

OCD - HOBBS
07/21/2020
RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMNM086154
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: ☐ Hydraulic Fracturing ☒ Single Zone ☐ Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator DEVON ENERGY PRODUCTION COMPANY LP [6137]		8. Lease Name and Well No. SNEAKY SNAKE 24 FED COM [328900] 3H
3a. Address 333 West Sheridan Avenue, Oklahoma City, OK 73102	3b. Phone No. (include area code) (800) 583-3866	9. API Well No. 30-025-47466
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SESW / 230 FSL / 1523 FWL / LAT 32.283609 / LONG -103.631959 At proposed prod. zone NENW / 20 FNL / 1630 FWL / LAT 32.29744 / LONG -103.631623		10. Field and Pool, or Exploratory DIAMONDTAIL/WOLFCAMP [98177]
14. Distance in miles and direction from nearest town or post office*		11. Sec., T. R. M. or Blk. and Survey or Area SEC 24/T23S/R32E/NMP
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 230 feet		12. County or Parish LEA
16. No of acres in lease 280		13. State NM
17. Spacing Unit dedicated to this well 320.0		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 529 feet		
19. Proposed Depth 12423 feet / 17393 feet		
20. BLM/BIA Bond No. in file FED: NMB000801		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3717 feet		
22. Approximate date work will start* 11/01/2020		
23. Estimated duration 45 days		
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be requested by the BLM. |

25. Signature (Electronic Submission)	Name (Printed/Typed) REBECCA DEAL / Ph: (800) 583-3866	Date 03/18/2020
Title Regulatory Compliance Professional		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Cody Layton / Ph: (575) 234-5959	Date 07/15/2020
Title Assistant Field Manager Lands & Minerals		
Office Carlsbad Field Office		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

GCP Rec 07/21/2020

SL

APPROVED WITH CONDITIONS
Approval Date: 07/15/2020

KZ
07/30/2020

1. Geologic Formations

TVD of target	12423	Pilot hole depth	N/A
MD at TD:	17393	Deepest expected fresh water	

Basin

[illegible]

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

2. Casing Program (Primary Design)

Hole Size	Csg. Size	Wt (PPF)	Grade	Conn	Casing Interval		Casing Interval	
					From (MD)	To (MD)	From (TVD)	To (TVD)
17 1/2	13 3/8	48.0	H40	STC	0	1255	0	1255
9 7/8	8 5/8	32.0	P110	TLW	0	11122	0	11122
7 7/8	5 1/2	17.0	P110	BTC	0	17393	0	12423

• All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 IILB.1.h Must have table for contingency casing.

3. Cementing Program (Primary Design)

Casing	# Sks	TOC	Wt. ppg	Yld (ft3/sack)	Slurry Description
Surface	947	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	477	Surf	9	3.27	Lead: Class C Cement + additives
	465	4000' above	13.2	1.44	Tail: Class H / C + additives
Int 1 Intermediate Squeeze	As Needed	Surf	13.2	1.44	Squeeze Lead: Class C Cement + additives
	477	Surf	9	3.27	Lead: Class C Cement + additives
	465	4000' above	13.2	1.44	Tail: Class H / C + additives
Production	117	9853	9.0	3.3	Lead: Class H / C + additives
	733	11853	13.2	1.4	Tail: Class H / C + additives

Casing String	% Excess
Surface	50%
Intermediate 1	30%
Intermediate 1 (Two Stage)	25%
Prod	10%

4. Pressure Control Equipment (Three String Design)

BOP installed and tested before drilling which hole?		Size?	Min. Required WP	Type	✓	Tested to:
Int 1	13-58"	5M	Annular		X	50% of rated working pressure
			Blind Ram		X	5M
			Pipe Ram			
			Double Ram		X	
			Other*			
Production	13-5/8"	10M	Annular (5M)		X	100% of rated working pressure
			Blind Ram		X	10M
			Pipe Ram			
			Double Ram		X	
			Other*			
			Annular (5M)			
			Blind Ram			
			Pipe Ram			
			Double Ram			
			Other*			
N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.					
Y	A variance is requested to run a 5 M annular on a 10M system					

5. Mud Program (Three String Design)

Section	Type	Weight (ppg)
Surface	FW Gel	8.5-9
Intermediate	DBE / Cut Brine	10-10.5
Production	OBM	10-10.5

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
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6. Logging and Testing Procedures**Logging, Coring and Testing**

X	Will run GR/CNL 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.
	Drill stem test? If yes, explain.
	Coring? If yes, explain.

Additional logs planned		Interval
	Resistivity	Int. shoe to KOP
	Density	Int. shoe to KOP
X	CBL	Production casing
X	Mud log	Intermediate shoe to TD
	PEX	

7. Drilling Conditions

Condition	Specify what type and where?
BH pressure at deepest TVD	6783
Abnormal temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers.

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

N	H ₂ S is present
Y	H ₂ S plan attached.

8. Other facets of operation

Is this a walking operation? Potentially

- 1 If operator elects, drilling rig will batch drill the surface holes and run/cement surface casing; walking the rig to next wells on the pad.
- 2 The drilling rig will then batch drill the intermediate sections and run/cement intermediate casing; the wellbore will be isolated with a blind flange and pressure gauge installed for monitoring the well before walking to the next well.
- 3 The drilling rig will then batch drill the production hole sections on the wells with OBM, run/cement production casing, and install TA caps or tubing heads for completions.

NOTE: During batch operations the drilling rig will be moved from well to well however, it will not be removed

from the pad until all wells have production casing run/cemented.

Will be pre-setting casing? Potentially

- 1 Spudder rig will move in and batch drill surface hole.
 - a. Rig will utilize fresh water based mud to drill surface hole to TD. Solids control will be handled entirely on a closed loop basis.,
- 2 After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
- 3 The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.
- 4 A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
- 5 Spudder rig operations is expected to take 4-5 days per well on a multi-well pa.
- 6 The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
- 7 Drilling operations will be performed with drilling rig. A that time an approved BOP stack will be nipped up and tested on the wellhead before drilling operations commences on each well.
 - a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments

X Directional Plan
 Other, describe

WCDSC Permian NM

Lea County (NAD83 New Mexico East)

Sec 24-T23S-R32E

Sneaky Snake 24 Fed Com 3H

Wellbore #1

Permit Plan 1

Anticollision Report

18 February, 2020

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Reference	Permit Plan 1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.00 ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	2/18/2020		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	17,392.67	Permit Plan 1 (Wellbore #1)	MWD+HDGM	OWSG MWD + HDGM

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Sec 24-T23S-R32E						
Diamondtail 24 Fed #001 (Active) - Wellbore #1 - Wellbo	4,000.00	3,989.70	1,948.47	1,873.95	26.146	CC
Diamondtail 24 Fed #001 (Active) - Wellbore #1 - Wellbo	10,800.00	10,788.01	2,138.98	1,853.02	7.480	ES, SF
Diamondtail 24 Fed A#001 - Wellbore #1 - Wellbore #1	10,800.00	10,795.01	3,473.99	3,187.82	12.140	SF
Diamondtail 24 Fed A#001 - Wellbore #1 - Wellbore #1	15,422.38	10,300.00	2,488.78	2,318.41	14.608	CC, ES
Fields #001 (P&A) - Wellbore #1 - Wellbore #1	5,743.50	5,736.54	3,124.11	3,017.81	29.388	CC, ES, SF
Fields Fed 1 - Johnston (P&A) - Wellbore #1 - Wellbore #	5,650.58	5,643.66	3,722.19	3,617.58	35.582	CC, ES, SF
Red Deer 24 Fed 1 (P&A) - Wellbore #1 - Wellbore #1	4,000.00	3,977.70	3,047.60	2,973.22	40.973	CC
Red Deer 24 Fed 1 (P&A) - Wellbore #1 - Wellbore #1	9,500.00	9,476.54	3,092.51	2,850.30	12.768	ES, SF
Sneaky Snake 24 Fed Com 1H - Wellbore #1 - Permit PI	4,000.00	3,996.20	842.00	813.77	29.823	CC, ES
Sneaky Snake 24 Fed Com 1H - Wellbore #1 - Permit PI	17,392.67	17,354.63	1,250.62	1,078.96	7.286	SF
Sneaky Snake 24 Fed Com 2H - Wellbore #1 - Permit PI	11,853.00	11,853.22	625.01	541.78	7.510	CC
Sneaky Snake 24 Fed Com 2H - Wellbore #1 - Permit PI	17,392.67	17,546.85	642.85	473.36	3.793	Alert, ES, SF
Sneaky Snake 24 Fed Com 5H - Wellbore #1 - Permit PI	2,000.00	1,995.90	782.00	768.09	56.210	CC
Sneaky Snake 24 Fed Com 5H - Wellbore #1 - Permit PI	4,000.00	4,008.90	793.78	765.85	28.427	ES
Sneaky Snake 24 Fed Com 5H - Wellbore #1 - Permit PI	17,392.67	17,349.65	940.81	768.50	5.460	SF

Sec 24-T23S-R32E - Diamondtail 24 Fed #001 (Active) - Wellbore #1 - Wellbore #1											Offset Site Error:		0.00 ft
Survey Program: 10-INC-ONLY											Offset Well Error:		10.00 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
0.00	0.00	0.00	0.00	0.50	10.00	-26.58	1,742.58	-871.77	1,948.50				
100.00	100.00	89.70	89.70	0.52	10.07	-26.58	1,742.58	-871.77	1,948.47	1,937.88	10.59	184.015	
200.00	200.00	189.70	189.70	0.70	10.36	-26.58	1,742.58	-871.77	1,948.47	1,937.42	11.06	176.213	
300.00	300.00	289.70	289.70	0.99	10.84	-26.58	1,742.58	-871.77	1,948.47	1,936.65	11.83	164.730	
400.00	400.00	389.70	389.70	1.31	11.50	-26.58	1,742.58	-871.77	1,948.47	1,935.66	12.81	152.091	
500.00	500.00	489.70	489.70	1.65	12.31	-26.58	1,742.58	-871.77	1,948.47	1,934.52	13.96	139.608	
600.00	600.00	589.70	589.70	1.99	13.24	-26.58	1,742.58	-871.77	1,948.47	1,933.24	15.23	127.935	
700.00	700.00	689.70	689.70	2.34	14.27	-26.58	1,742.58	-871.77	1,948.47	1,931.87	16.60	117.345	
800.00	800.00	789.70	789.70	2.69	15.37	-26.58	1,742.58	-871.77	1,948.47	1,930.41	18.06	107.894	
900.00	900.00	889.70	889.70	3.04	16.53	-26.58	1,742.58	-871.77	1,948.47	1,928.90	19.58	99.527	
1,000.00	1,000.00	989.70	989.70	3.40	17.75	-26.58	1,742.58	-871.77	1,948.47	1,927.33	21.15	92.141	
1,100.00	1,100.00	1,089.70	1,089.70	3.75	19.00	-26.58	1,742.58	-871.77	1,948.47	1,925.72	22.76	85.621	
1,200.00	1,200.00	1,189.70	1,189.70	4.11	20.29	-26.58	1,742.58	-871.77	1,948.47	1,924.07	24.40	79.854	

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

Anticollision Report

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Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 10-INCO-NONLY												Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
1,300.00	1,300.00	1,289.70	1,289.70	4.46	21.61	-26.58	1,742.58	-871.77	1,948.47	1,922.40	26.07	74.736	
1,400.00	1,400.00	1,389.70	1,389.70	4.82	22.94	-26.58	1,742.58	-871.77	1,948.47	1,920.71	27.77	70.177	
1,500.00	1,500.00	1,489.70	1,489.70	5.18	24.30	-26.58	1,742.58	-871.77	1,948.47	1,919.00	29.48	66.100	
1,600.00	1,600.00	1,589.70	1,589.70	5.53	25.67	-26.58	1,742.58	-871.77	1,948.47	1,917.27	31.21	62.439	
1,700.00	1,700.00	1,689.70	1,689.70	5.89	27.06	-26.58	1,742.58	-871.77	1,948.47	1,915.53	32.95	59.138	
1,800.00	1,800.00	1,789.70	1,789.70	6.25	28.45	-26.58	1,742.58	-871.77	1,948.47	1,913.77	34.70	56.150	
1,900.00	1,900.00	1,889.70	1,889.70	6.61	29.86	-26.58	1,742.58	-871.77	1,948.47	1,912.01	36.46	53.434	
2,000.00	2,000.00	1,989.70	1,989.70	6.96	31.27	-26.58	1,742.58	-871.77	1,948.47	1,910.24	38.24	50.958	
2,100.00	2,100.00	2,089.70	2,089.70	7.32	32.70	-26.58	1,742.58	-871.77	1,948.47	1,908.46	40.02	48.693	
2,200.00	2,200.00	2,189.70	2,189.70	7.68	34.12	-26.58	1,742.58	-871.77	1,948.47	1,906.67	41.80	46.612	
2,300.00	2,300.00	2,289.70	2,289.70	8.04	35.56	-26.58	1,742.58	-871.77	1,948.47	1,904.88	43.59	44.697	
2,400.00	2,400.00	2,389.70	2,389.70	8.39	37.00	-26.58	1,742.58	-871.77	1,948.47	1,903.08	45.39	42.928	
2,500.00	2,500.00	2,489.70	2,489.70	8.75	38.44	-26.58	1,742.58	-871.77	1,948.47	1,901.28	47.19	41.289	
2,600.00	2,600.00	2,589.70	2,589.70	9.11	39.89	-26.58	1,742.58	-871.77	1,948.47	1,899.48	49.00	39.768	
2,700.00	2,700.00	2,689.70	2,689.70	9.47	41.34	-26.58	1,742.58	-871.77	1,948.47	1,897.67	50.80	38.353	
2,800.00	2,800.00	2,789.70	2,789.70	9.83	42.79	-26.58	1,742.58	-871.77	1,948.47	1,895.86	52.62	37.032	
2,900.00	2,900.00	2,889.70	2,889.70	10.18	44.25	-26.58	1,742.58	-871.77	1,948.47	1,894.04	54.43	35.797	
3,000.00	3,000.00	2,989.70	2,989.70	10.54	45.71	-26.58	1,742.58	-871.77	1,948.47	1,892.23	56.25	34.641	
3,100.00	3,100.00	3,089.70	3,089.70	10.90	47.17	-26.58	1,742.58	-871.77	1,948.47	1,890.41	58.07	33.555	
3,200.00	3,200.00	3,189.70	3,189.70	11.26	48.63	-26.58	1,742.58	-871.77	1,948.47	1,888.58	59.89	32.534	
3,300.00	3,300.00	3,289.70	3,289.70	11.62	50.10	-26.58	1,742.58	-871.77	1,948.47	1,886.76	61.71	31.573	
3,400.00	3,400.00	3,389.70	3,389.70	11.97	51.57	-26.58	1,742.58	-871.77	1,948.47	1,884.93	63.54	30.666	
3,500.00	3,500.00	3,489.70	3,489.70	12.33	53.03	-26.58	1,742.58	-871.77	1,948.47	1,883.11	65.37	29.808	
3,600.00	3,600.00	3,589.70	3,589.70	12.69	54.50	-26.58	1,742.58	-871.77	1,948.47	1,881.28	67.20	28.997	
3,700.00	3,700.00	3,689.70	3,689.70	13.05	55.98	-26.58	1,742.58	-871.77	1,948.47	1,879.45	69.03	28.228	
3,800.00	3,800.00	3,789.70	3,789.70	13.41	57.45	-26.58	1,742.58	-871.77	1,948.47	1,877.62	70.86	27.499	
3,900.00	3,900.00	3,889.70	3,889.70	13.77	58.92	-26.58	1,742.58	-871.77	1,948.47	1,875.78	72.69	26.805	
4,000.00	4,000.00	3,989.70	3,989.70	14.12	60.40	-26.58	1,742.58	-871.77	1,948.47	1,873.95	74.52	26.146 CC	
4,100.00	4,100.00	4,089.70	4,089.70	14.46	61.88	-175.85	1,742.58	-871.77	1,949.34	1,873.00	76.34	25.535	
4,162.88	4,162.85	4,152.55	4,152.55	14.67	62.81	-175.85	1,742.58	-871.77	1,950.78	1,873.31	77.47	25.180	
4,200.00	4,199.96	4,189.66	4,189.66	14.79	63.35	-175.85	1,742.58	-871.77	1,951.83	1,873.69	78.14	24.977	
4,300.00	4,299.92	4,289.62	4,289.62	15.12	64.83	-175.86	1,742.58	-871.77	1,954.67	1,874.72	79.95	24.449	
4,400.00	4,399.88	4,389.58	4,389.58	15.45	66.31	-175.87	1,742.58	-871.77	1,957.50	1,875.75	81.76	23.944	
4,500.00	4,499.84	4,489.54	4,489.54	15.78	67.80	-175.87	1,742.58	-871.77	1,960.34	1,876.78	83.59	23.459	
4,600.00	4,599.80	4,589.50	4,589.50	16.11	69.29	-175.88	1,742.58	-871.77	1,963.17	1,877.81	85.43	22.984	
4,700.00	4,699.76	4,689.46	4,689.46	16.44	70.78	-175.88	1,742.58	-871.77	1,966.01	1,878.84	87.28	22.520	
4,800.00	4,799.72	4,789.42	4,789.42	16.77	72.27	-175.89	1,742.58	-871.77	1,968.84	1,879.87	89.13	22.067	
4,900.00	4,899.68	4,889.38	4,889.38	17.11	73.76	-175.90	1,742.58	-871.77	1,971.68	1,880.90	91.00	21.624	
5,000.00	4,999.64	4,989.34	4,989.34	17.44	75.25	-175.91	1,742.58	-871.77	1,974.51	1,881.93	92.88	21.192	
5,100.00	5,099.60	5,089.30	5,089.30	17.78	76.74	-175.91	1,742.58	-871.77	1,977.35	1,882.96	94.77	20.769	
5,200.00	5,199.56	5,189.26	5,189.26	18.12	78.23	-175.91	1,742.58	-871.77	1,980.18	1,883.99	96.67	20.356	
5,300.00	5,299.52	5,289.22	5,289.22	18.46	79.72	-175.92	1,742.58	-871.77	1,983.02	1,885.02	98.58	19.952	
5,400.00	5,399.48	5,389.19	5,389.19	18.79	81.21	-175.93	1,742.58	-871.77	1,985.86	1,886.05	100.50	19.558	
5,500.00	5,499.44	5,489.15	5,489.15	19.13	82.70	-175.93	1,742.58	-871.77	1,988.69	1,887.08	102.43	19.173	
5,600.00	5,599.40	5,589.11	5,589.11	19.48	84.19	-175.94	1,742.58	-871.77	1,991.53	1,888.11	104.37	18.797	
5,700.00	5,699.36	5,689.07	5,689.07	19.82	85.68	-175.94	1,742.58	-871.77	1,994.36	1,889.14	106.32	18.430	
5,800.00	5,799.32	5,789.03	5,789.03	20.16	87.17	-175.95	1,742.58	-871.77	1,997.20	1,890.17	108.28	18.071	
5,900.00	5,899.28	5,889.99	5,889.99	20.50	88.66	-175.95	1,742.58	-871.77	2,000.03	1,891.20	110.25	17.720	
6,000.00	5,999.24	5,989.95	5,989.95	20.85	90.15	-175.96	1,742.58	-871.77	2,002.87	1,892.23	112.23	17.378	
6,100.00	6,099.20	6,089.91	6,089.91	21.19	91.64	-175.97	1,742.58	-871.77	2,005.70	1,893.26	114.22	17.044	
6,200.00	6,199.16	6,189.87	6,189.87	21.53	93.13	-175.97	1,742.58	-871.77	2,008.54	1,894.29	116.22	16.718	
6,300.00	6,299.11	6,289.83	6,289.83	21.88	94.62	-175.98	1,742.58	-871.77	2,011.37	1,895.32	118.22	16.400	

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 10-INCO-ONLY													Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
6,400.00	6,399.07	6,389.79	6,388.77	22.23	116.76	-175.98	1,742.58	-871.77	2,014.21	1,875.24	138.97	14.494		
6,500.00	6,499.03	6,489.75	6,488.73	22.57	119.75	-175.99	1,742.58	-871.77	2,017.04	1,874.74	142.30	14.175		
6,600.00	6,598.99	6,589.71	6,588.69	22.92	122.73	-175.99	1,742.58	-871.77	2,019.88	1,874.25	145.63	13.870		
6,700.00	6,698.95	6,689.67	6,688.65	23.27	125.72	-176.00	1,742.58	-871.77	2,022.71	1,873.75	148.96	13.579		
6,800.00	6,798.91	6,789.63	6,788.61	23.61	128.70	-176.01	1,742.58	-871.77	2,025.55	1,873.26	152.29	13.300		
6,900.00	6,898.87	6,889.59	6,888.57	23.96	131.69	-176.01	1,742.58	-871.77	2,028.38	1,872.76	155.63	13.034		
7,000.00	6,998.83	6,989.55	6,988.53	24.31	134.68	-176.02	1,742.58	-871.77	2,031.22	1,872.26	158.96	12.778		
7,100.00	7,098.79	7,089.50	7,088.49	24.66	137.66	-176.02	1,742.58	-871.77	2,034.06	1,871.76	162.29	12.533		
7,200.00	7,198.75	7,189.46	7,188.45	25.01	140.65	-176.03	1,742.58	-871.77	2,036.89	1,871.26	165.63	12.298		
7,300.00	7,298.71	7,289.42	7,288.41	25.36	143.64	-176.03	1,742.58	-871.77	2,039.73	1,870.76	168.97	12.072		
7,400.00	7,398.67	7,389.38	7,388.37	25.71	146.63	-176.04	1,742.58	-871.77	2,042.56	1,870.26	172.30	11.855		
7,500.00	7,498.63	7,489.34	7,488.33	26.06	149.62	-176.04	1,742.58	-871.77	2,045.40	1,869.76	175.64	11.646		
7,600.00	7,598.59	7,589.30	7,588.29	26.41	152.60	-176.05	1,742.58	-871.77	2,048.23	1,869.26	178.98	11.444		
7,700.00	7,698.55	7,689.26	7,688.25	26.76	155.59	-176.05	1,742.58	-871.77	2,051.07	1,868.76	182.31	11.250		
7,800.00	7,798.51	7,789.22	7,788.21	27.11	158.58	-176.06	1,742.58	-871.77	2,053.90	1,868.25	185.65	11.063		
7,900.00	7,898.47	7,889.18	7,888.17	27.46	161.57	-176.07	1,742.58	-871.77	2,056.74	1,867.75	188.99	10.883		
8,000.00	7,998.43	7,989.14	7,988.13	27.81	164.56	-176.07	1,742.58	-871.77	2,059.58	1,867.25	192.33	10.709		
8,100.00	8,098.39	8,089.10	8,088.09	28.16	167.55	-176.08	1,742.58	-871.77	2,062.41	1,866.74	195.67	10.540		
8,200.00	8,198.35	8,189.06	8,188.05	28.51	170.54	-176.08	1,742.58	-871.77	2,065.25	1,866.24	199.01	10.378		
8,300.00	8,298.31	8,289.02	8,288.01	28.87	173.53	-176.09	1,742.58	-871.77	2,068.08	1,865.73	202.35	10.220		
8,400.00	8,398.27	8,388.98	8,387.97	29.22	176.52	-176.09	1,742.58	-871.77	2,070.92	1,865.23	205.69	10.068		
8,500.00	8,498.23	8,488.94	8,487.93	29.57	179.51	-176.10	1,742.58	-871.77	2,073.75	1,864.72	209.03	9.921		
8,600.00	8,598.19	8,588.90	8,587.89	29.92	182.50	-176.10	1,742.58	-871.77	2,076.59	1,864.21	212.38	9.778		
8,700.00	8,698.15	8,688.86	8,687.85	30.28	185.49	-176.11	1,742.58	-871.77	2,079.43	1,863.71	215.72	9.640		
8,800.00	8,798.10	8,788.82	8,787.80	30.63	188.48	-176.11	1,742.58	-871.77	2,082.26	1,863.20	219.06	9.505		
8,900.00	8,898.06	8,888.78	8,887.76	30.98	191.48	-176.12	1,742.58	-871.77	2,085.10	1,862.69	222.40	9.375		
9,000.00	8,998.02	8,988.74	8,987.72	31.34	194.47	-176.12	1,742.58	-871.77	2,087.93	1,862.19	225.75	9.249		
9,100.00	9,097.98	9,088.70	9,087.68	31.69	197.46	-176.13	1,742.58	-871.77	2,090.77	1,861.68	229.09	9.126		
9,200.00	9,197.94	9,188.66	9,187.64	32.05	200.45	-176.14	1,742.58	-871.77	2,093.61	1,861.17	232.43	9.007		
9,300.00	9,297.90	9,288.62	9,287.60	32.40	203.44	-176.14	1,742.58	-871.77	2,096.44	1,860.66	235.78	8.892		
9,400.00	9,397.86	9,388.58	9,387.56	32.75	206.43	-176.15	1,742.58	-871.77	2,099.28	1,860.16	239.12	8.779		
9,500.00	9,497.82	9,488.54	9,487.52	33.11	209.43	-176.15	1,742.58	-871.77	2,102.11	1,859.65	242.46	8.670		
9,600.00	9,597.78	9,588.49	9,587.48	33.46	212.42	-176.16	1,742.58	-871.77	2,104.95	1,859.14	245.81	8.563		
9,700.00	9,697.74	9,688.45	9,687.44	33.82	215.41	-176.16	1,742.58	-871.77	2,107.78	1,858.63	249.15	8.460		
9,800.00	9,797.70	9,788.41	9,787.40	34.17	218.40	-176.17	1,742.58	-871.77	2,110.62	1,858.12	252.50	8.359		
9,900.00	9,897.66	9,888.37	9,887.36	34.53	221.39	-176.17	1,742.58	-871.77	2,113.46	1,857.61	255.84	8.261		
10,000.00	9,997.62	9,988.33	9,987.32	34.88	224.39	-176.18	1,742.58	-871.77	2,116.29	1,857.10	259.19	8.165		
10,100.00	10,097.58	10,088.29	10,087.28	35.24	227.38	-176.18	1,742.58	-871.77	2,119.13	1,856.59	262.54	8.072		
10,200.00	10,197.54	10,188.25	10,187.24	35.59	230.37	-176.19	1,742.58	-871.77	2,121.96	1,856.08	265.88	7.981		
10,300.00	10,297.50	10,288.21	10,287.20	35.95	233.36	-176.19	1,742.58	-871.77	2,124.80	1,855.57	269.23	7.892		
10,400.00	10,397.46	10,388.17	10,387.16	36.30	236.36	-176.20	1,742.58	-871.77	2,127.64	1,855.06	272.57	7.806		
10,500.00	10,497.42	10,488.13	10,487.12	36.66	239.35	-176.20	1,742.58	-871.77	2,130.47	1,854.55	275.92	7.721		
10,600.00	10,597.38	10,588.09	10,587.08	37.02	242.34	-176.21	1,742.58	-871.77	2,133.31	1,854.04	279.27	7.639		
10,700.00	10,697.34	10,688.05	10,687.04	37.37	245.33	-176.21	1,742.58	-871.77	2,136.15	1,853.53	282.61	7.559		
10,800.00	10,797.30	10,788.01	10,787.00	37.73	248.33	-176.22	1,742.58	-871.77	2,138.98	1,853.02	285.96	7.480 ES, SF		
10,900.00	10,897.26	10,888.00	10,887.00	38.08	251.32	-176.19	1,742.58	-871.77	2,221.91	1,959.50	262.41	8.467		
11,000.00	10,997.22	10,988.00	10,987.00	38.44	254.32	-176.19	1,742.58	-871.77	2,253.27	1,993.61	259.66	8.678		
11,100.00	11,097.18	11,088.00	11,087.00	38.80	257.32	-176.19	1,742.58	-871.77	2,288.58	2,031.99	256.59	8.919		
11,200.00	11,197.14	11,188.00	11,187.00	39.15	260.32	-176.19	1,742.58	-871.77	2,327.64	2,074.40	253.24	9.191		
11,300.00	11,297.09	11,288.00	11,287.00	39.51	263.32	-176.19	1,742.58	-871.77	2,370.29	2,120.61	249.67	9.494		
11,394.37	11,391.43	11,382.00	11,381.00	39.85	266.32	-176.19	1,742.58	-871.77	2,413.64	2,167.50	246.15	9.806		
11,400.00	11,397.05	11,388.00	11,387.00	39.87	266.32	-176.20	1,742.58	-871.77	2,416.32	2,170.39	245.93	9.825		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 10-INCO-NONLY												Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
11,502.96	11,500.00	10,300.00	10,295.76	40.23	233.72	-26.98	1,742.58	-871.77	2,465.72	2,223.82	241.90	10.193	
11,600.00	11,597.04	10,300.00	10,295.76	40.56	233.72	-26.98	1,742.58	-871.77	2,514.14	2,276.18	237.97	10.565	
11,700.00	11,697.04	10,300.00	10,295.76	40.90	233.72	-26.98	1,742.58	-871.77	2,566.93	2,333.07	233.86	10.977	
11,800.00	11,797.04	10,300.00	10,295.76	41.24	233.72	-26.98	1,742.58	-871.77	2,622.46	2,392.75	229.71	11.416	
11,853.00	11,850.04	10,300.00	10,295.76	41.43	233.72	-26.98	1,742.58	-871.77	2,652.95	2,425.44	227.52	11.661	
11,900.00	11,896.99	10,300.00	10,295.76	41.59	233.72	-25.20	1,742.58	-871.77	2,679.16	2,453.65	225.51	11.880	
11,950.00	11,946.58	10,300.00	10,295.76	41.75	233.72	-23.98	1,742.58	-871.77	2,704.45	2,481.18	223.27	12.113	
12,000.00	11,995.43	10,300.00	10,295.76	41.92	233.72	-22.98	1,742.58	-871.77	2,726.95	2,506.03	220.92	12.344	
12,050.00	12,043.18	10,300.00	10,295.76	42.07	233.72	-22.16	1,742.58	-871.77	2,746.56	2,528.09	218.47	12.572	
12,100.00	12,089.46	10,300.00	10,295.76	42.23	233.72	-21.50	1,742.58	-871.77	2,763.20	2,547.26	215.94	12.796	
12,150.00	12,133.92	10,300.00	10,295.76	42.37	233.72	-20.99	1,742.58	-871.77	2,776.79	2,563.47	213.32	13.017	
12,200.00	12,176.21	10,300.00	10,295.76	42.51	233.72	-20.61	1,742.58	-871.77	2,787.28	2,576.64	210.64	13.232	
12,250.00	12,216.03	10,300.00	10,295.76	42.65	233.72	-20.35	1,742.58	-871.77	2,794.62	2,586.71	207.91	13.442	
12,300.00	12,253.06	10,300.00	10,295.76	42.78	233.72	-20.21	1,742.58	-871.77	2,798.78	2,593.65	205.13	13.644	
12,350.00	12,287.02	10,300.00	10,295.76	42.91	233.72	-20.17	1,742.58	-871.77	2,799.74	2,597.42	202.33	13.838	
12,400.00	12,317.65	10,300.00	10,295.76	43.03	233.72	-20.25	1,742.58	-871.77	2,797.50	2,597.99	199.51	14.022	
12,450.00	12,344.73	10,300.00	10,295.76	43.15	233.72	-20.44	1,742.58	-871.77	2,792.07	2,595.36	196.71	14.194	
12,500.00	12,368.04	10,300.00	10,295.76	43.27	233.72	-20.75	1,742.58	-871.77	2,783.47	2,589.54	193.93	14.353	
12,550.00	12,387.41	10,300.00	10,295.76	43.39	233.72	-21.18	1,742.58	-871.77	2,771.73	2,580.54	191.19	14.497	
12,600.00	12,402.69	10,300.00	10,295.76	43.51	233.72	-21.75	1,742.58	-871.77	2,756.92	2,568.39	188.52	14.624	
12,650.00	12,413.77	10,300.00	10,295.76	43.63	233.72	-22.47	1,742.58	-871.77	2,739.08	2,553.14	185.94	14.731	
12,700.00	12,420.55	10,300.00	10,295.76	43.74	233.72	-23.36	1,742.58	-871.77	2,718.30	2,534.83	183.47	14.816	
12,753.00	12,423.00	10,300.00	10,295.76	43.86	233.72	-24.51	1,742.58	-871.77	2,693.17	2,512.18	180.99	14.880	
12,800.00	12,423.00	10,300.00	10,295.76	43.97	233.72	-24.51	1,742.58	-871.77	2,669.81	2,490.95	178.85	14.928	
12,900.00	12,423.00	10,300.00	10,295.76	44.23	233.72	-24.51	1,742.58	-871.77	2,622.21	2,447.97	174.24	15.049	
13,000.00	12,423.00	10,300.00	10,295.76	44.55	233.72	-24.51	1,742.58	-871.77	2,577.62	2,408.03	169.59	15.199	
13,100.00	12,423.00	10,300.00	10,295.76	44.90	233.72	-24.51	1,742.58	-871.77	2,536.19	2,371.24	164.95	15.376	
13,200.00	12,423.00	10,300.00	10,295.76	45.31	233.72	-24.51	1,742.58	-871.77	2,498.07	2,337.70	160.37	15.577	
13,300.00	12,423.00	10,300.00	10,295.76	45.75	233.72	-24.51	1,742.58	-871.77	2,463.43	2,307.50	155.94	15.798	
13,400.00	12,423.00	10,300.00	10,295.76	46.24	233.72	-24.51	1,742.58	-871.77	2,432.41	2,280.69	151.72	16.032	
13,500.00	12,423.00	10,300.00	10,295.76	46.76	233.72	-24.51	1,742.58	-871.77	2,405.15	2,257.33	147.82	16.271	
13,600.00	12,423.00	10,300.00	10,295.76	47.33	233.72	-24.51	1,742.58	-871.77	2,381.78	2,237.44	144.34	16.501	
13,700.00	12,423.00	10,300.00	10,295.76	47.93	233.72	-24.51	1,742.58	-871.77	2,362.41	2,221.03	141.39	16.709	
13,800.00	12,423.00	10,300.00	10,295.76	48.57	233.72	-24.51	1,742.58	-871.77	2,347.15	2,208.09	139.06	16.879	
13,900.00	12,423.00	10,300.00	10,295.76	49.25	233.72	-24.51	1,742.58	-871.77	2,336.08	2,198.62	137.46	16.995	
14,000.00	12,423.00	10,300.00	10,295.76	49.95	233.72	-24.51	1,742.58	-871.77	2,329.25	2,192.59	136.66	17.045	
14,100.00	12,423.00	10,300.00	10,295.76	50.69	233.72	-24.51	1,742.58	-871.77	2,326.69	2,189.99	136.70	17.020	
14,109.37	12,423.00	10,300.00	10,295.76	50.77	233.72	-24.51	1,742.58	-871.77	2,326.68	2,189.92	136.75	17.014	
14,200.00	12,423.00	10,300.00	10,295.76	51.46	233.72	-24.51	1,742.58	-871.77	2,328.44	2,190.83	137.61	16.921	
14,300.00	12,423.00	10,300.00	10,295.76	52.26	233.72	-24.51	1,742.58	-871.77	2,334.47	2,195.12	139.35	16.752	
14,400.00	12,423.00	10,300.00	10,295.76	53.09	233.72	-24.51	1,742.58	-871.77	2,344.76	2,202.88	141.88	16.527	
14,500.00	12,423.00	10,300.00	10,295.76	53.95	233.72	-24.51	1,742.58	-871.77	2,359.24	2,214.15	145.09	16.261	
14,600.00	12,423.00	10,300.00	10,295.76	54.83	233.72	-24.51	1,742.58	-871.77	2,377.84	2,228.96	148.89	15.971	
14,700.00	12,423.00	10,300.00	10,295.76	55.73	233.72	-24.51	1,742.58	-871.77	2,400.47	2,247.31	153.16	15.673	
14,800.00	12,423.00	10,300.00	10,295.76	56.66	233.72	-24.51	1,742.58	-871.77	2,427.01	2,269.22	157.79	15.381	
14,900.00	12,423.00	10,300.00	10,295.76	57.61	233.72	-24.51	1,742.58	-871.77	2,457.34	2,294.66	162.68	15.106	
15,000.00	12,423.00	10,300.00	10,295.76	58.58	233.72	-24.51	1,742.58	-871.77	2,491.31	2,323.59	167.72	14.854	
15,100.00	12,423.00	10,300.00	10,295.76	59.56	233.72	-24.51	1,742.58	-871.77	2,528.79	2,355.96	172.83	14.631	
15,200.00	12,423.00	10,300.00	10,295.76	60.57	233.72	-24.51	1,742.58	-871.77	2,569.61	2,391.66	177.95	14.440	
15,300.00	12,423.00	10,300.00	10,295.76	61.60	233.72	-24.51	1,742.58	-871.77	2,613.62	2,430.61	183.01	14.281	
15,400.00	12,423.00	10,300.00	10,295.76	62.64	233.72	-24.51	1,742.58	-871.77	2,660.67	2,472.70	187.97	14.155	
15,500.00	12,423.00	10,300.00	10,295.76	63.70	233.72	-24.51	1,742.58	-871.77	2,710.59	2,517.80	192.79	14.060	

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 24-T23S-R32E - Diamondtail 24 Fed #001 (Active) - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 ft
Survey Program: 10-INC-ONLY												Offset Well Error:	10.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,600.00	12,423.00	10,300.00	10,295.76	64.78	233.72	-24.51	1,742.58	-871.77	2,763.22	2,565.77	197.45	13.994	
15,700.00	12,423.00	10,300.00	10,295.76	65.87	233.72	-24.51	1,742.58	-871.77	2,818.43	2,616.50	201.93	13.957	
15,800.00	12,423.00	10,300.00	10,295.76	66.97	233.72	-24.51	1,742.58	-871.77	2,876.05	2,669.83	206.22	13.947	
15,900.00	12,423.00	10,300.00	10,295.76	68.09	233.72	-24.51	1,742.58	-871.77	2,935.95	2,725.64	210.31	13.960	
16,000.00	12,423.00	10,300.00	10,295.76	69.22	233.72	-24.51	1,742.58	-871.77	2,997.98	2,783.79	214.20	13.996	
16,100.00	12,423.00	10,300.00	10,295.76	70.36	233.72	-24.51	1,742.58	-871.77	3,062.03	2,844.14	217.89	14.053	
16,200.00	12,423.00	10,300.00	10,295.76	71.51	233.72	-24.51	1,742.58	-871.77	3,127.96	2,906.58	221.38	14.129	
16,300.00	12,423.00	10,300.00	10,295.76	72.68	233.72	-24.51	1,742.58	-871.77	3,195.67	2,970.98	224.68	14.223	
16,400.00	12,423.00	10,300.00	10,295.76	73.85	233.72	-24.51	1,742.58	-871.77	3,265.03	3,037.23	227.80	14.333	
16,500.00	12,423.00	10,300.00	10,295.76	75.04	233.72	-24.51	1,742.58	-871.77	3,335.95	3,105.20	230.75	14.457	
16,600.00	12,423.00	10,300.00	10,295.76	76.23	233.72	-24.51	1,742.58	-871.77	3,408.32	3,174.80	233.52	14.595	
16,700.00	12,423.00	10,300.00	10,295.76	77.43	233.72	-24.51	1,742.58	-871.77	3,482.07	3,245.93	236.14	14.746	
16,800.00	12,423.00	10,300.00	10,295.76	78.64	233.72	-24.51	1,742.58	-871.77	3,557.09	3,318.50	238.60	14.908	
16,900.00	12,423.00	10,300.00	10,295.76	79.86	233.72	-24.51	1,742.58	-871.77	3,633.32	3,392.40	240.92	15.081	
17,000.00	12,423.00	10,300.00	10,295.76	81.09	233.72	-24.51	1,742.58	-871.77	3,710.68	3,467.58	243.11	15.264	
17,100.00	12,423.00	10,300.00	10,295.76	82.33	233.72	-24.51	1,742.58	-871.77	3,789.10	3,543.94	245.17	15.455	
17,200.00	12,423.00	10,300.00	10,295.76	83.57	233.72	-24.51	1,742.58	-871.77	3,868.52	3,621.41	247.11	15.655	
17,300.00	12,423.00	10,300.00	10,295.76	84.82	233.72	-24.51	1,742.58	-871.77	3,948.87	3,699.93	248.94	15.863	
17,392.67	12,423.00	10,300.00	10,295.76	85.98	233.72	-24.51	1,742.58	-871.77	4,024.11	3,773.57	250.55	16.061	

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 10-IN-C-ONLY													Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	0.50	10.00	-21.66	3,053.25	-1,212.75	3,285.29					
100.00	100.00	96.70	96.70	0.52	10.08	-21.66	3,053.25	-1,212.75	3,285.28	3,274.68	10.60	309.886		
200.00	200.00	196.70	196.70	0.70	10.38	-21.66	3,053.25	-1,212.75	3,285.28	3,274.20	11.09	296.366		
300.00	300.00	296.70	296.70	0.99	10.88	-21.66	3,053.25	-1,212.75	3,285.28	3,273.41	11.87	276.791		
400.00	400.00	396.70	396.70	1.31	11.55	-21.66	3,053.25	-1,212.75	3,285.28	3,272.42	12.86	255.399		
500.00	500.00	496.70	496.70	1.65	12.37	-21.66	3,053.25	-1,212.75	3,285.28	3,271.27	14.02	234.360		
600.00	600.00	596.70	596.70	1.99	13.31	-21.66	3,053.25	-1,212.75	3,285.28	3,269.98	15.30	214.738		
700.00	700.00	696.70	696.70	2.34	14.34	-21.66	3,053.25	-1,212.75	3,285.28	3,268.60	16.68	196.965		
800.00	800.00	796.70	796.70	2.69	15.45	-21.66	3,053.25	-1,212.75	3,285.28	3,267.14	18.14	181.118		
900.00	900.00	896.70	896.70	3.04	16.62	-21.66	3,053.25	-1,212.75	3,285.28	3,265.62	19.66	167.096		
1,000.00	1,000.00	996.70	996.70	3.40	17.84	-21.66	3,053.25	-1,212.75	3,285.28	3,264.05	21.23	154.723		
1,100.00	1,100.00	1,096.70	1,096.70	3.75	19.09	-21.66	3,053.25	-1,212.75	3,285.28	3,262.44	22.85	143.801		
1,200.00	1,200.00	1,196.70	1,196.70	4.11	20.38	-21.66	3,053.25	-1,212.75	3,285.28	3,260.79	24.49	134.138		
1,300.00	1,300.00	1,296.70	1,296.70	4.46	21.70	-21.66	3,053.25	-1,212.75	3,285.28	3,259.12	26.16	125.563		
1,400.00	1,400.00	1,396.70	1,396.70	4.82	23.04	-21.66	3,053.25	-1,212.75	3,285.28	3,257.42	27.86	117.923		
1,500.00	1,500.00	1,496.70	1,496.70	5.18	24.40	-21.66	3,053.25	-1,212.75	3,285.28	3,255.71	29.57	111.090		
1,600.00	1,600.00	1,596.70	1,596.70	5.53	25.77	-21.66	3,053.25	-1,212.75	3,285.28	3,253.98	31.30	104.952		
1,700.00	1,700.00	1,696.70	1,696.70	5.89	27.15	-21.66	3,053.25	-1,212.75	3,285.28	3,252.24	33.05	99.417		
1,800.00	1,800.00	1,796.70	1,796.70	6.25	28.55	-21.66	3,053.25	-1,212.75	3,285.28	3,250.48	34.80	94.406		
1,900.00	1,900.00	1,896.70	1,896.70	6.61	29.96	-21.66	3,053.25	-1,212.75	3,285.28	3,248.72	36.56	89.851		
2,000.00	2,000.00	1,996.70	1,996.70	6.96	31.37	-21.66	3,053.25	-1,212.75	3,285.28	3,246.95	38.34	85.697		
2,100.00	2,100.00	2,096.70	2,096.70	7.32	32.79	-21.66	3,053.25	-1,212.75	3,285.28	3,245.17	40.12	81.895		
2,200.00	2,200.00	2,196.70	2,196.70	7.68	34.22	-21.66	3,053.25	-1,212.75	3,285.28	3,243.38	41.90	78.404		
2,300.00	2,300.00	2,296.70	2,296.70	8.04	35.66	-21.66	3,053.25	-1,212.75	3,285.28	3,241.59	43.69	75.189		
2,400.00	2,400.00	2,396.70	2,396.70	8.39	37.10	-21.66	3,053.25	-1,212.75	3,285.28	3,239.79	45.49	72.219		
2,500.00	2,500.00	2,496.70	2,496.70	8.75	38.54	-21.66	3,053.25	-1,212.75	3,285.28	3,237.99	47.29	69.468		
2,600.00	2,600.00	2,596.70	2,596.70	9.11	39.99	-21.66	3,053.25	-1,212.75	3,285.28	3,236.19	49.10	66.914		
2,700.00	2,700.00	2,696.70	2,696.70	9.47	41.44	-21.66	3,053.25	-1,212.75	3,285.28	3,234.38	50.91	64.536		
2,800.00	2,800.00	2,796.70	2,796.70	9.83	42.89	-21.66	3,053.25	-1,212.75	3,285.28	3,232.57	52.72	62.318		
2,900.00	2,900.00	2,896.70	2,896.70	10.18	44.35	-21.66	3,053.25	-1,212.75	3,285.28	3,230.75	54.53	60.244		
3,000.00	3,000.00	2,996.70	2,996.70	10.54	45.81	-21.66	3,053.25	-1,212.75	3,285.28	3,228.93	56.35	58.301		
3,100.00	3,100.00	3,096.70	3,096.70	10.90	47.27	-21.66	3,053.25	-1,212.75	3,285.28	3,227.11	58.17	56.477		
3,200.00	3,200.00	3,196.70	3,196.70	11.26	48.73	-21.66	3,053.25	-1,212.75	3,285.28	3,225.29	59.99	54.762		
3,300.00	3,300.00	3,296.70	3,296.70	11.62	50.20	-21.66	3,053.25	-1,212.75	3,285.28	3,223.47	61.82	53.146		
3,400.00	3,400.00	3,396.70	3,396.70	11.97	51.67	-21.66	3,053.25	-1,212.75	3,285.28	3,221.64	63.64	51.621		
3,500.00	3,500.00	3,496.70	3,496.70	12.33	53.14	-21.66	3,053.25	-1,212.75	3,285.28	3,219.81	65.47	50.180		
3,600.00	3,600.00	3,596.70	3,596.70	12.69	54.61	-21.66	3,053.25	-1,212.75	3,285.28	3,217.99	67.30	48.817		
3,700.00	3,700.00	3,696.70	3,696.70	13.05	56.08	-21.66	3,053.25	-1,212.75	3,285.28	3,216.16	69.13	47.524		
3,800.00	3,800.00	3,796.70	3,796.70	13.41	57.55	-21.66	3,053.25	-1,212.75	3,285.28	3,214.32	70.96	46.297		
3,900.00	3,900.00	3,896.70	3,896.70	13.77	59.03	-21.66	3,053.25	-1,212.75	3,285.28	3,212.49	72.79	45.132		
4,000.00	4,000.00	3,996.70	3,996.70	14.12	60.50	-21.66	3,053.25	-1,212.75	3,285.28	3,210.66	74.63	44.023		
4,100.00	4,100.00	4,096.70	4,096.70	14.46	61.98	-170.93	3,053.25	-1,212.75	3,286.15	3,209.70	76.44	42.987		
4,162.88	4,162.85	4,159.55	4,159.55	14.67	62.91	-170.94	3,053.25	-1,212.75	3,287.57	3,209.99	77.58	42.378		
4,200.00	4,199.96	4,196.66	4,196.66	14.79	63.46	-170.94	3,053.25	-1,212.75	3,288.61	3,210.36	78.25	42.028		
4,300.00	4,299.92	4,296.62	4,296.62	15.12	64.94	-170.95	3,053.25	-1,212.75	3,291.42	3,211.37	80.05	41.116		
4,400.00	4,399.88	4,396.58	4,396.58	15.45	66.41	-170.96	3,053.25	-1,212.75	3,294.23	3,212.37	81.86	40.243		
4,500.00	4,499.84	5,502.44	4,496.54	15.78	90.30	-170.96	3,053.25	-1,212.75	3,297.03	3,190.96	106.07	31.082		
4,600.00	4,599.80	5,402.49	4,596.50	16.11	87.32	-170.97	3,053.25	-1,212.75	3,299.84	3,196.41	103.43	31.904		
4,700.00	4,699.76	5,302.53	4,696.46	16.44	84.35	-170.98	3,053.25	-1,212.75	3,302.65	3,201.86	100.79	32.769		
4,800.00	4,799.72	5,202.57	4,796.42	16.77	81.38	-170.99	3,053.25	-1,212.75	3,305.45	3,207.31	98.15	33.679		
4,900.00	4,899.68	5,102.61	4,896.38	17.11	78.40	-170.99	3,053.25	-1,212.75	3,308.26	3,212.75	95.51	34.639		
5,000.00	4,999.64	5,002.65	4,996.34	17.44	75.43	-171.00	3,053.25	-1,212.75	3,311.07	3,218.20	92.87	35.652		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 10-IN-C-ONLY													Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,099.60	5,097.31	5,096.30	17.78	78.25	-171.01	3,053.25	-1,212.75	3,313.88	3,217.85	96.02	34.512		
5,200.00	5,199.56	5,197.27	5,196.26	18.12	81.22	-171.02	3,053.25	-1,212.75	3,316.68	3,217.35	99.33	33.390		
5,300.00	5,299.52	5,297.23	5,296.22	18.46	84.19	-171.02	3,053.25	-1,212.75	3,319.49	3,216.85	102.64	32.341		
5,400.00	5,399.48	5,397.19	5,396.18	18.79	87.17	-171.03	3,053.25	-1,212.75	3,322.30	3,216.34	105.95	31.356		
5,500.00	5,499.44	5,497.15	5,496.14	19.13	90.14	-171.04	3,053.25	-1,212.75	3,325.11	3,215.84	109.27	30.430		
5,600.00	5,599.40	5,597.11	5,596.10	19.48	93.12	-171.05	3,053.25	-1,212.75	3,327.91	3,215.33	112.59	29.559		
5,700.00	5,699.36	5,697.07	5,696.06	19.82	96.10	-171.06	3,053.25	-1,212.75	3,330.72	3,214.82	115.91	28.736		
5,800.00	5,799.32	5,797.03	5,796.02	20.16	99.08	-171.06	3,053.25	-1,212.75	3,333.53	3,214.30	119.23	27.960		
5,900.00	5,899.28	5,896.99	5,895.98	20.50	102.06	-171.07	3,053.25	-1,212.75	3,336.34	3,213.79	122.55	27.224		
6,000.00	5,999.24	5,996.95	5,995.94	20.85	105.04	-171.08	3,053.25	-1,212.75	3,339.15	3,213.27	125.87	26.528		
6,100.00	6,099.20	6,096.91	6,095.90	21.19	108.02	-171.09	3,053.25	-1,212.75	3,341.95	3,212.76	129.20	25.867		
6,200.00	6,199.16	6,196.87	6,195.86	21.53	111.00	-171.09	3,053.25	-1,212.75	3,344.76	3,212.24	132.52	25.239		
6,300.00	6,299.11	6,296.83	6,295.81	21.88	113.99	-171.10	3,053.25	-1,212.75	3,347.57	3,211.72	135.85	24.641		
6,400.00	6,399.07	6,396.79	6,395.77	22.23	116.97	-171.11	3,053.25	-1,212.75	3,350.38	3,211.20	139.18	24.072		
6,500.00	6,499.03	6,496.75	6,495.73	22.57	119.96	-171.12	3,053.25	-1,212.75	3,353.19	3,210.68	142.51	23.530		
6,600.00	6,598.99	6,596.71	6,595.69	22.92	122.94	-171.12	3,053.25	-1,212.75	3,355.99	3,210.15	145.84	23.011		
6,700.00	6,698.95	6,696.67	6,695.65	23.27	125.93	-171.13	3,053.25	-1,212.75	3,358.80	3,209.63	149.17	22.516		
6,800.00	6,798.91	6,796.63	6,795.61	23.61	128.91	-171.14	3,053.25	-1,212.75	3,361.61	3,209.11	152.50	22.043		
6,900.00	6,898.87	6,896.59	6,895.57	23.96	131.90	-171.15	3,053.25	-1,212.75	3,364.42	3,208.58	155.84	21.589		
7,000.00	6,998.83	6,996.55	6,995.53	24.31	134.89	-171.15	3,053.25	-1,212.75	3,367.23	3,208.06	159.17	21.155		
7,100.00	7,098.79	7,096.50	7,095.49	24.66	137.87	-171.16	3,053.25	-1,212.75	3,370.04	3,207.53	162.50	20.738		
7,200.00	7,198.75	7,196.46	7,195.45	25.01	140.86	-171.17	3,053.25	-1,212.75	3,372.85	3,207.01	165.84	20.338		
7,300.00	7,298.71	7,296.42	7,295.41	25.36	143.85	-171.18	3,053.25	-1,212.75	3,375.65	3,206.48	169.18	19.954		
7,400.00	7,398.67	7,396.38	7,395.37	25.71	146.84	-171.18	3,053.25	-1,212.75	3,378.46	3,205.95	172.51	19.584		
7,500.00	7,498.63	7,496.34	7,495.33	26.06	149.82	-171.19	3,053.25	-1,212.75	3,381.27	3,205.42	175.85	19.228		
7,600.00	7,598.59	7,596.30	7,595.29	26.41	152.81	-171.20	3,053.25	-1,212.75	3,384.08	3,204.89	179.19	18.886		
7,700.00	7,698.55	7,696.26	7,695.25	26.76	155.80	-171.20	3,053.25	-1,212.75	3,386.89	3,204.36	182.52	18.556		
7,800.00	7,798.51	7,796.22	7,795.21	27.11	158.79	-171.21	3,053.25	-1,212.75	3,389.70	3,203.84	185.86	18.238		
7,900.00	7,898.47	7,896.18	7,895.17	27.46	161.78	-171.22	3,053.25	-1,212.75	3,392.51	3,203.31	189.20	17.931		
8,000.00	7,998.43	7,996.14	7,995.13	27.81	164.77	-171.23	3,053.25	-1,212.75	3,395.32	3,202.78	192.54	17.634		
8,100.00	8,098.39	8,096.10	8,095.09	28.16	167.76	-171.23	3,053.25	-1,212.75	3,398.13	3,202.24	195.88	17.348		
8,200.00	8,198.35	8,196.06	8,195.05	28.51	170.75	-171.24	3,053.25	-1,212.75	3,400.93	3,201.71	199.22	17.071		
8,300.00	8,298.31	8,296.02	8,295.01	28.87	173.74	-171.25	3,053.25	-1,212.75	3,403.74	3,201.18	202.56	16.803		
8,400.00	8,398.27	8,395.98	8,394.97	29.22	176.73	-171.26	3,053.25	-1,212.75	3,406.55	3,200.65	205.90	16.544		
8,500.00	8,498.23	8,495.94	8,494.93	29.57	179.72	-171.26	3,053.25	-1,212.75	3,409.36	3,200.12	209.24	16.294		
8,600.00	8,598.19	8,595.90	8,594.89	29.92	182.71	-171.27	3,053.25	-1,212.75	3,412.17	3,199.59	212.59	16.051		
8,700.00	8,698.15	8,695.86	8,694.85	30.28	185.70	-171.28	3,053.25	-1,212.75	3,414.98	3,199.05	215.93	15.815		
8,800.00	8,798.10	8,795.82	8,794.80	30.63	188.69	-171.28	3,053.25	-1,212.75	3,417.79	3,198.52	219.27	15.587		
8,900.00	8,898.06	8,895.78	8,894.76	30.98	191.69	-171.29	3,053.25	-1,212.75	3,420.60	3,197.99	222.61	15.366		
9,000.00	8,998.02	8,995.74	8,994.72	31.34	194.68	-171.30	3,053.25	-1,212.75	3,423.41	3,197.45	225.96	15.151		
9,100.00	9,097.98	9,095.70	9,094.68	31.69	197.67	-171.31	3,053.25	-1,212.75	3,426.22	3,196.92	229.30	14.942		
9,200.00	9,197.94	9,195.66	9,194.64	32.05	200.66	-171.31	3,053.25	-1,212.75	3,429.03	3,196.39	232.64	14.739		
9,300.00	9,297.90	9,295.62	9,294.60	32.40	203.65	-171.32	3,053.25	-1,212.75	3,431.84	3,195.85	235.99	14.542		
9,400.00	9,397.86	9,395.58	9,394.56	32.75	206.64	-171.33	3,053.25	-1,212.75	3,434.65	3,195.32	239.33	14.351		
9,500.00	9,497.82	9,495.54	9,494.52	33.11	209.63	-171.33	3,053.25	-1,212.75	3,437.46	3,194.78	242.68	14.165		
9,600.00	9,597.78	9,595.49	9,594.48	33.46	212.63	-171.34	3,053.25	-1,212.75	3,440.27	3,194.25	246.02	13.984		
9,700.00	9,697.74	9,695.45	9,694.44	33.82	215.62	-171.35	3,053.25	-1,212.75	3,443.08	3,193.71	249.37	13.807		
9,800.00	9,797.70	9,795.41	9,794.40	34.17	218.61	-171.36	3,053.25	-1,212.75	3,445.89	3,193.18	252.71	13.636		
9,900.00	9,897.66	9,895.37	9,894.36	34.53	221.60	-171.36	3,053.25	-1,212.75	3,448.70	3,192.64	256.06	13.469		
10,000.00	9,997.62	9,995.33	9,994.32	34.88	224.60	-171.37	3,053.25	-1,212.75	3,451.51	3,192.11	259.40	13.306		
10,100.00	10,097.58	10,095.29	10,094.28	35.24	227.59	-171.38	3,053.25	-1,212.75	3,454.32	3,191.57	262.75	13.147		
10,200.00	10,197.54	10,195.25	10,194.24	35.59	230.58	-171.38	3,053.25	-1,212.75	3,457.13	3,191.04	266.09	12.992		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 10-INC-ONLY													Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	10,297.50	10,295.21	10,294.20	35.95	233.57	-171.39	3,053.25	-1,212.75	3,459.94	3,190.50	269.44	12.841		
10,400.00	10,397.46	10,395.17	10,394.16	36.30	236.56	-171.40	3,053.25	-1,212.75	3,462.75	3,189.97	272.78	12.694		
10,500.00	10,497.42	10,495.13	10,494.12	36.66	239.56	-171.41	3,053.25	-1,212.75	3,465.56	3,189.43	276.13	12.550		
10,600.00	10,597.38	10,595.09	10,594.08	37.02	242.55	-171.41	3,053.25	-1,212.75	3,468.37	3,188.89	279.48	12.410		
10,700.00	10,697.34	10,695.05	10,694.04	37.37	245.54	-171.42	3,053.25	-1,212.75	3,471.18	3,188.36	282.82	12.273		
10,800.00	10,797.30	10,795.01	10,794.00	37.73	248.54	-171.43	3,053.25	-1,212.75	3,473.99	3,187.82	286.17	12.140 SF		
10,900.00	10,897.26	10,300.00	10,295.76	38.08	233.72	-171.39	3,053.25	-1,212.75	3,527.89	3,259.95	267.94	13.167		
11,000.00	10,997.22	10,300.00	10,295.76	38.44	233.72	-171.39	3,053.25	-1,212.75	3,548.96	3,281.97	266.99	13.293		
11,100.00	11,097.18	10,300.00	10,295.76	38.80	233.72	-171.39	3,053.25	-1,212.75	3,572.71	3,306.84	265.87	13.438		
11,200.00	11,197.14	10,300.00	10,295.76	39.15	233.72	-171.39	3,053.25	-1,212.75	3,599.08	3,334.49	264.60	13.602		
11,300.00	11,297.09	10,300.00	10,295.76	39.51	233.72	-171.39	3,053.25	-1,212.75	3,628.02	3,364.85	263.17	13.786		
11,394.37	11,391.43	10,300.00	10,295.76	39.85	233.72	-171.39	3,053.25	-1,212.75	3,657.63	3,395.93	261.70	13.976		
11,400.00	11,397.05	10,300.00	10,295.76	39.87	233.72	-171.40	3,053.25	-1,212.75	3,659.46	3,397.85	261.61	13.988		
11,502.96	11,500.00	10,300.00	10,295.76	40.23	233.72	-22.20	3,053.25	-1,212.75	3,692.95	3,433.10	259.85	14.212		
11,600.00	11,597.04	10,300.00	10,295.76	40.56	233.72	-22.20	3,053.25	-1,212.75	3,725.64	3,467.57	258.07	14.436		
11,700.00	11,697.04	10,300.00	10,295.76	40.90	233.72	-22.20	3,053.25	-1,212.75	3,761.65	3,505.52	256.13	14.686		
11,800.00	11,797.04	10,300.00	10,295.76	41.24	233.72	-22.20	3,053.25	-1,212.75	3,799.95	3,545.85	254.09	14.955		
11,853.00	11,850.04	10,300.00	10,295.76	41.43	233.72	-22.20	3,053.25	-1,212.75	3,821.15	3,568.17	252.98	15.105		
11,900.00	11,896.99	10,300.00	10,295.76	41.59	233.72	-21.11	3,053.25	-1,212.75	3,838.82	3,586.87	251.95	15.236		
11,950.00	11,946.58	10,300.00	10,295.76	41.75	233.72	-20.52	3,053.25	-1,212.75	3,854.47	3,603.67	250.80	15.369		
12,000.00	11,995.43	10,300.00	10,295.76	41.92	233.72	-20.08	3,053.25	-1,212.75	3,866.79	3,617.20	249.59	15.493		
12,050.00	12,043.18	10,300.00	10,295.76	42.07	233.72	-19.77	3,053.25	-1,212.75	3,875.73	3,627.41	248.32	15.608		
12,100.00	12,089.46	10,300.00	10,295.76	42.23	233.72	-19.58	3,053.25	-1,212.75	3,881.24	3,634.23	247.01	15.713		
12,150.00	12,133.92	10,300.00	10,295.76	42.37	233.72	-19.52	3,053.25	-1,212.75	3,883.29	3,637.63	245.65	15.808		
12,200.00	12,176.21	10,300.00	10,295.76	42.51	233.72	-19.56	3,053.25	-1,212.75	3,881.87	3,637.61	244.26	15.892		
12,250.00	12,216.03	10,300.00	10,295.76	42.65	233.72	-19.73	3,053.25	-1,212.75	3,876.99	3,634.15	242.84	15.965		
12,300.00	12,253.06	10,300.00	10,295.76	42.78	233.72	-20.02	3,053.25	-1,212.75	3,868.68	3,627.28	241.40	16.026		
12,350.00	12,287.02	10,300.00	10,295.76	42.91	233.72	-20.43	3,053.25	-1,212.75	3,856.97	3,617.02	239.95	16.074		
12,400.00	12,317.65	10,300.00	10,295.76	43.03	233.72	-20.99	3,053.25	-1,212.75	3,841.93	3,603.42	238.51	16.108		
12,450.00	12,344.73	10,300.00	10,295.76	43.15	233.72	-21.71	3,053.25	-1,212.75	3,823.62	3,586.56	237.07	16.129		
12,500.00	12,368.04	10,300.00	10,295.76	43.27	233.72	-22.60	3,053.25	-1,212.75	3,802.15	3,566.50	235.65	16.135		
12,550.00	12,387.41	10,300.00	10,295.76	43.39	233.72	-23.71	3,053.25	-1,212.75	3,777.62	3,543.35	234.27	16.125		
12,600.00	12,402.69	10,300.00	10,295.76	43.51	233.72	-25.07	3,053.25	-1,212.75	3,750.17	3,517.22	232.94	16.099		
12,650.00	12,413.77	10,300.00	10,295.76	43.63	233.72	-26.73	3,053.25	-1,212.75	3,719.93	3,488.25	231.68	16.056		
12,700.00	12,420.55	10,300.00	10,295.76	43.74	233.72	-28.76	3,053.25	-1,212.75	3,687.08	3,456.59	230.49	15.997		
12,753.00	12,423.00	10,300.00	10,295.76	43.86	233.72	-31.42	3,053.25	-1,212.75	3,649.60	3,420.27	229.33	15.914		
12,800.00	12,423.00	10,300.00	10,295.76	43.97	233.72	-31.42	3,053.25	-1,212.75	3,615.37	3,387.02	228.35	15.833		
12,900.00	12,423.00	10,300.00	10,295.76	44.23	233.72	-31.42	3,053.25	-1,212.75	3,543.50	3,317.33	226.17	15.668		
13,000.00	12,423.00	10,300.00	10,295.76	44.55	233.72	-31.42	3,053.25	-1,212.75	3,473.03	3,249.13	223.90	15.512		
13,100.00	12,423.00	10,300.00	10,295.76	44.90	233.72	-31.42	3,053.25	-1,212.75	3,404.04	3,182.50	221.53	15.366		
13,200.00	12,423.00	10,300.00	10,295.76	45.31	233.72	-31.42	3,053.25	-1,212.75	3,336.61	3,117.54	219.07	15.231		
13,300.00	12,423.00	10,300.00	10,295.76	45.75	233.72	-31.42	3,053.25	-1,212.75	3,270.86	3,054.34	216.51	15.107		
13,400.00	12,423.00	10,300.00	10,295.76	46.24	233.72	-31.42	3,053.25	-1,212.75	3,206.87	2,993.01	213.86	14.995		
13,500.00	12,423.00	10,300.00	10,295.76	46.76	233.72	-31.42	3,053.25	-1,212.75	3,144.77	2,933.64	211.13	14.895		
13,600.00	12,423.00	10,300.00	10,295.76	47.33	233.72	-31.42	3,053.25	-1,212.75	3,084.65	2,876.34	208.31	14.808		
13,700.00	12,423.00	10,300.00	10,295.76	47.93	233.72	-31.42	3,053.25	-1,212.75	3,026.65	2,821.23	205.41	14.734		
13,800.00	12,423.00	10,300.00	10,295.76	48.57	233.72	-31.42	3,053.25	-1,212.75	2,970.88	2,768.42	202.46	14.674		
13,900.00	12,423.00	10,300.00	10,295.76	49.25	233.72	-31.42	3,053.25	-1,212.75	2,917.47	2,718.02	199.45	14.627		
14,000.00	12,423.00	10,300.00	10,295.76	49.95	233.72	-31.42	3,053.25	-1,212.75	2,866.56	2,670.14	196.42	14.594		
14,100.00	12,423.00	10,300.00	10,295.76	50.69	233.72	-31.42	3,053.25	-1,212.75	2,818.28	2,624.91	193.37	14.574		
14,200.00	12,423.00	10,300.00	10,295.76	51.46	233.72	-31.42	3,053.25	-1,212.75	2,772.77	2,582.42	190.34	14.567		
14,300.00	12,423.00	10,300.00	10,295.76	52.26	233.72	-31.42	3,053.25	-1,212.75	2,730.16	2,542.79	187.36	14.572		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 10-INC-ONLY													Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
14,400.00	12,423.00	10,300.00	10,295.76	53.09	233.72	-31.42	3,053.25	-1,212.75	2,690.59	2,506.13	184.46	14.586		
14,500.00	12,423.00	10,300.00	10,295.76	53.95	233.72	-31.42	3,053.25	-1,212.75	2,654.21	2,472.52	181.69	14.609		
14,600.00	12,423.00	10,300.00	10,295.76	54.83	233.72	-31.42	3,053.25	-1,212.75	2,621.13	2,442.05	179.08	14.637		
14,700.00	12,423.00	10,300.00	10,295.76	55.73	233.72	-31.42	3,053.25	-1,212.75	2,591.50	2,414.81	176.69	14.667		
14,800.00	12,423.00	10,300.00	10,295.76	56.66	233.72	-31.42	3,053.25	-1,212.75	2,565.42	2,390.85	174.57	14.696		
14,900.00	12,423.00	10,300.00	10,295.76	57.61	233.72	-31.42	3,053.25	-1,212.75	2,543.01	2,370.24	172.77	14.719		
15,000.00	12,423.00	10,300.00	10,295.76	58.58	233.72	-31.42	3,053.25	-1,212.75	2,524.37	2,353.02	171.35	14.733		
15,100.00	12,423.00	10,300.00	10,295.76	59.56	233.72	-31.42	3,053.25	-1,212.75	2,509.57	2,339.23	170.34	14.733		
15,200.00	12,423.00	10,300.00	10,295.76	60.57	233.72	-31.42	3,053.25	-1,212.75	2,498.70	2,328.90	169.80	14.716		
15,300.00	12,423.00	10,300.00	10,295.76	61.60	233.72	-31.42	3,053.25	-1,212.75	2,491.79	2,322.05	169.74	14.680		
15,400.00	12,423.00	10,300.00	10,295.76	62.64	233.72	-31.42	3,053.25	-1,212.75	2,488.88	2,318.68	170.20	14.623		
15,422.38	12,423.00	10,300.00	10,295.76	62.88	233.72	-31.42	3,053.25	-1,212.75	2,488.78	2,318.41	170.37	14.608 CC, ES		
15,500.00	12,423.00	10,300.00	10,295.76	63.70	233.72	-31.42	3,053.25	-1,212.75	2,489.99	2,318.83	171.17	14.547		
15,600.00	12,423.00	10,300.00	10,295.76	64.78	233.72	-31.42	3,053.25	-1,212.75	2,495.11	2,322.48	172.63	14.453		
15,700.00	12,423.00	10,300.00	10,295.76	65.87	233.72	-31.42	3,053.25	-1,212.75	2,504.22	2,329.65	174.57	14.345		
15,800.00	12,423.00	10,300.00	10,295.76	66.97	233.72	-31.42	3,053.25	-1,212.75	2,517.27	2,340.33	176.94	14.227		
15,900.00	12,423.00	10,300.00	10,295.76	68.09	233.72	-31.42	3,053.25	-1,212.75	2,534.20	2,354.51	179.69	14.103		
16,000.00	12,423.00	10,300.00	10,295.76	69.22	233.72	-31.42	3,053.25	-1,212.75	2,554.93	2,372.17	182.77	13.979		
16,100.00	12,423.00	10,300.00	10,295.76	70.36	233.72	-31.42	3,053.25	-1,212.75	2,579.38	2,393.28	186.10	13.860		
16,200.00	12,423.00	10,300.00	10,295.76	71.51	233.72	-31.42	3,053.25	-1,212.75	2,607.44	2,417.79	189.65	13.749		
16,300.00	12,423.00	10,300.00	10,295.76	72.68	233.72	-31.42	3,053.25	-1,212.75	2,638.99	2,445.65	193.33	13.650		
16,400.00	12,423.00	10,300.00	10,295.76	73.85	233.72	-31.42	3,053.25	-1,212.75	2,673.91	2,476.79	197.11	13.565		
16,500.00	12,423.00	10,300.00	10,295.76	75.04	233.72	-31.42	3,053.25	-1,212.75	2,712.07	2,511.13	200.94	13.497		
16,600.00	12,423.00	10,300.00	10,295.76	76.23	233.72	-31.42	3,053.25	-1,212.75	2,753.33	2,548.57	204.76	13.447		
16,700.00	12,423.00	10,300.00	10,295.76	77.43	233.72	-31.42	3,053.25	-1,212.75	2,797.56	2,589.02	208.55	13.415		
16,800.00	12,423.00	10,300.00	10,295.76	78.64	233.72	-31.42	3,053.25	-1,212.75	2,844.62	2,632.35	212.27	13.401		
16,900.00	12,423.00	10,300.00	10,295.76	79.86	233.72	-31.42	3,053.25	-1,212.75	2,894.37	2,678.47	215.90	13.406		
17,000.00	12,423.00	10,300.00	10,295.76	81.09	233.72	-31.42	3,053.25	-1,212.75	2,946.68	2,727.25	219.43	13.429		
17,100.00	12,423.00	10,300.00	10,295.76	82.33	233.72	-31.42	3,053.25	-1,212.75	3,001.41	2,778.57	222.84	13.469		
17,200.00	12,423.00	10,300.00	10,295.76	83.57	233.72	-31.42	3,053.25	-1,212.75	3,058.43	2,832.31	226.12	13.526		
17,300.00	12,423.00	10,300.00	10,295.76	84.82	233.72	-31.42	3,053.25	-1,212.75	3,117.61	2,888.35	229.26	13.598		
17,392.67	12,423.00	10,300.00	10,295.76	85.98	233.72	-31.42	3,053.25	-1,212.75	3,174.28	2,942.23	232.05	13.679		

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 10-IN-C-ONLY												Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	0.00	0.50	10.00	81.50	464.17	3,107.20	3,141.69				
100.00	100.00	93.70	93.70	0.52	10.08	81.50	464.17	3,107.20	3,141.68	3,131.08	10.60	296.496	
200.00	200.00	193.70	193.70	0.70	10.37	81.50	464.17	3,107.20	3,141.68	3,130.61	11.07	283.708	
300.00	300.00	293.70	293.70	0.99	10.87	81.50	464.17	3,107.20	3,141.68	3,129.83	11.85	265.064	
400.00	400.00	393.70	393.70	1.31	11.53	81.50	464.17	3,107.20	3,141.68	3,128.84	12.84	244.629	
500.00	500.00	493.70	493.70	1.65	12.35	81.50	464.17	3,107.20	3,141.68	3,127.69	13.99	224.498	
600.00	600.00	593.70	593.70	1.99	13.28	81.50	464.17	3,107.20	3,141.68	3,126.41	15.27	205.703	
700.00	700.00	693.70	693.70	2.34	14.31	81.50	464.17	3,107.20	3,141.68	3,125.03	16.65	188.669	
800.00	800.00	793.70	793.70	2.69	15.42	81.50	464.17	3,107.20	3,141.68	3,123.57	18.11	173.477	
900.00	900.00	893.70	893.70	3.04	16.59	81.50	464.17	3,107.20	3,141.68	3,122.05	19.63	160.033	
1,000.00	1,000.00	993.70	993.70	3.40	17.81	81.50	464.17	3,107.20	3,141.68	3,120.48	21.20	148.169	
1,100.00	1,100.00	1,093.70	1,093.70	3.75	19.06	81.50	464.17	3,107.20	3,141.68	3,118.86	22.82	137.696	
1,200.00	1,200.00	1,193.70	1,193.70	4.11	20.35	81.50	464.17	3,107.20	3,141.68	3,117.22	24.46	128.432	
1,300.00	1,300.00	1,293.70	1,293.70	4.46	21.67	81.50	464.17	3,107.20	3,141.68	3,115.55	26.13	120.211	
1,400.00	1,400.00	1,393.70	1,393.70	4.82	23.01	81.50	464.17	3,107.20	3,141.68	3,113.85	27.83	112.888	
1,500.00	1,500.00	1,493.70	1,493.70	5.18	24.37	81.50	464.17	3,107.20	3,141.68	3,112.14	29.54	106.338	
1,600.00	1,600.00	1,593.70	1,593.70	5.53	25.74	81.50	464.17	3,107.20	3,141.68	3,110.41	31.27	100.456	
1,700.00	1,700.00	1,693.70	1,693.70	5.89	27.13	81.50	464.17	3,107.20	3,141.68	3,108.66	33.02	95.151	
1,800.00	1,800.00	1,793.70	1,793.70	6.25	28.52	81.50	464.17	3,107.20	3,141.68	3,106.91	34.77	90.350	
1,900.00	1,900.00	1,893.70	1,893.70	6.61	29.93	81.50	464.17	3,107.20	3,141.68	3,105.14	36.54	85.986	
2,000.00	2,000.00	1,993.70	1,993.70	6.96	31.35	81.50	464.17	3,107.20	3,141.68	3,103.37	38.31	82.007	
2,100.00	2,100.00	2,093.70	2,093.70	7.32	32.77	81.50	464.17	3,107.20	3,141.68	3,101.59	40.09	78.365	
2,200.00	2,200.00	2,193.70	2,193.70	7.68	34.20	81.50	464.17	3,107.20	3,141.68	3,099.80	41.88	75.021	
2,300.00	2,300.00	2,293.70	2,293.70	8.04	35.63	81.50	464.17	3,107.20	3,141.68	3,098.01	43.67	71.941	
2,400.00	2,400.00	2,393.70	2,393.70	8.39	37.07	81.50	464.17	3,107.20	3,141.68	3,096.21	45.47	69.097	
2,500.00	2,500.00	2,493.70	2,493.70	8.75	38.52	81.50	464.17	3,107.20	3,141.68	3,094.41	47.27	66.463	
2,600.00	2,600.00	2,593.70	2,593.70	9.11	39.97	81.50	464.17	3,107.20	3,141.68	3,092.60	49.08	64.017	
2,700.00	2,700.00	2,693.70	2,693.70	9.47	41.42	81.50	464.17	3,107.20	3,141.68	3,090.79	50.89	61.740	
2,800.00	2,800.00	2,793.70	2,793.70	9.83	42.87	81.50	464.17	3,107.20	3,141.68	3,088.98	52.70	59.616	
2,900.00	2,900.00	2,893.70	2,893.70	10.18	44.33	81.50	464.17	3,107.20	3,141.68	3,087.17	54.51	57.630	
3,000.00	3,000.00	2,993.70	2,993.70	10.54	45.79	81.50	464.17	3,107.20	3,141.68	3,085.35	56.33	55.770	
3,100.00	3,100.00	3,093.70	3,093.70	10.90	47.25	81.50	464.17	3,107.20	3,141.68	3,083.53	58.15	54.024	
3,200.00	3,200.00	3,193.70	3,193.70	11.26	48.72	81.50	464.17	3,107.20	3,141.68	3,081.70	59.98	52.382	
3,300.00	3,300.00	3,293.70	3,293.70	11.62	50.19	81.50	464.17	3,107.20	3,141.68	3,079.88	61.80	50.835	
3,400.00	3,400.00	3,393.70	3,393.70	11.97	51.65	81.50	464.17	3,107.20	3,141.68	3,078.05	63.63	49.376	
3,500.00	3,500.00	3,493.70	3,493.70	12.33	53.12	81.50	464.17	3,107.20	3,141.68	3,076.22	65.46	47.997	
3,600.00	3,600.00	3,593.70	3,593.70	12.69	54.60	81.50	464.17	3,107.20	3,141.68	3,074.39	67.29	46.692	
3,700.00	3,700.00	3,693.70	3,693.70	13.05	56.07	81.50	464.17	3,107.20	3,141.68	3,072.56	69.12	45.455	
3,800.00	3,800.00	3,793.70	3,793.70	13.41	57.54	81.50	464.17	3,107.20	3,141.68	3,070.73	70.95	44.281	
3,900.00	3,900.00	3,893.70	3,893.70	13.77	59.02	81.50	464.17	3,107.20	3,141.68	3,068.90	72.78	43.165	
4,000.00	4,000.00	3,993.70	3,993.70	14.12	60.50	81.50	464.17	3,107.20	3,141.68	3,067.06	74.62	42.104	
4,100.00	4,100.00	4,093.70	4,093.70	14.46	61.97	-67.78	464.17	3,107.20	3,141.35	3,064.91	76.44	41.098	
4,162.88	4,162.85	4,156.55	4,156.55	14.67	62.90	-67.81	464.17	3,107.20	3,140.81	3,063.24	77.57	40.490	
4,200.00	4,199.96	4,193.66	4,193.66	14.79	63.45	-67.83	464.17	3,107.20	3,140.41	3,062.17	78.24	40.139	
4,300.00	4,299.92	4,293.62	4,293.62	15.12	64.93	-67.88	464.17	3,107.20	3,139.33	3,059.29	80.04	39.220	
4,400.00	4,399.88	4,393.58	4,393.58	15.45	66.41	-67.93	464.17	3,107.20	3,138.27	3,056.41	81.85	38.341	
4,500.00	4,499.84	4,493.54	4,493.54	15.78	67.89	-67.98	464.17	3,107.20	3,137.20	3,053.54	83.66	37.499	
4,600.00	4,599.80	4,593.50	4,593.50	16.11	69.37	-68.02	464.17	3,107.20	3,136.13	3,050.66	85.47	36.691	
4,700.00	4,699.76	4,693.46	4,693.46	16.44	70.85	-68.07	464.17	3,107.20	3,135.07	3,047.78	87.29	35.917	
4,800.00	4,799.72	4,793.42	4,793.42	16.77	72.34	-68.12	464.17	3,107.20	3,134.01	3,044.91	89.10	35.173	
4,900.00	4,899.68	4,893.38	4,893.38	17.11	73.82	-68.17	464.17	3,107.20	3,132.95	3,042.03	90.92	34.458	
5,000.00	4,999.64	4,993.34	4,993.34	17.44	75.30	-68.22	464.17	3,107.20	3,131.89	3,039.16	92.74	33.771	

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 10-IN-C-ONLY													Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,099.60	5,093.30	5,093.30	17.78	76.79	-68.27	464.17	3,107.20	3,130.84	3,036.28	94.56	33.110		
5,200.00	5,199.56	5,193.26	5,193.26	18.12	78.27	-68.31	464.17	3,107.20	3,129.79	3,033.41	96.38	32.473		
5,300.00	5,299.52	5,293.22	5,293.22	18.46	79.76	-68.36	464.17	3,107.20	3,128.74	3,030.53	98.20	31.859		
5,400.00	5,399.48	5,393.18	5,393.18	18.79	81.24	-68.41	464.17	3,107.20	3,127.69	3,027.66	100.03	31.288		
5,500.00	5,499.44	5,493.14	5,493.14	19.13	82.73	-68.46	464.17	3,107.20	3,126.65	3,024.79	101.86	30.697		
5,600.00	5,599.40	5,593.10	5,593.10	19.48	84.21	-68.51	464.17	3,107.20	3,125.60	3,021.92	103.68	30.146		
5,700.00	5,699.36	5,693.06	5,693.06	19.82	85.70	-68.56	464.17	3,107.20	3,124.56	3,019.05	105.51	29.614		
5,743.50	5,742.84	5,736.54	5,736.54	19.97	86.35	-68.58	464.17	3,107.20	3,124.11	3,017.81	106.31	29.388	CC, ES, SF	
5,800.00	5,799.32	5,217.00	5,215.94	20.16	78.62	-68.32	464.17	3,107.20	3,176.39	3,079.13	97.26	32.660		
5,900.00	5,899.28	5,217.00	5,215.94	20.50	78.62	-68.32	464.17	3,107.20	3,195.04	3,098.01	97.04	32.926		
6,000.00	5,999.24	5,217.00	5,215.94	20.85	78.62	-68.32	464.17	3,107.20	3,216.71	3,119.96	96.74	33.250		
6,100.00	6,099.20	5,217.00	5,215.94	21.19	78.62	-68.32	464.17	3,107.20	3,241.31	3,144.94	96.37	33.633		
6,200.00	6,199.16	5,217.00	5,215.94	21.53	78.62	-68.32	464.17	3,107.20	3,268.79	3,172.85	95.93	34.073		
6,300.00	6,299.11	5,217.00	5,215.94	21.88	78.62	-68.32	464.17	3,107.20	3,299.07	3,203.64	95.43	34.570		
6,400.00	6,399.07	5,217.00	5,215.94	22.23	78.62	-68.32	464.17	3,107.20	3,332.08	3,237.21	94.87	35.123		
6,500.00	6,499.03	5,217.00	5,215.94	22.57	78.62	-68.32	464.17	3,107.20	3,367.74	3,273.48	94.25	35.730		
6,600.00	6,598.99	5,217.00	5,215.94	22.92	78.62	-68.32	464.17	3,107.20	3,405.96	3,312.36	93.59	36.391		
6,700.00	6,698.95	5,217.00	5,215.94	23.27	78.62	-68.32	464.17	3,107.20	3,446.65	3,353.76	92.89	37.105		
6,800.00	6,798.91	5,217.00	5,215.94	23.61	78.62	-68.32	464.17	3,107.20	3,489.74	3,397.59	92.15	37.870		
6,900.00	6,898.87	5,217.00	5,215.94	23.96	78.62	-68.32	464.17	3,107.20	3,535.14	3,443.75	91.38	38.685		
7,000.00	6,998.83	5,217.00	5,215.94	24.31	78.62	-68.32	464.17	3,107.20	3,582.75	3,492.16	90.59	39.550		
7,100.00	7,098.79	5,217.00	5,215.94	24.66	78.62	-68.32	464.17	3,107.20	3,632.49	3,542.71	89.77	40.463		
7,200.00	7,198.75	5,217.00	5,215.94	25.01	78.62	-68.32	464.17	3,107.20	3,684.27	3,595.33	88.94	41.422		
7,300.00	7,298.71	5,217.00	5,215.94	25.36	78.62	-68.32	464.17	3,107.20	3,738.01	3,649.91	88.10	42.428		
7,400.00	7,398.67	5,217.00	5,215.94	25.71	78.62	-68.32	464.17	3,107.20	3,793.63	3,706.38	87.25	43.478		
7,500.00	7,498.63	5,217.00	5,215.94	26.06	78.62	-68.32	464.17	3,107.20	3,851.04	3,764.64	86.40	44.570		
7,600.00	7,598.59	5,217.00	5,215.94	26.41	78.62	-68.32	464.17	3,107.20	3,910.17	3,824.62	85.55	45.705		
7,700.00	7,698.55	5,217.00	5,215.94	26.76	78.62	-68.32	464.17	3,107.20	3,970.93	3,886.23	84.70	46.880		
7,800.00	7,798.51	5,217.00	5,215.94	27.11	78.62	-68.32	464.17	3,107.20	4,033.26	3,949.40	83.86	48.094		
7,900.00	7,898.47	5,217.00	5,215.94	27.46	78.62	-68.32	464.17	3,107.20	4,097.08	4,014.05	83.03	49.346		
8,000.00	7,998.43	5,217.00	5,215.94	27.81	78.62	-68.32	464.17	3,107.20	4,162.33	4,080.12	82.20	50.634		
8,100.00	8,098.39	5,217.00	5,215.94	28.16	78.62	-68.32	464.17	3,107.20	4,228.93	4,147.54	81.39	51.956		
8,200.00	8,198.35	5,217.00	5,215.94	28.51	78.62	-68.32	464.17	3,107.20	4,296.83	4,216.23	80.60	53.312		
8,300.00	8,298.31	5,217.00	5,215.94	28.87	78.62	-68.32	464.17	3,107.20	4,365.96	4,286.15	79.82	54.699		
8,400.00	8,398.27	5,217.00	5,215.94	29.22	78.62	-68.32	464.17	3,107.20	4,436.27	4,357.22	79.05	56.117		
8,500.00	8,498.23	5,217.00	5,215.94	29.57	78.62	-68.32	464.17	3,107.20	4,507.71	4,429.40	78.31	57.563		
8,600.00	8,598.19	5,217.00	5,215.94	29.92	78.62	-68.32	464.17	3,107.20	4,580.21	4,502.62	77.58	59.036		
8,700.00	8,698.15	5,217.00	5,215.94	30.28	78.62	-68.32	464.17	3,107.20	4,653.73	4,576.85	76.88	60.535		
8,800.00	8,798.10	5,217.00	5,215.94	30.63	78.62	-68.32	464.17	3,107.20	4,728.22	4,652.03	76.19	62.058		
8,900.00	8,898.06	5,217.00	5,215.94	30.98	78.62	-68.32	464.17	3,107.20	4,803.64	4,728.12	75.53	63.603		
9,000.00	8,998.02	5,217.00	5,215.94	31.34	78.62	-68.32	464.17	3,107.20	4,879.94	4,805.06	74.88	65.169		
9,100.00	9,097.98	5,217.00	5,215.94	31.69	78.62	-68.32	464.17	3,107.20	4,957.09	4,882.83	74.26	66.754		
9,200.00	9,197.94	5,217.00	5,215.94	32.05	78.62	-68.32	464.17	3,107.20	5,035.04	4,961.38	73.66	68.356		
9,300.00	9,297.90	5,217.00	5,215.94	32.40	78.62	-68.32	464.17	3,107.20	5,113.76	5,040.68	73.08	69.975		
9,400.00	9,397.86	5,217.00	5,215.94	32.75	78.62	-68.32	464.17	3,107.20	5,193.21	5,120.68	72.52	71.608		
9,500.00	9,497.82	5,217.00	5,215.94	33.11	78.62	-68.32	464.17	3,107.20	5,273.36	5,201.37	71.99	73.254		
9,600.00	9,597.78	5,217.00	5,215.94	33.46	78.62	-68.32	464.17	3,107.20	5,354.17	5,282.70	71.47	74.911		
9,700.00	9,697.74	5,217.00	5,215.94	33.82	78.62	-68.32	464.17	3,107.20	5,435.63	5,364.65	70.98	76.579		
9,800.00	9,797.70	5,217.00	5,215.94	34.17	78.62	-68.32	464.17	3,107.20	5,517.69	5,447.18	70.51	78.254		
9,900.00	9,897.66	5,217.00	5,215.94	34.53	78.62	-68.32	464.17	3,107.20	5,600.34	5,530.28	70.06	79.936		
10,000.00	9,997.62	5,217.00	5,215.94	34.88	78.62	-68.32	464.17	3,107.20	5,683.55	5,613.92	69.63	81.624		
10,100.00	10,097.58	5,217.00	5,215.94	35.24	78.62	-68.32	464.17	3,107.20	5,767.29	5,698.07	69.22	83.315		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 10-INCO-NONLY												Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,200.00	10,197.54	5,217.00	5,215.94	35.59	78.62	-68.32	464.17	3,107.20	5,851.54	5,782.71	68.83	85.009	
10,300.00	10,297.50	5,217.00	5,215.94	35.95	78.62	-68.32	464.17	3,107.20	5,936.28	5,867.81	68.47	86.704	
10,400.00	10,397.46	5,217.00	5,215.94	36.30	78.62	-68.32	464.17	3,107.20	6,021.49	5,953.37	68.12	88.399	
10,500.00	10,497.42	5,217.00	5,215.94	36.66	78.62	-68.32	464.17	3,107.20	6,107.14	6,039.35	67.79	90.092	
10,600.00	10,597.38	5,217.00	5,215.94	37.02	78.62	-68.32	464.17	3,107.20	6,193.23	6,125.75	67.48	91.783	
10,700.00	10,697.34	5,217.00	5,215.94	37.37	78.62	-68.32	464.17	3,107.20	6,279.73	6,212.54	67.19	93.469	
10,800.00	10,797.30	5,217.00	5,215.94	37.73	78.62	-68.32	464.17	3,107.20	6,366.62	6,299.71	66.91	95.150	
10,900.00	10,897.26	5,217.00	5,215.94	38.08	78.62	-68.32	464.17	3,107.20	6,453.89	6,387.24	66.66	96.824	
11,000.00	10,997.22	5,217.00	5,215.94	38.44	78.62	-68.32	464.17	3,107.20	6,541.53	6,475.11	66.42	98.491	
11,100.00	11,097.18	5,217.00	5,215.94	38.80	78.62	-68.32	464.17	3,107.20	6,629.52	6,563.32	66.20	100.149	
11,200.00	11,197.14	5,217.00	5,215.94	39.15	78.62	-68.32	464.17	3,107.20	6,717.84	6,651.85	65.99	101.797	
11,300.00	11,297.09	5,217.00	5,215.94	39.51	78.62	-68.32	464.17	3,107.20	6,806.49	6,740.68	65.81	103.434	
11,394.37	11,391.43	5,217.00	5,215.94	39.85	78.62	-68.32	464.17	3,107.20	6,890.43	6,824.79	65.64	104.968	
11,400.00	11,397.05	5,217.00	5,215.94	39.87	78.62	-68.48	464.17	3,107.20	6,895.45	6,829.81	65.63	105.060	
11,502.96	11,500.00	5,217.00	5,215.94	40.23	78.62	77.88	464.17	3,107.20	6,987.59	6,922.11	65.48	106.719	
11,600.00	11,597.04	5,217.00	5,215.94	40.56	78.62	77.88	464.17	3,107.20	7,074.90	7,009.56	65.35	108.270	
11,700.00	11,697.04	5,217.00	5,215.94	40.90	78.62	77.88	464.17	3,107.20	7,165.14	7,099.91	65.22	109.853	
11,800.00	11,797.04	5,217.00	5,215.94	41.24	78.62	77.88	464.17	3,107.20	7,255.63	7,190.51	65.12	111.421	
11,853.00	11,850.04	5,217.00	5,215.94	41.43	78.62	77.88	464.17	3,107.20	7,303.69	7,238.62	65.07	112.246	
11,900.00	11,896.99	5,217.00	5,215.94	41.59	78.62	68.79	464.17	3,107.20	7,346.16	7,281.13	65.02	112.978	
11,950.00	11,946.58	5,217.00	5,215.94	41.75	78.62	59.93	464.17	3,107.20	7,390.72	7,325.75	64.97	113.757	
12,000.00	11,995.43	5,217.00	5,215.94	41.92	78.62	52.52	464.17	3,107.20	7,434.33	7,369.42	64.91	114.533	
12,050.00	12,043.18	5,217.00	5,215.94	42.07	78.62	46.47	464.17	3,107.20	7,476.68	7,411.83	64.85	115.298	
12,100.00	12,089.46	5,217.00	5,215.94	42.23	78.62	41.57	464.17	3,107.20	7,517.46	7,452.68	64.78	116.046	
12,150.00	12,133.92	5,217.00	5,215.94	42.37	78.62	37.61	464.17	3,107.20	7,556.41	7,491.69	64.71	116.773	
12,200.00	12,176.21	5,217.00	5,215.94	42.51	78.62	34.40	464.17	3,107.20	7,593.24	7,528.60	64.64	117.470	
12,250.00	12,216.03	5,217.00	5,215.94	42.65	78.62	31.80	464.17	3,107.20	7,627.71	7,563.14	64.57	118.132	
12,300.00	12,253.06	5,217.00	5,215.94	42.78	78.62	29.69	464.17	3,107.20	7,659.60	7,595.09	64.50	118.750	
12,350.00	12,287.02	5,217.00	5,215.94	42.91	78.62	27.96	464.17	3,107.20	7,688.69	7,624.25	64.44	119.319	
12,400.00	12,317.65	5,217.00	5,215.94	43.03	78.62	26.56	464.17	3,107.20	7,714.79	7,650.41	64.38	119.829	
12,450.00	12,344.73	5,217.00	5,215.94	43.15	78.62	25.42	464.17	3,107.20	7,737.74	7,673.41	64.33	120.275	
12,500.00	12,368.04	5,217.00	5,215.94	43.27	78.62	24.52	464.17	3,107.20	7,757.40	7,693.10	64.30	120.649	
12,550.00	12,387.41	5,217.00	5,215.94	43.39	78.62	23.82	464.17	3,107.20	7,773.63	7,709.36	64.27	120.944	
12,600.00	12,402.69	5,217.00	5,215.94	43.51	78.62	23.29	464.17	3,107.20	7,786.34	7,722.07	64.27	121.154	
12,650.00	12,413.77	5,217.00	5,215.94	43.63	78.62	22.93	464.17	3,107.20	7,795.45	7,731.17	64.28	121.275	
12,700.00	12,420.55	5,217.00	5,215.94	43.74	78.62	22.72	464.17	3,107.20	7,800.89	7,736.58	64.31	121.302	
12,753.00	12,423.00	5,217.00	5,215.94	43.86	78.62	22.65	464.17	3,107.20	7,802.63	7,738.27	64.36	121.226	
12,800.00	12,423.00	5,217.00	5,215.94	43.97	78.62	22.65	464.17	3,107.20	7,802.47	7,738.04	64.43	121.099	
12,803.36	12,423.00	5,217.00	5,215.94	43.98	78.62	22.65	464.17	3,107.20	7,802.47	7,738.03	64.44	121.088	
12,900.00	12,423.00	5,217.00	5,215.94	44.23	78.62	22.65	464.17	3,107.20	7,803.07	7,738.45	64.62	120.762	
13,000.00	12,423.00	5,217.00	5,215.94	44.55	78.62	22.65	464.17	3,107.20	7,804.95	7,740.09	64.86	120.336	
13,100.00	12,423.00	5,217.00	5,215.94	44.90	78.62	22.65	464.17	3,107.20	7,808.11	7,742.94	65.16	119.825	
13,200.00	12,423.00	5,217.00	5,215.94	45.31	78.62	22.65	464.17	3,107.20	7,812.54	7,747.02	65.52	119.234	
13,300.00	12,423.00	5,217.00	5,215.94	45.75	78.62	22.65	464.17	3,107.20	7,818.26	7,752.32	65.94	118.569	
13,400.00	12,423.00	5,217.00	5,215.94	46.24	78.62	22.65	464.17	3,107.20	7,825.25	7,758.84	66.41	117.836	
13,500.00	12,423.00	5,217.00	5,215.94	46.76	78.62	22.65	464.17	3,107.20	7,833.51	7,766.58	66.93	117.042	
13,600.00	12,423.00	5,217.00	5,215.94	47.33	78.62	22.65	464.17	3,107.20	7,843.03	7,775.53	67.50	116.193	
13,700.00	12,423.00	5,217.00	5,215.94	47.93	78.62	22.65	464.17	3,107.20	7,853.82	7,785.70	68.12	115.296	
13,800.00	12,423.00	5,217.00	5,215.94	48.57	78.62	22.65	464.17	3,107.20	7,865.86	7,797.08	68.78	114.358	
13,900.00	12,423.00	5,217.00	5,215.94	49.25	78.62	22.65	464.17	3,107.20	7,879.16	7,809.67	69.49	113.386	
14,000.00	12,423.00	5,217.00	5,215.94	49.95	78.62	22.65	464.17	3,107.20	7,893.70	7,823.46	70.24	112.388	
14,100.00	12,423.00	5,217.00	5,215.94	50.69	78.62	22.65	464.17	3,107.20	7,909.48	7,838.45	71.02	111.368	

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 10-INC-ONLY												Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (")	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
14,200.00	12,423.00	5,217.00	5,215.94	51.46	78.62	22.65	464.17	3,107.20	7,926.48	7,854.64	71.84	110.333	
14,300.00	12,423.00	5,217.00	5,215.94	52.26	78.62	22.65	464.17	3,107.20	7,944.71	7,872.02	72.69	109.289	
14,400.00	12,423.00	5,217.00	5,215.94	53.09	78.62	22.65	464.17	3,107.20	7,964.16	7,890.58	73.58	108.241	
14,500.00	12,423.00	5,217.00	5,215.94	53.95	78.62	22.65	464.17	3,107.20	7,984.81	7,910.32	74.49	107.194	
14,600.00	12,423.00	5,217.00	5,215.94	54.83	78.62	22.65	464.17	3,107.20	8,006.65	7,931.22	75.43	106.152	
14,700.00	12,423.00	5,217.00	5,215.94	55.73	78.62	22.65	464.17	3,107.20	8,029.68	7,953.29	76.39	105.119	
14,800.00	12,423.00	5,217.00	5,215.94	56.66	78.62	22.65	464.17	3,107.20	8,053.89	7,976.52	77.37	104.099	
14,900.00	12,423.00	5,217.00	5,215.94	57.61	78.62	22.65	464.17	3,107.20	8,079.26	8,000.89	78.37	103.094	
15,000.00	12,423.00	5,217.00	5,215.94	58.58	78.62	22.65	464.17	3,107.20	8,105.79	8,026.40	79.38	102.108	
15,100.00	12,423.00	5,217.00	5,215.94	59.56	78.62	22.65	464.17	3,107.20	8,133.45	8,053.04	80.42	101.143	
15,200.00	12,423.00	5,217.00	5,215.94	60.57	78.62	22.65	464.17	3,107.20	8,162.26	8,080.80	81.46	100.200	
15,300.00	12,423.00	5,217.00	5,215.94	61.60	78.62	22.65	464.17	3,107.20	8,192.18	8,109.66	82.51	99.282	
15,400.00	12,423.00	5,217.00	5,215.94	62.64	78.62	22.65	464.17	3,107.20	8,223.20	8,139.63	83.58	98.390	
15,500.00	12,423.00	5,217.00	5,215.94	63.70	78.62	22.65	464.17	3,107.20	8,255.33	8,170.68	84.65	97.524	
15,600.00	12,423.00	5,217.00	5,215.94	64.78	78.62	22.65	464.17	3,107.20	8,288.53	8,202.80	85.73	96.686	
15,700.00	12,423.00	5,217.00	5,215.94	65.87	78.62	22.65	464.17	3,107.20	8,322.80	8,236.00	86.81	95.877	
15,800.00	12,423.00	5,217.00	5,215.94	66.97	78.62	22.65	464.17	3,107.20	8,358.13	8,270.24	87.89	95.097	
15,900.00	12,423.00	5,217.00	5,215.94	68.09	78.62	22.65	464.17	3,107.20	8,394.50	8,305.53	88.98	94.345	
16,000.00	12,423.00	5,217.00	5,215.94	69.22	78.62	22.65	464.17	3,107.20	8,431.91	8,341.84	90.06	93.623	
16,100.00	12,423.00	5,217.00	5,215.94	70.36	78.62	22.65	464.17	3,107.20	8,470.32	8,379.18	91.15	92.931	
16,200.00	12,423.00	5,217.00	5,215.94	71.51	78.62	22.65	464.17	3,107.20	8,509.74	8,417.51	92.23	92.267	
16,300.00	12,423.00	5,217.00	5,215.94	72.68	78.62	22.65	464.17	3,107.20	8,550.15	8,456.84	93.31	91.633	
16,400.00	12,423.00	5,217.00	5,215.94	73.85	78.62	22.65	464.17	3,107.20	8,591.53	8,497.14	94.38	91.027	
16,500.00	12,423.00	5,217.00	5,215.94	75.04	78.62	22.65	464.17	3,107.20	8,633.87	8,538.41	95.45	90.450	
16,600.00	12,423.00	5,217.00	5,215.94	76.23	78.62	22.65	464.17	3,107.20	8,677.15	8,580.63	96.52	89.900	
16,700.00	12,423.00	5,217.00	5,215.94	77.43	78.62	22.65	464.17	3,107.20	8,721.37	8,623.79	97.58	89.378	
16,800.00	12,423.00	5,217.00	5,215.94	78.64	78.62	22.65	464.17	3,107.20	8,766.51	8,667.88	98.63	88.883	
16,900.00	12,423.00	5,217.00	5,215.94	79.86	78.62	22.65	464.17	3,107.20	8,812.55	8,712.87	99.67	88.415	
17,000.00	12,423.00	5,217.00	5,215.94	81.09	78.62	22.65	464.17	3,107.20	8,859.48	8,758.77	100.71	87.972	
17,100.00	12,423.00	5,217.00	5,215.94	82.33	78.62	22.65	464.17	3,107.20	8,907.28	8,805.55	101.73	87.554	
17,200.00	12,423.00	5,217.00	5,215.94	83.57	78.62	22.65	464.17	3,107.20	8,955.95	8,853.20	102.75	87.162	
17,300.00	12,423.00	5,217.00	5,215.94	84.82	78.62	22.65	464.17	3,107.20	9,005.46	8,901.70	103.76	86.793	
17,392.67	12,423.00	5,217.00	5,215.94	85.98	78.62	22.65	464.17	3,107.20	9,052.09	8,947.40	104.68	86.472	

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 10-INC-ONLY													Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	0.50	10.00	66.97	1,458.62	3,430.69	3,727.90					
100.00	100.00	93.70	93.70	0.52	10.08	66.97	1,458.62	3,430.69	3,727.90	3,717.30	10.60	351.821		
200.00	200.00	193.70	193.70	0.70	10.37	66.97	1,458.62	3,430.69	3,727.90	3,716.82	11.07	336.646		
300.00	300.00	293.70	293.70	0.99	10.87	66.97	1,458.62	3,430.69	3,727.90	3,716.04	11.85	314.523		
400.00	400.00	393.70	393.70	1.31	11.53	66.97	1,458.62	3,430.69	3,727.90	3,715.05	12.84	290.276		
500.00	500.00	493.70	493.70	1.65	12.35	66.97	1,458.62	3,430.69	3,727.90	3,713.90	13.99	266.387		
600.00	600.00	593.70	593.70	1.99	13.28	66.97	1,458.62	3,430.69	3,727.90	3,712.62	15.27	244.086		
700.00	700.00	693.70	693.70	2.34	14.31	66.97	1,458.62	3,430.69	3,727.90	3,711.25	16.65	223.874		
800.00	800.00	793.70	793.70	2.69	15.42	66.97	1,458.62	3,430.69	3,727.90	3,709.79	18.11	205.847		
900.00	900.00	893.70	893.70	3.04	16.59	66.97	1,458.62	3,430.69	3,727.90	3,708.27	19.63	189.894		
1,000.00	1,000.00	993.70	993.70	3.40	17.81	66.97	1,458.62	3,430.69	3,727.90	3,706.69	21.20	175.816		
1,100.00	1,100.00	1,093.70	1,093.70	3.75	19.06	66.97	1,458.62	3,430.69	3,727.90	3,705.08	22.82	163.389		
1,200.00	1,200.00	1,193.70	1,193.70	4.11	20.35	66.97	1,458.62	3,430.69	3,727.90	3,703.44	24.46	152.397		
1,300.00	1,300.00	1,293.70	1,293.70	4.46	21.67	66.97	1,458.62	3,430.69	3,727.90	3,701.76	26.13	142.641		
1,400.00	1,400.00	1,393.70	1,393.70	4.82	23.01	66.97	1,458.62	3,430.69	3,727.90	3,700.07	27.83	133.952		
1,500.00	1,500.00	1,493.70	1,493.70	5.18	24.37	66.97	1,458.62	3,430.69	3,727.90	3,698.35	29.54	126.180		
1,600.00	1,600.00	1,593.70	1,593.70	5.53	25.74	66.97	1,458.62	3,430.69	3,727.90	3,696.62	31.27	119.200		
1,700.00	1,700.00	1,693.70	1,693.70	5.89	27.13	66.97	1,458.62	3,430.69	3,727.90	3,694.88	33.02	112.906		
1,800.00	1,800.00	1,793.70	1,793.70	6.25	28.52	66.97	1,458.62	3,430.69	3,727.90	3,693.12	34.77	107.208		
1,900.00	1,900.00	1,893.70	1,893.70	6.61	29.93	66.97	1,458.62	3,430.69	3,727.90	3,691.36	36.54	102.031		
2,000.00	2,000.00	1,993.70	1,993.70	6.96	31.35	66.97	1,458.62	3,430.69	3,727.90	3,689.59	38.31	97.308		
2,100.00	2,100.00	2,093.70	2,093.70	7.32	32.77	66.97	1,458.62	3,430.69	3,727.90	3,687.81	40.09	92.987		
2,200.00	2,200.00	2,193.70	2,193.70	7.68	34.20	66.97	1,458.62	3,430.69	3,727.90	3,686.02	41.88	89.019		
2,300.00	2,300.00	2,293.70	2,293.70	8.04	35.63	66.97	1,458.62	3,430.69	3,727.90	3,684.23	43.67	85.365		
2,400.00	2,400.00	2,393.70	2,393.70	8.39	37.07	66.97	1,458.62	3,430.69	3,727.90	3,682.43	45.47	81.990		
2,500.00	2,500.00	2,493.70	2,493.70	8.75	38.52	66.97	1,458.62	3,430.69	3,727.90	3,680.63	47.27	78.864		
2,600.00	2,600.00	2,593.70	2,593.70	9.11	39.97	66.97	1,458.62	3,430.69	3,727.90	3,678.82	49.08	75.962		
2,700.00	2,700.00	2,693.70	2,693.70	9.47	41.42	66.97	1,458.62	3,430.69	3,727.90	3,677.01	50.89	73.260		
2,800.00	2,800.00	2,793.70	2,793.70	9.83	42.87	66.97	1,458.62	3,430.69	3,727.90	3,675.20	52.70	70.740		
2,900.00	2,900.00	2,893.70	2,893.70	10.18	44.33	66.97	1,458.62	3,430.69	3,727.90	3,673.38	54.51	68.384		
3,000.00	3,000.00	2,993.70	2,993.70	10.54	45.79	66.97	1,458.62	3,430.69	3,727.90	3,671.56	56.33	66.176		
3,100.00	3,100.00	3,093.70	3,093.70	10.90	47.25	66.97	1,458.62	3,430.69	3,727.90	3,669.74	58.15	64.105		
3,200.00	3,200.00	3,193.70	3,193.70	11.26	48.72	66.97	1,458.62	3,430.69	3,727.90	3,667.92	59.98	62.156		
3,300.00	3,300.00	3,293.70	3,293.70	11.62	50.19	66.97	1,458.62	3,430.69	3,727.90	3,666.10	61.80	60.321		
3,400.00	3,400.00	3,393.70	3,393.70	11.97	51.65	66.97	1,458.62	3,430.69	3,727.90	3,664.27	63.63	58.589		
3,500.00	3,500.00	3,493.70	3,493.70	12.33	53.12	66.97	1,458.62	3,430.69	3,727.90	3,662.44	65.46	56.953		
3,600.00	3,600.00	3,593.70	3,593.70	12.69	54.60	66.97	1,458.62	3,430.69	3,727.90	3,660.61	67.29	55.404		
3,700.00	3,700.00	3,693.70	3,693.70	13.05	56.07	66.97	1,458.62	3,430.69	3,727.90	3,658.78	69.12	53.936		
3,800.00	3,800.00	3,793.70	3,793.70	13.41	57.54	66.97	1,458.62	3,430.69	3,727.90	3,656.95	70.95	52.543		
3,900.00	3,900.00	3,893.70	3,893.70	13.77	59.02	66.97	1,458.62	3,430.69	3,727.90	3,655.11	72.78	51.219		
4,000.00	4,000.00	3,993.70	3,993.70	14.12	60.50	66.97	1,458.62	3,430.69	3,727.90	3,653.28	74.62	49.960		
4,100.00	4,100.00	4,093.70	4,093.70	14.46	61.97	-82.32	1,458.62	3,430.69	3,727.78	3,651.34	76.44	48.770		
4,162.88	4,162.85	4,156.55	4,156.55	14.67	62.90	-82.34	1,458.62	3,430.69	3,727.59	3,650.02	77.57	48.055		
4,200.00	4,199.96	4,193.66	4,193.66	14.79	63.45	-82.36	1,458.62	3,430.69	3,727.45	3,649.21	78.24	47.642		
4,300.00	4,299.92	4,293.62	4,293.62	15.12	64.93	-82.40	1,458.62	3,430.69	3,727.07	3,647.03	80.04	46.562		
4,400.00	4,399.88	4,393.58	4,393.58	15.45	66.41	-82.45	1,458.62	3,430.69	3,726.70	3,644.84	81.85	45.529		
4,500.00	4,499.84	4,493.54	4,493.54	15.78	67.89	-82.49	1,458.62	3,430.69	3,726.32	3,642.66	83.66	44.540		
4,600.00	4,599.80	4,593.50	4,593.50	16.11	69.37	-82.53	1,458.62	3,430.69	3,725.95	3,640.48	85.47	43.592		
4,700.00	4,699.76	4,693.46	4,693.46	16.44	70.85	-82.58	1,458.62	3,430.69	3,725.58	3,638.30	87.29	42.681		
4,800.00	4,799.72	4,793.42	4,793.42	16.77	72.34	-82.62	1,458.62	3,430.69	3,725.22	3,636.11	89.10	41.808		
4,900.00	4,899.68	4,893.38	4,893.38	17.11	73.82	-82.66	1,458.62	3,430.69	3,724.85	3,633.93	90.92	40.968		
5,000.00	4,999.64	4,993.34	4,993.34	17.44	75.30	-82.71	1,458.62	3,430.69	3,724.49	3,631.75	92.74	40.160		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 10-INC-ONLY													Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,099.60	5,093.30	5,093.30	17.78	76.79	-82.75	1,458.62	3,430.69	3,724.13	3,629.57	94.56	39.383		
5,200.00	5,199.56	5,193.26	5,193.26	18.12	78.27	-82.79	1,458.62	3,430.69	3,723.77	3,627.39	96.38	38.635		
5,300.00	5,299.52	5,293.22	5,293.22	18.46	79.76	-82.84	1,458.62	3,430.69	3,723.42	3,625.21	98.21	37.914		
5,400.00	5,399.48	5,393.18	5,393.18	18.79	81.24	-82.88	1,458.62	3,430.69	3,723.06	3,623.03	100.03	37.219		
5,500.00	5,499.44	5,493.14	5,493.14	19.13	82.73	-82.92	1,458.62	3,430.69	3,722.71	3,620.85	101.86	36.548		
5,600.00	5,599.40	5,593.10	5,593.10	19.48	84.21	-82.97	1,458.62	3,430.69	3,722.36	3,618.68	103.68	35.901		
5,650.58	5,649.96	5,643.66	5,643.66	19.65	84.97	-82.99	1,458.62	3,430.69	3,722.19	3,617.58	104.61	35.582 CC, ES, SF		
5,700.00	5,699.36	5,168.00	5,166.95	19.82	77.90	-82.78	1,458.62	3,430.69	3,759.01	3,662.20	96.81	38.828		
5,800.00	5,799.32	5,168.00	5,166.95	20.16	77.90	-82.78	1,458.62	3,430.69	3,773.96	3,677.18	96.79	38.993		
5,900.00	5,899.28	5,168.00	5,166.95	20.50	77.90	-82.78	1,458.62	3,430.69	3,791.49	3,694.79	96.70	39.209		
6,000.00	5,999.24	5,168.00	5,166.95	20.85	77.90	-82.78	1,458.62	3,430.69	3,811.56	3,715.00	96.56	39.474		
6,100.00	6,099.20	5,168.00	5,166.95	21.19	77.90	-82.78	1,458.62	3,430.69	3,834.14	3,737.77	96.36	39.789		
6,200.00	6,199.16	5,168.00	5,166.95	21.53	77.90	-82.78	1,458.62	3,430.69	3,859.17	3,763.06	96.11	40.152		
6,300.00	6,299.11	5,168.00	5,166.95	21.88	77.90	-82.78	1,458.62	3,430.69	3,886.62	3,790.80	95.82	40.563		
6,400.00	6,399.07	5,168.00	5,166.95	22.23	77.90	-82.78	1,458.62	3,430.69	3,916.43	3,820.95	95.47	41.021		
6,500.00	6,499.03	5,168.00	5,166.95	22.57	77.90	-82.78	1,458.62	3,430.69	3,948.54	3,853.46	95.09	41.526		
6,600.00	6,598.99	5,168.00	5,166.95	22.92	77.90	-82.78	1,458.62	3,430.69	3,982.91	3,888.25	94.66	42.075		
6,700.00	6,698.95	5,168.00	5,166.95	23.27	77.90	-82.78	1,458.62	3,430.69	4,019.48	3,925.28	94.20	42.670		
6,800.00	6,798.91	5,168.00	5,166.95	23.61	77.90	-82.78	1,458.62	3,430.69	4,058.18	3,964.47	93.70	43.308		
6,900.00	6,898.87	5,168.00	5,166.95	23.96	77.90	-82.78	1,458.62	3,430.69	4,098.95	4,005.77	93.18	43.989		
7,000.00	6,998.83	5,168.00	5,166.95	24.31	77.90	-82.78	1,458.62	3,430.69	4,141.74	4,049.11	92.63	44.713		
7,100.00	7,098.79	5,168.00	5,166.95	24.66	77.90	-82.78	1,458.62	3,430.69	4,186.48	4,094.42	92.06	45.477		
7,200.00	7,198.75	5,168.00	5,166.95	25.01	77.90	-82.78	1,458.62	3,430.69	4,233.11	4,141.65	91.46	46.282		
7,300.00	7,298.71	5,168.00	5,166.95	25.36	77.90	-82.78	1,458.62	3,430.69	4,281.57	4,190.71	90.85	47.126		
7,400.00	7,398.67	5,168.00	5,166.95	25.71	77.90	-82.78	1,458.62	3,430.69	4,331.79	4,241.56	90.23	48.008		
7,500.00	7,498.63	5,168.00	5,166.95	26.06	77.90	-82.78	1,458.62	3,430.69	4,383.72	4,294.13	89.60	48.928		
7,600.00	7,598.59	5,168.00	5,166.95	26.41	77.90	-82.78	1,458.62	3,430.69	4,437.30	4,348.35	88.95	49.884		
7,700.00	7,698.55	5,168.00	5,166.95	26.76	77.90	-82.78	1,458.62	3,430.69	4,492.46	4,404.16	88.30	50.875		
7,800.00	7,798.51	5,168.00	5,166.95	27.11	77.90	-82.78	1,458.62	3,430.69	4,549.16	4,461.51	87.65	51.901		
7,900.00	7,898.47	5,168.00	5,166.95	27.46	77.90	-82.78	1,458.62	3,430.69	4,607.32	4,520.33	87.00	52.960		
8,000.00	7,998.43	5,168.00	5,166.95	27.81	77.90	-82.78	1,458.62	3,430.69	4,666.91	4,580.57	86.34	54.051		
8,100.00	8,098.39	5,168.00	5,166.95	28.16	77.90	-82.78	1,458.62	3,430.69	4,727.86	4,642.17	85.69	55.174		
8,200.00	8,198.35	5,168.00	5,166.95	28.51	77.90	-82.78	1,458.62	3,430.69	4,790.12	4,705.08	85.04	56.326		
8,300.00	8,298.31	5,168.00	5,166.95	28.87	77.90	-82.78	1,458.62	3,430.69	4,853.64	4,769.24	84.40	57.507		
8,400.00	8,398.27	5,168.00	5,166.95	29.22	77.90	-82.78	1,458.62	3,430.69	4,918.38	4,834.61	83.76	58.716		
8,500.00	8,498.23	5,168.00	5,166.95	29.57	77.90	-82.78	1,458.62	3,430.69	4,984.28	4,901.14	83.14	59.952		
8,600.00	8,598.19	5,168.00	5,166.95	29.92	77.90	-82.78	1,458.62	3,430.69	5,051.30	4,968.78	82.52	61.213		
8,700.00	8,698.15	5,168.00	5,166.95	30.28	77.90	-82.78	1,458.62	3,430.69	5,119.40	5,037.49	81.91	62.499		
8,800.00	8,798.10	5,168.00	5,166.95	30.63	77.90	-82.78	1,458.62	3,430.69	5,188.53	5,107.22	81.32	63.807		
8,900.00	8,898.06	5,168.00	5,166.95	30.98	77.90	-82.78	1,458.62	3,430.69	5,258.66	5,177.92	80.73	65.138		
9,000.00	8,998.02	5,168.00	5,166.95	31.34	77.90	-82.78	1,458.62	3,430.69	5,329.73	5,249.57	80.16	66.489		
9,100.00	9,097.98	5,168.00	5,166.95	31.69	77.90	-82.78	1,458.62	3,430.69	5,401.73	5,322.13	79.60	67.859		
9,200.00	9,197.94	5,168.00	5,166.95	32.05	77.90	-82.78	1,458.62	3,430.69	5,474.60	5,395.54	79.06	69.248		
9,300.00	9,297.90	5,168.00	5,166.95	32.40	77.90	-82.78	1,458.62	3,430.69	5,548.32	5,469.79	78.53	70.654		
9,400.00	9,397.86	5,168.00	5,166.95	32.75	77.90	-82.78	1,458.62	3,430.69	5,622.85	5,544.84	78.01	72.076		
9,500.00	9,497.82	5,168.00	5,166.95	33.11	77.90	-82.78	1,458.62	3,430.69	5,698.16	5,620.65	77.51	73.512		
9,600.00	9,597.78	5,168.00	5,166.95	33.46	77.90	-82.78	1,458.62	3,430.69	5,774.22	5,697.20	77.03	74.962		
9,700.00	9,697.74	5,168.00	5,166.95	33.82	77.90	-82.78	1,458.62	3,430.69	5,851.01	5,774.45	76.56	76.424		
9,800.00	9,797.70	5,168.00	5,166.95	34.17	77.90	-82.78	1,458.62	3,430.69	5,928.48	5,852.37	76.11	77.898		
9,900.00	9,897.66	5,168.00	5,166.95	34.53	77.90	-82.78	1,458.62	3,430.69	6,006.62	5,930.95	75.67	79.380		
10,000.00	9,997.62	5,168.00	5,166.95	34.88	77.90	-82.78	1,458.62	3,430.69	6,085.40	6,010.15	75.25	80.872		
10,100.00	10,097.58	5,168.00	5,166.95	35.24	77.90	-82.78	1,458.62	3,430.69	6,164.79	6,089.95	74.84	82.371		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 10-INC-ONLY													Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	10,197.54	5,168.00	5,166.95	35.59	77.90	-82.78	1,458.62	3,430.69	6,244.78	6,170.33	74.45	83.876		
10,300.00	10,297.50	5,168.00	5,166.95	35.95	77.90	-82.78	1,458.62	3,430.69	6,325.34	6,251.26	74.08	85.387		
10,400.00	10,397.46	5,168.00	5,166.95	36.30	77.90	-82.78	1,458.62	3,430.69	6,406.44	6,332.72	73.72	86.901		
10,500.00	10,497.42	5,168.00	5,166.95	36.66	77.90	-82.78	1,458.62	3,430.69	6,488.07	6,414.69	73.38	88.418		
10,600.00	10,597.38	5,168.00	5,166.95	37.02	77.90	-82.78	1,458.62	3,430.69	6,570.21	6,497.16	73.05	89.937		
10,700.00	10,697.34	5,168.00	5,166.95	37.37	77.90	-82.78	1,458.62	3,430.69	6,652.84	6,580.10	72.74	91.457		
10,800.00	10,797.30	5,168.00	5,166.95	37.73	77.90	-82.78	1,458.62	3,430.69	6,735.94	6,663.49	72.45	92.976		
10,900.00	10,897.26	5,168.00	5,166.95	38.08	77.90	-82.78	1,458.62	3,430.69	6,819.49	6,747.33	72.17	94.494		
11,000.00	10,997.22	5,168.00	5,166.95	38.44	77.90	-82.78	1,458.62	3,430.69	6,903.48	6,831.58	71.90	96.010		
11,100.00	11,097.18	5,168.00	5,166.95	38.80	77.90	-82.78	1,458.62	3,430.69	6,987.90	6,916.24	71.65	97.522		
11,200.00	11,197.14	5,168.00	5,166.95	39.15	77.90	-82.78	1,458.62	3,430.69	7,072.72	7,001.30	71.42	99.030		
11,300.00	11,297.09	5,168.00	5,166.95	39.51	77.90	-82.78	1,458.62	3,430.69	7,157.93	7,086.73	71.20	100.532		
11,394.37	11,391.43	5,168.00	5,166.95	39.85	77.90	-82.78	1,458.62	3,430.69	7,238.69	7,167.68	71.01	101.944		
11,400.00	11,397.05	5,168.00	5,166.95	39.87	77.90	-82.92	1,458.62	3,430.69	7,243.52	7,172.52	71.00	102.028		
11,502.96	11,500.00	5,168.00	5,166.95	40.23	77.90	63.76	1,458.62	3,430.69	7,332.10	7,261.31	70.80	103.564		
11,600.00	11,597.04	5,168.00	5,166.95	40.56	77.90	63.76	1,458.62	3,430.69	7,416.00	7,345.38	70.62	105.008		
11,700.00	11,697.04	5,168.00	5,166.95	40.90	77.90	63.76	1,458.62	3,430.69	7,502.79	7,432.33	70.46	106.486		
11,800.00	11,797.04	5,168.00	5,166.95	41.24	77.90	63.76	1,458.62	3,430.69	7,589.90	7,519.59	70.31	107.955		
11,853.00	11,850.04	5,168.00	5,166.95	41.43	77.90	63.76	1,458.62	3,430.69	7,636.20	7,565.96	70.23	108.729		
11,900.00	11,896.99	5,168.00	5,166.95	41.59	77.90	57.08	1,458.62	3,430.69	7,676.88	7,606.72	70.16	109.420		
11,950.00	11,946.58	5,168.00	5,166.95	41.75	77.90	50.74	1,458.62	3,430.69	7,719.04	7,648.97	70.07	110.162		
12,000.00	11,995.43	5,168.00	5,166.95	41.92	77.90	45.51	1,458.62	3,430.69	7,759.76	7,689.80	69.97	110.905		
12,050.00	12,043.18	5,168.00	5,166.95	42.07	77.90	41.23	1,458.62	3,430.69	7,798.76	7,728.91	69.85	111.643		
12,100.00	12,089.46	5,168.00	5,166.95	42.23	77.90	37.73	1,458.62	3,430.69	7,835.77	7,766.04	69.73	112.373		
12,150.00	12,133.92	5,168.00	5,166.95	42.37	77.90	34.87	1,458.62	3,430.69	7,870.54	7,800.94	69.60	113.088		
12,200.00	12,176.21	5,168.00	5,166.95	42.51	77.90	32.52	1,458.62	3,430.69	7,902.82	7,833.37	69.46	113.782		
12,250.00	12,216.03	5,168.00	5,166.95	42.65	77.90	30.60	1,458.62	3,430.69	7,932.42	7,863.11	69.31	114.451		
12,300.00	12,253.06	5,168.00	5,166.95	42.78	77.90	29.02	1,458.62	3,430.69	7,959.13	7,889.97	69.16	115.087		
12,350.00	12,287.02	5,168.00	5,166.95	42.91	77.90	27.75	1,458.62	3,430.69	7,982.78	7,913.77	69.01	115.684		
12,400.00	12,317.65	5,168.00	5,166.95	43.03	77.90	26.72	1,458.62	3,430.69	8,003.22	7,934.36	68.85	116.235		
12,450.00	12,344.73	5,168.00	5,166.95	43.15	77.90	25.91	1,458.62	3,430.69	8,020.32	7,951.61	68.71	116.735		
12,500.00	12,368.04	5,168.00	5,166.95	43.27	77.90	25.30	1,458.62	3,430.69	8,033.96	7,965.40	68.56	117.175		
12,550.00	12,387.41	5,168.00	5,166.95	43.39	77.90	24.86	1,458.62	3,430.69	8,044.07	7,975.64	68.43	117.551		
12,600.00	12,402.69	5,168.00	5,166.95	43.51	77.90	24.59	1,458.62	3,430.69	8,050.59	7,982.28	68.31	117.855		
12,650.00	12,413.77	5,168.00	5,166.95	43.63	77.90	24.47	1,458.62	3,430.69	8,053.46	7,985.26	68.20	118.084		
12,700.00	12,420.55	5,168.00	5,166.95	43.74	77.90	24.50	1,458.62	3,430.69	8,052.67	7,984.56	68.11	118.231		
12,753.00	12,423.00	5,168.00	5,166.95	43.86	77.90	24.70	1,458.62	3,430.69	8,047.85	7,979.82	68.03	118.295		
12,800.00	12,423.00	5,168.00	5,166.95	43.97	77.90	24.70	1,458.62	3,430.69	8,041.90	7,973.92	67.98	118.302		
12,900.00	12,423.00	5,168.00	5,166.95	44.23	77.90	24.70	1,458.62	3,430.69	8,030.13	7,962.23	67.90	118.264		
13,000.00	12,423.00	5,168.00	5,166.95	44.55	77.90	24.70	1,458.62	3,430.69	8,019.59	7,951.72	67.88	118.149		
13,100.00	12,423.00	5,168.00	5,166.95	44.90	77.90	24.70	1,458.62	3,430.69	8,010.29	7,942.38	67.91	117.957		
13,200.00	12,423.00	5,168.00	5,166.95	45.31	77.90	24.70	1,458.62	3,430.69	8,002.23	7,934.23	67.99	117.689		
13,300.00	12,423.00	5,168.00	5,166.95	45.75	77.90	24.70	1,458.62	3,430.69	7,995.41	7,927.27	68.14	117.346		
13,400.00	12,423.00	5,168.00	5,166.95	46.24	77.90	24.70	1,458.62	3,430.69	7,989.83	7,921.50	68.33	116.930		
13,500.00	12,423.00	5,168.00	5,166.95	46.76	77.90	24.70	1,458.62	3,430.69	7,985.51	7,916.93	68.58	116.444		
13,600.00	12,423.00	5,168.00	5,166.95	47.33	77.90	24.70	1,458.62	3,430.69	7,982.43	7,913.55	68.88	115.892		
13,700.00	12,423.00	5,168.00	5,166.95	47.93	77.90	24.70	1,458.62	3,430.69	7,980.61	7,911.38	69.23	115.277		
13,795.54	12,423.00	5,168.00	5,166.95	48.54	77.90	24.70	1,458.62	3,430.69	7,980.04	7,910.42	69.61	114.633		
13,800.00	12,423.00	5,168.00	5,166.95	48.57	77.90	24.70	1,458.62	3,430.69	7,980.04	7,910.41	69.63	114.603		
13,900.00	12,423.00	5,168.00	5,166.95	49.25	77.90	24.70	1,458.62	3,430.69	7,980.72	7,910.64	70.08	113.876		
14,000.00	12,423.00	5,168.00	5,166.95	49.95	77.90	24.70	1,458.62	3,430.69	7,982.66	7,912.08	70.58	113.099		
14,100.00	12,423.00	5,168.00	5,166.95	50.69	77.90	24.70	1,458.62	3,430.69	7,985.84	7,914.72	71.12	112.279		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 24-T23S-R32E - Fields Fed 1 - Johnston (P&A) - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 ft
Survey Program: 10-INC-ONLY												Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
14,200.00	12,423.00	5,168.00	5,166.95	51.46	77.90	24.70	1,458.62	3,430.69	7,990.28	7,918.57	71.71	111.421	
14,300.00	12,423.00	5,168.00	5,166.95	52.26	77.90	24.70	1,458.62	3,430.69	7,995.97	7,923.62	72.34	110.529	
14,400.00	12,423.00	5,168.00	5,166.95	53.09	77.90	24.70	1,458.62	3,430.69	8,002.90	7,929.88	73.01	109.609	
14,500.00	12,423.00	5,168.00	5,166.95	53.95	77.90	24.70	1,458.62	3,430.69	8,011.07	7,937.35	73.72	108.666	
14,600.00	12,423.00	5,168.00	5,166.95	54.83	77.90	24.70	1,458.62	3,430.69	8,020.48	7,946.02	74.47	107.705	
14,700.00	12,423.00	5,168.00	5,166.95	55.73	77.90	24.70	1,458.62	3,430.69	8,031.13	7,955.88	75.25	106.730	
14,800.00	12,423.00	5,168.00	5,166.95	56.66	77.90	24.70	1,458.62	3,430.69	8,043.01	7,966.95	76.06	105.746	
14,900.00	12,423.00	5,168.00	5,166.95	57.61	77.90	24.70	1,458.62	3,430.69	8,056.11	7,979.20	76.90	104.758	
15,000.00	12,423.00	5,168.00	5,166.95	58.58	77.90	24.70	1,458.62	3,430.69	8,070.42	7,992.65	77.77	103.769	
15,100.00	12,423.00	5,168.00	5,166.95	59.56	77.90	24.70	1,458.62	3,430.69	8,085.95	8,007.28	78.67	102.782	
15,200.00	12,423.00	5,168.00	5,166.95	60.57	77.90	24.70	1,458.62	3,430.69	8,102.69	8,023.09	79.59	101.802	
15,300.00	12,423.00	5,168.00	5,166.95	61.60	77.90	24.70	1,458.62	3,430.69	8,120.62	8,040.08	80.54	100.831	
15,400.00	12,423.00	5,168.00	5,166.95	62.64	77.90	24.70	1,458.62	3,430.69	8,139.74	8,058.23	81.50	99.871	
15,500.00	12,423.00	5,168.00	5,166.95	63.70	77.90	24.70	1,458.62	3,430.69	8,160.04	8,077.55	82.49	98.926	
15,600.00	12,423.00	5,168.00	5,166.95	64.78	77.90	24.70	1,458.62	3,430.69	8,181.51	8,098.02	83.49	97.998	
15,700.00	12,423.00	5,168.00	5,166.95	65.87	77.90	24.70	1,458.62	3,430.69	8,204.14	8,119.64	84.50	97.088	
15,800.00	12,423.00	5,168.00	5,166.95	66.97	77.90	24.70	1,458.62	3,430.69	8,227.93	8,142.40	85.53	96.198	
15,900.00	12,423.00	5,168.00	5,166.95	68.09	77.90	24.70	1,458.62	3,430.69	8,252.86	8,166.29	86.57	95.330	
16,000.00	12,423.00	5,168.00	5,166.95	69.22	77.90	24.70	1,458.62	3,430.69	8,278.93	8,191.31	87.62	94.485	
16,100.00	12,423.00	5,168.00	5,166.95	70.36	77.90	24.70	1,458.62	3,430.69	8,306.11	8,217.43	88.68	93.663	
16,200.00	12,423.00	5,168.00	5,166.95	71.51	77.90	24.70	1,458.62	3,430.69	8,334.41	8,244.67	89.75	92.865	
16,300.00	12,423.00	5,168.00	5,166.95	72.68	77.90	24.70	1,458.62	3,430.69	8,363.81	8,272.99	90.82	92.093	
16,400.00	12,423.00	5,168.00	5,166.95	73.85	77.90	24.70	1,458.62	3,430.69	8,394.30	8,302.40	91.89	91.347	
16,500.00	12,423.00	5,168.00	5,166.95	75.04	77.90	24.70	1,458.62	3,430.69	8,425.86	8,332.89	92.97	90.627	
16,600.00	12,423.00	5,168.00	5,166.95	76.23	77.90	24.70	1,458.62	3,430.69	8,458.49	8,364.43	94.05	89.932	
16,700.00	12,423.00	5,168.00	5,166.95	77.43	77.90	24.70	1,458.62	3,430.69	8,492.17	8,397.03	95.13	89.265	
16,800.00	12,423.00	5,168.00	5,166.95	78.64	77.90	24.70	1,458.62	3,430.69	8,526.89	8,430.67	96.22	88.623	
16,900.00	12,423.00	5,168.00	5,166.95	79.86	77.90	24.70	1,458.62	3,430.69	8,562.63	8,465.34	97.29	88.008	
17,000.00	12,423.00	5,168.00	5,166.95	81.09	77.90	24.70	1,458.62	3,430.69	8,599.39	8,501.02	98.37	87.419	
17,100.00	12,423.00	5,168.00	5,166.95	82.33	77.90	24.70	1,458.62	3,430.69	8,637.16	8,537.71	99.44	86.856	
17,200.00	12,423.00	5,168.00	5,166.95	83.57	77.90	24.70	1,458.62	3,430.69	8,675.91	8,575.40	100.51	86.318	
17,300.00	12,423.00	5,168.00	5,166.95	84.82	77.90	24.70	1,458.62	3,430.69	8,715.63	8,614.06	101.57	85.806	
17,392.67	12,423.00	5,168.00	5,166.95	85.98	77.90	24.70	1,458.62	3,430.69	8,753.30	8,650.75	102.55	85.353	

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 10-INCO-NONLY													Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	0.50	10.00	43.70	2,203.44	2,105.40	3,047.68					
100.00	100.00	77.70	77.70	0.52	10.05	43.70	2,203.44	2,105.40	3,047.60	3,037.03	10.57	288.352		
200.00	200.00	177.70	177.70	0.70	10.31	43.70	2,203.44	2,105.40	3,047.60	3,036.59	11.01	276.735		
300.00	300.00	277.70	277.70	0.99	10.77	43.70	2,203.44	2,105.40	3,047.60	3,035.84	11.76	259.126		
400.00	400.00	377.70	377.70	1.31	11.42	43.70	2,203.44	2,105.40	3,047.60	3,034.87	12.73	239.495		
500.00	500.00	477.70	477.70	1.65	12.21	43.70	2,203.44	2,105.40	3,047.60	3,033.74	13.86	219.960		
600.00	600.00	577.70	577.70	1.99	13.13	43.70	2,203.44	2,105.40	3,047.60	3,032.48	15.12	201.609		
700.00	700.00	677.70	677.70	2.34	14.14	43.70	2,203.44	2,105.40	3,047.60	3,031.12	16.48	184.912		
800.00	800.00	777.70	777.70	2.69	15.24	43.70	2,203.44	2,105.40	3,047.60	3,029.67	17.93	169.987		
900.00	900.00	877.70	877.70	3.04	16.40	43.70	2,203.44	2,105.40	3,047.60	3,028.16	19.44	156.762		
1,000.00	1,000.00	977.70	977.70	3.40	17.61	43.70	2,203.44	2,105.40	3,047.60	3,026.59	21.01	145.085		
1,100.00	1,100.00	1,077.70	1,077.70	3.75	18.86	43.70	2,203.44	2,105.40	3,047.60	3,024.99	22.61	134.776		
1,200.00	1,200.00	1,177.70	1,177.70	4.11	20.15	43.70	2,203.44	2,105.40	3,047.60	3,023.34	24.25	125.657		
1,300.00	1,300.00	1,277.70	1,277.70	4.46	21.46	43.70	2,203.44	2,105.40	3,047.60	3,021.68	25.92	117.566		
1,400.00	1,400.00	1,377.70	1,377.70	4.82	22.79	43.70	2,203.44	2,105.40	3,047.60	3,019.98	27.61	110.362		
1,500.00	1,500.00	1,477.70	1,477.70	5.18	24.15	43.70	2,203.44	2,105.40	3,047.60	3,018.27	29.33	103.921		
1,600.00	1,600.00	1,577.70	1,577.70	5.53	25.52	43.70	2,203.44	2,105.40	3,047.60	3,016.54	31.05	98.140		
1,700.00	1,700.00	1,677.70	1,677.70	5.89	26.90	43.70	2,203.44	2,105.40	3,047.60	3,014.80	32.80	92.929		
1,800.00	1,800.00	1,777.70	1,777.70	6.25	28.30	43.70	2,203.44	2,105.40	3,047.60	3,013.05	34.55	88.213		
1,900.00	1,900.00	1,877.70	1,877.70	6.61	29.71	43.70	2,203.44	2,105.40	3,047.60	3,011.29	36.31	83.930		
2,000.00	2,000.00	1,977.70	1,977.70	6.96	31.12	43.70	2,203.44	2,105.40	3,047.60	3,009.51	38.08	80.025		
2,100.00	2,100.00	2,077.70	2,077.70	7.32	32.54	43.70	2,203.44	2,105.40	3,047.60	3,007.74	39.86	76.453		
2,200.00	2,200.00	2,177.70	2,177.70	7.68	33.97	43.70	2,203.44	2,105.40	3,047.60	3,005.95	41.65	73.175		
2,300.00	2,300.00	2,277.70	2,277.70	8.04	35.40	43.70	2,203.44	2,105.40	3,047.60	3,004.16	43.44	70.156		
2,400.00	2,400.00	2,377.70	2,377.70	8.39	36.84	43.70	2,203.44	2,105.40	3,047.60	3,002.36	45.24	67.370		
2,500.00	2,500.00	2,477.70	2,477.70	8.75	38.29	43.70	2,203.44	2,105.40	3,047.60	3,000.56	47.04	64.789		
2,600.00	2,600.00	2,577.70	2,577.70	9.11	39.73	43.70	2,203.44	2,105.40	3,047.60	2,998.75	48.84	62.395		
2,700.00	2,700.00	2,677.70	2,677.70	9.47	41.19	43.70	2,203.44	2,105.40	3,047.60	2,996.94	50.65	60.166		
2,800.00	2,800.00	2,777.70	2,777.70	9.83	42.64	43.70	2,203.44	2,105.40	3,047.60	2,995.13	52.47	58.088		
2,900.00	2,900.00	2,877.70	2,877.70	10.18	44.10	43.70	2,203.44	2,105.40	3,047.60	2,993.32	54.28	56.145		
3,000.00	3,000.00	2,977.70	2,977.70	10.54	45.56	43.70	2,203.44	2,105.40	3,047.60	2,991.50	56.10	54.326		
3,100.00	3,100.00	3,077.70	3,077.70	10.90	47.02	43.70	2,203.44	2,105.40	3,047.60	2,989.68	57.92	52.618		
3,200.00	3,200.00	3,177.70	3,177.70	11.26	48.48	43.70	2,203.44	2,105.40	3,047.60	2,987.86	59.74	51.013		
3,300.00	3,300.00	3,277.70	3,277.70	11.62	49.95	43.70	2,203.44	2,105.40	3,047.60	2,986.03	61.57	49.501		
3,400.00	3,400.00	3,377.70	3,377.70	11.97	51.42	43.70	2,203.44	2,105.40	3,047.60	2,984.21	63.39	48.075		
3,500.00	3,500.00	3,477.70	3,477.70	12.33	52.89	43.70	2,203.44	2,105.40	3,047.60	2,982.38	65.22	46.728		
3,600.00	3,600.00	3,577.70	3,577.70	12.69	54.36	43.70	2,203.44	2,105.40	3,047.60	2,980.55	67.05	45.453		
3,700.00	3,700.00	3,677.70	3,677.70	13.05	55.83	43.70	2,203.44	2,105.40	3,047.60	2,978.72	68.88	44.244		
3,800.00	3,800.00	3,777.70	3,777.70	13.41	57.31	43.70	2,203.44	2,105.40	3,047.60	2,976.88	70.71	43.098		
3,900.00	3,900.00	3,877.70	3,877.70	13.77	58.78	43.70	2,203.44	2,105.40	3,047.60	2,975.05	72.55	42.009		
4,000.00	4,000.00	3,977.70	3,977.70	14.12	60.26	43.70	2,203.44	2,105.40	3,047.60	2,973.22	74.38	40.973 CC		
4,100.00	4,100.00	4,077.70	4,077.70	14.46	61.74	-105.59	2,203.44	2,105.40	3,047.83	2,971.63	76.20	39.998		
4,162.88	4,162.85	4,140.55	4,140.55	14.67	62.66	-105.61	2,203.44	2,105.40	3,048.22	2,970.89	77.33	39.417		
4,200.00	4,199.96	4,177.66	4,177.66	14.79	63.21	-105.63	2,203.44	2,105.40	3,048.50	2,970.50	78.00	39.082		
4,300.00	4,299.92	4,277.62	4,277.62	15.12	64.69	-105.68	2,203.44	2,105.40	3,049.27	2,969.46	79.81	38.207		
4,400.00	4,399.88	4,377.58	4,377.58	15.45	66.17	-105.73	2,203.44	2,105.40	3,050.04	2,968.43	81.62	37.371		
4,500.00	4,499.84	4,477.54	4,477.54	15.78	67.65	-105.78	2,203.44	2,105.40	3,050.81	2,967.39	83.43	36.569		
4,600.00	4,599.80	4,577.50	4,577.50	16.11	69.13	-105.83	2,203.44	2,105.40	3,051.59	2,966.35	85.24	35.801		
4,700.00	4,699.76	5,321.53	4,677.46	16.44	84.96	-105.89	2,203.44	2,105.40	3,052.37	2,950.97	101.40	30.103		
4,800.00	4,799.72	5,221.57	4,777.42	16.77	81.98	-105.94	2,203.44	2,105.40	3,053.14	2,954.39	98.76	30.916		
4,900.00	4,899.68	5,121.61	4,877.38	17.11	79.01	-105.99	2,203.44	2,105.40	3,053.93	2,957.81	96.12	31.772		
5,000.00	4,999.64	5,021.65	4,977.34	17.44	76.04	-106.04	2,203.44	2,105.40	3,054.71	2,961.23	93.48	32.676		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 10-IN-C-ONLY													Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,099.60	5,078.31	5,077.30	17.78	77.73	-106.09	2,203.44	2,105.40	3,055.50	2,959.99	95.50	31.993		
5,200.00	5,199.56	5,178.27	5,177.26	18.12	80.70	-106.14	2,203.44	2,105.40	3,056.29	2,957.47	98.81	30.930		
5,300.00	5,299.52	5,278.23	5,277.22	18.46	83.67	-106.19	2,203.44	2,105.40	3,057.08	2,954.95	102.12	29.935		
5,400.00	5,399.48	5,378.19	5,377.18	18.79	86.64	-106.24	2,203.44	2,105.40	3,057.87	2,952.43	105.44	29.001		
5,500.00	5,499.44	5,478.15	5,477.14	19.13	89.62	-106.30	2,203.44	2,105.40	3,058.67	2,949.92	108.75	28.124		
5,600.00	5,599.40	5,578.11	5,577.10	19.48	92.60	-106.35	2,203.44	2,105.40	3,059.47	2,947.40	112.07	27.299		
5,700.00	5,699.36	5,678.07	5,677.06	19.82	95.58	-106.40	2,203.44	2,105.40	3,060.27	2,944.88	115.39	26.521		
5,800.00	5,799.32	5,778.03	5,777.02	20.16	98.56	-106.45	2,203.44	2,105.40	3,061.07	2,942.36	118.71	25.785		
5,900.00	5,899.28	5,877.99	5,876.98	20.50	101.54	-106.50	2,203.44	2,105.40	3,061.88	2,939.84	122.04	25.090		
6,000.00	5,999.24	5,977.95	5,976.94	20.85	104.52	-106.55	2,203.44	2,105.40	3,062.69	2,937.33	125.36	24.431		
6,100.00	6,099.20	6,077.91	6,076.90	21.19	107.50	-106.60	2,203.44	2,105.40	3,063.50	2,934.81	128.69	23.806		
6,200.00	6,199.16	6,177.87	6,176.86	21.53	110.48	-106.65	2,203.44	2,105.40	3,064.31	2,932.30	132.02	23.212		
6,300.00	6,299.11	6,277.83	6,276.81	21.88	113.46	-106.70	2,203.44	2,105.40	3,065.13	2,929.79	135.34	22.647		
6,400.00	6,399.07	6,377.79	6,376.77	22.23	116.45	-106.75	2,203.44	2,105.40	3,065.95	2,927.28	138.67	22.109		
6,500.00	6,499.03	6,477.75	6,476.73	22.57	119.43	-106.81	2,203.44	2,105.40	3,066.77	2,924.77	142.00	21.596		
6,600.00	6,598.99	6,577.71	6,576.69	22.92	122.42	-106.86	2,203.44	2,105.40	3,067.59	2,922.26	145.34	21.107		
6,700.00	6,698.95	6,677.67	6,676.65	23.27	125.40	-106.91	2,203.44	2,105.40	3,068.42	2,919.75	148.67	20.639		
6,800.00	6,798.91	6,777.63	6,776.61	23.61	128.39	-106.96	2,203.44	2,105.40	3,069.25	2,917.25	152.00	20.192		
6,900.00	6,898.87	6,877.59	6,876.57	23.96	131.38	-107.01	2,203.44	2,105.40	3,070.08	2,914.74	155.34	19.764		
7,000.00	6,998.83	6,977.55	6,976.53	24.31	134.36	-107.06	2,203.44	2,105.40	3,070.91	2,912.24	158.67	19.354		
7,100.00	7,098.79	7,077.50	7,076.49	24.66	137.35	-107.11	2,203.44	2,105.40	3,071.75	2,909.74	162.01	18.961		
7,200.00	7,198.75	7,177.46	7,176.45	25.01	140.34	-107.16	2,203.44	2,105.40	3,072.58	2,907.24	165.34	18.583		
7,300.00	7,298.71	7,277.42	7,276.41	25.36	143.33	-107.21	2,203.44	2,105.40	3,073.42	2,904.74	168.68	18.220		
7,400.00	7,398.67	7,377.38	7,376.37	25.71	146.31	-107.26	2,203.44	2,105.40	3,074.27	2,902.25	172.02	17.872		
7,500.00	7,498.63	7,477.34	7,476.33	26.06	149.30	-107.31	2,203.44	2,105.40	3,075.11	2,899.76	175.36	17.536		
7,600.00	7,598.59	7,577.30	7,576.29	26.41	152.29	-107.36	2,203.44	2,105.40	3,075.96	2,897.26	178.69	17.213		
7,700.00	7,698.55	7,677.26	7,676.25	26.76	155.28	-107.41	2,203.44	2,105.40	3,076.81	2,894.77	182.03	16.902		
7,800.00	7,798.51	7,777.22	7,776.21	27.11	158.27	-107.46	2,203.44	2,105.40	3,077.66	2,892.29	185.37	16.602		
7,900.00	7,898.47	7,877.18	7,876.17	27.46	161.26	-107.51	2,203.44	2,105.40	3,078.51	2,889.80	188.71	16.313		
8,000.00	7,998.43	7,977.14	7,976.13	27.81	164.25	-107.56	2,203.44	2,105.40	3,079.37	2,887.32	192.06	16.034		
8,100.00	8,098.39	8,077.10	8,076.09	28.16	167.24	-107.61	2,203.44	2,105.40	3,080.23	2,884.83	195.40	15.764		
8,200.00	8,198.35	8,177.06	8,176.05	28.51	170.23	-107.67	2,203.44	2,105.40	3,081.09	2,882.35	198.74	15.503		
8,300.00	8,298.31	8,277.02	8,276.01	28.87	173.22	-107.72	2,203.44	2,105.40	3,081.96	2,879.88	202.08	15.251		
8,400.00	8,398.27	8,376.98	8,375.97	29.22	176.21	-107.77	2,203.44	2,105.40	3,082.82	2,877.40	205.42	15.007		
8,500.00	8,498.23	8,476.94	8,475.93	29.57	179.20	-107.82	2,203.44	2,105.40	3,083.69	2,874.93	208.77	14.771		
8,600.00	8,598.19	8,576.90	8,575.89	29.92	182.19	-107.87	2,203.44	2,105.40	3,084.56	2,872.45	212.11	14.542		
8,700.00	8,698.15	8,676.86	8,675.85	30.28	185.18	-107.92	2,203.44	2,105.40	3,085.44	2,869.98	215.45	14.321		
8,800.00	8,798.10	8,776.82	8,775.80	30.63	188.17	-107.97	2,203.44	2,105.40	3,086.31	2,867.52	218.80	14.106		
8,900.00	8,898.06	8,876.78	8,875.76	30.98	191.16	-108.02	2,203.44	2,105.40	3,087.19	2,865.05	222.14	13.897		
9,000.00	8,998.02	8,976.74	8,975.72	31.34	194.15	-108.07	2,203.44	2,105.40	3,088.07	2,862.59	225.49	13.695		
9,100.00	9,097.98	9,076.70	9,075.68	31.69	197.14	-108.12	2,203.44	2,105.40	3,088.95	2,860.12	228.83	13.499		
9,200.00	9,197.94	9,176.66	9,175.64	32.05	200.14	-108.17	2,203.44	2,105.40	3,089.84	2,857.66	232.18	13.308		
9,300.00	9,297.90	9,276.62	9,275.60	32.40	203.13	-108.22	2,203.44	2,105.40	3,090.73	2,855.21	235.52	13.123		
9,400.00	9,397.86	9,376.58	9,375.56	32.75	206.12	-108.27	2,203.44	2,105.40	3,091.62	2,852.75	238.87	12.943		
9,500.00	9,497.82	9,476.54	9,475.52	33.11	209.11	-108.32	2,203.44	2,105.40	3,092.51	2,850.30	242.21	12.768 ES, SF		
9,600.00	9,597.78	9,576.46	9,575.44	33.46	212.10	-108.37	2,203.44	2,105.40	3,093.40	2,847.85	245.55	12.600		
9,700.00	9,697.74	9,676.42	9,675.40	33.82	215.09	-108.42	2,203.44	2,105.40	3,094.29	2,845.40	248.89	12.438		
9,800.00	9,797.70	9,776.38	9,775.36	34.17	218.08	-108.47	2,203.44	2,105.40	3,095.18	2,842.95	252.23	12.281		
9,900.00	9,897.66	9,876.34	9,875.32	34.53	221.07	-108.52	2,203.44	2,105.40	3,096.07	2,840.50	255.57	12.129		
10,000.00	9,997.62	9,976.30	9,975.28	34.88	224.06	-108.57	2,203.44	2,105.40	3,096.96	2,838.05	258.91	11.981		
10,100.00	10,097.58	10,076.26	10,075.24	35.24	227.05	-108.62	2,203.44	2,105.40	3,097.85	2,835.60	262.25	11.834		
10,200.00	10,197.54	10,176.22	10,175.20	35.59	230.04	-108.67	2,203.44	2,105.40	3,098.74	2,833.15	265.59	11.691		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 10-INCO-NONLY													Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	10,297.50	9,101.00	9,097.49	35.95	197.87	-108.13	2,203.44	2,105.40	3,315.92	3,096.39	219.54	15.104		
10,400.00	10,397.46	9,101.00	9,097.49	36.30	197.87	-108.13	2,203.44	2,105.40	3,353.57	3,135.92	217.66	15.408		
10,500.00	10,497.42	9,101.00	9,097.49	36.66	197.87	-108.13	2,203.44	2,105.40	3,393.75	3,178.07	215.68	15.735		
10,600.00	10,597.38	9,101.00	9,097.49	37.02	197.87	-108.13	2,203.44	2,105.40	3,436.37	3,222.76	213.62	16.087		
10,700.00	10,697.34	9,101.00	9,097.49	37.37	197.87	-108.13	2,203.44	2,105.40	3,481.34	3,269.86	211.48	16.461		
10,800.00	10,797.30	9,101.00	9,097.49	37.73	197.87	-108.13	2,203.44	2,105.40	3,528.58	3,319.28	209.29	16.859		
10,900.00	10,897.26	9,101.00	9,097.49	38.08	197.87	-108.13	2,203.44	2,105.40	3,577.98	3,370.93	207.06	17.280		
11,000.00	10,997.22	9,101.00	9,097.49	38.44	197.87	-108.13	2,203.44	2,105.40	3,629.47	3,424.69	204.79	17.723		
11,100.00	11,097.18	9,101.00	9,097.49	38.80	197.87	-108.13	2,203.44	2,105.40	3,682.96	3,480.47	202.49	18.188		
11,200.00	11,197.14	9,101.00	9,097.49	39.15	197.87	-108.13	2,203.44	2,105.40	3,738.35	3,538.17	200.18	18.675		
11,300.00	11,297.09	9,101.00	9,097.49	39.51	197.87	-108.13	2,203.44	2,105.40	3,795.57	3,597.70	197.87	19.182		
11,394.37	11,391.43	9,101.00	9,097.49	39.85	197.87	-108.13	2,203.44	2,105.40	3,851.18	3,655.49	195.69	19.680		
11,400.00	11,397.05	9,101.00	9,097.49	39.87	197.87	-108.19	2,203.44	2,105.40	3,854.54	3,658.98	195.56	19.710		
11,502.96	11,500.00	9,101.00	9,097.49	40.23	197.87	39.98	2,203.44	2,105.40	3,916.60	3,723.43	193.17	20.275		
11,600.00	11,597.04	9,101.00	9,097.49	40.56	197.87	39.98	2,203.44	2,105.40	3,976.33	3,785.40	190.93	20.826		
11,700.00	11,697.04	9,101.00	9,097.49	40.90	197.87	39.98	2,203.44	2,105.40	4,039.38	3,850.74	188.64	21.413		
11,800.00	11,797.04	9,101.00	9,097.49	41.24	197.87	39.98	2,203.44	2,105.40	4,103.91	3,917.53	186.38	22.019		
11,853.00	11,850.04	9,101.00	9,097.49	41.43	197.87	39.98	2,203.44	2,105.40	4,138.68	3,953.49	185.19	22.348		
11,900.00	11,896.99	9,101.00	9,097.49	41.59	197.87	37.91	2,203.44	2,105.40	4,168.71	3,984.59	184.11	22.642		
11,950.00	11,946.58	9,101.00	9,097.49	41.75	197.87	35.70	2,203.44	2,105.40	4,198.38	4,015.47	182.91	22.954		
12,000.00	11,995.43	9,101.00	9,097.49	41.92	197.87	33.86	2,203.44	2,105.40	4,225.54	4,043.90	181.65	23.263		
12,050.00	12,043.18	9,101.00	9,097.49	42.07	197.87	32.32	2,203.44	2,105.40	4,250.04	4,069.70	180.34	23.567		
12,100.00	12,089.46	9,101.00	9,097.49	42.23	197.87	31.06	2,203.44	2,105.40	4,271.73	4,092.74	178.99	23.866		
12,150.00	12,133.92	9,101.00	9,097.49	42.37	197.87	30.03	2,203.44	2,105.40	4,290.49	4,112.88	177.61	24.156		
12,200.00	12,176.21	9,101.00	9,097.49	42.51	197.87	29.21	2,203.44	2,105.40	4,306.23	4,130.02	176.21	24.438		
12,250.00	12,216.03	9,101.00	9,097.49	42.65	197.87	28.58	2,203.44	2,105.40	4,318.84	4,144.05	174.79	24.708		
12,300.00	12,253.06	9,101.00	9,097.49	42.78	197.87	28.12	2,203.44	2,105.40	4,328.27	4,154.90	173.37	24.965		
12,350.00	12,287.02	9,101.00	9,097.49	42.91	197.87	27.83	2,203.44	2,105.40	4,334.47	4,162.52	171.95	25.207		
12,400.00	12,317.65	9,101.00	9,097.49	43.03	197.87	27.69	2,203.44	2,105.40	4,337.40	4,166.84	170.55	25.432		
12,450.00	12,344.73	9,101.00	9,097.49	43.15	197.87	27.71	2,203.44	2,105.40	4,337.04	4,167.86	169.17	25.637		
12,500.00	12,368.04	9,101.00	9,097.49	43.27	197.87	27.88	2,203.44	2,105.40	4,333.40	4,165.56	167.83	25.820		
12,550.00	12,387.41	9,101.00	9,097.49	43.39	197.87	28.21	2,203.44	2,105.40	4,326.49	4,159.95	166.54	25.979		
12,600.00	12,402.69	9,101.00	9,097.49	43.51	197.87	28.70	2,203.44	2,105.40	4,316.36	4,151.05	165.31	26.111		
12,650.00	12,413.77	9,101.00	9,097.49	43.63	197.87	29.37	2,203.44	2,105.40	4,303.06	4,138.92	164.14	26.216		
12,700.00	12,420.55	9,101.00	9,097.49	43.74	197.87	30.23	2,203.44	2,105.40	4,286.65	4,123.60	163.06	26.289		
12,753.00	12,423.00	9,101.00	9,097.49	43.86	197.87	31.38	2,203.44	2,105.40	4,265.98	4,103.98	162.01	26.332		
12,800.00	12,423.00	9,101.00	9,097.49	43.97	197.87	31.38	2,203.44	2,105.40	4,246.40	4,085.28	161.13	26.354		
12,900.00	12,423.00	9,101.00	9,097.49	44.23	197.87	31.38	2,203.44	2,105.40	4,206.19	4,046.90	159.29	26.406		
13,000.00	12,423.00	9,101.00	9,097.49	44.55	197.87	31.38	2,203.44	2,105.40	4,167.99	4,010.49	157.50	26.463		
13,100.00	12,423.00	9,101.00	9,097.49	44.90	197.87	31.38	2,203.44	2,105.40	4,131.85	3,976.07	155.78	26.523		
13,200.00	12,423.00	9,101.00	9,097.49	45.31	197.87	31.38	2,203.44	2,105.40	4,097.84	3,943.69	154.15	26.584		
13,300.00	12,423.00	9,101.00	9,097.49	45.75	197.87	31.38	2,203.44	2,105.40	4,066.00	3,913.40	152.61	26.644		
13,400.00	12,423.00	9,101.00	9,097.49	46.24	197.87	31.38	2,203.44	2,105.40	4,036.39	3,885.23	151.17	26.701		
13,500.00	12,423.00	9,101.00	9,097.49	46.76	197.87	31.38	2,203.44	2,105.40	4,009.06	3,859.21	149.85	26.753		
13,600.00	12,423.00	9,101.00	9,097.49	47.33	197.87	31.38	2,203.44	2,105.40	3,984.05	3,835.38	148.67	26.798		
13,700.00	12,423.00	9,101.00	9,097.49	47.93	197.87	31.38	2,203.44	2,105.40	3,961.41	3,813.78	147.63	26.834		
13,800.00	12,423.00	9,101.00	9,097.49	48.57	197.87	31.38	2,203.44	2,105.40	3,941.17	3,794.43	146.75	26.857		
13,900.00	12,423.00	9,101.00	9,097.49	49.25	197.87	31.38	2,203.44	2,105.40	3,923.38	3,777.35	146.03	26.866		
14,000.00	12,423.00	9,101.00	9,097.49	49.95	197.87	31.38	2,203.44	2,105.40	3,908.07	3,762.57	145.50	26.860		
14,100.00	12,423.00	9,101.00	9,097.49	50.69	197.87	31.38	2,203.44	2,105.40	3,895.27	3,750.11	145.15	26.835		
14,200.00	12,423.00	9,101.00	9,097.49	51.46	197.87	31.38	2,203.44	2,105.40	3,885.00	3,739.99	145.00	26.792		
14,300.00	12,423.00	9,101.00	9,097.49	52.26	197.87	31.38	2,203.44	2,105.40	3,877.28	3,732.23	145.05	26.730		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 24-T23S-R32E - Red Deer 24 Fed 1 (P&A) - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 ft
Survey Program: 10-INC-ONLY												Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
14,400.00	12,423.00	9,101.00	9,097.49	53.09	197.87	31.38	2,203.44	2,105.40	3,872.13	3,726.82	145.31	26.648	
14,500.00	12,423.00	9,101.00	9,097.49	53.95	197.87	31.38	2,203.44	2,105.40	3,869.56	3,723.79	145.76	26.547	
14,549.55	12,423.00	9,101.00	9,097.49	54.38	197.87	31.38	2,203.44	2,105.40	3,869.24	3,723.17	146.07	26.489	
14,600.00	12,423.00	9,101.00	9,097.49	54.83	197.87	31.38	2,203.44	2,105.40	3,869.57	3,723.14	146.42	26.427	
14,700.00	12,423.00	9,101.00	9,097.49	55.73	197.87	31.38	2,203.44	2,105.40	3,872.16	3,724.88	147.28	26.290	
14,800.00	12,423.00	9,101.00	9,097.49	56.66	197.87	31.38	2,203.44	2,105.40	3,877.34	3,729.00	148.34	26.139	
14,900.00	12,423.00	9,101.00	9,097.49	57.61	197.87	31.38	2,203.44	2,105.40	3,885.08	3,735.50	149.57	25.974	
15,000.00	12,423.00	9,101.00	9,097.49	58.58	197.87	31.38	2,203.44	2,105.40	3,895.37	3,744.39	150.99	25.800	
15,100.00	12,423.00	9,101.00	9,097.49	59.56	197.87	31.38	2,203.44	2,105.40	3,908.20	3,755.64	152.56	25.618	
15,200.00	12,423.00	9,101.00	9,097.49	60.57	197.87	31.38	2,203.44	2,105.40	3,923.53	3,769.25	154.28	25.431	
15,300.00	12,423.00	9,101.00	9,097.49	61.60	197.87	31.38	2,203.44	2,105.40	3,941.34	3,785.20	156.14	25.242	
15,400.00	12,423.00	9,101.00	9,097.49	62.64	197.87	31.38	2,203.44	2,105.40	3,961.60	3,803.48	158.12	25.055	
15,500.00	12,423.00	9,101.00	9,097.49	63.70	197.87	31.38	2,203.44	2,105.40	3,984.27	3,824.07	160.20	24.870	
15,600.00	12,423.00	9,101.00	9,097.49	64.78	197.87	31.38	2,203.44	2,105.40	4,009.30	3,846.93	162.37	24.692	
15,700.00	12,423.00	9,101.00	9,097.49	65.87	197.87	31.38	2,203.44	2,105.40	4,036.65	3,872.03	164.62	24.521	
15,800.00	12,423.00	9,101.00	9,097.49	66.97	197.87	31.38	2,203.44	2,105.40	4,066.28	3,899.36	166.92	24.360	
15,900.00	12,423.00	9,101.00	9,097.49	68.09	197.87	31.38	2,203.44	2,105.40	4,098.14	3,928.87	169.27	24.210	
16,000.00	12,423.00	9,101.00	9,097.49	69.22	197.87	31.38	2,203.44	2,105.40	4,132.17	3,960.52	171.65	24.073	
16,100.00	12,423.00	9,101.00	9,097.49	70.36	197.87	31.38	2,203.44	2,105.40	4,168.32	3,994.27	174.06	23.948	
16,200.00	12,423.00	9,101.00	9,097.49	71.51	197.87	31.38	2,203.44	2,105.40	4,206.54	4,030.08	176.47	23.838	
16,300.00	12,423.00	9,101.00	9,097.49	72.68	197.87	31.38	2,203.44	2,105.40	4,246.78	4,067.90	178.87	23.742	
16,400.00	12,423.00	9,101.00	9,097.49	73.85	197.87	31.38	2,203.44	2,105.40	4,288.96	4,107.69	181.27	23.660	
16,500.00	12,423.00	9,101.00	9,097.49	75.04	197.87	31.38	2,203.44	2,105.40	4,333.05	4,149.40	183.65	23.594	
16,600.00	12,423.00	9,101.00	9,097.49	76.23	197.87	31.38	2,203.44	2,105.40	4,378.97	4,192.97	186.00	23.543	
16,700.00	12,423.00	9,101.00	9,097.49	77.43	197.87	31.38	2,203.44	2,105.40	4,426.68	4,238.36	188.32	23.506	
16,800.00	12,423.00	9,101.00	9,097.49	78.64	197.87	31.38	2,203.44	2,105.40	4,476.11	4,285.51	190.60	23.484	
16,900.00	12,423.00	9,101.00	9,097.49	79.86	197.87	31.38	2,203.44	2,105.40	4,527.21	4,334.37	192.84	23.476	
17,000.00	12,423.00	9,101.00	9,097.49	81.09	197.87	31.38	2,203.44	2,105.40	4,579.93	4,384.89	195.03	23.483	
17,100.00	12,423.00	9,101.00	9,097.49	82.33	197.87	31.38	2,203.44	2,105.40	4,634.20	4,437.03	197.18	23.503	
17,200.00	12,423.00	9,101.00	9,097.49	83.57	197.87	31.38	2,203.44	2,105.40	4,689.98	4,490.71	199.27	23.536	
17,300.00	12,423.00	9,101.00	9,097.49	84.82	197.87	31.38	2,203.44	2,105.40	4,747.21	4,545.90	201.31	23.582	
17,392.67	12,423.00	9,101.00	9,097.49	85.98	197.87	31.38	2,203.44	2,105.40	4,801.49	4,598.35	203.15	23.636	

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.50 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.00	0.00	3.80	-3.80	0.50	0.50	-90.56	-8.19	-841.96	842.00					
100.00	100.00	103.80	96.20	0.52	0.52	-90.56	-8.19	-841.96	842.00	840.96	1.04	810.230		
200.00	200.00	203.80	196.20	0.70	0.71	-90.56	-8.19	-841.96	842.00	840.59	1.41	595.544		
300.00	300.00	303.80	296.20	0.99	1.00	-90.56	-8.19	-841.96	842.00	840.02	1.99	423.875		
400.00	400.00	403.80	396.20	1.31	1.32	-90.56	-8.19	-841.96	842.00	839.37	2.63	320.058		
500.00	500.00	503.80	496.20	1.65	1.66	-90.56	-8.19	-841.96	842.00	838.70	3.31	254.754		
600.00	600.00	603.80	596.20	1.99	2.00	-90.56	-8.19	-841.96	842.00	838.01	3.99	210.796		
700.00	700.00	703.80	696.20	2.34	2.35	-90.56	-8.19	-841.96	842.00	837.31	4.69	179.457		
800.00	800.00	803.80	796.20	2.69	2.70	-90.56	-8.19	-841.96	842.00	836.61	5.39	156.083		
900.00	900.00	903.80	896.20	3.04	3.06	-90.56	-8.19	-841.96	842.00	835.90	6.10	138.021		
1,000.00	1,000.00	1,003.80	996.20	3.40	3.41	-90.56	-8.19	-841.96	842.00	835.19	6.81	123.664		
1,100.00	1,100.00	1,103.80	1,096.20	3.75	3.77	-90.56	-8.19	-841.96	842.00	834.48	7.52	111.988		
1,200.00	1,200.00	1,203.80	1,196.20	4.11	4.12	-90.56	-8.19	-841.96	842.00	833.77	8.23	102.311		
1,300.00	1,300.00	1,303.80	1,296.20	4.46	4.48	-90.56	-8.19	-841.96	842.00	833.06	8.94	94.164		
1,400.00	1,400.00	1,403.80	1,396.20	4.82	4.83	-90.56	-8.19	-841.96	842.00	832.35	9.65	87.212		
1,500.00	1,500.00	1,503.80	1,496.20	5.18	5.19	-90.56	-8.19	-841.96	842.00	831.63	10.37	81.211		
1,600.00	1,600.00	1,603.80	1,596.20	5.53	5.55	-90.56	-8.19	-841.96	842.00	830.92	11.08	75.980		
1,700.00	1,700.00	1,703.80	1,696.20	5.89	5.90	-90.56	-8.19	-841.96	842.00	830.21	11.80	71.380		
1,800.00	1,800.00	1,803.80	1,796.20	6.25	6.26	-90.56	-8.19	-841.96	842.00	829.49	12.51	67.303		
1,900.00	1,900.00	1,903.80	1,896.20	6.61	6.62	-90.56	-8.19	-841.96	842.00	828.78	13.23	63.666		
2,000.00	2,000.00	2,003.80	1,996.20	6.96	6.98	-90.56	-8.19	-841.96	842.00	828.06	13.94	60.400		
2,100.00	2,100.00	2,103.80	2,096.20	7.32	7.33	-90.56	-8.19	-841.96	842.00	827.35	14.66	57.453		
2,200.00	2,200.00	2,203.80	2,196.20	7.68	7.69	-90.56	-8.19	-841.96	842.00	826.63	15.37	54.779		
2,300.00	2,300.00	2,303.80	2,296.20	8.04	8.05	-90.56	-8.19	-841.96	842.00	825.92	16.09	52.343		
2,400.00	2,400.00	2,403.80	2,396.20	8.39	8.41	-90.56	-8.19	-841.96	842.00	825.20	16.80	50.113		
2,500.00	2,500.00	2,503.80	2,496.20	8.75	8.77	-90.56	-8.19	-841.96	842.00	824.48	17.52	48.066		
2,600.00	2,600.00	2,603.80	2,596.20	9.11	9.12	-90.56	-8.19	-841.96	842.00	823.77	18.23	46.179		
2,700.00	2,700.00	2,703.80	2,696.20	9.47	9.48	-90.56	-8.19	-841.96	842.00	823.05	18.95	44.434		
2,800.00	2,800.00	2,803.80	2,796.20	9.83	9.84	-90.56	-8.19	-841.96	842.00	822.34	19.67	42.816		
2,900.00	2,900.00	2,903.80	2,896.20	10.18	10.20	-90.56	-8.19	-841.96	842.00	821.62	20.38	41.312		
3,000.00	3,000.00	3,003.80	2,996.20	10.54	10.56	-90.56	-8.19	-841.96	842.00	820.90	21.10	39.910		
3,100.00	3,100.00	3,103.80	3,096.20	10.90	10.91	-90.56	-8.19	-841.96	842.00	820.19	21.81	38.600		
3,200.00	3,200.00	3,203.80	3,196.20	11.26	11.27	-90.56	-8.19	-841.96	842.00	819.47	22.53	37.373		
3,300.00	3,300.00	3,303.80	3,296.20	11.62	11.63	-90.56	-8.19	-841.96	842.00	818.76	23.25	36.221		
3,400.00	3,400.00	3,403.80	3,396.20	11.97	11.99	-90.56	-8.19	-841.96	842.00	818.04	23.96	35.138		
3,500.00	3,500.00	3,503.80	3,496.20	12.33	12.35	-90.56	-8.19	-841.96	842.00	817.32	24.68	34.118		
3,600.00	3,600.00	3,603.80	3,596.20	12.69	12.70	-90.56	-8.19	-841.96	842.00	816.61	25.40	33.156		
3,700.00	3,700.00	3,703.80	3,696.20	13.05	13.06	-90.56	-8.19	-841.96	842.00	815.89	26.11	32.246		
3,800.00	3,800.00	3,803.80	3,796.20	13.41	13.42	-90.56	-8.19	-841.96	842.00	815.17	26.83	31.385		
3,900.00	3,900.00	3,903.80	3,896.20	13.77	13.78	-90.56	-8.19	-841.96	842.00	814.46	27.54	30.569		
4,000.00	4,000.00	3,996.20	3,996.20	14.12	14.11	-90.56	-8.19	-841.96	842.00	813.77	28.23	29.823 CC, ES		
4,100.00	4,100.00	4,085.36	4,085.36	14.46	14.42	120.19	-8.52	-842.51	843.06	814.18	28.88	29.192		
4,162.88	4,162.85	4,141.12	4,141.11	14.67	14.60	120.21	-9.08	-843.45	844.86	815.59	29.27	28.867		
4,200.00	4,199.96	4,174.03	4,174.00	14.79	14.71	120.23	-9.55	-844.23	846.27	816.77	29.49	28.693		
4,300.00	4,299.92	4,262.60	4,262.51	15.12	15.01	120.26	-11.28	-847.13	850.98	820.88	30.10	28.269		
4,400.00	4,399.88	4,360.49	4,360.28	15.45	15.34	120.26	-13.70	-851.18	856.58	825.82	30.75	27.852		
4,500.00	4,499.84	4,460.33	4,460.01	15.78	15.67	120.26	-16.19	-855.34	862.19	830.77	31.42	27.444		
4,600.00	4,599.80	4,560.17	4,559.73	16.11	16.01	120.26	-18.67	-859.49	867.80	835.72	32.08	27.050		
4,700.00	4,699.76	4,660.02	4,659.46	16.44	16.35	120.26	-21.16	-863.64	873.41	840.66	32.75	26.670		
4,800.00	4,799.72	4,759.86	4,759.18	16.77	16.68	120.26	-23.64	-867.80	879.02	845.61	33.42	26.303		
4,900.00	4,899.68	4,859.70	4,858.91	17.11	17.02	120.26	-26.13	-871.95	884.64	850.55	34.09	25.949		
5,000.00	4,999.64	4,959.54	4,958.63	17.44	17.36	120.26	-28.61	-876.11	890.25	855.48	34.76	25.608		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.50 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,099.60	5,059.39	5,058.36	17.78	17.71	120.26	-31.09	-880.26	895.86	860.42	35.44	25.278		
5,200.00	5,199.56	5,159.23	5,158.08	18.12	18.05	120.26	-33.58	-884.42	901.47	865.35	36.12	24.959		
5,300.00	5,299.52	5,259.07	5,257.81	18.46	18.39	120.26	-36.06	-888.57	907.08	870.29	36.80	24.651		
5,400.00	5,399.48	5,358.91	5,357.53	18.79	18.74	120.26	-38.55	-892.73	912.70	875.22	37.48	24.352		
5,500.00	5,499.44	5,458.76	5,457.26	19.13	19.08	120.26	-41.03	-896.88	918.31	880.15	38.16	24.064		
5,600.00	5,599.40	5,558.60	5,556.98	19.48	19.43	120.26	-43.52	-901.03	923.92	885.07	38.84	23.785		
5,700.00	5,699.36	5,658.44	5,656.71	19.82	19.77	120.26	-46.00	-905.19	929.53	890.00	39.53	23.514		
5,800.00	5,799.32	5,758.28	5,756.43	20.16	20.12	120.26	-48.48	-909.34	935.14	894.93	40.22	23.253		
5,900.00	5,899.28	5,858.13	5,856.16	20.50	20.47	120.26	-50.97	-913.50	940.75	899.85	40.90	22.999		
6,000.00	5,999.24	5,957.97	5,955.88	20.85	20.82	120.26	-53.45	-917.65	946.37	904.77	41.59	22.753		
6,100.00	6,099.20	6,057.81	6,055.61	21.19	21.17	120.26	-55.94	-921.81	951.98	909.70	42.28	22.514		
6,200.00	6,199.16	6,157.65	6,155.33	21.53	21.52	120.26	-58.42	-925.96	957.59	914.62	42.97	22.283		
6,300.00	6,299.11	6,257.49	6,255.06	21.88	21.87	120.26	-60.91	-930.12	963.20	919.54	43.67	22.058		
6,400.00	6,399.07	6,357.34	6,354.78	22.23	22.22	120.26	-63.39	-934.27	968.81	924.45	44.36	21.840		
6,500.00	6,499.03	6,457.18	6,454.51	22.57	22.57	120.26	-65.88	-938.42	974.43	929.37	45.05	21.628		
6,600.00	6,598.99	6,557.02	6,554.23	22.92	22.92	120.26	-68.36	-942.58	980.04	934.29	45.75	21.422		
6,700.00	6,698.95	6,656.86	6,653.96	23.27	23.27	120.26	-70.84	-946.73	985.65	939.21	46.44	21.222		
6,800.00	6,798.91	6,756.71	6,753.68	23.61	23.62	120.26	-73.33	-950.89	991.26	944.12	47.14	21.028		
6,900.00	6,898.87	6,856.55	6,853.41	23.96	23.97	120.26	-75.81	-955.04	996.87	949.04	47.84	20.839		
7,000.00	6,998.83	6,956.39	6,953.13	24.31	24.33	120.26	-78.30	-959.20	1,002.48	953.95	48.54	20.655		
7,100.00	7,098.79	7,056.23	7,052.86	24.66	24.68	120.26	-80.78	-963.35	1,008.10	958.86	49.23	20.476		
7,200.00	7,198.75	7,156.08	7,152.58	25.01	25.03	120.26	-83.27	-967.50	1,013.71	963.78	49.93	20.301		
7,300.00	7,298.71	7,255.92	7,252.31	25.36	25.39	120.26	-85.75	-971.66	1,019.32	968.69	50.63	20.131		
7,400.00	7,398.67	7,355.76	7,352.03	25.71	25.74	120.26	-88.23	-975.81	1,024.93	973.60	51.33	19.966		
7,500.00	7,498.63	7,455.60	7,451.76	26.06	26.10	120.26	-90.72	-979.97	1,030.54	978.51	52.04	19.805		
7,600.00	7,598.59	7,555.45	7,551.48	26.41	26.45	120.26	-93.20	-984.12	1,036.16	983.42	52.74	19.648		
7,700.00	7,698.55	7,655.29	7,651.21	26.76	26.81	120.26	-95.69	-988.28	1,041.77	988.33	53.44	19.495		
7,800.00	7,798.51	7,755.13	7,750.93	27.11	27.16	120.26	-98.17	-992.43	1,047.38	993.24	54.14	19.345		
7,900.00	7,898.47	7,854.97	7,850.66	27.46	27.52	120.26	-100.66	-996.59	1,052.99	998.15	54.85	19.199		
8,000.00	7,998.43	7,954.82	7,950.38	27.81	27.87	120.26	-103.14	-1,000.74	1,058.60	1,003.05	55.55	19.057		
8,100.00	8,098.39	8,054.66	8,050.11	28.16	28.23	120.26	-105.62	-1,004.89	1,064.22	1,007.96	56.25	18.918		
8,200.00	8,198.35	8,154.50	8,149.83	28.51	28.59	120.26	-108.11	-1,009.05	1,069.83	1,012.87	56.96	18.783		
8,300.00	8,298.31	8,254.34	8,249.56	28.87	28.94	120.26	-110.59	-1,013.20	1,075.44	1,017.78	57.66	18.650		
8,400.00	8,398.27	8,354.19	8,349.28	29.22	29.30	120.26	-113.08	-1,017.36	1,081.05	1,022.68	58.37	18.521		
8,500.00	8,498.23	8,454.03	8,449.01	29.57	29.66	120.26	-115.56	-1,021.51	1,086.66	1,027.59	59.07	18.395		
8,600.00	8,598.19	8,553.87	8,548.73	29.92	30.01	120.26	-118.05	-1,025.67	1,092.27	1,032.49	59.78	18.271		
8,700.00	8,698.15	8,653.71	8,648.46	30.28	30.37	120.26	-120.53	-1,029.82	1,097.89	1,037.40	60.49	18.151		
8,800.00	8,798.10	8,753.56	8,748.18	30.63	30.73	120.26	-123.02	-1,033.98	1,103.50	1,042.30	61.19	18.033		
8,900.00	8,898.06	8,853.40	8,847.91	30.98	31.08	120.26	-125.50	-1,038.13	1,109.11	1,047.21	61.90	17.917		
9,000.00	8,998.02	8,953.24	8,947.63	31.34	31.44	120.26	-127.98	-1,042.28	1,114.72	1,052.11	62.61	17.804		
9,100.00	9,097.98	9,053.08	9,047.36	31.69	31.80	120.26	-130.47	-1,046.44	1,120.33	1,057.02	63.32	17.694		
9,200.00	9,197.94	9,152.92	9,147.08	32.05	32.16	120.26	-132.95	-1,050.59	1,125.95	1,061.92	64.03	17.586		
9,300.00	9,297.90	9,252.77	9,246.81	32.40	32.52	120.26	-135.44	-1,054.75	1,131.56	1,066.82	64.74	17.480		
9,400.00	9,397.86	9,352.61	9,346.53	32.75	32.88	120.26	-137.92	-1,058.90	1,137.17	1,071.72	65.44	17.376		
9,500.00	9,497.82	9,452.45	9,446.26	33.11	33.23	120.26	-140.41	-1,063.06	1,142.78	1,076.63	66.15	17.275		
9,600.00	9,597.78	9,552.29	9,546.98	33.46	33.59	120.26	-142.89	-1,067.21	1,148.39	1,081.53	66.86	17.175		
9,700.00	9,697.74	9,652.14	9,645.71	33.82	33.95	120.26	-145.37	-1,071.37	1,154.00	1,086.43	67.57	17.078		
9,800.00	9,797.70	9,751.98	9,745.43	34.17	34.31	120.26	-147.86	-1,075.52	1,159.62	1,091.33	68.28	16.982		
9,900.00	9,897.66	9,851.82	9,845.16	34.53	34.67	120.26	-150.34	-1,079.67	1,165.23	1,096.23	68.99	16.889		
10,000.00	9,997.62	9,951.66	9,944.88	34.88	35.03	120.26	-152.83	-1,083.83	1,170.84	1,101.14	69.70	16.797		
10,100.00	10,097.58	10,051.51	10,044.61	35.24	35.39	120.26	-155.31	-1,087.98	1,176.45	1,106.04	70.42	16.707		
10,200.00	10,197.54	10,151.35	10,144.33	35.59	35.75	120.26	-157.80	-1,092.14	1,182.06	1,110.94	71.13	16.619		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.50 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	10,297.50	10,251.19	10,244.06	35.95	36.11	120.26	-160.28	-1,096.29	1,187.68	1,115.84	71.84	16.533		
10,400.00	10,397.46	10,351.03	10,343.78	36.30	36.47	120.26	-162.77	-1,100.45	1,193.29	1,120.74	72.55	16.448		
10,500.00	10,497.42	10,450.88	10,443.51	36.66	36.83	120.26	-165.25	-1,104.60	1,198.90	1,125.64	73.26	16.365		
10,600.00	10,597.38	10,550.72	10,543.23	37.02	37.19	120.26	-167.73	-1,108.75	1,204.51	1,130.54	73.97	16.283		
10,700.00	10,697.34	10,650.56	10,642.96	37.37	37.55	120.26	-170.22	-1,112.91	1,210.12	1,135.44	74.69	16.203		
10,800.00	10,797.30	10,750.40	10,742.68	37.73	37.91	120.26	-172.70	-1,117.06	1,215.74	1,140.34	75.40	16.124		
10,900.00	10,897.26	10,850.25	10,842.41	38.08	38.27	120.26	-175.19	-1,121.22	1,221.35	1,145.24	76.11	16.047		
11,000.00	10,997.22	10,950.09	10,942.13	38.44	38.63	120.26	-177.67	-1,125.37	1,226.96	1,150.14	76.82	15.971		
11,100.00	11,097.18	11,049.93	11,041.86	38.80	38.99	120.26	-180.16	-1,129.53	1,232.57	1,155.03	77.54	15.897		
11,200.00	11,197.14	11,149.77	11,141.58	39.15	39.35	120.26	-182.64	-1,133.68	1,238.18	1,159.93	78.25	15.823		
11,300.00	11,297.09	11,249.62	11,241.31	39.51	39.71	120.26	-185.12	-1,137.84	1,243.79	1,164.83	78.96	15.752		
11,394.37	11,391.43	11,368.83	11,360.42	39.85	40.14	120.28	-187.56	-1,141.91	1,248.45	1,168.70	79.75	15.655		
11,400.00	11,397.05	11,376.66	11,368.25	39.87	40.16	120.29	-187.66	-1,142.08	1,248.65	1,168.85	79.80	15.647		
11,502.96	11,500.00	11,504.62	11,496.20	40.23	40.61	-90.38	-188.19	-1,142.96	1,249.99	1,169.38	80.61	15.507		
11,600.00	11,597.04	11,601.66	11,593.24	40.56	40.94	-90.38	-188.19	-1,142.96	1,249.99	1,168.71	81.27	15.380		
11,700.00	11,697.04	11,701.66	11,693.24	40.90	41.29	-90.38	-188.19	-1,142.96	1,249.99	1,168.03	81.96	15.251		
11,800.00	11,797.04	11,801.66	11,793.24	41.24	41.63	-90.38	-188.19	-1,142.96	1,249.99	1,167.34	82.65	15.124		
11,803.76	11,800.80	11,805.41	11,797.00	41.26	41.65	-90.38	-188.19	-1,142.96	1,249.99	1,167.31	82.68	15.119		
11,853.00	11,850.04	11,854.56	11,846.12	41.43	41.81	-90.31	-186.86	-1,142.97	1,249.99	1,166.97	83.01	15.057		
11,900.00	11,896.99	11,901.18	11,892.44	41.59	41.97	-89.77	-181.79	-1,143.01	1,250.00	1,166.67	83.33	15.000		
11,950.00	11,946.58	11,950.49	11,940.82	41.75	42.13	-89.62	-172.35	-1,143.07	1,250.02	1,166.35	83.66	14.941		
12,000.00	11,995.43	11,999.52	11,987.96	41.92	42.29	-89.47	-158.88	-1,143.17	1,250.04	1,166.06	83.98	14.885		
12,050.00	12,043.18	12,048.29	12,033.52	42.07	42.43	-89.32	-141.53	-1,143.29	1,250.08	1,165.79	84.29	14.830		
12,100.00	12,089.46	12,096.81	12,077.23	42.23	42.56	-89.18	-120.49	-1,143.43	1,250.12	1,165.53	84.59	14.779		
12,150.00	12,133.92	12,145.10	12,118.79	42.37	42.69	-89.05	-95.95	-1,143.60	1,250.16	1,165.29	84.87	14.730		
12,200.00	12,176.21	12,193.16	12,157.97	42.51	42.80	-88.92	-68.14	-1,143.80	1,250.21	1,165.06	85.15	14.683		
12,250.00	12,216.03	12,241.01	12,194.53	42.65	42.90	-88.80	-37.29	-1,144.01	1,250.26	1,164.85	85.41	14.638		
12,300.00	12,253.06	12,288.68	12,228.26	42.78	42.99	-88.69	-3.63	-1,144.24	1,250.32	1,164.65	85.67	14.595		
12,350.00	12,287.02	12,336.17	12,258.98	42.91	43.08	-88.59	32.58	-1,144.50	1,250.37	1,164.45	85.91	14.554		
12,400.00	12,317.65	12,383.51	12,286.50	43.03	43.17	-88.50	71.08	-1,144.76	1,250.42	1,164.26	86.15	14.514		
12,450.00	12,344.73	12,430.72	12,310.69	43.15	43.26	-88.42	111.60	-1,145.04	1,250.46	1,164.08	86.39	14.475		
12,500.00	12,368.04	12,477.80	12,331.41	43.27	43.36	-88.36	153.86	-1,145.34	1,250.50	1,163.89	86.62	14.437		
12,550.00	12,387.41	12,524.80	12,348.57	43.39	43.46	-88.30	197.60	-1,145.64	1,250.54	1,163.70	86.84	14.401		
12,600.00	12,402.69	12,571.71	12,362.06	43.51	43.56	-88.26	242.51	-1,145.95	1,250.57	1,163.51	87.06	14.364		
12,650.00	12,413.77	12,618.57	12,371.83	43.63	43.66	-88.23	288.33	-1,146.27	1,250.59	1,163.31	87.28	14.329		
12,700.00	12,420.55	12,665.39	12,377.81	43.74	43.77	-88.21	334.75	-1,146.60	1,250.60	1,163.11	87.49	14.294		
12,753.00	12,423.00	12,715.95	12,380.00	43.86	43.87	-88.20	384.26	-1,146.94	1,250.60	1,162.89	87.72	14.257		
12,800.00	12,423.00	12,761.96	12,380.00	43.97	43.98	-88.20	431.26	-1,147.27	1,250.60	1,162.67	87.93	14.222		
12,900.00	12,423.00	12,861.96	12,380.00	44.23	44.24	-88.20	531.26	-1,147.96	1,250.61	1,162.15	88.46	14.138		
13,000.00	12,423.00	12,961.96	12,380.00	44.55	44.55	-88.20	631.25	-1,148.66	1,250.61	1,161.53	89.07	14.041		
13,100.00	12,423.00	13,061.96	12,380.00	44.90	44.90	-88.20	731.25	-1,149.35	1,250.61	1,160.83	89.78	13.930		
13,200.00	12,423.00	13,161.96	12,380.00	45.31	45.29	-88.20	831.25	-1,150.04	1,250.61	1,160.04	90.57	13.809		
13,300.00	12,423.00	13,261.96	12,380.00	45.75	45.73	-88.20	931.25	-1,150.74	1,250.61	1,159.16	91.45	13.676		
13,400.00	12,423.00	13,361.96	12,380.00	46.24	46.20	-88.20	1,031.24	-1,151.43	1,250.61	1,158.20	92.41	13.534		
13,500.00	12,423.00	13,461.96	12,380.00	46.76	46.72	-88.20	1,131.24	-1,152.13	1,250.61	1,157.16	93.45	13.383		
13,600.00	12,423.00	13,561.96	12,380.00	47.33	47.28	-88.20	1,231.24	-1,152.82	1,250.61	1,156.04	94.57	13.224		
13,700.00	12,423.00	13,661.96	12,380.00	47.93	47.87	-88.20	1,331.24	-1,153.52	1,250.61	1,154.84	95.77	13.059		
13,800.00	12,423.00	13,761.96	12,380.00	48.57	48.51	-88.20	1,431.24	-1,154.21	1,250.61	1,153.57	97.04	12.888		
13,900.00	12,423.00	13,861.96	12,380.00	49.25	49.17	-88.20	1,531.23	-1,154.91	1,250.61	1,152.23	98.38	12.713		
14,000.00	12,423.00	13,961.96	12,380.00	49.95	49.87	-88.20	1,631.23	-1,155.60	1,250.61	1,150.83	99.78	12.533		
14,100.00	12,423.00	14,061.96	12,380.00	50.69	50.60	-88.20	1,731.23	-1,156.30	1,250.61	1,149.36	101.25	12.351		
14,200.00	12,423.00	14,161.96	12,380.00	51.46	51.36	-88.20	1,831.23	-1,156.99	1,250.61	1,147.82	102.79	12.167		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0.50 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
14,300.00	12,423.00	14,261.96	12,380.00	52.26	52.16	-88.20	1,931.22	-1,157.69	1,250.61	1,146.23	104.38	11.982	
14,400.00	12,423.00	14,361.96	12,380.00	53.09	52.98	-88.20	2,031.22	-1,158.38	1,250.61	1,144.59	106.02	11.796	
14,500.00	12,423.00	14,461.96	12,380.00	53.95	53.82	-88.20	2,131.22	-1,159.08	1,250.61	1,142.89	107.72	11.609	
14,600.00	12,423.00	14,561.96	12,380.00	54.83	54.70	-88.20	2,231.22	-1,159.77	1,250.61	1,141.14	109.48	11.424	
14,700.00	12,423.00	14,661.96	12,380.00	55.73	55.59	-88.20	2,331.21	-1,160.47	1,250.61	1,139.34	111.28	11.239	
14,800.00	12,423.00	14,761.96	12,380.00	56.66	56.51	-88.20	2,431.21	-1,161.16	1,250.61	1,137.49	113.12	11.055	
14,900.00	12,423.00	14,861.96	12,380.00	57.61	57.46	-88.20	2,531.21	-1,161.86	1,250.61	1,135.60	115.01	10.874	
15,000.00	12,423.00	14,961.96	12,380.00	58.58	58.42	-88.20	2,631.21	-1,162.55	1,250.61	1,133.67	116.95	10.694	
15,100.00	12,423.00	15,061.96	12,380.00	59.56	59.40	-88.20	2,731.20	-1,163.25	1,250.61	1,131.69	118.92	10.516	
15,200.00	12,423.00	15,161.96	12,380.00	60.57	60.41	-88.20	2,831.20	-1,163.94	1,250.61	1,129.68	120.93	10.342	
15,300.00	12,423.00	15,261.96	12,380.00	61.60	61.43	-88.20	2,931.20	-1,164.64	1,250.61	1,127.64	122.98	10.169	
15,400.00	12,423.00	15,361.96	12,380.00	62.64	62.47	-88.20	3,031.20	-1,165.33	1,250.61	1,125.55	125.06	10.000	
15,500.00	12,423.00	15,461.96	12,380.00	63.70	63.52	-88.20	3,131.19	-1,166.02	1,250.61	1,123.44	127.17	9.834	
15,600.00	12,423.00	15,561.96	12,380.00	64.78	64.59	-88.20	3,231.19	-1,166.72	1,250.61	1,121.30	129.32	9.671	
15,700.00	12,423.00	15,661.96	12,380.00	65.87	65.68	-88.20	3,331.19	-1,167.41	1,250.61	1,119.12	131.49	9.511	
15,800.00	12,423.00	15,761.96	12,380.00	66.97	66.78	-88.20	3,431.19	-1,168.11	1,250.61	1,116.92	133.70	9.354	
15,900.00	12,423.00	15,861.96	12,380.00	68.09	67.89	-88.20	3,531.18	-1,168.80	1,250.61	1,114.69	135.92	9.201	
16,000.00	12,423.00	15,961.96	12,380.00	69.22	69.01	-88.20	3,631.18	-1,169.50	1,250.62	1,112.44	138.18	9.051	
16,100.00	12,423.00	16,061.96	12,380.00	70.36	70.15	-88.20	3,731.18	-1,170.19	1,250.62	1,110.16	140.46	8.904	
16,200.00	12,423.00	16,161.96	12,380.00	71.51	71.30	-88.20	3,831.18	-1,170.89	1,250.62	1,107.85	142.76	8.760	
16,300.00	12,423.00	16,261.96	12,380.00	72.68	72.46	-88.20	3,931.17	-1,171.58	1,250.62	1,105.53	145.09	8.620	
16,400.00	12,423.00	16,361.96	12,380.00	73.85	73.63	-88.20	4,031.17	-1,172.28	1,250.62	1,103.19	147.43	8.483	
16,500.00	12,423.00	16,461.96	12,380.00	75.04	74.81	-88.20	4,131.17	-1,172.97	1,250.62	1,100.82	149.80	8.349	
16,600.00	12,423.00	16,561.96	12,380.00	76.23	76.00	-88.20	4,231.17	-1,173.67	1,250.62	1,098.44	152.18	8.218	
16,700.00	12,423.00	16,661.96	12,380.00	77.43	77.20	-88.20	4,331.17	-1,174.36	1,250.62	1,096.04	154.58	8.090	
16,800.00	12,423.00	16,761.96	12,380.00	78.64	78.41	-88.20	4,431.16	-1,175.06	1,250.62	1,093.62	157.00	7.966	
16,900.00	12,423.00	16,861.96	12,380.00	79.86	79.63	-88.20	4,531.16	-1,175.75	1,250.62	1,091.18	159.44	7.844	
17,000.00	12,423.00	16,961.96	12,380.00	81.09	80.85	-88.20	4,631.16	-1,176.45	1,250.62	1,088.73	161.89	7.725	
17,100.00	12,423.00	17,061.96	12,380.00	82.33	82.09	-88.20	4,731.16	-1,177.14	1,250.62	1,086.26	164.36	7.609	
17,200.00	12,423.00	17,161.96	12,380.00	83.57	83.33	-88.20	4,831.15	-1,177.84	1,250.62	1,083.78	166.84	7.496	
17,300.00	12,423.00	17,261.96	12,380.00	84.82	84.57	-88.20	4,931.15	-1,178.53	1,250.62	1,081.29	169.33	7.386	
17,392.67	12,423.00	17,354.63	12,380.00	85.98	85.73	-88.20	5,023.82	-1,179.17	1,250.62	1,078.96	171.65	7.286 SF	

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.50 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	3.40	-3.40	0.50	0.50	-90.56	-7.90	-811.96	812.00					
100.00	100.00	103.40	96.60	0.52	0.52	-90.56	-7.90	-811.96	812.00	810.96	1.04	781.665		
200.00	200.00	203.40	196.60	0.70	0.71	-90.56	-7.90	-811.96	812.00	810.59	1.41	574.739		
300.00	300.00	303.40	296.60	0.99	1.00	-90.56	-7.90	-811.96	812.00	810.01	1.99	409.027		
400.00	400.00	403.40	396.60	1.31	1.32	-90.56	-7.90	-811.96	812.00	809.37	2.63	308.810		
500.00	500.00	503.40	496.60	1.65	1.66	-90.56	-7.90	-811.96	812.00	808.70	3.30	245.778		
600.00	600.00	603.40	596.60	1.99	2.00	-90.56	-7.90	-811.96	812.00	808.01	3.99	203.356		
700.00	700.00	703.40	696.60	2.34	2.35	-90.56	-7.90	-811.96	812.00	807.31	4.69	173.114		
800.00	800.00	803.40	796.60	2.69	2.70	-90.56	-7.90	-811.96	812.00	806.61	5.39	150.561		
900.00	900.00	903.40	896.60	3.04	3.06	-90.56	-7.90	-811.96	812.00	805.90	6.10	133.134		
1,000.00	1,000.00	1,003.40	996.60	3.40	3.41	-90.56	-7.90	-811.96	812.00	805.19	6.81	119.282		
1,100.00	1,100.00	1,103.40	1,096.60	3.75	3.76	-90.56	-7.90	-811.96	812.00	804.48	7.52	108.018		
1,200.00	1,200.00	1,203.40	1,196.60	4.11	4.12	-90.56	-7.90	-811.96	812.00	803.77	8.23	98.683		
1,300.00	1,300.00	1,303.40	1,296.60	4.46	4.48	-90.56	-7.90	-811.96	812.00	803.06	8.94	90.823		
1,400.00	1,400.00	1,403.40	1,396.60	4.82	4.83	-90.56	-7.90	-811.96	812.00	802.35	9.65	84.117		
1,500.00	1,500.00	1,503.40	1,496.60	5.18	5.19	-90.56	-7.90	-811.96	812.00	801.63	10.37	78.329		
1,600.00	1,600.00	1,603.40	1,596.60	5.53	5.55	-90.56	-7.90	-811.96	812.00	800.92	11.08	73.283		
1,700.00	1,700.00	1,703.40	1,696.60	5.89	5.90	-90.56	-7.90	-811.96	812.00	800.21	11.79	68.845		
1,800.00	1,800.00	1,803.40	1,796.60	6.25	6.26	-90.56	-7.90	-811.96	812.00	799.49	12.51	64.913		
1,900.00	1,900.00	1,903.40	1,896.60	6.61	6.62	-90.56	-7.90	-811.96	812.00	798.78	13.22	61.404		
2,000.00	2,000.00	2,003.40	1,996.60	6.96	6.98	-90.56	-7.90	-811.96	812.00	798.06	13.94	58.254		
2,100.00	2,100.00	2,103.40	2,096.60	7.32	7.33	-90.56	-7.90	-811.96	812.00	797.35	14.65	55.411		
2,200.00	2,200.00	2,203.40	2,196.60	7.68	7.69	-90.56	-7.90	-811.96	812.00	796.63	15.37	52.832		
2,300.00	2,300.00	2,303.40	2,296.60	8.04	8.05	-90.56	-7.90	-811.96	812.00	795.92	16.08	50.482		
2,400.00	2,400.00	2,403.40	2,396.60	8.39	8.41	-90.56	-7.90	-811.96	812.00	795.20	16.80	48.332		
2,500.00	2,500.00	2,496.60	2,496.60	8.75	8.74	-90.56	-7.90	-811.96	812.00	794.51	17.49	46.421		
2,600.00	2,600.00	2,609.78	2,609.77	9.11	9.13	-90.60	-8.45	-811.06	811.22	792.98	18.24	44.483		
2,700.00	2,700.00	2,723.33	2,723.28	9.47	9.51	-90.72	-10.17	-808.25	808.75	789.79	18.96	42.645		
2,800.00	2,800.00	2,822.89	2,822.76	9.83	9.84	-90.87	-12.17	-804.99	805.50	785.85	19.66	40.982		
2,900.00	2,900.00	2,922.82	2,922.61	10.18	10.18	-91.01	-14.18	-801.71	802.26	781.91	20.35	39.426		
3,000.00	3,000.00	3,022.74	3,022.46	10.54	10.52	-91.16	-16.18	-798.44	799.02	777.98	21.04	37.969		
3,100.00	3,100.00	3,122.67	3,122.32	10.90	10.86	-91.31	-18.19	-795.16	795.79	774.05	21.74	36.604		
3,200.00	3,200.00	3,222.59	3,222.17	11.26	11.20	-91.46	-20.19	-791.89	792.56	770.12	22.44	35.321		
3,300.00	3,300.00	3,322.52	3,322.02	11.62	11.54	-91.61	-22.20	-788.61	789.33	766.20	23.14	34.114		
3,400.00	3,400.00	3,422.45	3,421.87	11.97	11.88	-91.77	-24.20	-785.34	786.12	762.28	23.84	32.977		
3,500.00	3,500.00	3,522.37	3,521.73	12.33	12.23	-91.92	-26.21	-782.06	782.90	758.36	24.54	31.903		
3,600.00	3,600.00	3,622.30	3,621.58	12.69	12.57	-92.07	-28.21	-778.79	779.70	754.45	25.24	30.888		
3,700.00	3,700.00	3,722.22	3,721.43	13.05	12.92	-92.23	-30.22	-775.51	776.50	750.55	25.95	29.927		
3,800.00	3,800.00	3,822.15	3,821.28	13.41	13.27	-92.39	-32.22	-772.24	773.30	746.65	26.65	29.016		
3,900.00	3,900.00	3,922.08	3,921.13	13.77	13.62	-92.55	-34.23	-768.96	770.11	742.76	27.36	28.152		
4,000.00	4,000.00	4,022.00	4,020.99	14.12	13.97	-92.71	-36.23	-765.69	766.93	738.87	28.06	27.330		
4,100.00	4,100.00	4,121.95	4,120.86	14.46	14.32	117.94	-38.24	-762.41	764.16	735.41	28.75	26.579		
4,162.88	4,162.85	4,184.82	4,183.68	14.67	14.54	117.95	-39.50	-760.35	762.84	733.67	29.17	26.148		
4,200.00	4,199.96	4,221.93	4,220.77	14.79	14.67	117.96	-40.24	-759.13	762.16	732.73	29.42	25.902		
4,300.00	4,299.92	4,321.92	4,320.68	15.12	15.02	117.98	-42.25	-755.86	760.31	730.21	30.10	25.259		
4,400.00	4,399.88	4,421.90	4,420.59	15.45	15.37	118.01	-44.26	-752.58	758.47	727.69	30.78	24.643		
4,500.00	4,499.84	4,521.88	4,520.49	15.78	15.72	118.03	-46.26	-749.30	756.62	725.16	31.46	24.051		
4,600.00	4,599.80	4,621.86	4,620.40	16.11	16.07	118.06	-48.27	-746.03	754.78	722.64	32.14	23.484		
4,700.00	4,699.76	4,721.84	4,720.31	16.44	16.43	118.09	-50.28	-742.75	752.93	720.11	32.82	22.938		
4,800.00	4,799.72	4,821.83	4,820.22	16.77	16.78	118.11	-52.28	-739.47	751.09	717.58	33.51	22.414		
4,900.00	4,899.68	4,921.81	4,920.13	17.11	17.13	118.14	-54.29	-736.19	749.25	715.05	34.20	21.910		
5,000.00	4,999.64	5,021.79	5,020.04	17.44	17.49	118.17	-56.29	-732.92	747.40	712.52	34.88	21.425		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.50 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,099.60	5,121.77	5,119.95	17.78	17.84	118.20	-58.30	-729.64	745.56	709.99	35.57	20.958		
5,200.00	5,199.56	5,221.76	5,219.85	18.12	18.20	118.22	-60.31	-726.36	743.72	707.45	36.26	20.508		
5,300.00	5,299.52	5,321.74	5,319.76	18.46	18.55	118.25	-62.31	-723.09	741.88	704.92	36.96	20.075		
5,400.00	5,399.48	5,421.72	5,419.67	18.79	18.91	118.28	-64.32	-719.81	740.03	702.38	37.65	19.656		
5,500.00	5,499.44	5,521.70	5,519.58	19.13	19.26	118.31	-66.33	-716.53	738.19	699.85	38.34	19.252		
5,600.00	5,599.40	5,621.69	5,619.49	19.48	19.62	118.33	-68.33	-713.26	736.35	697.31	39.04	18.862		
5,700.00	5,699.36	5,721.67	5,719.40	19.82	19.98	118.36	-70.34	-709.98	734.51	694.77	39.73	18.486		
5,800.00	5,799.32	5,821.65	5,819.31	20.16	20.33	118.39	-72.35	-706.70	732.66	692.23	40.43	18.122		
5,900.00	5,899.28	5,921.63	5,919.21	20.50	20.69	118.42	-74.35	-703.42	730.82	689.69	41.13	17.769		
6,000.00	5,999.24	6,021.62	6,019.12	20.85	21.05	118.45	-76.36	-700.15	728.98	687.15	41.83	17.429		
6,100.00	6,099.20	6,121.60	6,119.03	21.19	21.40	118.47	-78.36	-696.87	727.14	684.61	42.53	17.099		
6,200.00	6,199.16	6,221.58	6,218.94	21.53	21.76	118.50	-80.37	-693.59	725.30	682.07	43.23	16.779		
6,300.00	6,299.11	6,321.56	6,318.85	21.88	22.12	118.53	-82.38	-690.32	723.46	679.53	43.93	16.470		
6,400.00	6,399.07	6,421.55	6,418.76	22.23	22.48	118.56	-84.38	-687.04	721.62	676.99	44.63	16.169		
6,500.00	6,499.03	6,521.53	6,518.67	22.57	22.84	118.59	-86.39	-683.76	719.78	674.45	45.33	15.878		
6,600.00	6,598.99	6,621.51	6,618.57	22.92	23.19	118.62	-88.40	-680.49	717.94	671.90	46.03	15.596		
6,700.00	6,698.95	6,721.49	6,718.48	23.27	23.55	118.65	-90.40	-677.21	716.09	669.36	46.74	15.322		
6,800.00	6,798.91	6,821.47	6,818.39	23.61	23.91	118.68	-92.41	-673.93	714.25	666.81	47.44	15.056		
6,900.00	6,898.87	6,921.46	6,918.30	23.96	24.27	118.71	-94.41	-670.65	712.41	664.27	48.14	14.797		
7,000.00	6,998.83	7,021.44	7,018.21	24.31	24.63	118.74	-96.42	-667.38	710.58	661.73	48.85	14.546		
7,100.00	7,098.79	7,121.42	7,118.12	24.66	24.99	118.77	-98.43	-664.10	708.74	659.18	49.55	14.302		
7,200.00	7,198.75	7,221.40	7,218.02	25.01	25.34	118.80	-100.43	-660.82	706.90	656.64	50.26	14.065		
7,300.00	7,298.71	7,321.39	7,317.93	25.36	25.70	118.83	-102.44	-657.55	705.06	654.09	50.97	13.834		
7,400.00	7,398.67	7,421.37	7,417.84	25.71	26.06	118.86	-104.45	-654.27	703.22	651.54	51.67	13.609		
7,500.00	7,498.63	7,521.35	7,517.75	26.06	26.42	118.89	-106.45	-650.99	701.38	649.00	52.38	13.390		
7,600.00	7,598.59	7,621.33	7,617.66	26.41	26.78	118.92	-108.46	-647.72	699.54	646.45	53.09	13.177		
7,700.00	7,698.55	7,721.32	7,717.57	26.76	27.14	118.95	-110.47	-644.44	697.70	643.91	53.80	12.969		
7,800.00	7,798.51	7,821.30	7,817.48	27.11	27.50	118.98	-112.47	-641.16	695.86	641.36	54.50	12.767		
7,900.00	7,898.47	7,921.28	7,917.38	27.46	27.86	119.02	-114.48	-637.88	694.03	638.81	55.21	12.570		
8,000.00	7,998.43	8,021.26	8,017.29	27.81	28.22	119.05	-116.48	-634.61	692.19	636.27	55.92	12.378		
8,100.00	8,098.39	8,121.25	8,117.20	28.16	28.58	119.08	-118.49	-631.33	690.35	633.72	56.63	12.190		
8,200.00	8,198.35	8,221.23	8,217.11	28.51	28.94	119.11	-120.50	-628.05	688.51	631.17	57.34	12.008		
8,300.00	8,298.31	8,321.21	8,317.02	28.87	29.30	119.14	-122.50	-624.78	686.68	628.63	58.05	11.829		
8,400.00	8,398.27	8,421.19	8,416.93	29.22	29.66	119.17	-124.51	-621.50	684.84	626.08	58.76	11.655		
8,500.00	8,498.23	8,521.18	8,516.84	29.57	30.02	119.21	-126.52	-618.22	683.00	623.53	59.47	11.485		
8,600.00	8,598.19	8,621.16	8,616.74	29.92	30.38	119.24	-128.52	-614.95	681.17	620.99	60.18	11.319		
8,700.00	8,698.15	8,721.14	8,716.65	30.28	30.74	119.27	-130.53	-611.67	679.33	618.44	60.89	11.156		
8,800.00	8,798.10	8,821.12	8,816.56	30.63	31.10	119.31	-132.53	-608.39	677.50	615.89	61.60	10.998		
8,900.00	8,898.06	8,921.10	8,916.47	30.98	31.46	119.34	-134.54	-605.11	675.66	613.34	62.31	10.843		
9,000.00	8,998.02	9,021.09	9,016.38	31.34	31.82	119.37	-136.55	-601.84	673.82	610.80	63.03	10.691		
9,100.00	9,097.98	9,121.07	9,116.29	31.69	32.18	119.41	-138.55	-598.56	671.99	608.25	63.74	10.543		
9,200.00	9,197.94	9,221.05	9,216.20	32.05	32.54	119.44	-140.56	-595.28	670.15	605.70	64.45	10.398		
9,300.00	9,297.90	9,321.03	9,316.10	32.40	32.90	119.47	-142.57	-592.01	668.32	603.16	65.16	10.256		
9,400.00	9,397.86	9,421.02	9,416.01	32.75	33.26	119.51	-144.57	-588.73	666.48	600.61	65.87	10.117		
9,500.00	9,497.82	9,521.00	9,515.92	33.11	33.62	119.54	-146.58	-585.45	664.65	598.06	66.59	9.982		
9,600.00	9,597.78	9,620.98	9,615.83	33.46	33.98	119.58	-148.59	-582.18	662.82	595.52	67.30	9.849		
9,700.00	9,697.74	9,720.96	9,715.74	33.82	34.34	119.61	-150.59	-578.90	660.98	592.97	68.01	9.718		
9,800.00	9,797.70	9,820.95	9,815.65	34.17	34.70	119.64	-152.60	-575.62	659.15	590.42	68.73	9.591		
9,900.00	9,897.66	9,920.93	9,915.56	34.53	35.06	119.68	-154.60	-572.34	657.31	587.88	69.44	9.466		
10,000.00	9,997.62	10,020.91	10,015.46	34.88	35.42	119.72	-156.61	-569.07	655.48	585.33	70.15	9.344		
10,100.00	10,097.58	10,120.89	10,115.37	35.24	35.78	119.75	-158.62	-565.79	653.65	582.78	70.87	9.224		
10,200.00	10,197.54	10,220.88	10,215.28	35.59	36.15	119.79	-160.62	-562.51	651.82	580.24	71.58	9.106		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0.50 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,300.00	10,297.50	10,320.86	10,315.19	35.95	36.51	119.82	-162.63	-559.24	649.98	577.69	72.30	8.991	
10,400.00	10,397.46	10,420.84	10,415.10	36.30	36.87	119.86	-164.64	-555.96	648.15	575.14	73.01	8.878	
10,500.00	10,497.42	10,520.82	10,515.01	36.66	37.23	119.89	-166.64	-552.68	646.32	572.60	73.72	8.767	
10,600.00	10,597.38	10,620.81	10,614.91	37.02	37.59	119.93	-168.65	-549.41	644.49	570.05	74.44	8.658	
10,700.00	10,697.34	10,720.79	10,714.82	37.37	37.95	119.97	-170.65	-546.13	642.66	567.50	75.15	8.551	
10,800.00	10,797.30	10,820.77	10,814.73	37.73	38.31	120.00	-172.66	-542.85	640.83	564.96	75.87	8.447	
10,900.00	10,897.26	10,920.75	10,914.64	38.08	38.67	120.04	-174.67	-539.57	639.00	562.41	76.58	8.344	
11,000.00	10,997.22	11,020.74	11,014.55	38.44	39.03	120.08	-176.67	-536.30	637.16	559.87	77.30	8.243	
11,100.00	11,097.18	11,120.72	11,114.46	38.80	39.40	120.12	-178.68	-533.02	635.33	557.32	78.01	8.144	
11,200.00	11,197.14	11,220.70	11,214.37	39.15	39.76	120.15	-180.69	-529.74	633.50	554.78	78.73	8.047	
11,300.00	11,297.09	11,320.68	11,314.27	39.51	40.12	120.19	-182.69	-526.47	631.67	552.23	79.44	7.951	
11,394.37	11,391.43	11,415.04	11,408.56	39.85	40.46	120.23	-184.59	-523.37	629.95	549.83	80.12	7.863	
11,400.00	11,397.05	11,420.66	11,414.18	39.87	40.48	120.23	-184.70	-523.19	629.84	549.69	80.16	7.858	
11,502.96	11,500.00	11,521.53	11,514.97	40.23	40.84	-90.61	-186.71	-519.91	627.21	546.33	80.88	7.755	
11,600.00	11,597.04	11,606.72	11,600.13	40.56	41.15	-90.71	-187.75	-518.21	625.29	543.76	81.52	7.670	
11,671.46	11,668.50	11,671.68	11,665.10	40.80	41.37	-90.72	-187.90	-517.96	625.01	543.02	81.99	7.623	
11,700.00	11,697.04	11,700.22	11,693.64	40.90	41.47	-90.72	-187.90	-517.96	625.01	542.83	82.18	7.605	
11,800.00	11,797.04	11,800.22	11,793.64	41.24	41.81	-90.72	-187.90	-517.96	625.01	542.15	82.86	7.543	
11,853.00	11,850.04	11,853.22	11,846.64	41.43	41.99	-90.72	-187.90	-517.96	625.01	541.78	83.23	7.510 CC	
11,900.00	11,896.99	11,900.17	11,893.59	41.59	42.15	-90.50	-187.90	-517.96	625.03	541.48	83.55	7.481	
11,950.00	11,946.58	11,949.76	11,943.18	41.75	42.32	-91.06	-187.90	-517.96	625.11	541.23	83.89	7.452	
12,000.00	11,995.43	11,998.62	11,992.03	41.92	42.48	-91.98	-187.90	-517.96	625.40	541.18	84.22	7.426	
12,050.00	12,043.18	12,049.23	12,042.60	42.07	42.65	-93.13	-186.09	-517.97	626.00	541.44	84.56	7.403	
12,100.00	12,089.46	12,101.32	12,094.27	42.23	42.82	-94.28	-179.59	-518.02	626.87	541.97	84.90	7.384	
12,150.00	12,133.92	12,154.79	12,146.46	42.37	42.99	-95.41	-168.07	-518.10	627.98	542.76	85.22	7.369	
12,200.00	12,176.21	12,209.68	12,198.69	42.51	43.16	-96.51	-151.24	-518.22	629.31	543.79	85.52	7.358	
12,250.00	12,216.03	12,266.07	12,250.40	42.65	43.32	-97.57	-128.84	-518.37	630.81	545.02	85.80	7.352	
12,300.00	12,253.06	12,323.99	12,300.97	42.78	43.47	-98.59	-100.65	-518.57	632.44	546.41	86.04	7.351	
12,350.00	12,287.02	12,383.45	12,349.66	42.91	43.62	-99.54	-66.54	-518.80	634.15	547.91	86.23	7.354	
12,400.00	12,317.65	12,444.46	12,395.65	43.03	43.75	-100.43	-26.52	-519.08	635.86	549.46	86.39	7.360	
12,450.00	12,344.73	12,506.94	12,438.08	43.15	43.88	-101.22	19.31	-519.40	637.51	551.00	86.52	7.369	
12,500.00	12,368.04	12,570.81	12,476.03	43.27	44.01	-101.92	70.64	-519.76	639.05	552.43	86.61	7.378	
12,550.00	12,387.41	12,635.92	12,508.59	43.39	44.15	-102.51	126.98	-520.15	640.39	553.68	86.70	7.386	
12,600.00	12,402.69	12,702.09	12,534.92	43.51	44.30	-102.97	187.64	-520.57	641.48	554.68	86.81	7.390	
12,650.00	12,413.77	12,769.07	12,554.27	43.63	44.44	-103.30	251.73	-521.02	642.28	555.34	86.94	7.388	
12,700.00	12,420.55	12,836.60	12,566.08	43.74	44.59	-103.49	318.18	-521.48	642.74	555.62	87.12	7.378	
12,753.00	12,423.00	12,908.45	12,569.98	43.86	44.75	-103.53	389.87	-521.97	642.84	555.47	87.37	7.358	
12,755.35	12,423.00	12,911.64	12,569.94	43.86	44.75	-103.53	393.06	-522.00	642.83	555.45	87.38	7.357	
12,800.00	12,423.00	12,954.18	12,570.00	43.97	44.85	-103.53	435.60	-522.29	642.84	555.26	87.59	7.340	
12,900.00	12,423.00	13,054.18	12,570.00	44.23	45.11	-103.53	535.60	-522.99	642.84	554.74	88.11	7.296	
13,000.00	12,423.00	13,154.18	12,570.00	44.55	45.42	-103.53	635.60	-523.68	642.84	554.13	88.72	7.246	
13,100.00	12,423.00	13,254.18	12,570.00	44.90	45.77	-103.53	735.60	-524.38	642.84	553.43	89.42	7.189	
13,200.00	12,423.00	13,354.18	12,570.00	45.31	46.16	-103.53	835.59	-525.07	642.84	552.64	90.20	7.127	
13,300.00	12,423.00	13,454.18	12,570.00	45.75	46.59	-103.53	935.59	-525.77	642.84	551.78	91.07	7.059	
13,400.00	12,423.00	13,554.18	12,570.00	46.24	47.07	-103.53	1,035.59	-526.46	642.84	550.83	92.01	6.986	
13,500.00	12,423.00	13,654.18	12,570.00	46.76	47.58	-103.53	1,135.59	-527.15	642.84	549.81	93.04	6.910	
13,600.00	12,423.00	13,754.18	12,570.00	47.33	48.13	-103.53	1,235.58	-527.85	642.84	548.71	94.14	6.829	
13,700.00	12,423.00	13,854.18	12,570.00	47.93	48.72	-103.53	1,335.58	-528.54	642.84	547.53	95.31	6.745	
13,800.00	12,423.00	13,954.18	12,570.00	48.57	49.35	-103.53	1,435.58	-529.24	642.84	546.29	96.56	6.658	
13,900.00	12,423.00	14,054.18	12,570.00	49.25	50.01	-103.53	1,535.58	-529.93	642.84	544.98	97.87	6.569	
14,000.00	12,423.00	14,154.18	12,570.00	49.95	50.70	-103.53	1,635.57	-530.63	642.84	543.60	99.24	6.477	
14,100.00	12,423.00	14,254.18	12,570.00	50.69	51.43	-103.53	1,735.57	-531.32	642.85	542.16	100.68	6.385	

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0.50 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
14,200.00	12,423.00	14,354.18	12,570.00	51.46	52.18	-103.53	1,835.57	-532.02	642.85	540.66	102.18	6.291	
14,300.00	12,423.00	14,454.18	12,570.00	52.26	52.97	-103.53	1,935.57	-532.71	642.85	539.11	103.74	6.197	
14,400.00	12,423.00	14,554.18	12,570.00	53.09	53.78	-103.53	2,035.56	-533.41	642.85	537.50	105.35	6.102	
14,500.00	12,423.00	14,654.18	12,570.00	53.95	54.62	-103.53	2,135.56	-534.10	642.85	535.84	107.01	6.007	
14,600.00	12,423.00	14,754.18	12,570.00	54.83	55.48	-103.53	2,235.56	-534.79	642.85	534.13	108.72	5.913	
14,700.00	12,423.00	14,854.18	12,570.00	55.73	56.37	-103.53	2,335.56	-535.49	642.85	532.37	110.48	5.819	
14,800.00	12,423.00	14,954.18	12,570.00	56.66	57.29	-103.53	2,435.55	-536.18	642.85	530.56	112.28	5.725	
14,900.00	12,423.00	15,054.18	12,570.00	57.61	58.22	-103.53	2,535.55	-536.88	642.85	528.72	114.13	5.633	
15,000.00	12,423.00	15,154.18	12,570.00	58.58	59.18	-103.53	2,635.55	-537.57	642.85	526.83	116.02	5.541	
15,100.00	12,423.00	15,254.18	12,570.00	59.56	60.15	-103.53	2,735.55	-538.27	642.85	524.90	117.95	5.450	
15,200.00	12,423.00	15,354.18	12,570.00	60.57	61.15	-103.53	2,835.54	-538.96	642.85	522.94	119.91	5.361	
15,300.00	12,423.00	15,454.18	12,570.00	61.60	62.16	-103.53	2,935.54	-539.66	642.85	520.94	121.91	5.273	
15,400.00	12,423.00	15,554.18	12,570.00	62.64	63.19	-103.53	3,035.54	-540.35	642.85	518.90	123.94	5.187	
15,500.00	12,423.00	15,654.18	12,570.00	63.70	64.24	-103.53	3,135.54	-541.05	642.85	516.84	126.01	5.102	
15,600.00	12,423.00	15,754.18	12,570.00	64.78	65.30	-103.53	3,235.54	-541.74	642.85	514.74	128.10	5.018	
15,700.00	12,423.00	15,854.18	12,570.00	65.87	66.38	-103.53	3,335.53	-542.44	642.85	512.62	130.23	4.936	Alert
15,800.00	12,423.00	15,954.18	12,570.00	66.97	67.47	-103.53	3,435.53	-543.13	642.85	510.46	132.38	4.856	Alert
15,900.00	12,423.00	16,054.18	12,570.00	68.09	68.58	-103.53	3,535.53	-543.82	642.85	508.29	134.56	4.777	Alert
16,000.00	12,423.00	16,154.18	12,570.00	69.22	69.70	-103.53	3,635.53	-544.52	642.85	506.08	136.76	4.700	Alert
16,100.00	12,423.00	16,254.18	12,570.00	70.36	70.83	-103.53	3,735.52	-545.21	642.85	503.86	138.99	4.625	Alert
16,200.00	12,423.00	16,354.18	12,570.00	71.51	71.97	-103.53	3,835.52	-545.91	642.85	501.61	141.24	4.551	Alert
16,300.00	12,423.00	16,454.18	12,570.00	72.68	73.12	-103.53	3,935.52	-546.60	642.85	499.33	143.51	4.479	Alert
16,400.00	12,423.00	16,554.18	12,570.00	73.85	74.29	-103.53	4,035.52	-547.30	642.85	497.04	145.81	4.409	Alert
16,500.00	12,423.00	16,654.18	12,570.00	75.04	75.46	-103.53	4,135.51	-547.99	642.85	494.73	148.12	4.340	Alert
16,600.00	12,423.00	16,754.18	12,570.00	76.23	76.65	-103.53	4,235.51	-548.69	642.85	492.40	150.45	4.273	Alert
16,700.00	12,423.00	16,854.18	12,570.00	77.43	77.84	-103.53	4,335.51	-549.38	642.85	490.05	152.80	4.207	Alert
16,800.00	12,423.00	16,954.18	12,570.00	78.64	79.04	-103.53	4,435.51	-550.08	642.85	487.69	155.16	4.143	Alert
16,900.00	12,423.00	17,054.18	12,570.00	79.86	80.25	-103.53	4,535.50	-550.77	642.85	485.30	157.54	4.080	Alert
17,000.00	12,423.00	17,154.18	12,570.00	81.09	81.47	-103.53	4,635.50	-551.46	642.85	482.91	159.94	4.019	Alert
17,100.00	12,423.00	17,254.18	12,570.00	82.33	82.70	-103.53	4,735.50	-552.16	642.85	480.49	162.35	3.960	Alert
17,200.00	12,423.00	17,354.18	12,570.00	83.57	83.93	-103.53	4,835.50	-552.85	642.85	478.07	164.78	3.901	Alert
17,300.00	12,423.00	17,454.18	12,570.00	84.82	85.17	-103.53	4,935.49	-553.55	642.85	475.63	167.22	3.844	Alert
17,392.67	12,423.00	17,546.85	12,570.00	85.98	86.33	-103.53	5,028.16	-554.19	642.85	473.36	169.49	3.793	Alert, ES, SF

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.50 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.00	0.00	4.10	-4.10	0.50	0.50	-90.56	-7.61	-781.96	782.00					
100.00	100.00	104.10	95.90	0.52	0.52	-90.56	-7.61	-781.96	782.00	780.96	1.04	752.269		
200.00	200.00	204.10	195.90	0.70	0.71	-90.56	-7.61	-781.96	782.00	780.58	1.41	552.805		
300.00	300.00	304.10	295.90	0.99	1.00	-90.56	-7.61	-781.96	782.00	780.01	1.99	393.484		
400.00	400.00	404.10	395.90	1.31	1.32	-90.56	-7.61	-781.96	782.00	779.37	2.63	297.137		
500.00	500.00	504.10	495.90	1.65	1.66	-90.56	-7.61	-781.96	782.00	778.69	3.31	236.526		
600.00	600.00	604.10	595.90	1.99	2.00	-90.56	-7.61	-781.96	782.00	778.00	4.00	195.723		
700.00	700.00	704.10	695.90	2.34	2.35	-90.56	-7.61	-781.96	782.00	777.31	4.69	166.631		
800.00	800.00	804.10	795.90	2.69	2.71	-90.56	-7.61	-781.96	782.00	776.60	5.40	144.932		
900.00	900.00	904.10	895.90	3.04	3.06	-90.56	-7.61	-781.96	782.00	775.90	6.10	128.163		
1,000.00	1,000.00	1,004.10	995.90	3.40	3.41	-90.56	-7.61	-781.96	782.00	775.19	6.81	114.833		
1,100.00	1,100.00	1,104.10	1,095.90	3.75	3.77	-90.56	-7.61	-781.96	782.00	774.48	7.52	103.992		
1,200.00	1,200.00	1,204.10	1,195.90	4.11	4.12	-90.56	-7.61	-781.96	782.00	773.77	8.23	95.008		
1,300.00	1,300.00	1,304.10	1,295.90	4.46	4.48	-90.56	-7.61	-781.96	782.00	773.06	8.94	87.443		
1,400.00	1,400.00	1,404.10	1,395.90	4.82	4.84	-90.56	-7.61	-781.96	782.00	772.34	9.66	80.988		
1,500.00	1,500.00	1,504.10	1,495.90	5.18	5.19	-90.56	-7.61	-781.96	782.00	771.63	10.37	75.416		
1,600.00	1,600.00	1,604.10	1,595.90	5.53	5.55	-90.56	-7.61	-781.96	782.00	770.92	11.08	70.559		
1,700.00	1,700.00	1,704.10	1,695.90	5.89	5.91	-90.56	-7.61	-781.96	782.00	770.20	11.80	66.287		
1,800.00	1,800.00	1,804.10	1,795.90	6.25	6.26	-90.56	-7.61	-781.96	782.00	769.49	12.51	62.502		
1,900.00	1,900.00	1,904.10	1,895.90	6.61	6.62	-90.56	-7.61	-781.96	782.00	768.77	13.23	59.124		
2,000.00	2,000.00	1,995.90	1,995.90	6.96	6.95	-90.56	-7.61	-781.96	782.00	768.09	13.91	56.210 CC		
2,100.00	2,100.00	2,092.34	2,092.33	7.32	7.28	-90.61	-8.33	-782.16	782.22	767.62	14.60	53.585		
2,200.00	2,200.00	2,191.46	2,191.44	7.68	7.60	-90.75	-10.19	-782.69	782.77	767.49	15.28	51.236		
2,300.00	2,300.00	2,308.56	2,291.40	8.04	7.98	-90.89	-12.11	-783.24	783.34	767.33	16.02	48.902		
2,400.00	2,400.00	2,408.58	2,391.36	8.39	8.31	-91.03	-14.03	-783.78	783.92	767.21	16.71	46.923		
2,500.00	2,500.00	2,508.60	2,491.32	8.75	8.65	-91.17	-15.96	-784.33	784.50	767.11	17.40	45.094		
2,600.00	2,600.00	2,608.62	2,591.28	9.11	8.98	-91.30	-17.88	-784.87	785.09	767.00	18.09	43.400		
2,700.00	2,700.00	2,708.64	2,691.24	9.47	9.32	-91.44	-19.80	-785.42	785.68	766.89	18.78	41.827		
2,800.00	2,800.00	2,808.66	2,791.20	9.83	9.66	-91.58	-21.72	-785.96	786.27	766.79	19.48	40.362		
2,900.00	2,900.00	2,891.32	2,891.16	10.18	9.94	-91.72	-23.64	-786.50	786.87	766.76	20.12	39.111		
3,000.00	3,000.00	3,008.70	2,991.12	10.54	10.34	-91.86	-25.57	-787.05	787.48	766.60	20.88	37.719		
3,100.00	3,100.00	3,108.72	3,091.08	10.90	10.68	-92.00	-27.49	-787.59	788.09	766.51	21.58	36.523		
3,200.00	3,200.00	3,208.74	3,191.04	11.26	11.02	-92.14	-29.41	-788.14	788.70	766.42	22.28	35.400		
3,300.00	3,300.00	3,308.76	3,291.00	11.62	11.37	-92.27	-31.33	-788.68	789.32	766.34	22.98	34.345		
3,400.00	3,400.00	3,408.78	3,390.96	11.97	11.71	-92.41	-33.25	-789.23	789.94	766.26	23.69	33.351		
3,500.00	3,500.00	3,508.80	3,490.92	12.33	12.06	-92.55	-35.18	-789.77	790.57	766.18	24.39	32.413		
3,600.00	3,600.00	3,608.82	3,590.88	12.69	12.41	-92.69	-37.10	-790.32	791.20	766.11	25.10	31.527		
3,700.00	3,700.00	3,708.84	3,690.84	13.05	12.75	-92.82	-39.02	-790.86	791.84	766.04	25.80	30.689		
3,800.00	3,800.00	3,808.86	3,790.80	13.41	13.10	-92.96	-40.94	-791.41	792.48	765.97	26.51	29.895		
3,900.00	3,900.00	3,908.88	3,890.76	13.77	13.45	-93.10	-42.86	-791.95	793.13	765.91	27.22	29.142		
4,000.00	4,000.00	4,008.90	3,990.72	14.12	13.80	-93.23	-44.79	-792.49	793.78	765.85	27.92	28.427 ES		
4,100.00	4,100.00	4,108.91	4,090.69	14.46	14.15	117.40	-46.71	-793.04	794.83	766.22	28.61	27.777		
4,162.88	4,162.85	4,153.96	4,153.54	14.67	14.31	117.40	-47.92	-793.38	795.91	766.93	28.98	27.467		
4,200.00	4,199.96	4,208.93	4,190.65	14.79	14.50	117.42	-48.63	-793.58	796.64	767.35	29.29	27.198		
4,300.00	4,299.92	4,308.95	4,290.61	15.12	14.85	117.46	-50.55	-794.13	798.60	768.63	29.97	26.649		
4,400.00	4,399.88	4,408.97	4,390.57	15.45	15.21	117.51	-52.47	-794.67	800.57	769.92	30.65	26.122		
4,500.00	4,499.84	4,508.99	4,490.53	15.78	15.56	117.56	-54.40	-795.22	802.53	771.20	31.33	25.617		
4,600.00	4,599.80	4,609.01	4,590.49	16.11	15.91	117.60	-56.32	-795.76	804.50	772.48	32.01	25.131		
4,700.00	4,699.76	4,709.03	4,690.44	16.44	16.26	117.64	-58.24	-796.31	806.46	773.77	32.70	24.665		
4,800.00	4,799.72	4,809.05	4,790.40	16.77	16.62	117.69	-60.16	-796.85	808.43	775.05	33.38	24.217		
4,900.00	4,899.68	4,909.08	4,890.36	17.11	16.97	117.73	-62.08	-797.40	810.39	776.33	34.07	23.786		
5,000.00	4,999.64	5,009.10	4,990.32	17.44	17.32	117.78	-64.01	-797.94	812.36	777.60	34.76	23.372		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.50 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,099.60	5,109.12	5,090.28	17.78	17.68	117.82	-65.93	-798.48	814.33	778.88	35.45	22.972		
5,200.00	5,199.56	5,209.14	5,190.24	18.12	18.03	117.87	-67.85	-799.03	816.30	780.16	36.14	22.587		
5,300.00	5,299.52	5,309.16	5,290.20	18.46	18.39	117.91	-69.77	-799.57	818.27	781.43	36.83	22.216		
5,400.00	5,399.48	5,409.18	5,390.16	18.79	18.74	117.95	-71.69	-800.12	820.24	782.71	37.53	21.858		
5,500.00	5,499.44	5,509.20	5,490.11	19.13	19.10	117.99	-73.62	-800.66	822.21	783.99	38.22	21.512		
5,600.00	5,599.40	5,609.23	5,590.07	19.48	19.45	118.04	-75.54	-801.21	824.18	785.26	38.92	21.178		
5,700.00	5,699.36	5,709.25	5,690.03	19.82	19.81	118.08	-77.46	-801.75	826.15	786.53	39.61	20.856		
5,800.00	5,799.32	5,809.27	5,789.99	20.16	20.16	118.12	-79.38	-802.30	828.12	787.81	40.31	20.544		
5,900.00	5,899.28	5,909.29	5,889.95	20.50	20.52	118.16	-81.30	-802.84	830.09	789.08	41.01	20.242		
6,000.00	5,999.24	6,009.31	5,989.91	20.85	20.87	118.21	-83.23	-803.39	832.06	790.35	41.71	19.950		
6,100.00	6,099.20	6,109.33	6,089.87	21.19	21.23	118.25	-85.15	-803.93	834.03	791.63	42.41	19.668		
6,200.00	6,199.16	6,209.35	6,189.83	21.53	21.58	118.29	-87.07	-804.48	836.01	792.90	43.11	19.394		
6,300.00	6,299.11	6,309.37	6,289.78	21.88	21.94	118.33	-88.99	-805.02	837.98	794.17	43.81	19.128		
6,400.00	6,399.07	6,409.40	6,389.74	22.23	22.30	118.37	-90.91	-805.56	839.95	795.44	44.51	18.871		
6,500.00	6,499.03	6,509.42	6,489.70	22.57	22.65	118.41	-92.84	-806.11	841.93	796.72	45.21	18.622		
6,600.00	6,598.99	6,609.44	6,589.66	22.92	23.01	118.45	-94.76	-806.65	843.90	797.99	45.91	18.380		
6,700.00	6,698.95	6,709.46	6,689.62	23.27	23.37	118.49	-96.68	-807.20	845.88	799.26	46.62	18.145		
6,800.00	6,798.91	6,809.48	6,789.58	23.61	23.72	118.54	-98.60	-807.74	847.85	800.53	47.32	17.917		
6,900.00	6,898.87	6,909.50	6,889.54	23.96	24.08	118.58	-100.52	-808.29	849.83	801.80	48.03	17.695		
7,000.00	6,998.83	7,009.52	6,989.50	24.31	24.44	118.62	-102.44	-808.83	851.81	803.07	48.73	17.480		
7,100.00	7,098.79	7,109.54	7,089.45	24.66	24.79	118.66	-104.37	-809.38	853.78	804.35	49.44	17.270		
7,200.00	7,198.75	7,209.57	7,189.41	25.01	25.15	118.70	-106.29	-809.92	855.76	805.62	50.14	17.066		
7,300.00	7,298.71	7,309.59	7,289.37	25.36	25.51	118.73	-108.21	-810.47	857.74	806.89	50.85	16.868		
7,400.00	7,398.67	7,409.61	7,389.33	25.71	25.87	118.77	-110.13	-811.01	859.71	808.16	51.56	16.675		
7,500.00	7,498.63	7,509.63	7,489.29	26.06	26.22	118.81	-112.05	-811.55	861.69	809.43	52.26	16.488		
7,600.00	7,598.59	7,609.65	7,589.25	26.41	26.58	118.85	-113.98	-812.10	863.67	810.70	52.97	16.305		
7,700.00	7,698.55	7,709.67	7,689.21	26.76	26.94	118.89	-115.90	-812.64	865.65	811.97	53.68	16.127		
7,800.00	7,798.51	7,809.69	7,789.17	27.11	27.30	118.93	-117.82	-813.19	867.63	813.24	54.39	15.953		
7,900.00	7,898.47	7,909.72	7,889.12	27.46	27.65	118.97	-119.74	-813.73	869.61	814.52	55.09	15.784		
8,000.00	7,998.43	8,009.74	7,989.08	27.81	28.01	119.01	-121.66	-814.28	871.59	815.79	55.80	15.619		
8,100.00	8,098.39	8,109.76	8,089.04	28.16	28.37	119.04	-123.59	-814.82	873.57	817.06	56.51	15.458		
8,200.00	8,198.35	8,209.78	8,189.00	28.51	28.73	119.08	-125.51	-815.37	875.55	818.33	57.22	15.301		
8,300.00	8,298.31	8,309.80	8,288.96	28.87	29.08	119.12	-127.43	-815.91	877.53	819.60	57.93	15.148		
8,400.00	8,398.27	8,409.82	8,388.92	29.22	29.44	119.16	-129.35	-816.46	879.52	820.87	58.64	14.998		
8,500.00	8,498.23	8,509.84	8,488.88	29.57	29.80	119.20	-131.27	-817.00	881.50	822.15	59.35	14.852		
8,600.00	8,598.19	8,609.86	8,588.84	29.92	30.16	119.23	-133.20	-817.54	883.48	823.42	60.06	14.709		
8,700.00	8,698.15	8,709.89	8,688.79	30.28	30.52	119.27	-135.12	-818.09	885.46	824.69	60.77	14.570		
8,800.00	8,798.10	8,809.91	8,788.75	30.63	30.87	119.31	-137.04	-818.63	887.45	825.96	61.48	14.434		
8,900.00	8,898.06	8,909.93	8,888.71	30.98	31.23	119.34	-138.96	-819.18	889.43	827.24	62.20	14.301		
9,000.00	8,998.02	9,009.95	8,988.67	31.34	31.59	119.38	-140.88	-819.72	891.41	828.51	62.91	14.170		
9,100.00	9,097.98	9,109.97	9,088.63	31.69	31.95	119.42	-142.81	-820.27	893.40	829.78	63.62	14.043		
9,200.00	9,197.94	9,209.99	9,188.59	32.05	32.31	119.45	-144.73	-820.81	895.38	831.05	64.33	13.919		
9,300.00	9,297.90	9,289.99	9,288.55	32.40	32.59	119.49	-146.65	-821.36	897.37	832.40	64.97	13.812		
9,400.00	9,397.86	9,389.97	9,388.51	32.75	32.95	119.52	-148.57	-821.90	899.35	833.67	65.68	13.692		
9,500.00	9,497.82	9,489.94	9,488.46	33.11	33.31	119.56	-150.49	-822.45	901.34	834.95	66.39	13.575		
9,600.00	9,597.78	9,589.92	9,588.42	33.46	33.67	119.60	-152.42	-822.99	903.33	836.22	67.11	13.461		
9,700.00	9,697.74	9,689.90	9,688.38	33.82	34.03	119.63	-154.34	-823.53	905.31	837.49	67.82	13.349		
9,800.00	9,797.70	9,789.88	9,788.34	34.17	34.39	119.67	-156.26	-824.08	907.30	838.77	68.53	13.239		
9,900.00	9,897.66	9,889.86	9,888.30	34.53	34.74	119.70	-158.18	-824.62	909.29	840.04	69.25	13.131		
10,000.00	9,997.62	9,989.84	9,988.26	34.88	35.10	119.74	-160.10	-825.17	911.27	841.32	69.96	13.026		
10,100.00	10,097.58	10,089.82	10,088.22	35.24	35.46	119.77	-162.03	-825.71	913.26	842.59	70.67	12.923		
10,200.00	10,197.54	10,189.80	10,188.18	35.59	35.82	119.81	-163.95	-826.26	915.25	843.87	71.39	12.821		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.50 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	10,297.50	10,289.77	10,288.13	35.95	36.18	119.84	-165.87	-826.80	917.24	845.14	72.10	12.722		
10,400.00	10,397.46	10,389.75	10,388.09	36.30	36.54	119.87	-167.79	-827.35	919.23	846.42	72.81	12.625		
10,500.00	10,497.42	10,489.73	10,488.05	36.66	36.90	119.91	-169.71	-827.89	921.22	847.69	73.53	12.529		
10,600.00	10,597.38	10,589.71	10,588.01	37.02	37.25	119.94	-171.64	-828.44	923.21	848.97	74.24	12.435		
10,700.00	10,697.34	10,689.69	10,687.97	37.37	37.61	119.98	-173.56	-828.98	925.20	850.24	74.96	12.343		
10,800.00	10,797.30	10,789.67	10,787.93	37.73	37.97	120.01	-175.48	-829.52	927.19	851.52	75.67	12.253		
10,900.00	10,897.26	10,889.65	10,887.89	38.08	38.33	120.04	-177.40	-830.07	929.18	852.79	76.38	12.165		
11,000.00	10,997.22	10,989.63	10,987.85	38.44	38.69	120.08	-179.32	-830.61	931.17	854.07	77.10	12.078		
11,100.00	11,097.18	11,089.60	11,087.80	38.80	39.05	120.11	-181.25	-831.16	933.16	855.35	77.81	11.992		
11,200.00	11,197.14	11,189.58	11,187.76	39.15	39.41	120.14	-183.17	-831.70	935.15	856.62	78.53	11.909		
11,300.00	11,297.09	11,289.56	11,287.72	39.51	39.77	120.18	-185.09	-832.25	937.14	857.90	79.24	11.826		
11,394.37	11,391.43	11,384.02	11,382.16	39.85	40.11	120.21	-186.90	-832.76	939.02	859.11	79.92	11.750		
11,400.00	11,397.05	11,390.06	11,388.20	39.87	40.13	120.21	-187.01	-832.79	939.13	859.17	79.96	11.745		
11,502.96	11,500.00	11,502.24	11,495.90	40.23	40.51	-90.46	-187.61	-832.96	939.99	859.29	80.70	11.648		
11,600.00	11,597.04	11,605.20	11,592.94	40.56	40.85	-90.46	-187.61	-832.96	939.99	858.61	81.38	11.551		
11,700.00	11,697.04	11,705.20	11,692.94	40.90	41.18	-90.46	-187.61	-832.96	939.99	857.94	82.05	11.456		
11,800.00	11,797.04	11,794.80	11,792.94	41.24	41.48	-90.46	-187.61	-832.96	939.99	857.30	82.70	11.367		
11,849.27	11,846.31	11,844.09	11,842.21	41.41	41.65	-90.40	-186.53	-832.97	939.99	856.96	83.03	11.321		
11,853.00	11,850.04	11,847.82	11,845.92	41.43	41.66	-90.38	-186.29	-832.97	939.99	856.94	83.05	11.318		
11,900.00	11,896.99	11,894.56	11,892.38	41.59	41.81	-89.79	-181.22	-833.01	940.00	856.63	83.37	11.276		
11,950.00	11,946.58	11,944.01	11,940.90	41.75	41.97	-89.59	-171.75	-833.07	940.02	856.32	83.69	11.232		
12,000.00	11,995.43	11,993.18	11,988.15	41.92	42.13	-89.39	-158.23	-833.17	940.05	856.04	84.01	11.190		
12,050.00	12,043.18	12,042.08	12,033.83	42.07	42.27	-89.19	-140.81	-833.29	940.09	855.77	84.32	11.150		
12,100.00	12,089.46	12,090.73	12,077.63	42.23	42.42	-89.00	-119.69	-833.43	940.13	855.52	84.61	11.111		
12,150.00	12,133.92	12,139.13	12,119.28	42.37	42.56	-88.82	-95.05	-833.60	940.19	855.29	84.90	11.074		
12,200.00	12,176.21	12,187.30	12,158.53	42.51	42.69	-88.65	-67.14	-833.80	940.25	855.08	85.18	11.039		
12,250.00	12,216.03	12,235.27	12,195.13	42.65	42.82	-88.49	-36.16	-834.01	940.32	854.88	85.44	11.005		
12,300.00	12,253.06	12,283.03	12,228.88	42.78	42.95	-88.34	-2.38	-834.25	940.39	854.69	85.70	10.973		
12,350.00	12,287.02	12,330.62	12,259.59	42.91	43.07	-88.20	33.95	-834.50	940.46	854.51	85.95	10.942		
12,400.00	12,317.65	12,378.05	12,287.10	43.03	43.19	-88.08	72.57	-834.77	940.52	854.33	86.19	10.912		
12,450.00	12,344.73	12,425.34	12,311.25	43.15	43.31	-87.97	113.21	-835.05	940.59	854.15	86.43	10.882		
12,500.00	12,368.04	12,472.50	12,331.91	43.27	43.43	-87.87	155.58	-835.35	940.64	853.98	86.67	10.854		
12,550.00	12,387.41	12,519.55	12,348.99	43.39	43.55	-87.79	199.41	-835.65	940.69	853.80	86.90	10.825		
12,600.00	12,402.69	12,566.52	12,362.40	43.51	43.66	-87.73	244.41	-835.96	940.73	853.61	87.13	10.797		
12,650.00	12,413.77	12,613.42	12,372.06	43.63	43.78	-87.68	290.30	-836.28	940.77	853.41	87.35	10.770		
12,700.00	12,420.55	12,660.28	12,377.94	43.74	43.89	-87.65	336.77	-836.60	940.79	853.21	87.58	10.742		
12,753.00	12,423.00	12,709.99	12,380.00	43.86	44.01	-87.63	386.42	-836.95	940.80	852.98	87.81	10.714		
12,800.00	12,423.00	12,756.99	12,380.00	43.97	44.13	-87.63	433.41	-837.28	940.80	852.75	88.04	10.686		
12,900.00	12,423.00	12,856.99	12,380.00	44.23	44.41	-87.63	533.41	-837.97	940.80	852.21	88.59	10.619		
13,000.00	12,423.00	12,956.99	12,380.00	44.55	44.74	-87.63	633.41	-838.66	940.80	851.57	89.23	10.543		
13,100.00	12,423.00	13,056.99	12,380.00	44.90	45.11	-87.63	733.41	-839.36	940.80	850.84	89.96	10.458		
13,200.00	12,423.00	13,156.99	12,380.00	45.31	45.53	-87.63	833.40	-840.05	940.80	850.02	90.78	10.364		
13,300.00	12,423.00	13,256.99	12,380.00	45.75	45.98	-87.63	933.40	-840.75	940.80	849.12	91.68	10.262		
13,400.00	12,423.00	13,356.99	12,380.00	46.24	46.48	-87.63	1,033.40	-841.44	940.80	848.14	92.66	10.153		
13,500.00	12,423.00	13,456.99	12,380.00	46.76	47.02	-87.63	1,133.40	-842.14	940.80	847.07	93.73	10.038		
13,600.00	12,423.00	13,556.99	12,380.00	47.33	47.60	-87.63	1,233.39	-842.83	940.80	845.93	94.87	9.917		
13,700.00	12,423.00	13,656.99	12,380.00	47.93	48.21	-87.63	1,333.39	-843.53	940.80	844.71	96.09	9.791		
13,800.00	12,423.00	13,756.99	12,380.00	48.57	48.86	-87.63	1,433.39	-844.22	940.80	843.43	97.37	9.662		
13,900.00	12,423.00	13,856.99	12,380.00	49.25	49.55	-87.63	1,533.39	-844.92	940.80	842.07	98.73	9.529		
14,000.00	12,423.00	13,956.99	12,380.00	49.95	50.27	-87.63	1,633.39	-845.61	940.80	840.64	100.16	9.393		
14,100.00	12,423.00	14,056.99	12,380.00	50.69	51.02	-87.63	1,733.38	-846.31	940.80	839.16	101.64	9.256		
14,200.00	12,423.00	14,156.99	12,380.00	51.46	51.80	-87.63	1,833.38	-847.00	940.80	837.61	103.19	9.117		

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

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 24-T23S-R32E - Sneaky Snake 24 Fed Com 5H - Wellbore #1 - Permit Plan 1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0.50 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
14,300.00	12,423.00	14,256.99	12,380.00	52.26	52.60	-87.63	1,933.38	-847.70	940.80	836.00	104.80	8.977	
14,400.00	12,423.00	14,356.99	12,380.00	53.09	53.44	-87.63	2,033.38	-848.39	940.80	834.34	106.46	8.837	
14,500.00	12,423.00	14,456.99	12,380.00	53.95	54.30	-87.63	2,133.37	-849.08	940.80	832.63	108.18	8.697	
14,600.00	12,423.00	14,556.99	12,380.00	54.83	55.19	-87.63	2,233.37	-849.78	940.80	830.86	109.94	8.557	
14,700.00	12,423.00	14,656.99	12,380.00	55.73	56.10	-87.63	2,333.37	-850.47	940.80	829.05	111.75	8.419	
14,800.00	12,423.00	14,756.99	12,380.00	56.66	57.03	-87.63	2,433.37	-851.17	940.80	827.19	113.61	8.281	
14,900.00	12,423.00	14,856.99	12,380.00	57.61	57.99	-87.63	2,533.36	-851.86	940.80	825.29	115.52	8.144	
15,000.00	12,423.00	14,956.99	12,380.00	58.58	58.96	-87.63	2,633.36	-852.56	940.80	823.34	117.46	8.010	
15,100.00	12,423.00	15,056.99	12,380.00	59.56	59.96	-87.63	2,733.36	-853.25	940.80	821.36	119.44	7.877	
15,200.00	12,423.00	15,156.99	12,380.00	60.57	60.97	-87.63	2,833.36	-853.95	940.80	819.34	121.46	7.746	
15,300.00	12,423.00	15,256.99	12,380.00	61.60	62.00	-87.63	2,933.35	-854.64	940.80	817.28	123.52	7.617	
15,400.00	12,423.00	15,356.99	12,380.00	62.64	63.05	-87.63	3,033.35	-855.34	940.80	815.19	125.61	7.490	
15,500.00	12,423.00	15,456.99	12,380.00	63.70	64.12	-87.63	3,133.35	-856.03	940.80	813.07	127.73	7.365	
15,600.00	12,423.00	15,556.99	12,380.00	64.78	65.19	-87.63	3,233.35	-856.73	940.80	810.92	129.88	7.243	
15,700.00	12,423.00	15,656.99	12,380.00	65.87	66.29	-87.63	3,333.34	-857.42	940.80	808.74	132.07	7.124	
15,800.00	12,423.00	15,756.99	12,380.00	66.97	67.40	-87.63	3,433.34	-858.12	940.80	806.53	134.28	7.006	
15,900.00	12,423.00	15,856.99	12,380.00	68.09	68.52	-87.63	3,533.34	-858.81	940.80	804.29	136.51	6.892	
16,000.00	12,423.00	15,956.99	12,380.00	69.22	69.65	-87.63	3,633.34	-859.50	940.80	802.03	138.77	6.779	
16,100.00	12,423.00	16,056.99	12,380.00	70.36	70.79	-87.63	3,733.33	-860.20	940.80	799.74	141.06	6.670	
16,200.00	12,423.00	16,156.99	12,380.00	71.51	71.95	-87.63	3,833.33	-860.89	940.80	797.44	143.37	6.562	
16,300.00	12,423.00	16,256.99	12,380.00	72.68	73.12	-87.63	3,933.33	-861.59	940.80	795.11	145.70	6.457	
16,400.00	12,423.00	16,356.99	12,380.00	73.85	74.30	-87.63	4,033.33	-862.28	940.80	792.76	148.05	6.355	
16,500.00	12,423.00	16,456.99	12,380.00	75.04	75.48	-87.63	4,133.33	-862.98	940.80	790.39	150.42	6.255	
16,600.00	12,423.00	16,556.99	12,380.00	76.23	76.68	-87.63	4,233.32	-863.67	940.80	788.00	152.81	6.157	
16,700.00	12,423.00	16,656.99	12,380.00	77.43	77.88	-87.63	4,333.32	-864.37	940.80	785.59	155.21	6.061	
16,800.00	12,423.00	16,756.99	12,380.00	78.64	79.10	-87.63	4,433.32	-865.06	940.80	783.17	157.64	5.968	
16,900.00	12,423.00	16,856.99	12,380.00	79.86	80.32	-87.63	4,533.32	-865.76	940.81	780.73	160.08	5.877	
17,000.00	12,423.00	16,956.99	12,380.00	81.09	81.55	-87.63	4,633.31	-866.45	940.81	778.27	162.53	5.788	
17,100.00	12,423.00	17,056.99	12,380.00	82.33	82.79	-87.63	4,733.31	-867.15	940.81	775.80	165.00	5.702	
17,200.00	12,423.00	17,156.99	12,380.00	83.57	84.03	-87.63	4,833.31	-867.84	940.81	773.32	167.49	5.617	
17,300.00	12,423.00	17,256.99	12,380.00	84.82	85.28	-87.63	4,933.31	-868.53	940.81	770.82	169.98	5.535	
17,392.67	12,423.00	17,349.65	12,380.00	85.98	86.44	-87.63	5,025.97	-869.18	940.81	768.50	172.31	5.460 SF	

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB @ 3742.30ft

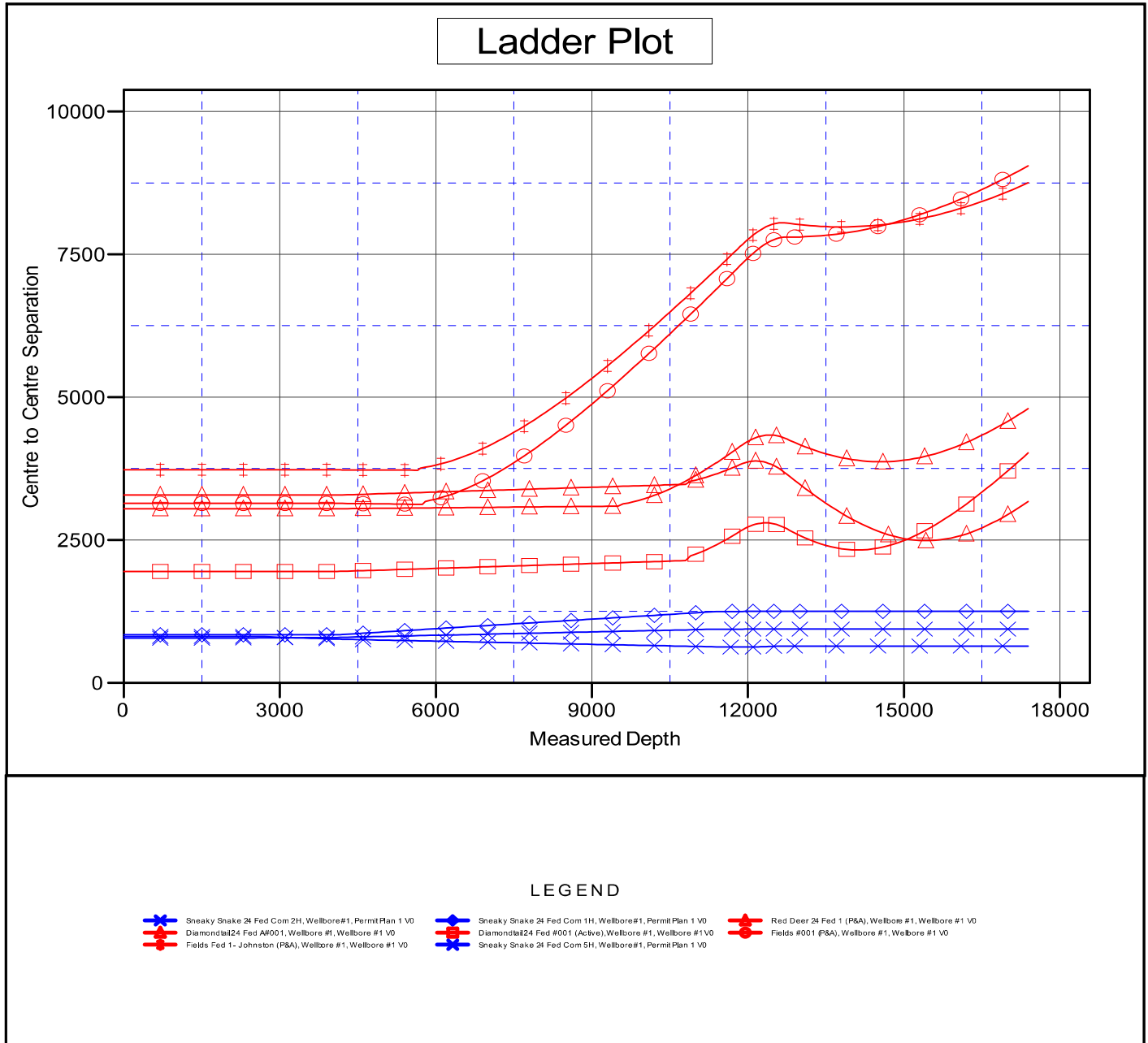
Offset Depths are relative to Offset Datum

Central Meridian is -104.333334

Coordinates are relative to: Sneaky Snake 24 Fed Com 3H

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

Grid Convergence at Surface is: 0.37°



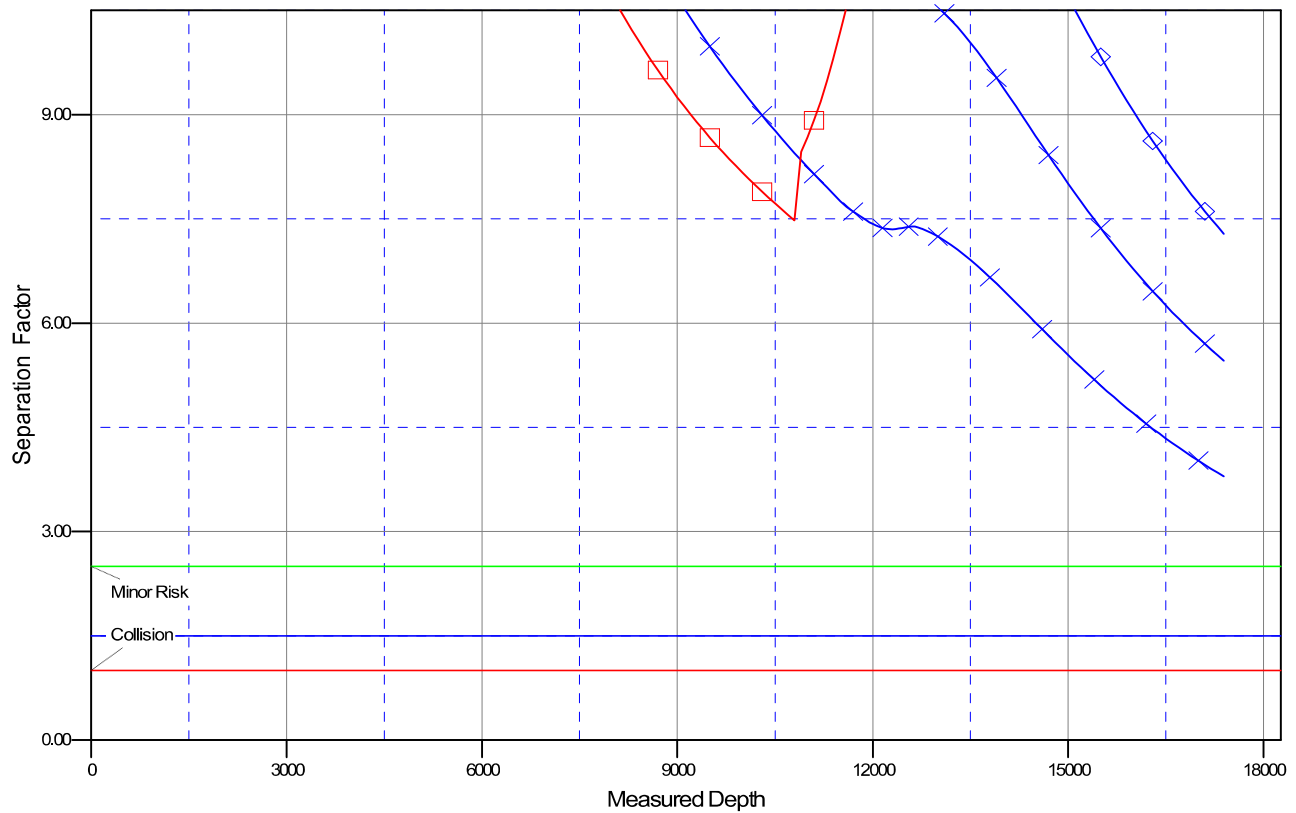
Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well Sneaky Snake 24 Fed Com 3H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	RKB @ 3742.30ft
Reference Site:	Sec 24-T23S-R32E	MD Reference:	RKB @ 3742.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Sneaky Snake 24 Fed Com 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB @ 3742.30ft
 Offset Depths are relative to Offset Datum
 Central Meridian is -104.333334

Coordinates are relative to: Sneaky Snake 24 Fed Com 3H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.37°

Separation Factor Plot



LEGEND

- ★ Sneaky Snake 24 Fed Com 2H, Wellbore#1, Permit Plan 1 V0
- ★ Sneaky Snake 24 Fed Com 1H, Wellbore#1, Permit Plan 1 V0
- ★ Red Deer 24 Fed 1 (P&A), Wellbore #1, Wellbore #1 V0
- ★ Diamondtail24 Fed A#001, Wellbore #1, Wellbore #1 V0
- ★ Diamondtail24 Fed #001 (Active), Wellbore #1, Wellbore #1 V0
- ★ Fields #001 (P&A), Wellbore #1, Wellbore #1 V0
- ★ Fields Fed 1 - Johnson (P&A), Wellbore #1, Wellbore #1 V0
- ★ Sneaky Snake 24 Fed Com 5H, Wellbore#1, Permit Plan 1 V0

Devon Energy

APD VARIANCE DATA

OPERATOR NAME: Devon Energy

1. SUMMARY OF Variance:

Devon Energy respectfully requests approval for the following additions to the drilling plan:

1. Potential utilization of a spudder rig to pre-set surface casing.

2. Description of Operations

1. A spudder rig contractor may move in their rig to drill the surface hole section and pre-set surface casing on this well.
 - a. After drilling the surface hole section, the rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
 - b. Rig will utilize fresh water based mud to drill surface hole to TD.
2. The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.
3. A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on two wingvalves.
 - a. A means for intervention will be maintained while the drilling rig is not over the well.
4. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.
5. Drilling operation will be performed with the big rig. At that time an approved BOP stack will be nipped up and tested on the wellhead before drilling operations commences on each well.
 - a. The BLM will be contacted / notified 24 hours before the big rig moves back on to the pad with the pre-set surface casing.
6. Devon Energy will have supervision on the rig to ensure compliance with all BLM and NMOCD regulations and to oversee operations.
7. Once the rig is removed, Devon Energy will secure the wellhead area by placing a guard rail around the cellar area.



**Devon Energy Center
333 West Sheridan Avenue
Oklahoma City, Oklahoma 73102-5015**

Hydrogen Sulfide (H₂S) Contingency Plan

For

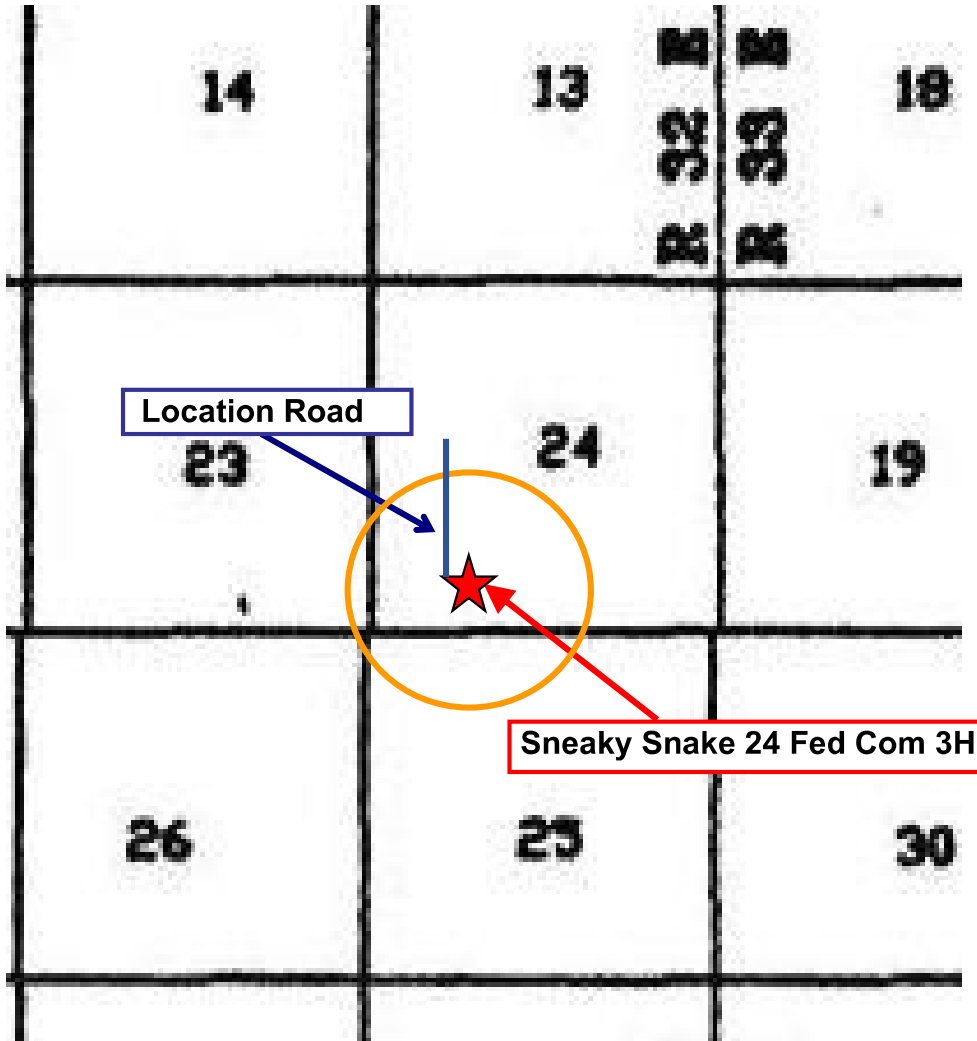
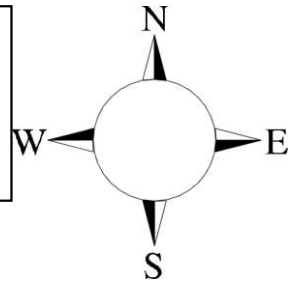
Sneaky Snake 24 Fed Com 3H

**Sec-24 T-23S R-32E
230' FSL & 1523' FWL
LAT. = 32.283609' N (NAD83)
LONG = 103.631959' W**

Lea County NM

Sneaky Snake 24 Fed Com 3H

This is an open drilling site. H₂S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H₂S, including warning signs, wind indicators and H₂S monitor.



Assumed 100 ppm **ROE = 3000'** (**Radius of Exposure**)
100 ppm H₂S concentration shall trigger activation of this plan.

Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated from the location entrance road. Crews should then block the entrance to the location from the lease road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE. There are no homes or buildings in or near the ROE.

Assumed 100 ppm ROE = 3000'

100 ppm H₂S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must

- **Isolate the area and prevent entry by other persons into the 100 ppm ROE.**
- **Evacuate any public places encompassed by the 100 ppm ROE.**
- **Be equipped with H₂S monitors and air packs in order to control the release.**
- **Use the “buddy system” to ensure no injuries occur during the response**
- **Take precautions to avoid personal injury during this operation.**
- **Contact operator and/or local officials to aid in operation. See list of phone numbers attached.**
- **Have received training in the**
 - **Detection of H₂S, and**
 - **Measures for protection against the gas,**
 - **Equipment used for protection and emergency response.**

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

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

Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE (H₂S) TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

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

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

1. The effects of H₂S metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan.

II. HYDROGEN SULFIDE TRAINING

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H₂S.

1. Well Control Equipment

- A. Flare line
- B. Choke manifold – Remotely Operated
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
- D. Auxiliary equipment may include if applicable: annular preventer and rotating head.
- E. Mud/Gas Separator

2. Protective equipment for essential personnel:

30-minute SCBA units located at briefing areas, as indicated on well site diagram, with escape units available in the top doghouse. As it may be difficult to communicate audibly while wearing these units, hand signals shall be utilized.

3. H₂S detection and monitoring equipment:

Portable H₂S monitors positioned on location for best coverage and response. These units have warning lights which activate when H₂S levels reach 10 ppm and audible sirens which activate at 15 ppm. Sensor locations:

- **Bell nipple**
- **Possum Belly/Shale shaker**
- **Rig floor**
- **Choke manifold**
- **Cellar**

Visual warning systems:

- A. Wind direction indicators as shown on well site diagram
- B. Caution/ Danger signs shall be posted on roads providing direct access to locations. Signs will be painted a high visibility yellow with black lettering of sufficient size to be reasonable distance from the immediate location. Bilingual signs will be used when appropriate.

4. Mud program:

The mud program has been designed to minimize the volume of H₂S circulated to surface. Proper mud weight, safe drilling practices and the use of H₂S scavengers will minimize hazards when penetrating H₂S bearing zones.

5. Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold lines, and valves shall be H₂S trim.
- B. All elastomers used for packing and seals shall be H₂S trim.

6. Communication:

- A. Company personnel have/use cellular telephones in the field.
- B. Land line (telephone) communications at Office

7. Well testing:

- A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safety and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H₂S environment will use the closed chamber method of testing.
- B. There will be no drill stem testing.

<u>Devon Energy Corp. Company Call List</u>		
Drilling Supervisor – Basin – Mark Kramer		405-823-4796
EHS Professional – Laura Wright		405-439-8129
<u>Agency Call List</u>		
<u>Lea County (575)</u>	Hobbs	
	Lea County Communication Authority	393-3981
	State Police	392-5588
	City Police	397-9265
	Sheriff's Office	393-2515
	Ambulance	911
	Fire Department	397-9308
	LEPC (Local Emergency Planning Committee)	393-2870
	NMOCD	393-6161
	US Bureau of Land Management	393-3612
<u>Eddy County (575)</u>	Carlsbad	
	State Police	885-3137
	City Police	885-2111
	Sheriff's Office	887-7551
	Ambulance	911
	Fire Department	885-3125
	LEPC (Local Emergency Planning Committee)	887-3798
	US Bureau of Land Management	887-6544
	NM Emergency Response Commission (Santa Fe)	(505) 476-9600
	24 HR	(505) 827-9126
	National Emergency Response Center	(800) 424-8802
	National Pollution Control Center: Direct	(703) 872-6000
	For Oil Spills	(800) 280-7118
	Emergency Services	
	Wild Well Control	(281) 784-4700
	Cudd Pressure Control	(915) 699-0139 (915) 563-3356
	Halliburton	(575) 746-2757
	B. J. Services	(575) 746-3569
<u>Give GPS position:</u>	Native Air – Emergency Helicopter – Hobbs	(575) 392-6429
	Flight For Life - Lubbock, TX	(806) 743-9911
	Aerocare - Lubbock, TX	(806) 747-8923
	Med Flight Air Amb - Albuquerque, NM	(575) 842-4433
	Lifeguard Air Med Svc. Albuquerque, NM	(800) 222-1222
	Poison Control (24/7)	(575) 272-3115
	Oil & Gas Pipeline 24 Hour Service	(800) 364-4366
	NOAA – Website - www.nhc.noaa.gov	

Prepared in conjunction with
Dave Small





DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-9720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-47466	Pool Code 98177	Pool Name WC-025 G-09 S233332A;WOLFCAMP
Property Code 328900	Property Name SNEAKY SNAKE 24 FED COM	Well Number 3H
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	Elevation 3717.3'

Surface Location

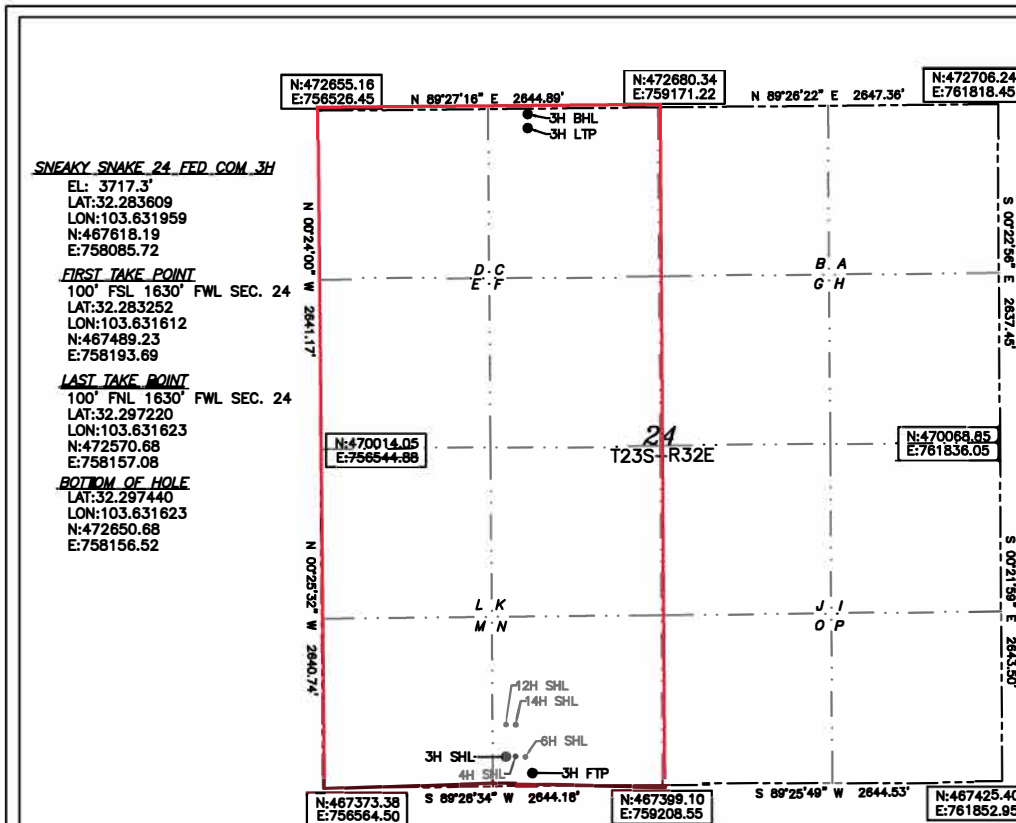
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	24	23-S	32-E		230	SOUTH	1523	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	24	23-S	32-E		20	NORTH	1630	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

**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**



Note: All bearings recited herein are based on the New Mexico State Plane Coordinate System, NAD 83, New Mexico East Zone 3001, US Survey Feet, all distances are grid.

OPERATOR CERTIFICATION

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

Rebecca Deal 2/19/2020
Signature Date
Rebecca Deal, Regulatory Analyst
Printed Name
rebecca.deal@dm.com
E-mail Address

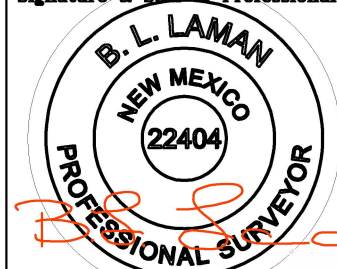
SURVEYOR CERTIFICATION

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

10/2019

Date of Survey

Signature & Seal of Professional Surveyor



10/24/19

Certificate No. 22404 B.L. LAMAN
DRAWN BY: CM

Intent ☒ As Drilled ☐

API #
30-025-47466

Operator Name: DEVON ENERGY PRODUCTION COMPANY, LP.	Property Name: SNEAKY SNAKE 24 FED COM	Well Number 3H
---	--	--------------------------

Kick Off Point (KOP)

UL	Section 24	Township 23S	Range 32E	Lot	Feet 50	From N/S FSL	Feet 1630	From E/W FWL	County LEA
Latitude 32.283112					Longitude -103.631617				NAD 83

First Take Point (FTP)

UL	Section 24	Township 23-S	Range 32-E	Lot	Feet 100	From N/S SOUTH	Feet 1630	From E/W WEST	County LEA
Latitude 32.283252					Longitude 103.631612				NAD 83

Last Take Point (LTP)

UL	Section 24	Township 23-S	Range 32-E	Lot	Feet 100	From N/S NORTH	Feet 1630	From E/W WEST	County LEA
Latitude 32.297220					Longitude 103.631623				NAD 83

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

Is this well an infill well? ☐

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

API #

Operator Name:	Property Name:	Well Number
----------------	----------------	-------------

KZ 06/29/2018

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Submit Original
to Appropriate
District Office

GAS CAPTURE PLAN

Date: 3/16/2020

☒ Original Operator & OGRID No.: 6137
☐ Amended - Reason for Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Danger Noodle 29 CTB 1

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
SNEAKY SNAKE 24 FED COM 3H	30-025-47466	24-23S-32E	230 FSL & 1523 FWL			Will connect to Sneaky Snake 24 CTB 1
SNEAKY SNAKE 24 FED COM 4H		24-23S-32E	230 FSL & 1553 FWL			Will connect to Sneaky Snake 24 CTB 1
SNEAKY SNAKE 24 FED COM 6H		24-23S-32E	230 FSL & 1583 FWL			Will connect to Sneaky Snake 24 CTB 1
SNEAKY SNAKE 24 FED COM 12H		24-23S-32E	480 FSL & 1523 FWL			Will connect to Sneaky Snake 24 CTB 1
SNEAKY SNAKE 24 FED COM 14H		24-23S-32E	480 FSL & 553 FWL			Will connect to Sneaky Snake 24 CTB 1

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to DCP Super System and will be connected to DCP low/high pressure gathering system located in Lea County, New Mexico. It will require 2mi of pipeline to connect the facility to low/high pressure gathering system. Devon provides (periodically) to DCP a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Devon and DCP have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at DCP Super System Plant located in Artesia Sec. 7, 18S, 28E, Eunice Sec. 5, T21S, R36E, Linam Sec. 6, T19S, 37E, & Zia II Sec. 19, T19S, 32E. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on DCP's system at that time. Based on current information, it is Devon's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease

- Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines