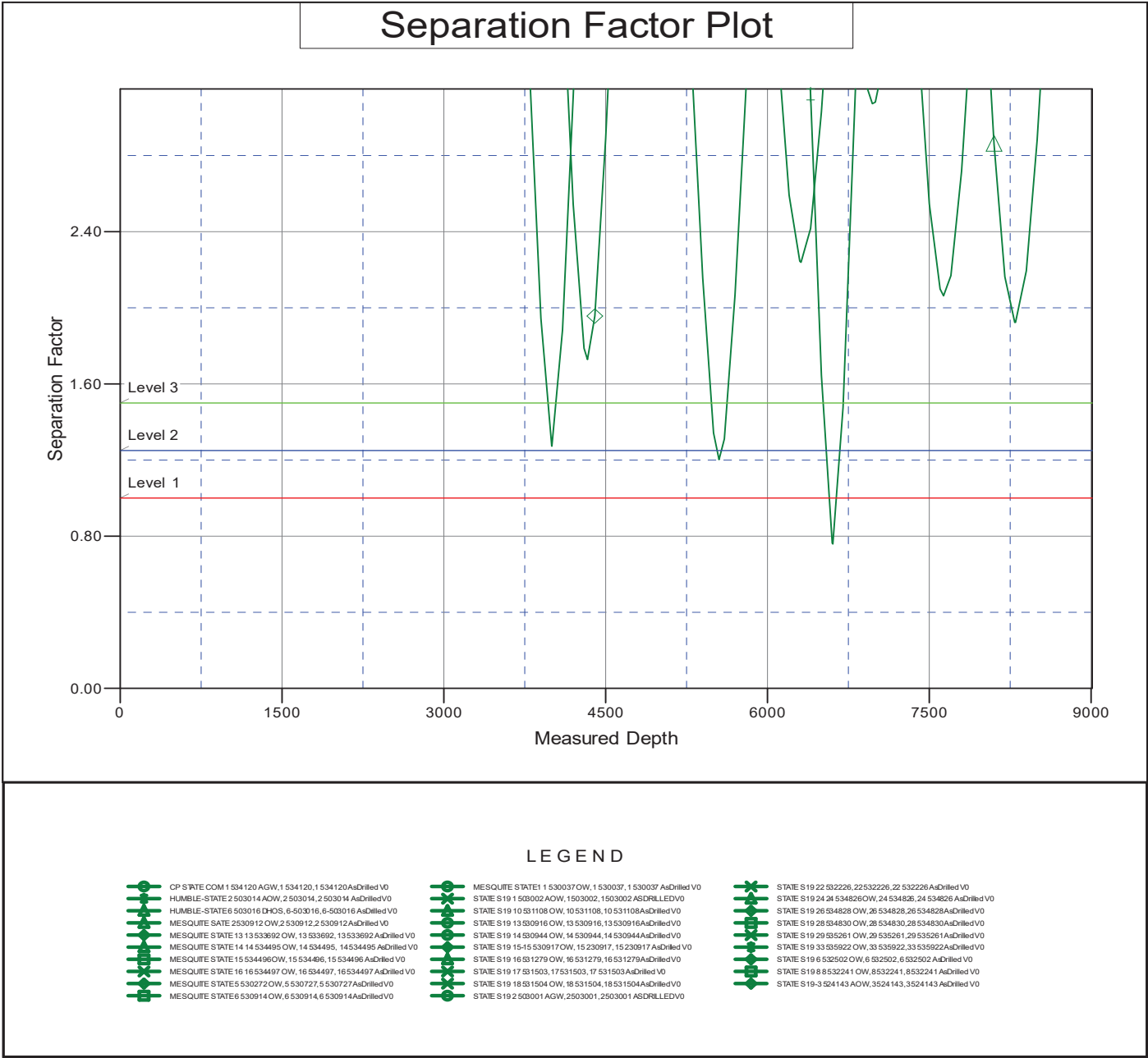
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS LLC.	Local Co-ordinate Reference:	Site ABACO STATE COM
Project:	Eddy County, NM (NAD83) NMEZ Grid	TVD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Reference Site:	ABACO STATE COM	MD Reference:	3667+20 (copy) @ 3687.00usft (AKITA)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	ABACO STATE COM 110H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	110H OH	Database:	PRIME_EDM
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Reference Depths are relative to 3667+20 (copy) @ 3687.00usft (AKITA)
Offset Depths are relative to Offset Datum
Central Meridian is -104.333333

Coordinates are relative to: ABACO STATE COM
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.12°



Spur Energy Partners LLC – Abaco State Com 110H

1. Geologic Formations

TVD of Target	3,050'
MD at TD	8,580'

Formation	Depth	Lithology	Expected Fluids
Quaternary	0'	Dolomite, other: Caliche	Useable Water
Rustler	270'	Dolomite; Shale; Anhydrite	Other: Brackish Water
Base Salt	645'	Anhydrite	Other: Salt
Tansill	670'	Sandstone, Dolomite	None
Yates	775'	Dolomite, Limestone, Shale, Siltstone	None
Seven Rivers	1035'	Dolomite, Limestone	Natural Gas, Oil
Queen	1615'	Sandstone w/ Dolomite, Anhydrite	Natural Gas, Oil
Grayburg	1995'	Dolomite, Sandstone	Natural Gas, Oil
San Andres	2305'	Dolomite, Limestone	Natural Gas, Oil
Glorieta	3745'	Dolomite, Siltstone	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
Rustler	17.5	0	300	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
Seven Rivers	12.25	0	1150	9.625	36	J-55	BTC	1.125	1.2	1.4	1.4
N/A	8.75	0	3400	7	32	L-80	GBCD	1.125	1.2	1.4	1.4
San Andres	8.75	3400	8580	5.5	20	L-80	GBCD	1.125	1.2	1.4	1.4
SF Values will meet or Exceed											

Spur Energy Partners LLC – Abaco State Com 110H

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	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 Tail	0	300	100%
Intermediate (Lead)	0	300	50%
Intermediate (Tail)	300	1150	100%
Production (Lead)	0	2400	0%
Production (Tail)	2400	8580	50%

Casing String	# Sks	Wt. (lb/gal)	Yld (ft3/sack)	H2O (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface Tail	188	13.2	2.32	9.92	6:59	Clas C Premium Plus Cement
Intermediate (Lead)	60	12.2	1.84	13.48	8:12	Clas C Premium Plus Cement
Intermediate (Tail)	238	13.2	2.32	9.92	6:59	Clas C Premium Plus Cement
Production (Lead)	346	11.8	2.54	15.29	N/A	Clas C Premium Plus Cement
Production (Tail)	1214	13.2	1.81	9.81	N/A	Clas C Premium Plus Cement

Spur Energy Partners LLC – Abaco State Com 110H

4. Pressure Control Equipment

Spur Energy Partners LLC variance for flex hose

Spur requests a variance to use a flex line from the BOP to the choke manifold. Documentation will be attached in the APD and be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no bends).

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
12.25" Hole	13-5/8"	5M	Annular	✓	70% of working pressure
		5M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram	✓	
			Double Ram		
			Other*		
8.75" Hole	13-5/8"	5M	Annular	✓	70% of working pressure
		5M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram	✓	
			Double Ram		
			Other*		

Spur Energy Partners LLC will be utilizing a 5M BOP

Condition	Specify what type and where?
BH Pressure at deepest TVD	1412 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	105°F

*Specify if additional ram is utilized.

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

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

Formation integrity test will be performed per Onshore Order #2.
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	On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
Y	Are anchors required by manufacturer?
	A conventional wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. See attached schematics.

5. BOP Break Testing Request

Spur Energy Partners LLC requests permission to adjust the BOP break testing requirements as follows:

BOP break test under the following conditions:

- After a full BOP test is conducted
- When skidding to drill the production section, where the surface casing point is shallower than the 3 Bone Spring or 10,000 TVD.
- When skidding to drill a production section that does not penetrate the 3rd Bone Spring or deeper.

If the kill line is broken prior to skid, four tests will be performed.

- 1) The void between the wellhead and the spool (this consists of two tests)
- 2) The spool between the kill lines and the choke manifold (this consists of two tests)

If the kill line is not broken prior to skid, two tests will be performed.

- 1) The void between the wellhead and the pipe rams

6. Mud Program

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Spur will use a closed mud system.

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From (ft)	To (ft)				
0	300	Water-Based Mud	8.6-8.9	32-36	N/C
450	1150	Brine	9.0-10.0	32-36	N/C
1150	8580	Brine	9.0-10.0	32-36	20-30

What will be used to monitor the loss or gain of fluid?	PVT/PASON/Visual Monitoring
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7. Logging and Testing Procedures

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

8. Drilling Conditions

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

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

Total estimated cuttings volume: 813.1 bbls.

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

	Yes/No
Will more than one drilling rig be used for drilling operations? If yes, describe. Spur Energy Partners LLC. requests the option to contract a Surface Rig to drill, set surface/intermediate 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 & Completions Manager	832-930-8629	713-380-7754
Ryan Barber	Sr. Drilling & Completion Engineer	832-930-8547	832-544-9267
Johnny Nabors	Executive 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:** 03 / 28 / 2025

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
ABACO STATE COM 110H	30-015-	K-19-17S-29E	1641' FSL 2152' FWL	313 BBL/D	542 MCF/D	1877 BBL/D

IV. Central Delivery Point Name: STATE S 19 CENTRAL 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
ABACO STATE COM 110H	30-015-	07/25/2025	08/01/2025	08/10/2025	08/20/2025	08/25/2025

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:	03/28/2025
Phone:	832-930-8613
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)	
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	



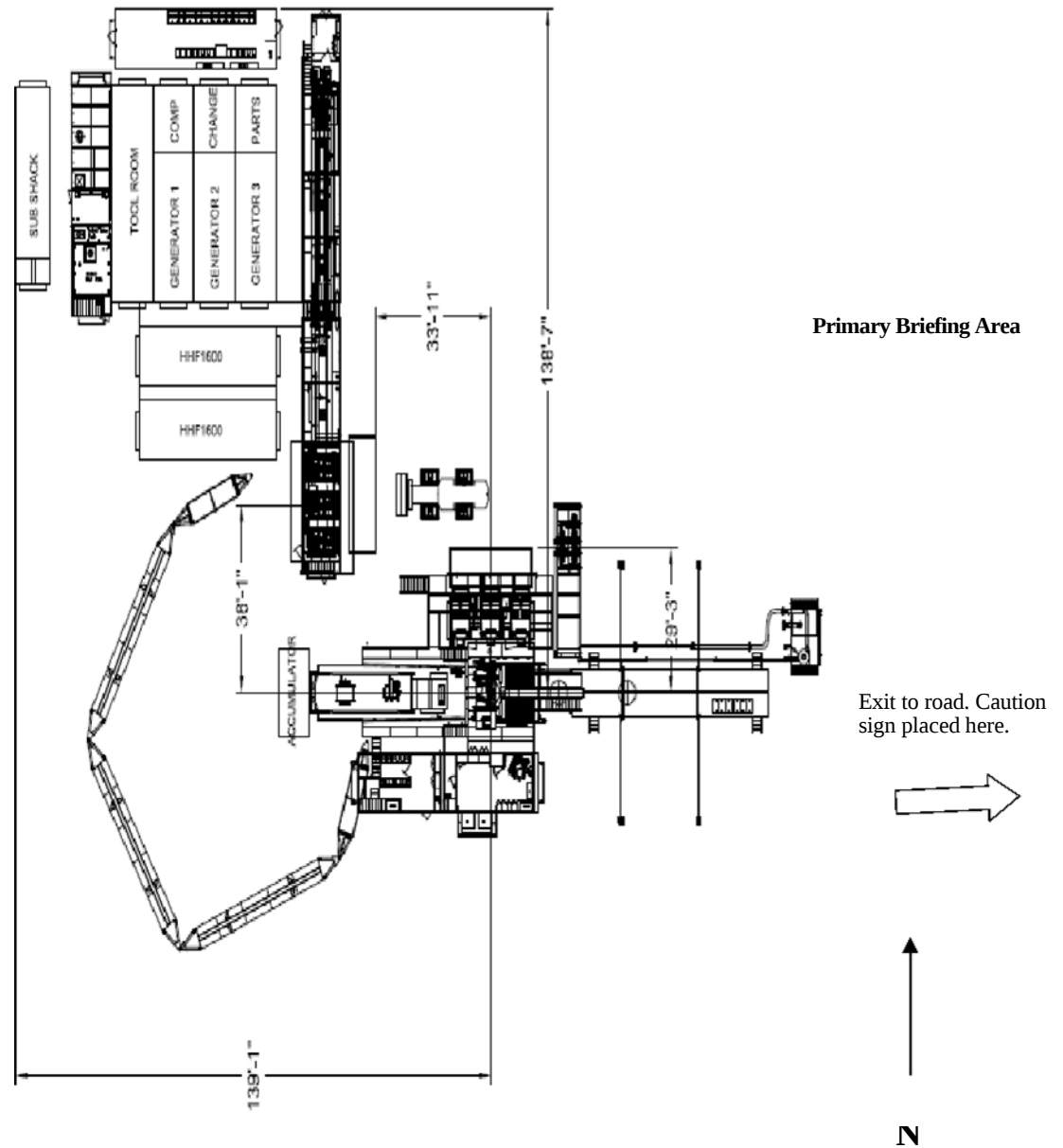
Permian Drilling Hydrogen Sulfide Drilling Operations Plan Abaco State Com Development

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

1. Escape

Personnel shall escape upwind of wellbore in the event of an emergency gas release. Escape can take place through the lease road on the Southeast side of the location. Personnel need to move to a safe distance and block the entrance to location. If the primary route is not an option due to the wind direction, then a secondary egress route should be taken.

Secondary Briefing Area



WIND: Prevailing winds are from the Southwest

Secondary Egress