

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

Form C-101
August 1, 2011

Permit 363972

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

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

1. Operator Name and Address MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241		2. OGRID Number 14744
		3. API Number 30-025-52839
4. Property Code 325675	5. Property Name NORTH WILSON DEEP UNIT	6. Well No. 009H

7. Surface Location

UL - Lot P	Section 18	Township 21S	Range 35E	Lot Idn p	Feet From 240	N/S Line S	Feet From 1200	E/W Line E	County Lea
---------------	---------------	-----------------	--------------	--------------	------------------	---------------	-------------------	---------------	---------------

8. Proposed Bottom Hole Location

UL - Lot A	Section 7	Township 21S	Range 35E	Lot Idn A	Feet From 100	N/S Line N	Feet From 500	E/W Line E	County Lea
---------------	--------------	-----------------	--------------	--------------	------------------	---------------	------------------	---------------	---------------

9. Pool Information

WILSON;BONE SPRING, NORTH	97704
---------------------------	-------

Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3651
16. Multiple N	17. Proposed Depth 9000	18. Formation 2nd Bone Spring Sand	19. Contractor	20. Spud Date 8/7/2022
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

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

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	48	1567	1280	0
Int1	12.25	9.625	36	3400	0	0
Int1	12.25	9.625	40	4350	0	0
Int1	12.25	9.62	40	5250	0	0
Int1	12.25	9.62	40	5575	1140	0
Prod	8.75	7	26	9000	0	0

Casing/Cement Program: Additional Comments

MOC proposed to drill & test the Bone Springs formation. H2S rule 118 does not apply because MOC has researched the area & no high concentrations were found. Will have on location & working all H2S safety equipment before Yates formation for safety & insurance purposes. Will stimulate as needed for production.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5000	2500	SCHAFFER
Double Ram	5000	5000	SCHAFFER
Annular	5000	2500	SCHAFFER

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.

Signature:

Printed Name: Electronically filed by Monty Whetstone

Title: Vice President Operations

Email Address: fking@mewbourne.com

Date: 4/17/2024

Phone: 903-561-2900

OIL CONSERVATION DIVISION

Approved By: Paul F Kautz

Title: Geologist

Approved Date: 4/24/2024

Expiration Date: 4/24/2026

Conditions of Approval Attached

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, 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, NM 87505

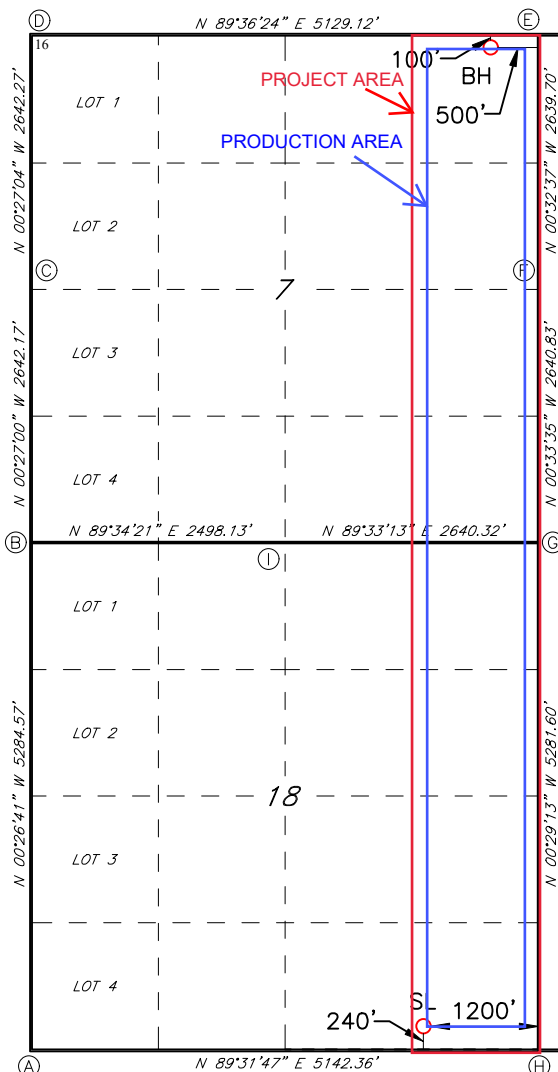
Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code 97704		³ Pool Name WILSON; BONE SPRING					
⁴ Property Code		⁵ Property Name NORTH WILSON DEEP UNIT						⁶ Well Number 9H	
⁷ OGRID NO. 14744		⁸ Operator Name MEWBOURNE OIL COMPANY						⁹ Elevation 3651'	
¹⁰ Surface Location									
UL or lot no. P	Section 18	Township 21S	Range 35E	Lot Idn	Feet from the 240	North/South line SOUTH	Feet From the 1200	East/West line EAST	County LEA
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. A	Section 7	Township 21S	Range 35E	Lot Idn	Feet from the 100	North/South line NORTH	Feet from the 500	East/West line EAST	County LEA
¹² Dedicated Acres 320		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

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



GEODETTIC DATA
NAD 83 GRID - NM EAST
SURFACE LOCATION
N: 536854.1 - E: 828514.3
LAT: 32.4724306° N
LONG: 103.4021318° W
BOTTOM HOLE
N: 547080.6 - E: 829121.5
LAT: 32.5005227° N
LONG: 103.3998732° W
CORNER DATA
NAD 83 GRID - NM EAST
A: FOUND 3/4" REBAR
N: 536581.8 - E: 824574.8
B: CALCULATED CORNER
N: 541865.4 - E: 824533.8
C: FOUND REBAR W/YELLOW
PLASTIC CAP STAMPED "NMPS 676"
N: 544507.0 - E: 824513.1
D: FOUND 2" PIPE
N: 547148.8 - E: 824492.3
E: FOUND 12"x6"x4"
LIMESTONE ROCK
N: 547184.0 - E: 829620.4
F: FOUND 1/2" REBAR
N: 544544.8 - E: 829645.5
G: CALCULATED CORNER
N: 541904.6 - E: 829671.3
H: FOUND 3/4" REBAR
N: 536624.0 - E: 829716.2
I: FOUND 1/2" REBAR
N: 541884.0 - E: 827031.5

17 OPERATOR CERTIFICATION

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

Signature: Andrew W Taylor Date: 4/16/24

Printed Name: **ANDY TAYLOR**

E-mail Address: **ATAYLOR@MEWBOURNE.COM**

18 SURVEYOR CERTIFICATION

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

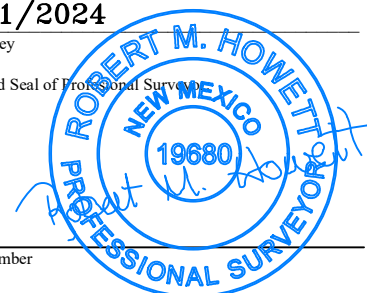
04/01/2024

Date of Survey

Signature and Seal of Professional Surveyor

19680

Certificate Number



Job No: **LS24040249**

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

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

Form APD Conditions
Permit 363972

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: MEWBOURNE OIL CO [14744] P.O. Box 5270 Hobbs, NM 88241	API Number: 30-025-52839
	Well: NORTH WILSON DEEP UNIT #009H

OCD Reviewer	Condition
pkautz	Notify OCD 24 hours prior to casing & cement
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing
pkautz	If cement does not circulate on any string, a CBL is required for that string of casing
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud



Mewbourne Oil Co.

BOP Break Testing Variance

Mewbourne Oil Company requests a variance from the minimum standards for well control equipment testing of 43 CFR 3172 to allow a testing schedule of the blow out preventer (BOP) and blow out prevention equipment (BOPE) along with batch drilling & offline cementing operations. Modern rig upgrades which facilitate pad drilling allow the BOP stack to be moved between wells on a multi-well pad without breaking any BOP stack components apart. Widespread use of these technologies has led to break testing BOPE being endorsed as safe and reliable. American Petroleum Institute (API) best practices are frequently used by regulators to develop their regulations. API Standard 53, *Well Control Equipment Systems for Drilling Wells* (5th Ed., Dec. 2018) Section 5.3.7.1 states "A pressure test of the pressure containing component shall be performed following the disconnection or repair, limited to the affected component."

Procedures

1. Full BOPE test at first installation on the pad.
 - Full BOPE test at least every 21 days.
 - Function test BOP elements per 43 CFR 3172.
 - Contact the BLM if a well control event occurs.
2. After the well section is secured and the well is confirmed to be static, the BOP will be disconnected from the wellhead and walked with the rig to another well on the pad. Two breaks on the BOPE will be made (Fig. 1).
 - Connection between the flex line and the HCR valve
 - Connection between the wellhead and the BOP quick connect (Fig. 5 & 6).
3. A capping flange will be installed after cementing per wellhead vendor procedure & casing pressure will be monitored via wellhead valve.
4. The BOP will be removed and carried by a hydraulic carrier (Fig. 3 & 4).
5. The rig will then walk to the next well.
6. Confirm that the well is static and remove the capping flange.
7. The connection between the flex line and HCR valve and the connection between the wellhead and the BOP quick connect will be reconnected.
8. Install a test plug into the wellhead.
9. A test will then be conducted against the upper pipe rams and choke, testing both breaks (Fig. 1 & 2).
10. The test will be held at 250 psi low and to the high value submitted in the APD, not to exceed 5000 psi.
11. The annular, blind rams and lower pipe rams will then be function tested.
12. If a pad consists of three or more wells, steps 4 through 11 will be repeated.



13. A break test will only be conducted if the intermediate section can be drilled and cased within 21 days of the last full BOPE test.

Barriers

Before Nipple Down:

- Floats in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Solid body mandrel and/or packoff

After Nipple Down:

- Floats in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Solid body mandrel and/or packoff
- Offline cementing tool and/or cement head
- Capping flange after cementing

Summary

A variance is requested to only test broken pressure seals on the BOPE when moving between wells on a multi-well pad if the following conditions are met:

- A full BOPE test is conducted on the first well on the pad. API Standard 53 requires testing annular BOP to 70% of RWP or 100% of MASP, whichever is greater.
- If the first well on the pad is not the well with the deepest intermediate section, a full BOPE test will also be performed when moving to a deeper well.
- The hole section being drilled has a MASP under 5000 psi.
- If a well control event occurs, Mewbourne will contact BLM for permission to continue break testing.
- If significant (>50%) losses occur, full BOPE testing will be required going forward.
- Full BOPE test will be required prior to drilling the production hole.

While walking the rig, the BOP stack will be secured via hydraulic winch or hydraulic carrier. A full BOPE test will be performed at least every 21 days.

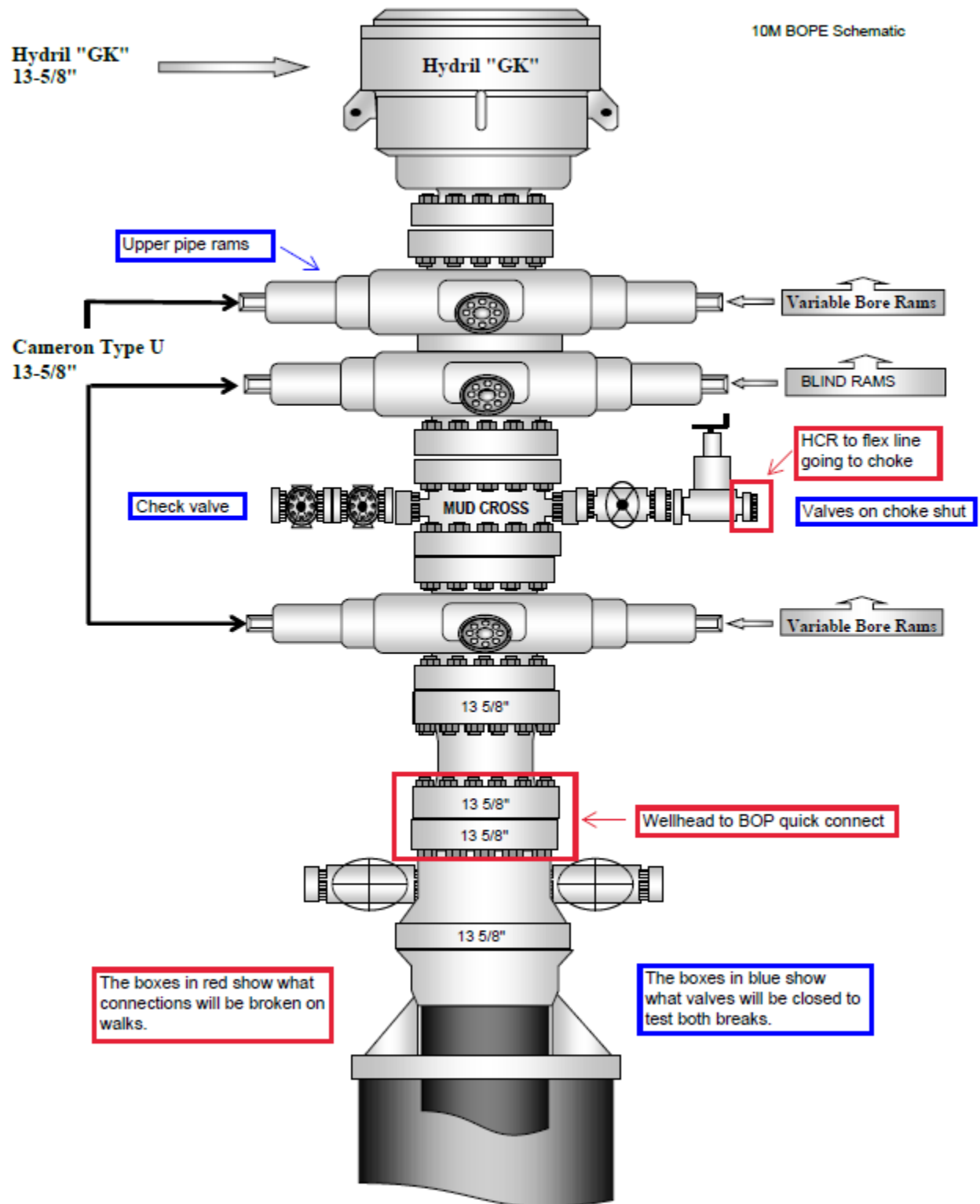


Figure 1. BOP diagram



5M BOPE & Closed Loop Equipment Schematic

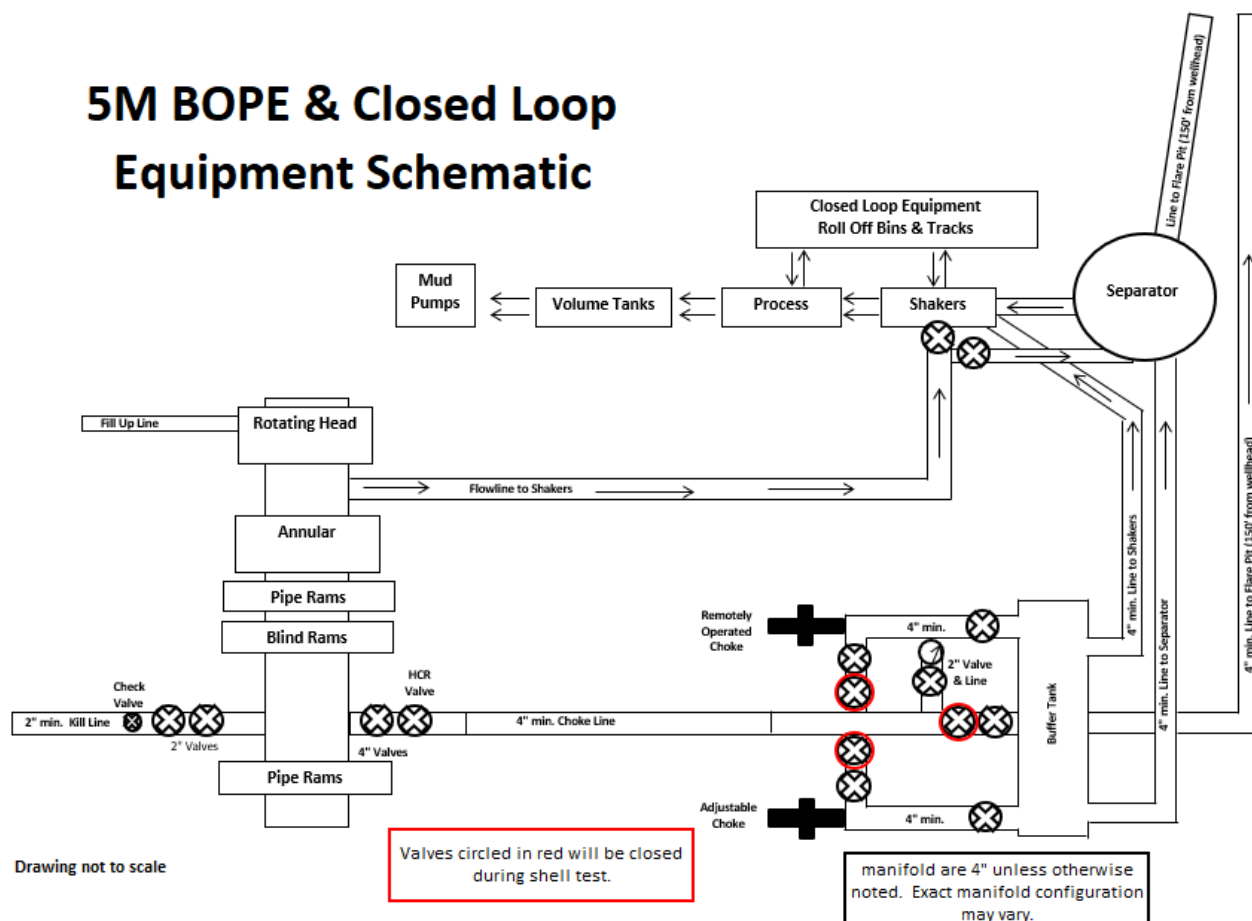


Figure 2. BOPE diagram



Figure 3. BOP handling system



Figure 4. BOP handling system

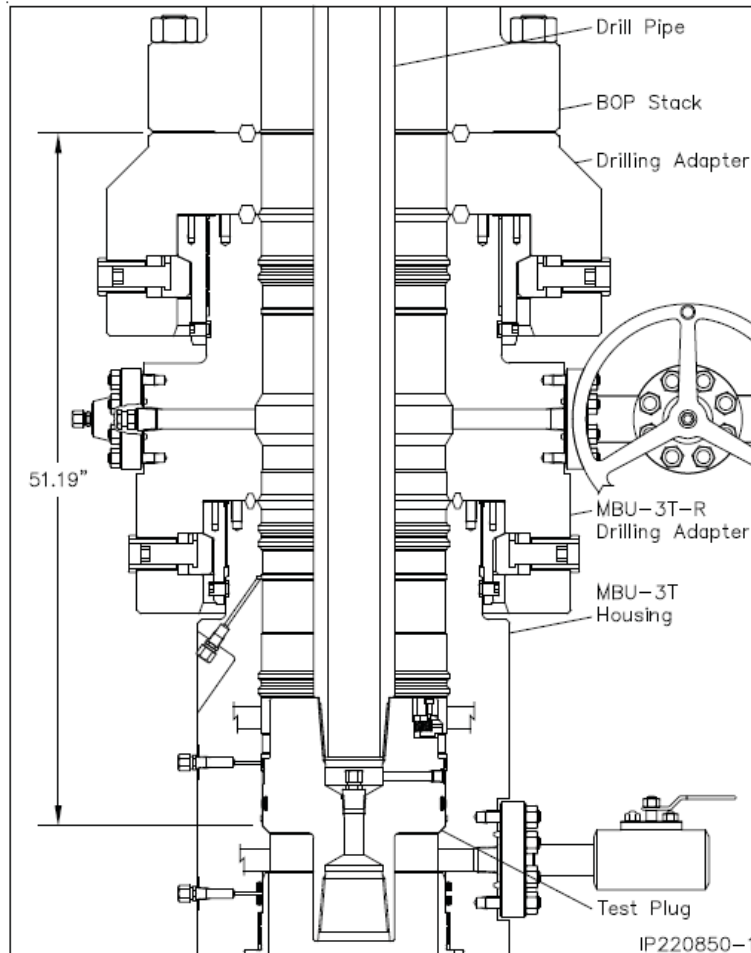


Figure 5. Cactus 5M wellhead with BOP quick connect

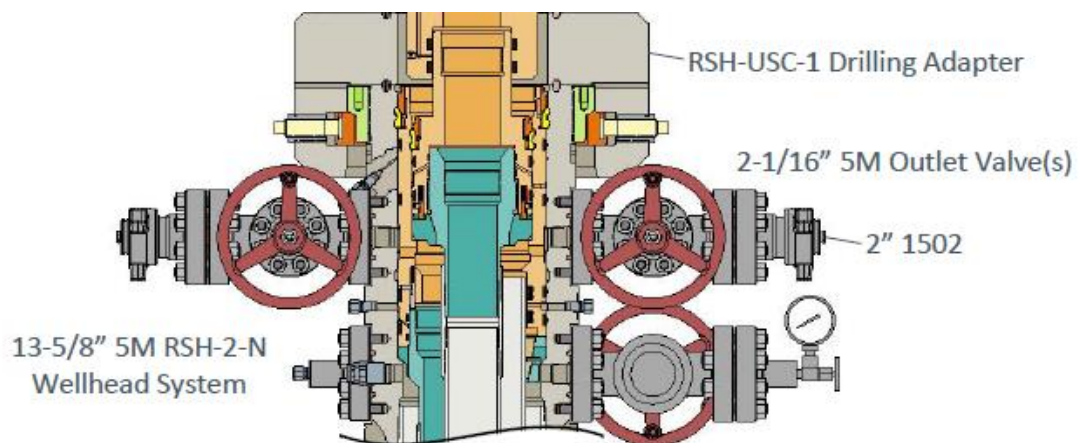


Figure 6. Vault 5M wellhead with BOP quick connect



Mewbourne Oil Co.

Surface & Intermediate Offline Cementing Variance

Mewbourne Oil Company requests a variance to perform offline cementing for surface and intermediate casing strings with the following conditions:

- Offline cementing will not be performed on production casing.
- Offline cementing will not be performed on a hole section with MASP > 5000 psi.
- Offline cementing will not be performed concurrently with offset drilling.

Surface Casing Order of Operations:

1. Run 13 3/8" surface casing as per normal operations (TPGS and float collar).
2. Perform negative pressure test to confirm integrity of float equipment while running casing.
3. Confirm well is static.
4. Make up 13 5/8" wellhead or wellhead landing ring assembly and land on 20" conductor.
5. Fill pipe, circulate casing capacity and confirm float(s) are still holding.
6. Confirm well is static.
7. Back out landing joint and pull to rig floor. Lay down landing joint.
8. Walk rig to next well on pad with cement crew standing by to rig up.
9. Make up offline cement tool with forklift per wellhead manufacturer (Fig. 1 & 2).
10. Make up cement head on top of offline cement tool with forklift.
11. Commence cement operations.
12. If cement circulates, confirm well is static and proceed to step 16.
13. If cement does not circulate, notify the appropriate BLM office, wait a minimum of six hours, and run a temperature survey to determine the top of cement.
14. Use 1" pipe for remedial cement job until the surface casing is cemented to surface.
15. Confirm well is static.
16. Once cement job is complete, the cement head and offline cementing tool are removed. The wellhead technician returns to cellar to install wellhead/valves.
17. Install wellhead capping flange.

Barriers

Before Walk:

- Float(s) in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus

**After Walk:**

- Float(s) in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Offline cementing tool tested to 5000 psi and cement head
- Capping flange after cementing

20" Surface Casing Order of Operations (4 string area):

1. Run 20" surface casing as per normal operations (TPGS and float collar).
2. Perform negative pressure test to confirm integrity of float equipment while running casing.
3. Fill pipe, circulate casing capacity and confirm float(s) are still holding.
4. Confirm well is static.
5. Back out landing joint and pull to rig floor. Lay down landing joint.
6. Make up cement head.
7. Walk rig to next well on pad with cement crew standing by to rig up.
8. Commence cement operations.
9. If cement circulates, confirm well is static and proceed to step 13.
10. If cement does not circulate, notify the appropriate BLM office, wait a minimum of six hours, and run a temperature survey to determine the top of cement.
11. Use 1" pipe for remedial cement job until the surface casing is cemented to surface.
12. Confirm well is static.
13. Once cement job is complete, remove cement head and install cap.

Barriers**Before Walk:**

- Float(s) in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Cement Head

After Walk:

- Float(s) in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Cement head
- Capping flange after cementing



Intermediate Casing Order of Operations:

1. Run casing as per normal operations (float shoe and float collar).
2. Perform negative pressure test to confirm integrity of float equipment while running casing.
3. Confirm well is static (if running SBM).
4. Land casing.
5. Fill pipe, circulate casing capacity and confirm floats are still holding.
6. Confirm well is static.
7. Back out landing joint and pull to rig floor. Lay down landing joint. Install packoff & test.
8. Nipple down BOP.
9. Walk rig to next well on pad with cement crew standing by to rig up.
10. Make up offline cement tool using forklift per wellhead manufacturer (Fig. 3 - 8).
11. Make up cement head on top of offline cement tool.
12. Commence cement operations.
13. If cement circulates, confirm well is static and proceed to step 16.
14. If cement does not circulate (when required), notify the appropriate BLM office, wait a minimum of six hours, and run a temperature survey to determine the top of cement.
15. Pump remedial cement job if required.
16. Confirm well is static.
17. Remove cement head and offline cementing tool.
18. Install wellhead capping flange and test.

Barriers

Before Nipple Down:

- Floats in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Solid body mandrel and/or packoff

After Nipple Down:

- Floats in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Solid body mandrel and/or packoff
- Offline cementing tool tested to 5000 psi and cement head
- Capping flange after cementing

**Risks:**

- Pressure build up in annulus before cementing
 - Contact BLM if a well control event occurs.
 - Rig up 3rd party pump or rig pumps to pump down casing and kill well.
 - Returns will be taken through the wellhead valves to a choke manifold (Fig 9 & 10).
 - Well could also be killed through the wellhead valves down the annulus.

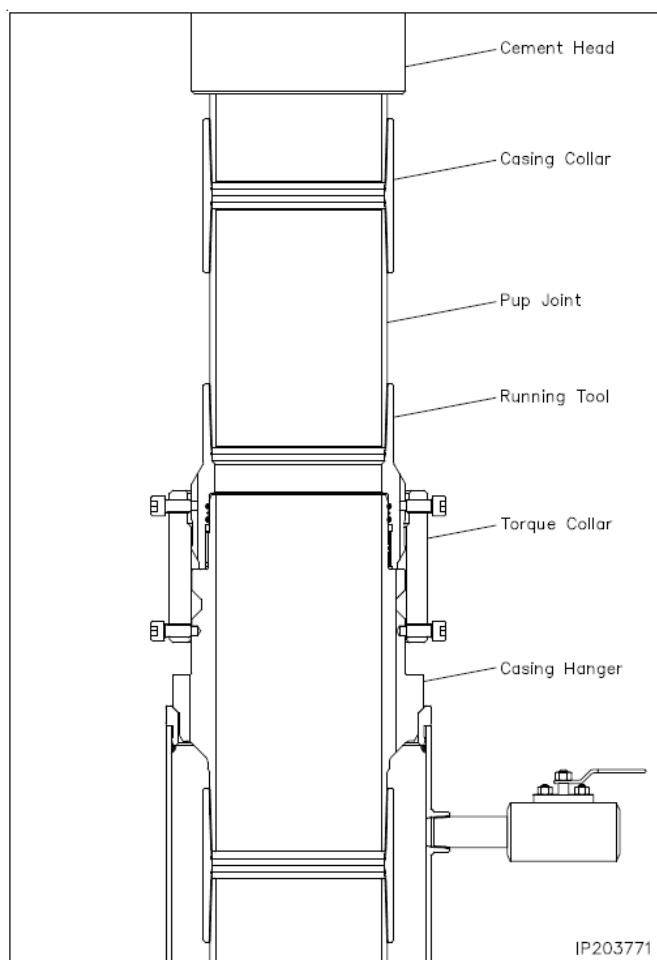


Figure 1. Cactus 13 3/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 13 3/8" pup joint and casing.

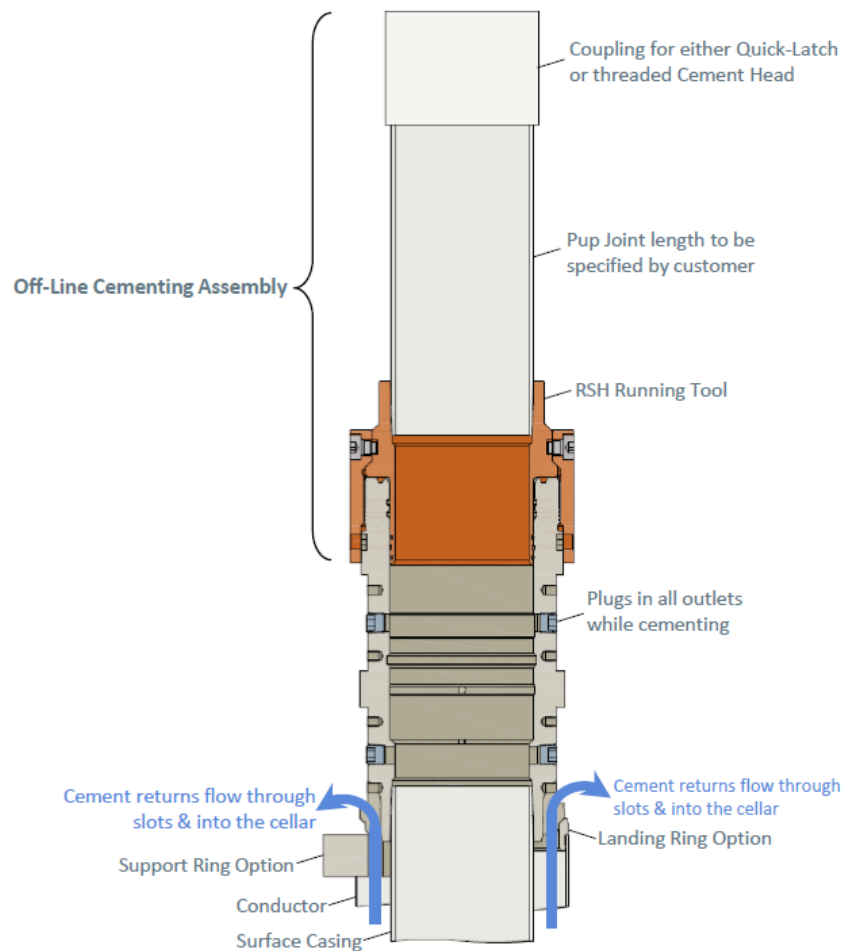


Figure 2. Vault 13 3/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 13 3/8" pup joint and casing.

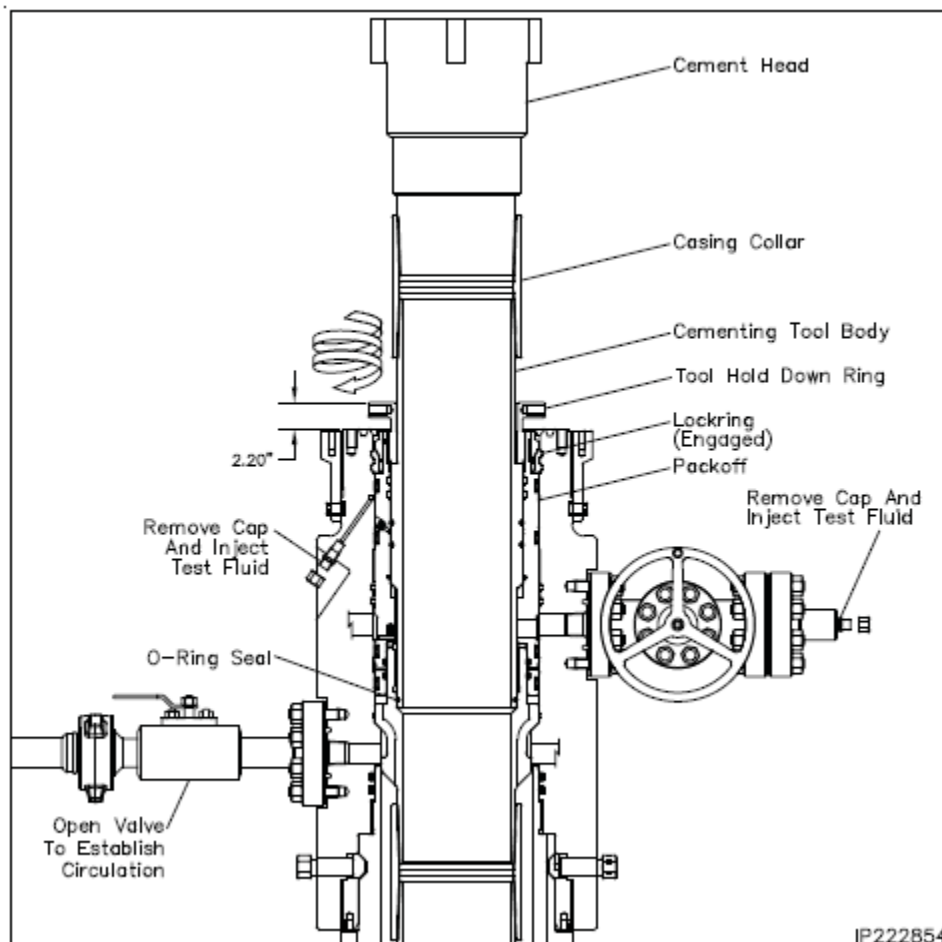


Figure 3. Cactus 9 5/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 9 5/8" pup joint and casing.

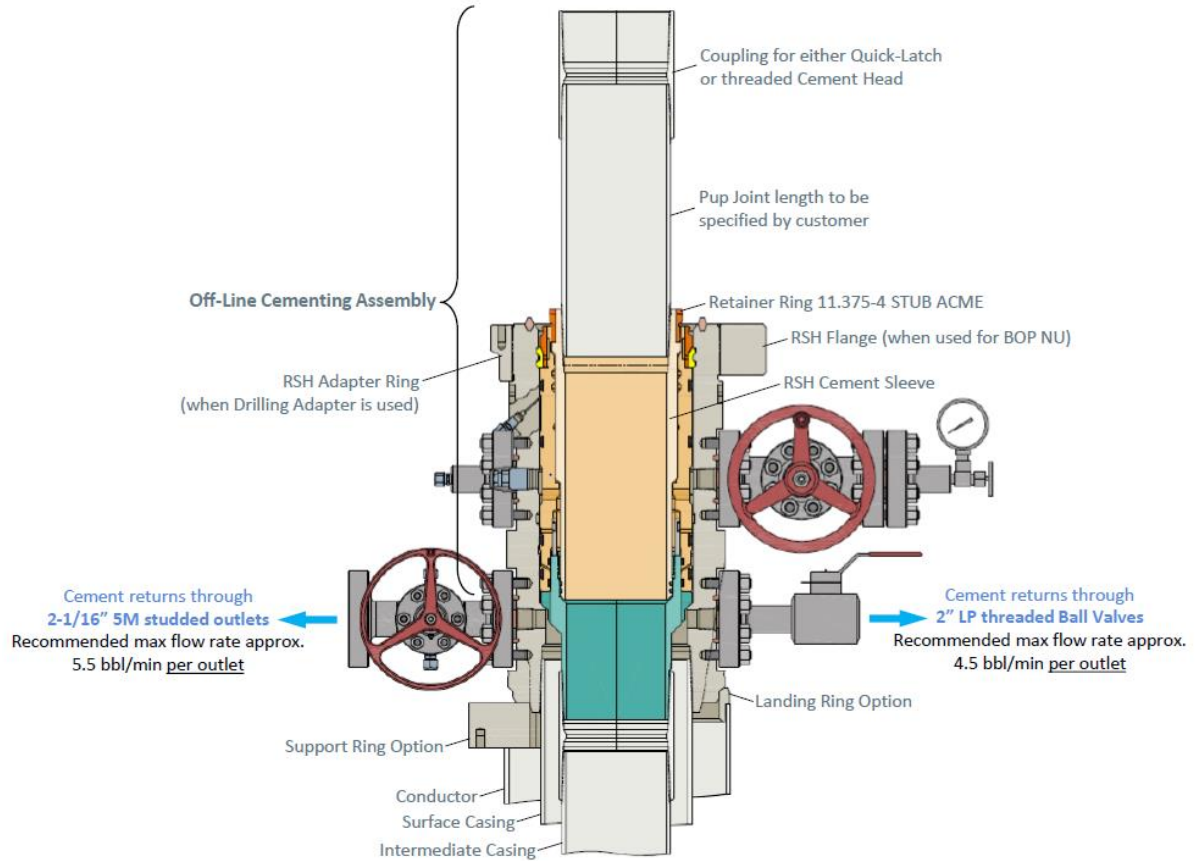


Figure 4. Vault 9 5/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 9 5/8" pup joint and casing.

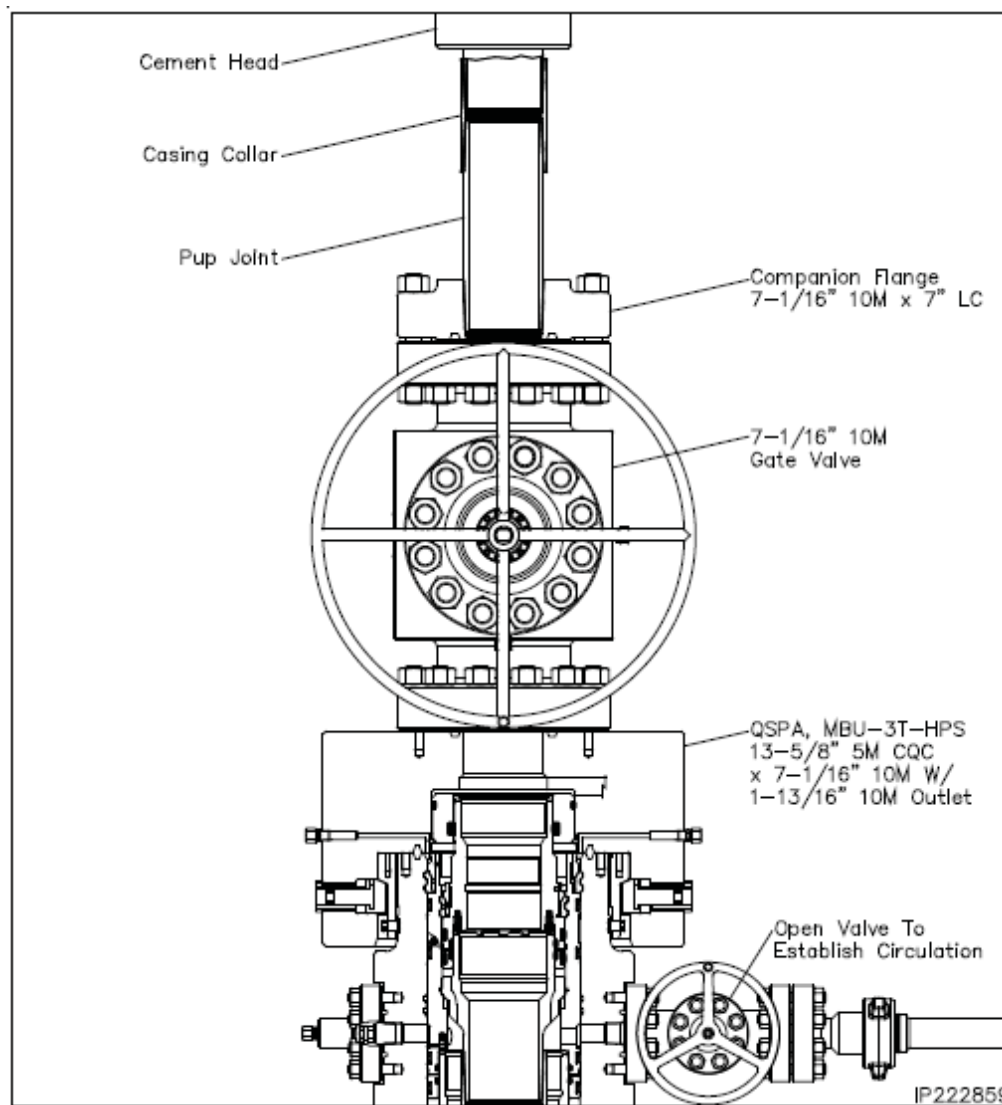


Figure 5. Cactus 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.

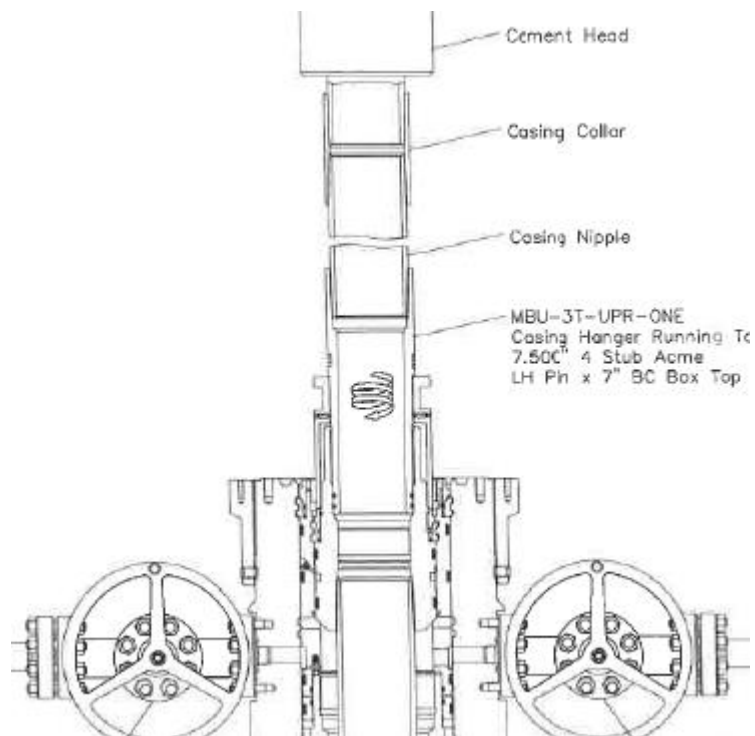


Figure 6. Cactus 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.

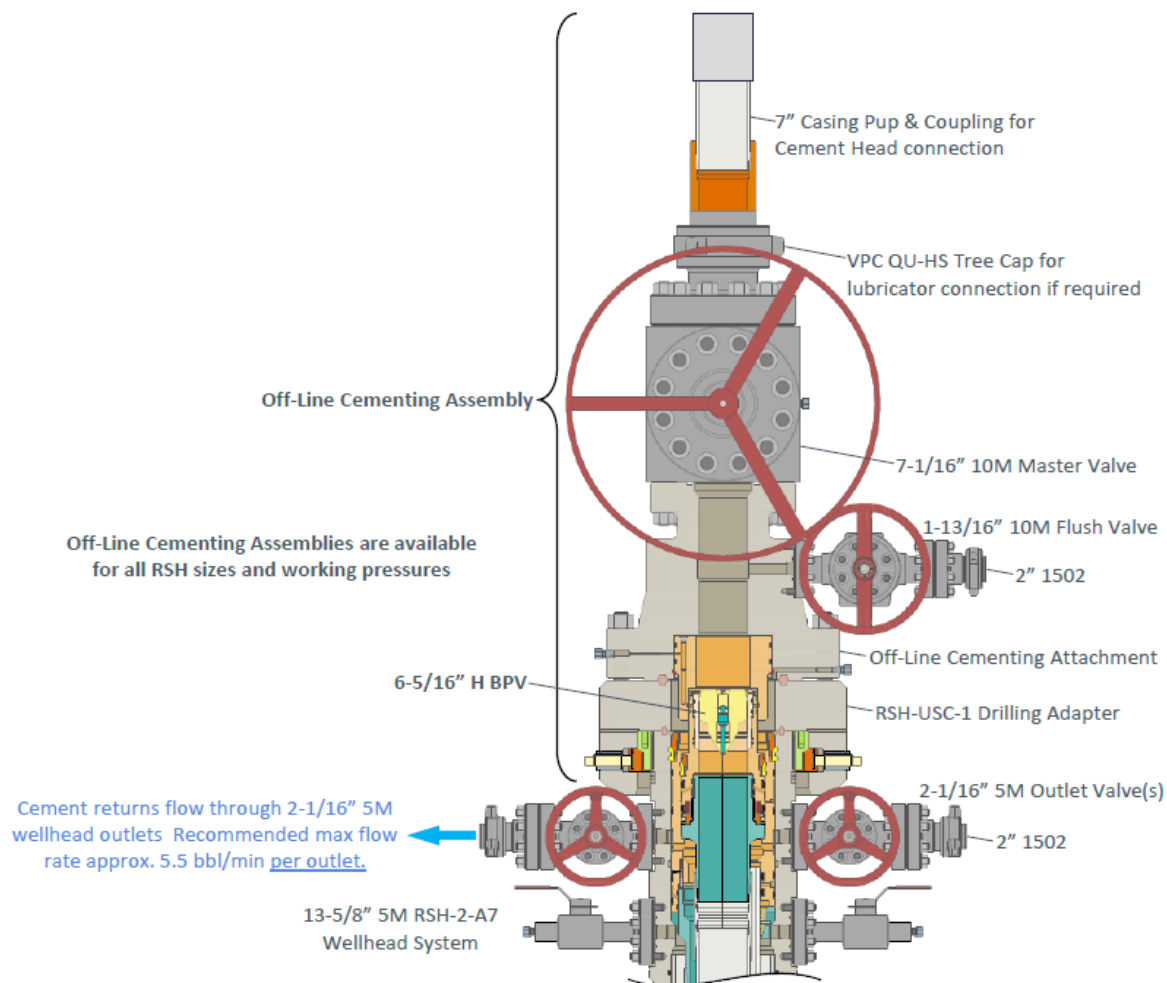


Figure 7. Vault 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.

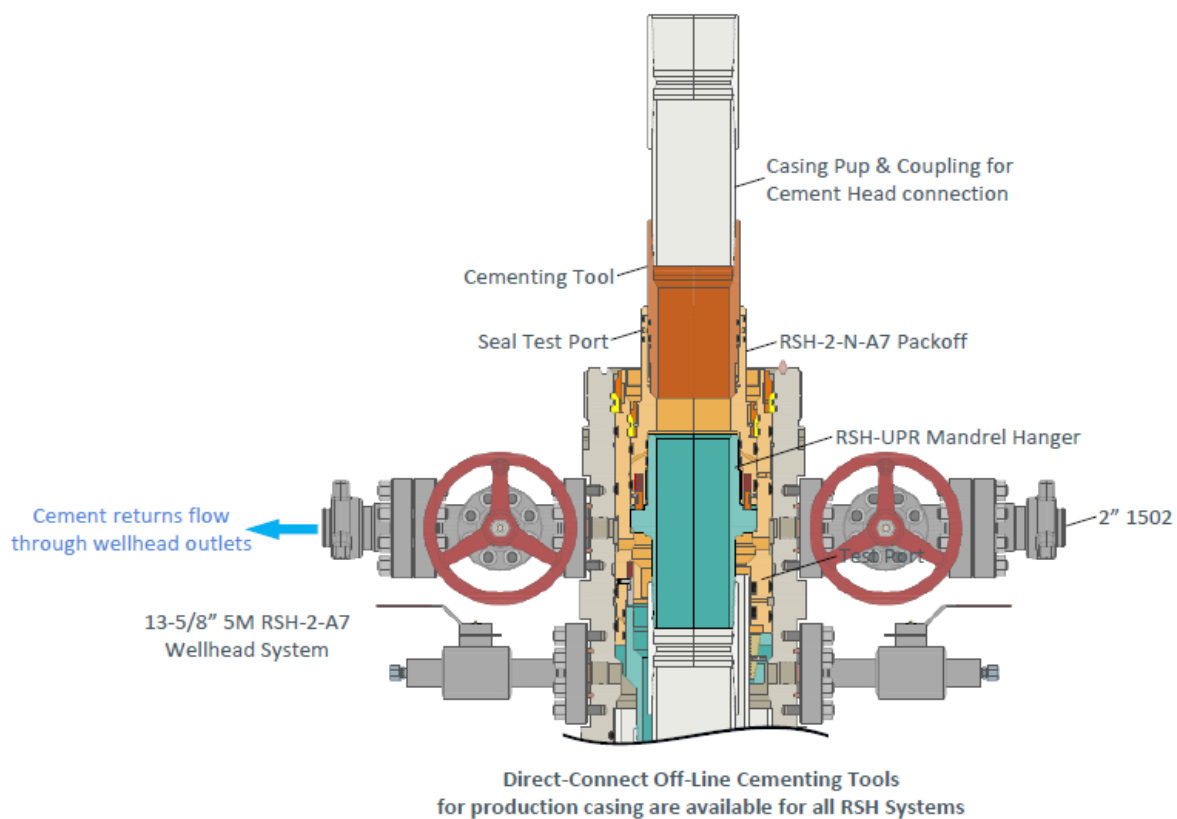


Figure 8. Vault 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.

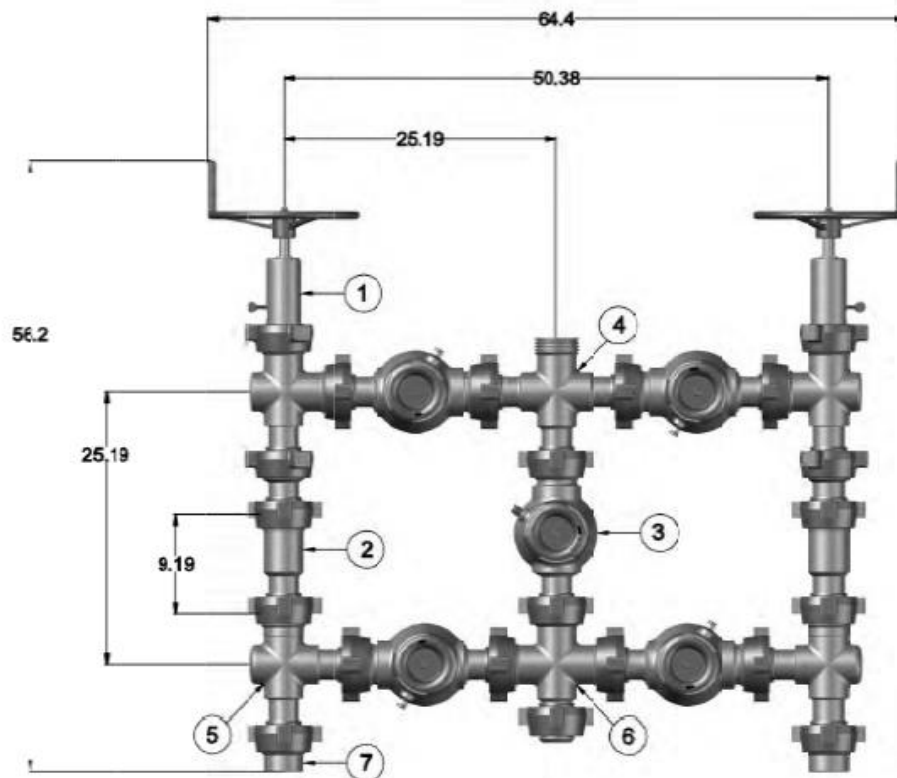


Figure 9. Five valve 15k choke manifold.

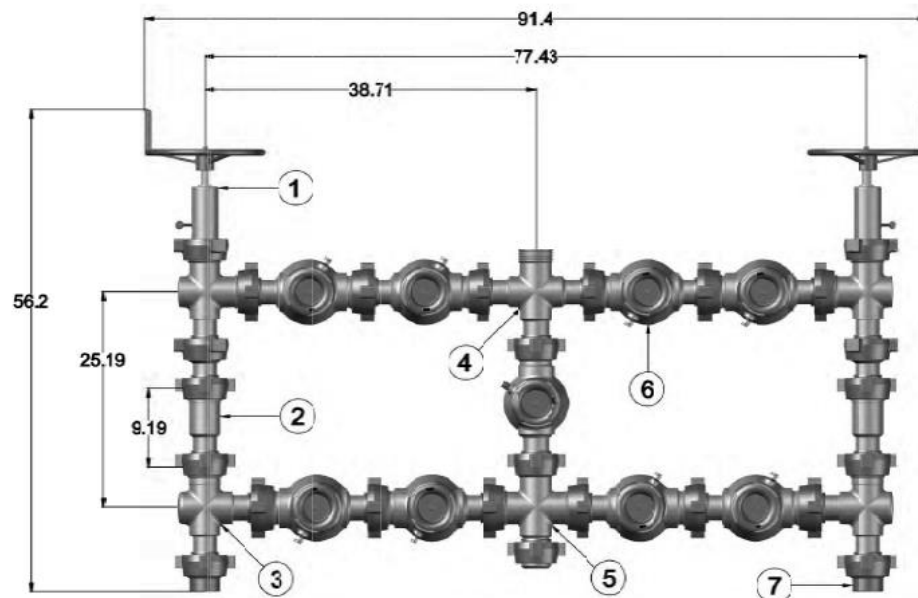


Figure 10. Nine valve 15k choke manifold.



Mewbourne Oil Company

Lea County, NM (NAD83) NMEZ Grid

North Wilson Deep

North Wilson Deep Unit #9H

Wellbore #1

Design #1

Anticollision Report

11 April, 2024





Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Reference	Design #1
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD Interval 100.00usft
Depth Range:	Unlimited
Results Limited by:	Maximum ellipse separation of 1,000.00 usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Combined Separation
Casing Method:	Not applied

Survey Tool Program		Date	4/10/2024		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	20,248.79	Design #1 (Wellbore #1)	MWD	OWSG MWD - Standard	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
North Wilson Deep						
North Wilson Deep Unit #8H - Wellbore #1 - Design #1	1,900.00	1,900.00	19.99	12.35	2.618	CC, ES, SF
North Wilson Deep Offsets						
Dee Osborne 1930 State Com #123H - Wellbore #1 - Pla	1,500.00	1,491.10	674.87	668.19	100.952	CC
Dee Osborne 1930 State Com #123H - Wellbore #1 - Pla	1,800.00	1,789.51	675.20	667.83	91.621	ES
Dee Osborne 1930 State Com #123H - Wellbore #1 - Pla	9,500.00	9,513.07	1,809.04	1,765.95	41.976	SF
Dee Osborne 1930 State Com #124H - Wellbore #1 - Pla	6,004.63	6,025.09	248.44	222.97	9.754	CC, ES
Dee Osborne 1930 State Com #124H - Wellbore #1 - Pla	6,200.00	6,207.83	253.58	227.05	9.558	SF
New Mexico O State NCT 1 #1 (P&A) - Wellbore #1 - Su	11,768.35	9,970.91	1,478.90	1,263.95	6.880	CC, ES
New Mexico O State NCT 1 #1 (P&A) - Wellbore #1 - Su	11,900.00	9,968.47	1,484.75	1,268.64	6.871	SF
Osudo 7 State Com #1 - Wellbore #1 - Surveys	17,100.00	9,877.19	1,627.17	1,383.78	6.686	CC
Osudo 7 State Com #1 - Wellbore #1 - Surveys	17,104.45	9,877.11	1,627.17	1,383.72	6.684	ES
Osudo 7 State Com #1 - Wellbore #1 - Surveys	17,200.00	9,875.42	1,630.17	1,385.48	6.662	SF
Osudo 7 State Com #2 - Wellbore #1 - Surveys	19,648.24	9,858.96	1,232.37	923.29	3.987	CC, ES, SF
Packer 18 State Com #1 (SWD) - Wellbore #1 - Surveys	14,400.00	9,933.24	157.65	-139.94	0.530	Level 3, ES, SF
Packer 18 State Com #1 (SWD) - Wellbore #1 - Surveys	14,408.09	9,932.98	157.44	-139.55	0.530	Level 3, CC
Section 6-21S-35E Cast Away 6 B2BW St Com Unit 1H						
Cast Away 6 B2BW St Com Unit 1H - Original Hole - Pla	20,248.79	17,431.25	1,678.43	1,464.37	7.841	CC, ES, SF
Pheasant Ridge 6 St Com 1 - Original Hole - Original Ho	20,248.79	9,845.70	2,115.07	1,954.62	13.182	CC, ES, SF
Section 6-21S-35E LaTrucha 6 B1CV St Com 1H						
La Trucha 6 B1CV St Com 1H - Original Hole - Plan#1						Out of range

Offset Design		North Wilson Deep - North Wilson Deep Unit #8H - Wellbore #1 - Design #1											Offset Site Error:		0.00 usft
Survey Program: 0-MWD													Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
0.00	0.00	0.00	0.00	0.00	0.00	-90.50	-0.17	-19.98	19.99						
100.00	100.00	100.00	100.00	0.82	0.82	-90.50	-0.17	-19.98	19.99	18.83	1.16	17.277			
200.00	200.00	200.00	200.00	1.43	1.43	-90.50	-0.17	-19.98	19.99	17.96	2.02	9.872			
300.00	300.00	300.00	300.00	1.88	1.88	-90.50	-0.17	-19.98	19.99	17.33	2.66	7.514			
400.00	400.00	400.00	400.00	2.24	2.24	-90.50	-0.17	-19.98	19.99	16.81	3.17	6.296			
500.00	500.00	500.00	500.00	2.56	2.56	-90.50	-0.17	-19.98	19.99	16.37	3.62	5.521			

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design North Wilson Deep - North Wilson Deep Unit #8H - Wellbore #1 - Design #1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
600.00	600.00	600.00	600.00	2.84	2.84	-90.50	-0.17	-19.98	19.99	15.97	4.02	4.972	
700.00	700.00	700.00	700.00	3.10	3.10	-90.50	-0.17	-19.98	19.99	15.60	4.39	4.556	
800.00	800.00	800.00	800.00	3.34	3.34	-90.50	-0.17	-19.98	19.99	15.26	4.73	4.227	
900.00	900.00	900.00	900.00	3.57	3.57	-90.50	-0.17	-19.98	19.99	14.94	5.05	3.959	
1,000.00	1,000.00	1,000.00	1,000.00	3.78	3.78	-90.50	-0.17	-19.98	19.99	14.63	5.35	3.734	
1,100.00	1,100.00	1,100.00	1,100.00	3.99	3.99	-90.50	-0.17	-19.98	19.99	14.34	5.64	3.542	
1,200.00	1,200.00	1,200.00	1,200.00	4.19	4.19	-90.50	-0.17	-19.98	19.99	14.07	5.92	3.376	
1,300.00	1,300.00	1,300.00	1,300.00	4.38	4.38	-90.50	-0.17	-19.98	19.99	13.80	6.19	3.230	
1,400.00	1,400.00	1,400.00	1,400.00	4.56	4.56	-90.50	-0.17	-19.98	19.99	13.54	6.45	3.100	
1,500.00	1,500.00	1,500.00	1,500.00	4.74	4.74	-90.50	-0.17	-19.98	19.99	13.29	6.70	2.984	
1,600.00	1,600.00	1,600.00	1,600.00	4.91	4.91	-90.50	-0.17	-19.98	19.99	13.04	6.94	2.879	
1,700.00	1,700.00	1,700.00	1,700.00	5.08	5.08	-90.50	-0.17	-19.98	19.99	12.81	7.18	2.784	
1,800.00	1,800.00	1,800.00	1,800.00	5.24	5.24	-90.50	-0.17	-19.98	19.99	12.58	7.41	2.697	
1,900.00	1,900.00	1,900.00	1,900.00	5.40	5.40	-90.50	-0.17	-19.98	19.99	12.35	7.64	2.618 CC, ES, SF	
2,000.00	1,999.98	1,999.22	1,999.20	5.63	5.63	-90.22	-0.62	-21.64	23.32	15.37	7.95	2.933	
2,100.00	2,099.84	2,097.78	2,097.62	6.19	6.18	-89.71	-1.95	-26.57	33.29	24.61	8.68	3.835	
2,200.00	2,199.45	2,195.04	2,194.52	6.72	6.70	-89.26	-4.13	-34.64	49.84	40.47	9.36	5.323	
2,300.00	2,298.91	2,291.25	2,290.05	7.01	6.99	-89.32	-7.11	-45.67	71.11	61.38	9.73	7.310	
2,400.00	2,398.36	2,388.74	2,386.71	7.19	7.15	-89.56	-10.40	-57.86	93.39	83.42	9.97	9.371	
2,500.00	2,497.82	2,486.22	2,483.38	7.39	7.35	-89.70	-13.69	-70.04	115.67	105.43	10.24	11.296	
2,600.00	2,597.27	2,583.71	2,580.04	7.60	7.56	-89.80	-16.98	-82.22	137.95	127.42	10.54	13.093	
2,700.00	2,696.73	2,681.20	2,676.71	7.83	7.80	-89.87	-20.27	-94.40	160.24	149.38	10.85	14.762	
2,800.00	2,796.19	2,778.68	2,773.37	8.07	8.04	-89.92	-23.56	-106.58	182.52	171.33	11.19	16.309	
2,900.00	2,895.64	2,876.17	2,870.04	8.33	8.30	-89.97	-26.85	-118.76	204.80	193.25	11.55	17.739	
3,000.00	2,995.10	2,973.65	2,966.71	8.60	8.58	-90.00	-30.14	-130.95	227.08	215.17	11.91	19.059	
3,100.00	3,094.55	3,071.14	3,063.37	8.88	8.86	-90.03	-33.43	-143.13	249.37	237.07	12.30	20.275	
3,200.00	3,194.01	3,168.62	3,160.04	9.16	9.16	-90.05	-36.72	-155.31	271.65	258.95	12.70	21.395	
3,300.00	3,293.46	3,266.11	3,256.70	9.46	9.46	-90.07	-40.01	-167.49	293.93	280.82	13.11	22.426	
3,400.00	3,392.92	3,363.60	3,353.37	9.76	9.77	-90.09	-43.30	-179.67	316.21	302.69	13.53	23.377	
3,500.00	3,492.38	3,461.08	3,450.03	10.07	10.09	-90.10	-46.59	-191.85	338.50	324.54	13.96	24.252	
3,600.00	3,591.83	3,558.57	3,546.70	10.39	10.41	-90.11	-49.88	-204.03	360.78	346.38	14.40	25.060	
3,700.00	3,691.29	3,656.05	3,643.37	10.71	10.75	-90.12	-53.17	-216.22	383.06	368.22	14.84	25.806	
3,800.00	3,790.74	3,753.54	3,740.03	11.04	11.08	-90.13	-56.46	-228.40	405.35	390.05	15.30	26.495	
3,900.00	3,890.20	3,851.02	3,836.70	11.38	11.43	-90.14	-59.75	-240.58	427.63	411.87	15.76	27.132	
4,000.00	3,989.65	3,948.51	3,933.36	11.71	11.77	-90.15	-63.04	-252.76	449.91	433.68	16.23	27.722	
4,100.00	4,089.11	4,046.00	4,030.03	12.06	12.13	-90.16	-66.33	-264.94	472.19	455.49	16.70	28.270	
4,200.00	4,188.56	4,143.48	4,126.69	12.40	12.48	-90.17	-69.63	-277.12	494.48	477.29	17.18	28.778	
4,300.00	4,288.02	4,240.97	4,223.36	12.75	12.84	-90.17	-72.92	-289.30	516.76	499.09	17.67	29.251	
4,400.00	4,387.48	4,338.45	4,320.02	13.10	13.20	-90.18	-76.21	-301.49	539.04	520.89	18.16	29.691	
4,500.00	4,486.93	4,435.94	4,416.69	13.46	13.57	-90.18	-79.50	-313.67	561.33	542.68	18.65	30.101	
4,600.00	4,586.39	4,533.42	4,513.36	13.82	13.94	-90.19	-82.79	-325.85	583.61	564.46	19.14	30.485	
4,700.00	4,685.84	4,630.91	4,610.02	14.18	14.31	-90.19	-86.08	-338.03	605.89	586.25	19.64	30.843	
4,800.00	4,785.30	4,728.40	4,706.69	14.54	14.68	-90.20	-89.37	-350.21	628.17	608.03	20.15	31.179	
4,900.00	4,884.75	4,825.88	4,803.35	14.91	15.06	-90.20	-92.66	-362.39	650.46	629.80	20.65	31.493	
5,000.00	4,984.21	4,923.37	4,900.02	15.28	15.44	-90.20	-95.95	-374.58	672.74	651.58	21.16	31.788	
5,100.00	5,083.67	5,020.85	4,996.68	15.64	15.82	-90.21	-99.24	-386.76	695.02	673.35	21.67	32.066	
5,200.00	5,183.12	5,118.34	5,093.35	16.02	16.20	-90.21	-102.53	-398.94	717.31	695.12	22.19	32.327	
5,300.00	5,282.58	5,215.82	5,190.02	16.39	16.58	-90.21	-105.82	-411.12	739.59	716.88	22.71	32.573	
5,400.00	5,382.03	5,313.31	5,286.68	16.76	16.96	-90.22	-109.11	-423.30	761.87	738.65	23.22	32.805	
5,500.00	5,481.49	5,410.80	5,383.35	17.14	17.35	-90.22	-112.40	-435.48	784.16	760.41	23.74	33.025	
5,600.00	5,580.94	5,508.28	5,480.01	17.51	17.74	-90.22	-115.69	-447.66	806.44	782.17	24.27	33.232	
5,700.00	5,680.40	5,605.77	5,576.68	17.89	18.13	-90.22	-118.98	-459.85	828.72	803.93	24.79	33.428	

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design North Wilson Deep - North Wilson Deep Unit #8H - Wellbore #1 - Design #1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,800.00	5,779.85	5,703.25	5,673.34	18.27	18.52	-90.23	-122.27	-472.03	851.00	825.69	25.32	33.614	
5,900.00	5,879.31	5,800.74	5,770.01	18.65	18.91	-90.23	-125.56	-484.21	873.29	847.44	25.84	33.790	
6,000.00	5,978.77	5,898.22	5,868.68	19.03	19.30	-90.23	-128.85	-496.39	895.57	869.20	26.37	33.957	
6,100.00	6,078.22	5,995.71	5,963.34	19.42	19.69	-90.23	-132.14	-508.57	917.85	890.95	26.90	34.116	
6,200.00	6,177.68	6,093.20	6,060.01	19.80	20.09	-90.23	-135.43	-520.75	940.14	912.70	27.44	34.268	
6,300.00	6,277.13	6,190.68	6,156.67	20.18	20.48	-90.23	-138.72	-532.94	962.42	934.45	27.97	34.412	
6,400.00	6,376.59	6,288.17	6,253.34	20.57	20.88	-90.24	-142.01	-545.12	984.70	956.20	28.50	34.549	
6,500.00	6,476.04	6,385.65	6,350.00	20.95	21.27	-90.24	-145.30	-557.30	1,006.99	977.95	29.04	34.680	
6,600.00	6,575.50	6,483.14	6,446.67	21.34	21.67	-90.24	-148.59	-569.48	1,029.27	999.70	29.57	34.804	
6,700.00	6,674.95	6,580.62	6,543.34	21.73	22.07	-90.24	-151.88	-581.66	1,051.55	1,021.44	30.11	34.924	
6,800.00	6,774.41	6,678.11	6,640.00	22.12	22.47	-90.24	-155.17	-593.84	1,073.83	1,043.19	30.65	35.038	
6,900.00	6,873.87	6,775.60	6,736.67	22.50	22.87	-90.24	-158.46	-606.02	1,096.12	1,064.93	31.19	35.147	
7,000.00	6,973.32	6,873.08	6,833.33	22.89	23.27	-90.24	-161.75	-618.21	1,118.40	1,086.67	31.73	35.251	
7,100.00	7,072.78	6,970.57	6,930.00	23.28	23.67	-90.25	-165.04	-630.39	1,140.68	1,108.42	32.27	35.351	
7,200.00	7,172.23	7,068.05	7,026.66	23.67	24.07	-90.25	-168.33	-642.57	1,162.97	1,130.16	32.81	35.447	
7,300.00	7,271.69	7,165.54	7,123.33	24.06	24.47	-90.25	-171.62	-654.75	1,185.25	1,151.90	33.35	35.539	
7,400.00	7,371.14	7,263.02	7,220.00	24.46	24.87	-90.25	-174.91	-666.93	1,207.53	1,173.64	33.89	35.628	
7,500.00	7,470.60	7,360.51	7,316.66	24.85	25.27	-90.25	-178.20	-679.11	1,229.82	1,195.38	34.44	35.712	
7,600.00	7,570.06	7,458.00	7,413.33	25.24	25.68	-90.25	-181.49	-691.29	1,252.10	1,217.12	34.98	35.794	
7,700.00	7,669.51	7,555.48	7,509.99	25.63	26.08	-90.25	-184.78	-703.48	1,274.38	1,238.86	35.53	35.872	
7,800.00	7,768.97	7,652.97	7,606.66	26.02	26.48	-90.25	-188.07	-715.66	1,296.66	1,260.59	36.07	35.948	
7,900.00	7,868.42	7,750.45	7,703.32	26.42	26.89	-90.25	-191.36	-727.84	1,318.95	1,282.33	36.62	36.021	
8,000.00	7,967.88	7,847.94	7,799.99	26.81	27.29	-90.26	-194.65	-740.02	1,341.23	1,304.07	37.16	36.090	
8,100.00	8,067.33	7,945.42	7,896.66	27.21	27.70	-90.26	-197.94	-752.20	1,363.51	1,325.80	37.71	36.158	
8,200.00	8,166.79	8,042.91	7,993.32	27.60	28.10	-90.26	-201.23	-764.38	1,385.80	1,347.54	38.26	36.223	
8,300.00	8,266.24	8,140.40	8,089.99	27.99	28.51	-90.26	-204.52	-776.57	1,408.08	1,369.27	38.81	36.286	
8,400.00	8,365.70	8,237.88	8,186.65	28.39	28.91	-90.26	-207.81	-788.75	1,430.36	1,391.01	39.35	36.346	
8,500.00	8,465.16	8,335.37	8,283.32	28.79	29.32	-90.26	-211.10	-800.93	1,452.65	1,412.74	39.90	36.405	
8,600.00	8,564.61	8,432.85	8,379.98	29.18	29.73	-90.26	-214.39	-813.11	1,474.93	1,434.48	40.45	36.461	
8,700.00	8,664.07	8,530.34	8,476.65	29.58	30.13	-90.26	-217.68	-825.29	1,497.21	1,456.21	41.00	36.516	
8,800.00	8,763.52	8,627.82	8,573.31	29.97	30.54	-90.26	-220.97	-837.47	1,519.49	1,477.94	41.55	36.568	
8,900.00	8,862.98	8,725.31	8,669.98	30.37	30.95	-90.26	-224.26	-849.65	1,541.78	1,499.67	42.10	36.619	
9,000.00	8,962.45	8,822.83	8,766.68	30.75	31.36	-90.26	-227.55	-861.84	1,563.91	1,521.27	42.65	36.673	
9,100.00	9,062.15	8,920.86	8,863.89	31.15	31.76	-90.30	-230.86	-874.09	1,583.60	1,540.41	43.20	36.661	
9,200.00	9,162.06	9,127.52	9,069.55	31.55	32.64	-90.43	-236.02	-893.20	1,596.92	1,552.69	44.23	36.108	
9,300.00	9,262.05	9,320.13	9,262.05	31.66	33.11	-90.47	-237.36	-898.16	1,600.00	1,555.35	44.65	35.831	
9,400.00	9,362.05	9,420.13	9,362.05	31.68	33.14	-90.47	-237.36	-898.16	1,600.00	1,555.32	44.68	35.806	
9,500.00	9,462.04	9,520.09	9,462.01	31.68	33.15	-90.49	-236.98	-898.17	1,600.00	1,555.29	44.71	35.790	
9,574.57	9,536.03	9,594.62	9,536.10	31.61	33.11	-90.53	-229.43	-898.23	1,600.00	1,555.30	44.70	35.797	
9,600.00	9,560.92	9,620.07	9,561.10	31.59	33.09	-90.55	-224.65	-898.28	1,600.00	1,555.31	44.69	35.802	
9,700.00	9,655.85	9,720.36	9,656.84	31.49	33.01	-90.60	-195.19	-898.54	1,600.00	1,555.35	44.65	35.838	
9,800.00	9,743.96	9,820.95	9,746.23	31.40	32.93	-90.65	-149.35	-898.96	1,600.00	1,555.41	44.59	35.882	
9,900.00	9,822.56	9,921.83	9,826.45	31.34	32.88	-90.67	-88.41	-899.51	1,600.01	1,555.46	44.55	35.915	
10,000.00	9,889.27	10,022.96	9,894.92	31.34	32.89	-90.67	-14.16	-900.18	1,600.01	1,555.45	44.56	35.909	
10,100.00	9,942.06	10,124.32	9,949.38	31.41	32.97	-90.65	71.16	-900.95	1,600.01	1,555.37	44.64	35.840	
10,200.00	9,979.32	10,225.86	9,988.04	31.59	33.15	-90.61	164.91	-901.79	1,600.01	1,555.18	44.83	35.687	
10,300.00	9,999.93	10,327.54	10,009.58	31.88	33.44	-90.56	264.14	-902.69	1,600.02	1,554.87	45.15	35.440	
10,396.36	10,005.12	10,425.20	10,013.76	32.27	33.83	-90.51	361.60	-903.57	1,600.01	1,554.44	45.57	35.110	
10,400.00	10,003.63	10,428.89	10,013.72	32.28	33.85	-90.51	365.30	-903.60	1,600.02	1,554.43	45.59	35.097	
10,500.00	10,001.86	10,528.89	10,012.45	32.77	34.33	-90.51	465.29	-904.51	1,600.02	1,553.87	46.14	34.674	
10,600.00	10,000.08	10,628.89	10,011.19	33.32	34.89	-90.51	565.28	-905.41	1,600.02	1,553.20	46.82	34.177	
10,700.00	9,998.31	10,728.89	10,009.93	33.95	35.51	-90.51	665.26	-906.31	1,600.02	1,552.42	47.59	33.619	

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design North Wilson Deep - North Wilson Deep Unit #8H - Wellbore #1 - Design #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,800.00	9,996.54	10,828.89	10,008.66	34.63	36.19	-90.51	765.25	-907.22	1,600.02	1,551.55	48.47	33.010		
10,900.00	9,994.76	10,928.89	10,007.40	35.37	36.93	-90.51	865.24	-908.12	1,600.02	1,550.58	49.44	32.360		
11,000.00	9,992.99	11,028.89	10,006.14	36.17	37.72	-90.51	965.22	-909.02	1,600.02	1,549.51	50.51	31.679		
11,100.00	9,991.22	11,128.89	10,004.87	37.01	38.55	-90.51	1,065.21	-909.93	1,600.02	1,548.37	51.66	30.975		
11,200.00	9,989.44	11,228.88	10,003.61	37.90	39.44	-90.51	1,165.20	-910.83	1,600.03	1,547.14	52.88	30.256		
11,300.00	9,987.67	11,328.88	10,002.35	38.84	40.36	-90.51	1,265.18	-911.73	1,600.03	1,545.84	54.18	29.530		
11,400.00	9,985.90	11,428.88	10,001.08	39.82	41.33	-90.51	1,365.17	-912.63	1,600.03	1,544.48	55.55	28.803		
11,500.00	9,984.13	11,528.88	9,999.82	40.84	42.34	-90.51	1,465.16	-913.54	1,600.03	1,543.05	56.98	28.079		
11,600.00	9,982.35	11,628.88	9,998.56	41.90	43.38	-90.51	1,565.14	-914.44	1,600.03	1,541.56	58.47	27.364		
11,700.00	9,980.58	11,728.88	9,997.29	43.00	44.45	-90.51	1,665.13	-915.34	1,600.04	1,540.02	60.02	26.659		
11,800.00	9,978.81	11,828.88	9,996.03	44.12	45.56	-90.51	1,765.12	-916.25	1,600.04	1,538.43	61.61	25.969		
11,900.00	9,977.03	11,928.88	9,994.76	45.28	46.69	-90.51	1,865.10	-917.15	1,600.04	1,536.79	63.26	25.295		
12,000.00	9,975.26	12,028.87	9,993.50	46.46	47.86	-90.51	1,965.09	-918.05	1,600.05	1,535.11	64.94	24.639		
12,100.00	9,973.49	12,128.87	9,992.24	47.67	49.04	-90.51	2,065.08	-918.96	1,600.05	1,533.38	66.66	24.001		
12,200.00	9,971.71	12,228.87	9,990.97	48.91	50.26	-90.51	2,165.06	-919.86	1,600.05	1,531.63	68.43	23.384		
12,300.00	9,969.94	12,328.87	9,989.71	50.17	51.49	-90.51	2,265.05	-920.76	1,600.06	1,529.83	70.22	22.786		
12,400.00	9,968.17	12,428.87	9,988.45	51.45	52.75	-90.51	2,365.04	-921.67	1,600.06	1,528.01	72.05	22.208		
12,500.00	9,966.39	12,528.87	9,987.18	52.75	54.03	-90.51	2,465.02	-922.57	1,600.06	1,526.16	73.90	21.651		
12,600.00	9,964.62	12,628.87	9,985.92	54.07	55.33	-90.51	2,565.01	-923.47	1,600.07	1,524.28	75.79	21.113		
12,700.00	9,962.85	12,728.87	9,984.66	55.41	56.64	-90.51	2,664.99	-924.37	1,600.07	1,522.38	77.69	20.595		
12,800.00	9,961.08	12,828.86	9,983.39	56.77	57.97	-90.51	2,764.98	-925.28	1,600.08	1,520.45	79.62	20.096		
12,900.00	9,959.30	12,928.86	9,982.13	58.14	59.32	-90.51	2,864.97	-926.18	1,600.08	1,518.51	81.58	19.615		
13,000.00	9,957.53	13,028.86	9,980.87	59.52	60.68	-90.51	2,964.95	-927.08	1,600.09	1,516.54	83.55	19.152		
13,100.00	9,955.76	13,128.86	9,979.60	60.92	62.06	-90.51	3,064.94	-927.99	1,600.09	1,514.55	85.54	18.706		
13,200.00	9,953.98	13,228.86	9,978.34	62.33	63.45	-90.51	3,164.93	-928.89	1,600.10	1,512.55	87.55	18.277		
13,300.00	9,952.21	13,328.86	9,977.07	63.75	64.85	-90.51	3,264.91	-929.79	1,600.10	1,510.53	89.57	17.864		
13,400.00	9,950.44	13,428.86	9,975.81	65.18	66.26	-90.51	3,364.90	-930.70	1,600.11	1,508.50	91.61	17.466		
13,500.00	9,948.66	13,528.85	9,974.55	66.63	67.68	-90.51	3,464.89	-931.60	1,600.11	1,506.45	93.66	17.084		
13,600.00	9,946.89	13,628.85	9,973.28	68.08	69.11	-90.51	3,564.87	-932.50	1,600.12	1,504.39	95.73	16.715		
13,700.00	9,945.12	13,728.85	9,972.02	69.54	70.55	-90.51	3,664.86	-933.40	1,600.12	1,502.31	97.81	16.360		
13,800.00	9,943.34	13,828.85	9,970.76	71.01	72.00	-90.51	3,764.85	-934.31	1,600.13	1,500.23	99.90	16.017		
13,900.00	9,941.57	13,928.85	9,969.49	72.49	73.46	-90.50	3,864.83	-935.21	1,600.14	1,498.13	102.00	15.687		
14,000.00	9,939.80	14,028.85	9,968.23	73.97	74.93	-90.50	3,964.82	-936.11	1,600.14	1,496.03	104.11	15.369		
14,100.00	9,938.02	14,128.85	9,966.97	75.47	76.41	-90.50	4,064.81	-937.02	1,600.15	1,493.91	106.24	15.062		
14,200.00	9,936.25	14,228.85	9,965.70	76.97	77.89	-90.50	4,164.79	-937.92	1,600.15	1,491.79	108.37	14.766		
14,300.00	9,934.48	14,328.84	9,964.44	78.47	79.38	-90.50	4,264.78	-938.82	1,600.16	1,489.66	110.51	14.480		
14,400.00	9,932.71	14,428.84	9,963.18	79.98	80.87	-90.50	4,364.77	-939.73	1,600.17	1,487.52	112.65	14.205		
14,500.00	9,930.93	14,528.84	9,961.91	81.50	82.37	-90.50	4,464.75	-940.63	1,600.18	1,485.37	114.81	13.938		
14,600.00	9,929.16	14,628.84	9,960.65	83.02	83.88	-90.50	4,564.74	-941.53	1,600.18	1,483.21	116.97	13.680		
14,700.00	9,927.39	14,728.84	9,959.38	84.55	85.39	-90.50	4,664.73	-942.43	1,600.19	1,481.05	119.14	13.432		
14,800.00	9,925.61	14,828.84	9,958.12	86.09	86.91	-90.50	4,764.71	-943.34	1,600.20	1,478.89	121.31	13.191		
14,900.00	9,923.84	14,928.84	9,956.86	87.62	88.43	-90.50	4,864.70	-944.24	1,600.21	1,476.71	123.49	12.958		
15,000.00	9,922.07	15,028.84	9,955.59	89.16	89.96	-90.50	4,964.69	-945.14	1,600.21	1,474.53	125.68	12.733		
15,100.00	9,920.29	15,128.83	9,954.33	90.71	91.49	-90.50	5,064.67	-946.05	1,600.22	1,472.35	127.87	12.514		
15,200.00	9,918.52	15,228.83	9,953.07	92.26	93.04	-89.49	5,164.66	-946.96	1,600.23	1,470.17	130.06	12.296		
15,300.00	9,916.75	15,328.82	9,951.81	93.81	94.81	-89.49	5,264.65	-947.87	1,599.23	1,468.00	132.25	12.078		
15,400.00	9,914.97	15,428.82	9,950.55	95.37	96.37	-88.48	5,364.64	-948.78	1,598.23	1,465.83	134.44	11.860		
15,500.00	9,913.20	15,528.81	9,949.29	96.93	97.93	-87.47	5,464.63	-949.69	1,597.23	1,463.66	136.63	11.642		
15,600.00	9,911.43	15,628.81	9,948.03	98.49	99.49	-86.46	5,564.62	-950.60	1,596.23	1,461.49	138.82	11.424		
15,700.00	9,909.66	15,728.80	9,946.77	100.06	101.06	-85.45	5,664.61	-951.51	1,595.23	1,459.32	141.01	11.206		
15,800.00	9,907.88	15,828.80	9,945.51	101.63	102.63	-84.44	5,764.60	-952.42	1,594.23	1,457.15	143.20	10.988		
15,900.00	9,906.11	15,928.79	9,944.25	103.20	104.20	-83.43	5,864.59	-953.33	1,593.23	1,454.98	145.39	10.770		

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design North Wilson Deep - North Wilson Deep Unit #8H - Wellbore #1 - Design #1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance								Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
16,000.00	9,904.34	16,242.60	9,940.25	104.77	108.35	-82.58	6,171.99	-840.54	1,499.11	1,350.63	148.48	10.096	
16,100.00	9,902.56	16,341.65	9,939.00	106.35	109.84	-82.58	6,270.20	-827.78	1,485.35	1,334.68	150.67	9.858	
16,200.00	9,900.79	16,440.69	9,937.75	107.93	111.35	-82.58	6,368.41	-815.03	1,471.60	1,318.73	152.86	9.627	
16,300.00	9,899.02	16,539.74	9,936.49	109.51	112.85	-82.58	6,466.63	-802.27	1,457.84	1,302.78	155.06	9.402	
16,400.00	9,897.24	16,638.78	9,935.24	111.09	114.36	-82.58	6,564.84	-789.52	1,444.08	1,286.82	157.26	9.183	
16,500.00	9,895.47	16,737.83	9,933.99	112.68	115.87	-82.58	6,663.05	-776.76	1,430.32	1,270.86	159.46	8.970	
16,600.00	9,893.70	16,825.42	9,932.88	114.27	117.21	-83.04	6,749.92	-765.57	1,416.71	1,254.99	161.72	8.760	
16,700.00	9,891.92	16,900.00	9,931.94	115.86	118.37	-84.05	6,824.06	-757.53	1,404.94	1,240.91	164.03	8.565	
16,800.00	9,890.15	16,958.84	9,931.19	117.45	119.29	-85.71	6,882.68	-752.55	1,395.42	1,229.13	166.29	8.392	
16,900.00	9,888.38	17,025.98	9,930.34	119.04	120.36	-87.05	6,949.68	-748.34	1,388.26	1,219.81	168.45	8.241	
17,000.00	9,886.60	17,100.00	9,929.40	120.64	121.54	-88.12	7,023.64	-745.52	1,383.47	1,212.90	170.57	8.111	
17,100.00	9,884.83	17,160.75	9,928.63	122.24	122.51	-89.75	7,084.38	-744.63	1,380.98	1,208.48	172.50	8.006	
17,157.05	9,883.82	17,200.00	9,928.13	123.15	123.14	-90.49	7,123.62	-744.74	1,380.63	1,207.04	173.59	7.953	
17,200.00	9,883.06	17,228.24	9,927.77	123.83	123.60	-91.10	7,151.85	-745.16	1,380.87	1,206.49	174.37	7.919	
17,300.00	9,881.29	17,300.00	9,926.86	125.43	124.76	-92.27	7,223.57	-747.46	1,383.12	1,206.90	176.22	7.849	
17,400.00	9,879.51	17,363.04	9,926.06	127.04	125.78	-93.79	7,286.50	-750.96	1,387.70	1,209.89	177.81	7.804	
17,500.00	9,877.74	17,430.20	9,925.22	128.64	126.87	-95.14	7,353.45	-756.22	1,394.64	1,215.27	179.36	7.775	
17,600.00	9,875.97	17,500.00	9,924.34	130.24	128.01	-96.36	7,422.88	-763.34	1,403.91	1,223.03	180.88	7.761	
17,700.00	9,874.19	17,587.67	9,923.23	131.85	129.42	-96.83	7,509.92	-773.77	1,414.87	1,232.05	182.83	7.739	
17,800.00	9,872.42	17,687.05	9,921.99	133.46	131.03	-96.83	7,608.59	-785.64	1,425.92	1,240.83	185.09	7.704	
17,900.00	9,870.65	17,786.44	9,920.74	135.06	132.63	-96.83	7,707.26	-797.51	1,436.98	1,249.62	187.36	7.670	
18,000.00	9,868.87	17,885.83	9,919.49	136.67	134.24	-96.83	7,805.92	-809.37	1,448.03	1,258.40	189.63	7.636	
18,100.00	9,867.10	17,985.22	9,918.24	138.28	135.85	-96.83	7,904.59	-821.24	1,459.08	1,267.18	191.90	7.603	
18,200.00	9,865.33	18,084.60	9,916.99	139.89	137.47	-96.83	8,003.26	-833.11	1,470.14	1,275.96	194.18	7.571	
18,300.00	9,863.55	18,183.99	9,915.74	141.51	139.08	-96.83	8,101.93	-844.98	1,481.19	1,284.74	196.45	7.540	
18,400.00	9,861.78	18,283.38	9,914.49	143.12	140.69	-96.83	8,200.60	-856.85	1,492.24	1,293.51	198.73	7.509	
18,500.00	9,860.01	18,382.76	9,913.24	144.73	142.31	-96.83	8,299.27	-868.72	1,503.29	1,302.28	201.01	7.479	
18,600.00	9,858.24	18,482.15	9,911.99	146.35	143.93	-96.83	8,397.93	-880.59	1,514.35	1,311.05	203.29	7.449	
18,700.00	9,856.46	18,581.54	9,910.74	147.97	145.55	-96.83	8,496.60	-892.45	1,525.40	1,319.82	205.57	7.420	
18,800.00	9,854.69	18,680.93	9,909.49	149.58	147.17	-96.83	8,595.27	-904.32	1,536.45	1,328.59	207.86	7.392	
18,900.00	9,852.92	18,780.31	9,908.24	151.20	148.79	-96.83	8,693.94	-916.19	1,547.50	1,337.36	210.14	7.364	
19,000.00	9,851.14	18,879.70	9,906.99	152.82	150.42	-96.83	8,792.61	-928.06	1,558.56	1,346.13	212.43	7.337	
19,100.00	9,849.37	18,979.09	9,905.74	154.44	152.04	-96.83	8,891.27	-939.93	1,569.61	1,354.89	214.72	7.310	
19,200.00	9,847.60	19,078.47	9,904.49	156.06	153.67	-96.83	8,989.94	-951.80	1,580.66	1,363.65	217.01	7.284	
19,300.00	9,845.82	19,177.86	9,903.25	157.68	155.30	-96.83	9,088.61	-963.66	1,591.71	1,372.41	219.30	7.258	
19,400.00	9,844.05	19,389.22	9,900.58	159.30	158.77	-92.82	9,299.11	-981.92	1,599.67	1,375.55	224.12	7.138	
19,500.00	9,842.28	19,554.26	9,898.50	160.93	161.47	-90.49	9,464.08	-985.78	1,600.73	1,373.41	227.32	7.042	
19,600.00	9,840.50	19,654.26	9,897.23	162.55	163.08	-90.49	9,564.07	-986.68	1,600.75	1,371.14	229.61	6.972	
19,700.00	9,838.73	19,754.26	9,895.97	164.17	164.70	-90.49	9,664.06	-987.59	1,600.76	1,368.86	231.90	6.903	
19,800.00	9,836.96	19,854.26	9,894.71	165.80	166.32	-90.49	9,764.04	-988.49	1,600.78	1,366.58	234.20	6.835	
19,900.00	9,835.18	19,954.26	9,893.44	167.42	167.94	-90.49	9,864.03	-989.39	1,600.79	1,364.30	236.49	6.769	
20,000.00	9,833.41	20,054.26	9,892.18	169.05	169.56	-90.49	9,964.02	-990.29	1,600.81	1,362.02	238.79	6.704	
20,100.00	9,831.64	20,154.25	9,890.91	170.67	171.18	-90.49	10,064.00	-991.20	1,600.83	1,359.74	241.09	6.640	
20,200.00	9,829.87	20,254.25	9,889.65	172.30	172.80	-90.49	10,163.99	-992.10	1,600.84	1,357.46	243.38	6.577	
20,248.79	9,829.00	20,303.04	9,889.03	173.09	173.59	-90.49	10,212.77	-992.54	1,600.85	1,356.35	244.50	6.547	

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design North Wilson Deep Offsets - Dee Osborne 1930 State Com #123H - Wellbore #1 - Plan for AC												Offset Site Error:	0.00 usft
Survey Program: 0-MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	8.90	0.00	0.00	-156.81	-620.34	-265.76	674.93				
100.00	100.00	91.10	100.00	0.82	0.74	-156.81	-620.34	-265.76	674.87	673.77	1.10	612.115	
200.00	200.00	191.10	200.00	1.43	1.37	-156.81	-620.34	-265.76	674.87	672.89	1.98	340.304	
300.00	300.00	291.10	300.00	1.88	1.84	-156.81	-620.34	-265.76	674.87	672.24	2.63	256.685	
400.00	400.00	391.10	400.00	2.24	2.21	-156.81	-620.34	-265.76	674.87	671.72	3.15	214.284	
500.00	500.00	491.10	500.00	2.56	2.53	-156.81	-620.34	-265.76	674.87	671.28	3.60	187.546	
600.00	600.00	591.10	600.00	2.84	2.82	-156.81	-620.34	-265.76	674.87	670.87	4.00	168.696	
700.00	700.00	691.10	700.00	3.10	3.08	-156.81	-620.34	-265.76	674.87	670.50	4.37	154.479	
800.00	800.00	791.10	800.00	3.34	3.32	-156.81	-620.34	-265.76	674.87	670.16	4.71	143.255	
900.00	900.00	891.10	900.00	3.57	3.55	-156.81	-620.34	-265.76	674.87	669.84	5.03	134.099	
1,000.00	1,000.00	991.10	1,000.00	3.78	3.76	-156.81	-620.34	-265.76	674.87	669.54	5.34	126.441	
1,100.00	1,100.00	1,091.10	1,100.00	3.99	3.97	-156.81	-620.34	-265.76	674.87	669.25	5.63	119.911	
1,200.00	1,200.00	1,191.10	1,200.00	4.19	4.17	-156.81	-620.34	-265.76	674.87	668.97	5.91	114.255	
1,300.00	1,300.00	1,291.10	1,300.00	4.38	4.36	-156.81	-620.34	-265.76	674.87	668.70	6.17	109.292	
1,400.00	1,400.00	1,391.10	1,400.00	4.56	4.54	-156.81	-620.34	-265.76	674.87	668.44	6.43	104.891	
1,500.00	1,500.00	1,491.10	1,500.00	4.74	4.72	-156.81	-620.34	-265.76	674.87	668.19	6.69	100.952 CC	
1,600.00	1,600.00	1,590.67	1,599.57	4.91	4.88	-156.75	-620.09	-266.43	674.90	667.99	6.92	97.574	
1,700.00	1,700.00	1,690.15	1,699.01	5.08	5.04	-156.54	-619.22	-268.71	675.01	667.86	7.15	94.468	
1,800.00	1,800.00	1,789.51	1,798.28	5.24	5.23	-156.19	-617.73	-272.59	675.20	667.83	7.37	91.621 ES	
1,900.00	1,900.00	1,888.69	1,897.30	5.40	5.43	-155.69	-615.63	-278.07	675.53	667.94	7.59	88.999	
2,000.00	1,999.98	1,987.48	1,995.79	5.63	5.65	-154.91	-612.94	-285.12	676.24	668.45	7.79	86.826	
2,100.00	2,099.84	2,085.45	2,093.33	6.19	5.89	-153.70	-609.67	-293.67	677.75	669.75	8.00	84.767	
2,200.00	2,199.45	2,182.25	2,189.54	6.72	6.14	-152.07	-605.85	-303.66	680.37	672.15	8.21	82.854	
2,300.00	2,298.91	2,277.99	2,284.50	7.01	6.41	-150.20	-601.50	-315.02	684.14	675.70	8.44	81.079	
2,400.00	2,398.36	2,374.62	2,380.20	7.19	6.70	-148.25	-596.71	-327.54	688.87	680.20	8.67	79.421	
2,500.00	2,497.82	2,471.66	2,476.29	7.39	7.01	-146.32	-591.89	-340.16	694.42	685.50	8.92	77.833	
2,600.00	2,597.27	2,568.70	2,572.39	7.60	7.32	-144.42	-587.06	-352.77	700.76	691.57	9.18	76.311	
2,700.00	2,696.73	2,665.74	2,668.49	7.83	7.65	-142.56	-582.24	-365.39	707.86	698.40	9.46	74.846	
2,800.00	2,796.19	2,762.78	2,764.58	8.07	7.98	-140.74	-577.42	-378.00	715.71	705.97	9.75	73.432	
2,900.00	2,895.64	2,859.82	2,860.68	8.33	8.33	-138.96	-572.59	-390.61	724.28	714.23	10.05	72.064	
3,000.00	2,995.10	2,956.86	2,956.77	8.60	8.68	-137.21	-567.77	-403.23	733.55	723.18	10.37	70.739	
3,100.00	3,094.55	3,053.90	3,052.87	8.88	9.03	-135.52	-562.94	-415.84	743.48	732.78	10.71	69.450	
3,200.00	3,194.01	3,150.94	3,148.96	9.16	9.39	-133.87	-558.12	-428.46	754.06	743.00	11.06	68.200	
3,300.00	3,293.46	3,247.98	3,245.06	9.46	9.76	-132.26	-553.29	-441.07	765.26	753.83	11.42	66.989	
3,400.00	3,392.92	3,345.02	3,341.15	9.76	10.13	-130.71	-548.47	-453.69	777.04	765.23	11.81	65.816	
3,500.00	3,492.38	3,442.06	3,437.25	10.07	10.50	-129.19	-543.64	-466.30	789.39	777.18	12.20	64.681	
3,600.00	3,591.83	3,539.10	3,533.34	10.39	10.88	-127.73	-538.82	-478.91	802.27	789.65	12.62	63.586	
3,700.00	3,691.29	3,636.14	3,629.44	10.71	11.26	-126.31	-534.00	-491.53	815.67	802.62	13.04	62.532	
3,800.00	3,790.74	3,733.18	3,725.53	11.04	11.64	-124.94	-529.17	-504.14	829.55	816.07	13.48	61.519	
3,900.00	3,890.20	3,830.22	3,821.63	11.38	12.03	-123.62	-524.35	-516.76	843.90	829.96	13.94	60.548	
4,000.00	3,989.65	3,927.26	3,917.73	11.71	12.41	-122.33	-519.52	-529.37	858.68	844.28	14.40	59.619	
4,100.00	4,089.11	4,024.30	4,013.82	12.06	12.80	-121.10	-514.70	-541.98	873.88	859.00	14.88	58.733	
4,200.00	4,188.56	4,121.34	4,109.92	12.40	13.20	-119.90	-509.87	-554.60	889.48	874.12	15.37	57.888	
4,300.00	4,288.02	4,218.38	4,206.01	12.75	13.59	-118.75	-505.05	-567.21	905.46	889.60	15.86	57.085	
4,400.00	4,387.48	4,315.42	4,302.11	13.10	13.98	-117.63	-500.22	-579.83	921.79	905.42	16.37	56.322	
4,500.00	4,486.93	4,412.46	4,398.20	13.46	14.38	-116.56	-495.40	-592.44	938.46	921.58	16.88	55.598	
4,600.00	4,586.39	4,509.50	4,494.30	13.82	14.78	-115.52	-490.58	-605.06	955.44	938.04	17.40	54.911	
4,700.00	4,685.84	4,606.54	4,590.39	14.18	15.18	-114.52	-485.75	-617.67	972.73	954.81	17.93	54.260	
4,800.00	4,785.30	4,703.58	4,686.49	14.54	15.58	-113.55	-480.93	-630.28	990.31	971.85	18.46	53.643	
4,900.00	4,884.75	4,800.62	4,782.58	14.91	15.98	-112.62	-476.10	-642.90	1,008.16	989.16	19.00	53.059	
5,000.00	4,984.21	4,897.66	4,878.68	15.28	16.38	-111.72	-471.28	-655.51	1,026.27	1,006.72	19.55	52.507	
5,100.00	5,083.67	4,994.70	4,974.78	15.64	16.78	-110.85	-466.45	-668.13	1,044.62	1,024.53	20.10	51.984	

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design North Wilson Deep Offsets - Dee Osborne 1930 State Com #123H - Wellbore #1 - Plan for AC												Offset Site Error:	0.00 usft
Survey Program: 0-MWD												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,200.00	5,183.12	5,091.74	5,070.87	16.02	17.19	-110.01	-461.63	-680.74	1,063.21	1,042.56	20.65	51.489	
5,300.00	5,282.58	5,188.78	5,166.97	16.39	17.59	-109.20	-456.80	-693.36	1,082.01	1,060.80	21.21	51.021	
5,400.00	5,382.03	5,285.82	5,263.06	16.76	18.00	-108.41	-451.98	-705.97	1,101.02	1,079.25	21.77	50.579	
5,500.00	5,481.49	5,382.86	5,359.16	17.14	18.41	-107.66	-447.16	-718.58	1,120.23	1,097.90	22.33	50.160	
5,600.00	5,580.94	5,479.90	5,455.25	17.51	18.81	-106.92	-442.33	-731.20	1,139.63	1,116.73	22.90	49.764	
5,700.00	5,680.40	5,576.94	5,551.35	17.89	19.22	-106.22	-437.51	-743.81	1,159.21	1,135.74	23.47	49.388	
5,800.00	5,779.85	5,673.98	5,647.44	18.27	19.63	-105.53	-432.68	-756.43	1,178.96	1,154.91	24.04	49.033	
5,900.00	5,879.31	5,771.01	5,743.54	18.65	20.04	-104.87	-427.86	-769.04	1,198.86	1,174.25	24.62	48.697	
6,000.00	5,978.77	5,868.05	5,839.63	19.03	20.45	-104.23	-423.03	-781.65	1,218.93	1,193.73	25.20	48.378	
6,100.00	6,078.22	5,965.09	5,935.73	19.42	20.86	-103.61	-418.21	-794.27	1,239.13	1,213.36	25.77	48.076	
6,200.00	6,177.68	6,062.13	6,031.82	19.80	21.27	-103.02	-413.38	-806.88	1,259.48	1,233.13	26.35	47.790	
6,300.00	6,277.13	6,159.17	6,127.92	20.18	21.68	-102.44	-408.56	-819.50	1,279.96	1,253.02	26.94	47.518	
6,400.00	6,376.59	6,256.21	6,224.02	20.57	22.09	-101.87	-403.73	-832.11	1,300.56	1,273.04	27.52	47.261	
6,500.00	6,476.04	6,353.25	6,320.11	20.95	22.50	-101.33	-398.91	-844.73	1,321.29	1,293.18	28.10	47.016	
6,600.00	6,575.50	6,450.29	6,416.21	21.34	22.91	-100.80	-394.09	-857.34	1,342.13	1,313.44	28.69	46.783	
6,700.00	6,674.95	6,547.33	6,512.30	21.73	23.32	-100.29	-389.26	-869.95	1,363.08	1,333.80	29.27	46.562	
6,800.00	6,774.41	6,644.37	6,608.40	22.12	23.74	-99.80	-384.44	-882.57	1,384.13	1,354.27	29.86	46.352	
6,900.00	6,873.87	6,741.41	6,704.49	22.50	24.15	-99.31	-379.61	-895.18	1,405.28	1,374.83	30.45	46.152	
7,000.00	6,973.32	6,838.45	6,800.59	22.89	24.56	-98.85	-374.79	-907.80	1,426.53	1,395.49	31.04	45.962	
7,100.00	7,072.78	6,935.49	6,896.68	23.28	24.98	-98.39	-369.96	-920.41	1,447.87	1,416.24	31.63	45.781	
7,200.00	7,172.23	7,032.53	6,992.78	23.67	25.39	-97.95	-365.14	-933.03	1,469.29	1,437.08	32.22	45.609	
7,300.00	7,271.69	7,129.57	7,088.87	24.06	25.80	-97.53	-360.31	-945.64	1,490.80	1,458.00	32.80	45.445	
7,400.00	7,371.14	7,226.61	7,184.97	24.46	26.22	-97.11	-355.49	-958.25	1,512.39	1,479.00	33.39	45.288	
7,500.00	7,470.60	7,323.65	7,281.06	24.85	26.63	-96.71	-350.67	-970.87	1,534.06	1,500.07	33.99	45.139	
7,600.00	7,570.06	7,420.69	7,377.16	25.24	27.05	-96.31	-345.84	-983.48	1,555.80	1,521.22	34.58	44.996	
7,700.00	7,669.51	7,517.73	7,473.26	25.63	27.46	-95.93	-341.02	-996.10	1,577.61	1,542.44	35.17	44.860	
7,800.00	7,768.97	7,614.77	7,569.35	26.02	27.88	-95.56	-336.19	-1,008.71	1,599.48	1,563.72	35.76	44.729	
7,900.00	7,868.42	7,711.81	7,665.45	26.42	28.29	-95.20	-331.37	-1,021.33	1,621.42	1,585.07	36.35	44.605	
8,000.00	7,967.88	7,808.85	7,761.54	26.81	28.71	-94.85	-326.54	-1,033.94	1,643.43	1,606.48	36.94	44.486	
8,100.00	8,067.33	7,905.89	7,857.64	27.21	29.12	-94.51	-321.72	-1,046.55	1,665.49	1,627.95	37.53	44.372	
8,200.00	8,166.79	8,002.93	7,953.73	27.60	29.54	-94.17	-316.89	-1,059.17	1,687.61	1,649.48	38.13	44.262	
8,300.00	8,266.24	8,104.34	8,054.16	27.99	29.97	-93.84	-311.86	-1,072.34	1,709.77	1,671.03	38.74	44.135	
8,400.00	8,365.70	8,209.75	8,218.46	28.39	30.71	-93.45	-305.07	-1,090.09	1,729.84	1,690.18	39.66	43.621	
8,500.00	8,465.16	8,438.08	8,386.35	28.79	31.40	-93.16	-300.77	-1,101.32	1,746.03	1,705.56	40.47	43.147	
8,600.00	8,564.61	8,608.74	8,556.93	29.18	31.97	-92.98	-299.12	-1,105.64	1,758.23	1,717.10	41.13	42.749	
8,700.00	8,664.07	8,715.88	8,664.07	29.58	31.99	-92.86	-299.11	-1,105.68	1,768.01	1,726.58	41.42	42.681	
8,800.00	8,763.52	8,815.33	8,763.52	29.97	32.02	-92.74	-299.11	-1,105.68	1,777.77	1,736.04	41.73	42.604	
8,900.00	8,862.98	8,914.79	8,862.98	30.37	32.05	-92.62	-299.11	-1,105.68	1,787.53	1,745.50	42.03	42.526	
9,000.00	8,962.45	9,014.26	8,962.45	30.75	32.08	-92.51	-299.11	-1,105.68	1,797.16	1,754.83	42.33	42.453	
9,100.00	9,062.15	9,113.96	9,062.15	31.15	32.12	-92.43	-299.11	-1,105.68	1,804.33	1,761.69	42.64	42.319	
9,200.00	9,162.06	9,213.87	9,162.06	31.55	32.15	-92.38	-299.11	-1,105.68	1,808.23	1,765.30	42.93	42.119	
9,300.00	9,262.05	9,313.87	9,262.05	31.66	32.18	-92.37	-299.11	-1,105.68	1,809.01	1,765.98	43.03	42.040	
9,400.00	9,362.05	9,413.87	9,362.05	31.68	32.21	-92.37	-299.11	-1,105.68	1,809.01	1,765.94	43.07	42.002	
9,400.45	9,362.50	9,414.32	9,362.50	31.68	32.21	-92.37	-299.11	-1,105.68	1,809.01	1,765.94	43.07	42.002	
9,500.00	9,462.04	9,513.07	9,461.26	31.68	32.24	-92.40	-299.15	-1,105.68	1,809.04	1,765.95	43.10	41.976 SF	
9,600.00	9,560.92	9,600.00	9,547.76	31.59	32.17	-93.09	-306.85	-1,105.61	1,809.94	1,766.97	42.97	42.122	
9,700.00	9,655.85	9,671.44	9,617.33	31.49	32.08	-94.58	-322.91	-1,105.48	1,813.03	1,770.37	42.66	42.495	
9,800.00	9,743.96	9,723.59	9,666.57	31.40	32.01	-96.59	-340.04	-1,105.34	1,819.95	1,777.71	42.23	43.091	
9,900.00	9,822.56	9,750.00	9,690.85	31.34	31.98	-98.84	-350.40	-1,105.25	1,832.07	1,790.35	41.72	43.914	
10,000.00	9,889.27	9,773.79	9,712.30	31.34	31.95	-101.44	-360.69	-1,105.16	1,849.96	1,808.87	41.09	45.019	
10,100.00	9,942.06	9,778.57	9,716.56	31.41	31.94	-104.07	-362.86	-1,105.14	1,873.54	1,833.12	40.42	46.355	
10,200.00	9,979.32	9,773.96	9,712.45	31.59	31.95	-106.75	-360.76	-1,105.16	1,902.02	1,862.31	39.70	47.906	

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design North Wilson Deep Offsets - Dee Osborne 1930 State Com #123H - Wellbore #1 - Plan for AC												Offset Site Error:	0.00 usft
Survey Program: 0-MWD												Offset Well Error:	0.00 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,300.00	9,999.93	9,750.00	9,690.85	31.88	31.98	-109.27	-350.40	-1,105.25	1,934.31	1,895.33	38.99	49.613	
10,400.00	10,003.63	9,750.00	9,690.85	32.28	31.98	-112.06	-350.40	-1,105.25	1,968.86	1,930.58	38.27	51.440	
10,500.00	10,001.86	9,728.63	9,671.24	32.77	32.01	-114.52	-341.93	-1,105.32	2,006.70	1,969.10	37.60	53.369	
10,600.00	10,000.08	9,700.00	9,644.49	33.32	32.04	-116.85	-331.74	-1,105.41	2,048.57	2,011.62	36.95	55.441	
10,700.00	9,998.31	9,700.00	9,644.49	33.95	32.04	-119.34	-331.74	-1,105.41	2,093.88	2,057.53	36.35	57.597	
10,800.00	9,996.54	9,700.00	9,644.49	34.63	32.04	-121.72	-331.74	-1,105.41	2,142.90	2,107.10	35.80	59.850	
10,900.00	9,994.76	9,678.71	9,624.28	35.37	32.07	-123.83	-325.03	-1,105.46	2,195.06	2,159.79	35.27	62.229	
11,000.00	9,992.99	9,669.30	9,615.27	36.17	32.08	-125.93	-322.30	-1,105.48	2,250.40	2,215.60	34.80	64.660	
11,100.00	9,991.22	9,650.00	9,596.67	37.01	32.11	-127.88	-317.18	-1,105.53	2,308.72	2,274.36	34.36	67.196	
11,200.00	9,989.44	9,650.00	9,596.67	37.90	32.11	-129.83	-317.18	-1,105.53	2,369.56	2,335.56	34.00	69.698	
11,300.00	9,987.67	9,650.00	9,596.67	38.84	32.11	-131.67	-317.18	-1,105.53	2,432.99	2,399.31	33.68	72.235	
11,400.00	9,985.90	9,650.00	9,596.67	39.82	32.11	-133.42	-317.18	-1,105.53	2,498.81	2,465.40	33.41	74.796	

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design North Wilson Deep Offsets - Dee Osborne 1930 State Com #124H - Wellbore #1 - Plan for AC												Offset Site Error:	0.00 usft
Survey Program: 0-MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	8.70	0.00	0.00	-155.76	-590.14	-265.72	647.26				
100.00	100.00	91.30	100.00	0.82	0.74	-155.76	-590.14	-265.72	647.21	646.10	1.10	586.440	
200.00	200.00	191.30	200.00	1.43	1.37	-155.76	-590.14	-265.72	647.21	645.22	1.98	326.212	
300.00	300.00	291.30	300.00	1.88	1.84	-155.76	-590.14	-265.72	647.21	644.58	2.63	246.102	
400.00	400.00	391.30	400.00	2.24	2.21	-155.76	-590.14	-265.72	647.21	644.06	3.15	205.466	
500.00	500.00	491.30	500.00	2.56	2.53	-155.76	-590.14	-265.72	647.21	643.61	3.60	179.835	
600.00	600.00	591.30	600.00	2.84	2.82	-155.76	-590.14	-265.72	647.21	643.20	4.00	161.764	
700.00	700.00	691.30	700.00	3.10	3.08	-155.76	-590.14	-265.72	647.21	642.84	4.37	148.133	
800.00	800.00	791.30	800.00	3.34	3.32	-155.76	-590.14	-265.72	647.21	642.49	4.71	137.372	
900.00	900.00	891.30	900.00	3.57	3.55	-155.76	-590.14	-265.72	647.21	642.17	5.03	128.593	
1,000.00	1,000.00	991.30	1,000.00	3.78	3.76	-155.76	-590.14	-265.72	647.21	641.87	5.34	121.250	
1,100.00	1,100.00	1,091.30	1,100.00	3.99	3.97	-155.76	-590.14	-265.72	647.21	641.58	5.63	114.989	
1,200.00	1,200.00	1,191.30	1,200.00	4.19	4.17	-155.76	-590.14	-265.72	647.21	641.30	5.91	109.565	
1,300.00	1,300.00	1,291.30	1,300.00	4.38	4.36	-155.76	-590.14	-265.72	647.21	641.03	6.18	104.807	
1,400.00	1,400.00	1,391.30	1,400.00	4.56	4.54	-155.76	-590.14	-265.72	647.21	640.77	6.43	100.587	
1,500.00	1,500.00	1,491.30	1,500.00	4.74	4.72	-155.76	-590.14	-265.72	647.21	640.52	6.69	96.809	
1,600.00	1,600.00	1,600.78	1,609.48	4.91	4.90	-155.80	-589.67	-264.97	646.54	639.60	6.93	93.273	
1,700.00	1,700.00	1,711.10	1,719.75	5.08	5.09	-155.95	-588.07	-262.43	644.27	637.09	7.18	89.716	
1,800.00	1,800.00	1,821.25	1,829.78	5.24	5.30	-156.21	-585.34	-258.10	640.41	632.97	7.44	86.130	
1,900.00	1,900.00	1,931.17	1,939.46	5.40	5.54	-156.57	-581.49	-252.00	634.98	627.28	7.70	82.501	
2,000.00	1,999.98	2,040.87	2,048.76	5.63	5.79	-156.89	-576.53	-244.14	628.15	620.21	7.94	79.064	
2,100.00	2,099.84	2,150.36	2,157.66	6.19	6.08	-157.01	-570.47	-234.53	620.10	611.89	8.21	75.528	
2,200.00	2,199.45	2,259.58	2,266.06	6.72	6.38	-156.91	-563.32	-223.20	610.83	602.34	8.49	71.934	
2,300.00	2,298.91	2,362.55	2,368.05	7.01	6.69	-156.69	-555.74	-211.20	600.49	591.71	8.78	68.358	
2,400.00	2,398.36	2,461.97	2,466.50	7.19	7.00	-156.44	-548.36	-199.49	590.05	580.97	9.09	64.943	
2,500.00	2,497.82	2,561.40	2,564.95	7.39	7.33	-156.18	-540.98	-187.79	579.63	570.23	9.40	61.675	
2,600.00	2,597.27	2,660.82	2,663.41	7.60	7.66	-155.91	-533.59	-176.09	569.22	559.49	9.72	58.554	
2,700.00	2,696.73	2,760.24	2,761.86	7.83	8.00	-155.64	-526.21	-164.39	558.82	548.76	10.05	55.581	
2,800.00	2,796.19	2,859.66	2,860.31	8.07	8.36	-155.35	-518.83	-152.69	548.43	538.03	10.40	52.754	
2,900.00	2,895.64	2,959.08	2,958.77	8.33	8.71	-155.05	-511.44	-140.98	538.06	527.31	10.75	50.069	
3,000.00	2,995.10	3,058.50	3,057.22	8.60	9.08	-154.74	-504.06	-129.28	527.70	516.59	11.10	47.520	
3,100.00	3,094.55	3,157.92	3,155.67	8.88	9.45	-154.41	-496.68	-117.58	517.36	505.89	11.47	45.101	
3,200.00	3,194.01	3,257.34	3,254.13	9.16	9.82	-154.08	-489.29	-105.88	507.03	495.19	11.84	42.806	
3,300.00	3,293.46	3,356.76	3,352.58	9.46	10.20	-153.73	-481.91	-94.18	496.72	484.50	12.23	40.629	
3,400.00	3,392.92	3,456.18	3,451.03	9.76	10.59	-153.36	-474.53	-82.47	486.44	473.82	12.61	38.564	
3,500.00	3,492.38	3,555.60	3,549.48	10.07	10.98	-152.98	-467.14	-70.77	476.17	463.16	13.01	36.605	
3,600.00	3,591.83	3,655.02	3,647.94	10.39	11.37	-152.58	-459.76	-59.07	465.93	452.52	13.41	34.746	
3,700.00	3,691.29	3,754.44	3,746.39	10.71	11.76	-152.17	-452.38	-47.37	455.70	441.89	13.82	32.981	
3,800.00	3,790.74	3,853.86	3,844.84	11.04	12.15	-151.73	-444.99	-35.67	445.51	431.28	14.23	31.307	
3,900.00	3,890.20	3,953.28	3,943.30	11.38	12.55	-151.28	-437.61	-23.96	435.34	420.69	14.65	29.715	
4,000.00	3,989.65	4,052.70	4,041.75	11.71	12.95	-150.80	-430.22	-12.26	425.19	410.12	15.08	28.202	
4,100.00	4,089.11	4,152.12	4,140.20	12.06	13.36	-150.30	-422.84	-0.56	415.08	399.57	15.51	26.762	
4,200.00	4,188.56	4,251.54	4,238.65	12.40	13.76	-149.77	-415.46	11.14	405.00	389.05	15.95	25.392	
4,300.00	4,288.02	4,350.96	4,337.11	12.75	14.16	-149.22	-408.07	22.84	394.96	378.56	16.40	24.088	
4,400.00	4,387.48	4,450.38	4,435.56	13.10	14.57	-148.64	-400.69	34.55	384.96	368.11	16.85	22.845	
4,500.00	4,486.93	4,549.81	4,534.01	13.46	14.98	-148.03	-393.31	46.25	374.99	357.68	17.31	21.662	
4,600.00	4,586.39	4,649.23	4,632.47	13.82	15.39	-147.38	-385.92	57.95	365.07	347.29	17.78	20.533	
4,700.00	4,685.84	4,748.65	4,730.92	14.18	15.80	-146.70	-378.54	69.65	355.20	336.95	18.26	19.457	
4,800.00	4,785.30	4,848.07	4,829.37	14.54	16.21	-145.98	-371.16	81.35	345.39	326.64	18.74	18.430	
4,900.00	4,884.75	4,947.49	4,927.83	14.91	16.63	-145.22	-363.77	93.06	335.62	316.39	19.23	17.449	
5,000.00	4,984.21	5,046.91	5,026.28	15.28	17.04	-144.41	-356.39	104.76	325.93	306.19	19.74	16.514	
5,100.00	5,083.67	5,146.33	5,124.73	15.64	17.45	-143.55	-349.01	116.46	316.30	296.05	20.25	15.620	

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design North Wilson Deep Offsets - Dee Osborne 1930 State Com #124H - Wellbore #1 - Plan for AC													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,200.00	5,183.12	5,245.75	5,223.18	16.02	17.87	-142.64	-341.62	128.16	306.74	285.97	20.77	14.767		
5,300.00	5,282.58	5,345.17	5,321.64	16.39	18.29	-141.66	-334.24	139.86	297.26	275.96	21.31	13.952		
5,400.00	5,382.03	5,444.59	5,420.09	16.76	18.70	-140.63	-326.86	151.57	287.88	266.03	21.85	13.174		
5,500.00	5,481.49	5,544.01	5,518.54	17.14	19.12	-139.52	-319.47	163.27	278.59	256.18	22.41	12.432		
5,600.00	5,580.94	5,643.43	5,617.00	17.51	19.54	-138.34	-312.09	174.97	269.42	246.44	22.98	11.724		
5,700.00	5,680.40	5,739.99	5,712.65	17.89	19.97	-137.04	-305.05	186.13	260.61	237.03	23.59	11.050		
5,800.00	5,779.85	5,833.45	5,805.48	18.27	20.43	-135.53	-299.27	195.28	253.97	229.75	24.22	10.485		
5,900.00	5,879.31	5,927.07	5,898.71	18.65	20.85	-133.85	-294.71	202.52	249.90	225.05	24.84	10.060		
6,000.00	5,978.77	6,020.75	5,992.17	19.03	21.24	-132.02	-291.36	207.83	248.44	223.00	25.44	9.764		
6,004.63	5,983.37	6,025.09	5,996.50	19.05	21.26	-131.93	-291.23	208.03	248.44	222.97	25.47	9.754 CC, ES		
6,100.00	6,078.22	6,114.37	6,085.71	19.42	21.60	-130.11	-289.23	211.20	249.66	223.64	26.02	9.596		
6,200.00	6,177.68	6,207.83	6,179.14	19.80	21.89	-128.17	-288.33	212.62	253.58	227.05	26.53	9.558 SF		
6,300.00	6,277.13	6,305.82	6,277.13	20.18	21.94	-126.26	-288.30	212.68	259.50	232.61	26.88	9.653		
6,400.00	6,376.59	6,405.27	6,376.59	20.57	21.98	-124.45	-288.30	212.68	265.76	238.52	27.24	9.757		
6,500.00	6,476.04	6,504.73	6,476.04	20.95	22.03	-122.71	-288.30	212.68	272.27	244.68	27.59	9.868		
6,600.00	6,575.50	6,604.18	6,575.50	21.34	22.07	-121.06	-288.30	212.68	279.02	251.08	27.94	9.986		
6,700.00	6,674.95	6,703.64	6,674.95	21.73	22.12	-119.49	-288.30	212.68	286.00	257.71	28.29	10.109		
6,800.00	6,774.41	6,803.10	6,774.41	22.12	22.17	-118.00	-288.30	212.68	293.18	264.54	28.64	10.238		
6,900.00	6,873.87	6,902.55	6,873.87	22.50	22.21	-116.58	-288.30	212.68	300.54	271.57	28.98	10.371		
7,000.00	6,973.32	7,002.01	6,973.32	22.89	22.26	-115.22	-288.30	212.68	308.09	278.77	29.32	10.508		
7,100.00	7,072.78	7,101.46	7,072.78	23.28	22.31	-113.94	-288.30	212.68	315.80	286.13	29.66	10.647		
7,200.00	7,172.23	7,200.92	7,172.23	23.67	22.35	-112.71	-288.30	212.68	323.66	293.65	30.00	10.787		
7,300.00	7,271.69	7,300.37	7,271.69	24.06	22.40	-111.54	-288.30	212.68	331.66	301.31	30.34	10.930		
7,400.00	7,371.14	7,399.83	7,371.14	24.46	22.45	-110.43	-288.30	212.68	339.79	309.10	30.68	11.073		
7,500.00	7,470.60	7,499.28	7,470.60	24.85	22.50	-109.37	-288.30	212.68	348.04	317.02	31.03	11.218		
7,600.00	7,570.06	7,598.74	7,570.06	25.24	22.54	-108.36	-288.30	212.68	356.41	325.04	31.37	11.362		
7,700.00	7,669.51	7,698.20	7,669.51	25.63	22.59	-107.40	-288.30	212.68	364.88	333.17	31.71	11.506		
7,800.00	7,768.97	7,797.65	7,768.97	26.02	22.64	-106.48	-288.30	212.68	373.45	341.40	32.05	11.650		
7,900.00	7,868.42	7,897.11	7,868.42	26.42	22.69	-105.60	-288.30	212.68	382.12	349.72	32.40	11.794		
8,000.00	7,967.88	7,996.56	7,967.88	26.81	22.74	-104.76	-288.30	212.68	390.87	358.12	32.75	11.936		
8,100.00	8,067.33	8,096.02	8,067.33	27.21	22.79	-103.96	-288.30	212.68	399.70	366.60	33.09	12.078		
8,200.00	8,166.79	8,195.47	8,166.79	27.60	22.84	-103.19	-288.30	212.68	408.60	375.16	33.44	12.218		
8,300.00	8,266.24	8,294.93	8,266.24	27.99	22.88	-102.46	-288.30	212.68	417.58	383.78	33.79	12.358		
8,400.00	8,365.70	8,394.38	8,365.70	28.39	22.93	-101.75	-288.30	212.68	426.62	392.47	34.14	12.495		
8,500.00	8,465.16	8,493.84	8,465.16	28.79	22.98	-101.08	-288.30	212.68	435.72	401.22	34.49	12.632		
8,600.00	8,564.61	8,593.30	8,564.61	29.18	23.03	-100.43	-288.30	212.68	444.88	410.03	34.85	12.766		
8,700.00	8,664.07	8,692.75	8,664.07	29.58	23.08	-99.81	-288.30	212.68	454.09	418.89	35.20	12.900		
8,800.00	8,763.52	8,792.21	8,763.52	29.97	23.13	-99.22	-288.30	212.68	463.36	427.80	35.56	13.031		
8,900.00	8,862.98	8,891.66	8,862.98	30.37	23.18	-98.64	-288.30	212.68	472.67	436.75	35.92	13.161		
9,000.00	8,962.45	8,991.13	8,962.45	30.75	23.23	-98.10	-288.30	212.68	481.89	445.62	36.26	13.288		
9,100.00	9,062.15	9,090.84	9,062.15	31.15	23.28	-97.71	-288.30	212.68	488.78	452.16	36.61	13.350		
9,200.00	9,162.06	9,190.75	9,162.06	31.55	23.34	-97.50	-288.30	212.68	492.53	455.59	36.94	13.332		
9,300.00	9,262.05	9,290.74	9,262.05	31.66	23.39	-97.46	-288.30	212.68	493.29	456.22	37.06	13.310		
9,400.00	9,362.05	9,390.74	9,362.05	31.68	23.44	-97.46	-288.30	212.68	493.29	456.18	37.11	13.292		
9,400.45	9,362.50	9,391.19	9,362.50	31.68	23.44	-97.46	-288.30	212.68	493.29	456.18	37.11	13.292		
9,500.00	9,462.04	9,488.57	9,459.89	31.68	23.46	-97.60	-288.65	212.68	493.44	456.32	37.12	13.293		
9,600.00	9,560.92	9,574.37	9,545.08	31.59	23.37	-100.29	-298.07	212.76	497.13	460.32	36.81	13.504		
9,700.00	9,655.85	9,645.01	9,613.54	31.49	23.30	-105.67	-315.30	212.90	509.07	473.00	36.07	14.112		
9,800.00	9,743.96	9,700.00	9,665.06	31.40	23.23	-112.61	-334.47	213.06	534.35	499.44	34.91	15.307		
9,900.00	9,822.56	9,727.67	9,690.23	31.34	23.20	-119.56	-345.97	213.16	575.53	542.08	33.45	17.208		
10,000.00	9,889.27	9,750.00	9,710.11	31.34	23.17	-126.56	-356.12	213.25	631.58	599.55	32.03	19.718		
10,100.00	9,942.06	9,750.00	9,710.11	31.41	23.17	-132.53	-356.12	213.25	698.72	667.94	30.77	22.705		

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 0-MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,200.00	9,979.32	9,750.00	9,710.11	31.59	23.17	-137.98	-356.12	213.25	772.80	742.98	29.82	25.916	
10,300.00	9,999.93	9,730.71	9,692.95	31.88	23.19	-142.34	-347.30	213.17	849.58	820.50	29.08	29.218	
10,400.00	10,003.63	9,700.00	9,665.06	32.28	23.23	-145.91	-334.47	213.06	926.33	897.81	28.52	32.480	
10,500.00	10,001.86	9,700.00	9,665.06	32.77	23.23	-149.35	-334.47	213.06	1,004.39	976.22	28.18	35.643	
10,600.00	10,000.08	9,681.47	9,647.91	33.32	23.25	-152.04	-327.46	213.01	1,085.63	1,057.75	27.88	38.941	
10,700.00	9,998.31	9,668.16	9,635.45	33.95	23.27	-154.38	-322.77	212.97	1,169.34	1,141.67	27.66	42.272	
10,800.00	9,996.54	9,650.00	9,618.29	34.63	23.29	-156.37	-316.84	212.92	1,255.11	1,227.62	27.49	45.650	
10,900.00	9,994.76	9,650.00	9,618.29	35.37	23.29	-158.19	-316.84	212.92	1,342.51	1,315.11	27.40	48.992	
11,000.00	9,992.99	9,650.00	9,618.29	36.17	23.29	-159.76	-316.84	212.92	1,431.56	1,404.22	27.34	52.361	
11,100.00	9,991.22	9,627.35	9,596.64	37.01	23.32	-161.05	-310.21	212.86	1,521.37	1,494.10	27.27	55.791	
11,200.00	9,989.44	9,619.45	9,589.02	37.90	23.33	-162.25	-308.09	212.84	1,612.44	1,585.20	27.24	59.199	
11,300.00	9,987.67	9,600.00	9,570.16	38.84	23.35	-163.28	-303.35	212.80	1,704.56	1,677.34	27.21	62.638	
11,400.00	9,985.90	9,600.00	9,570.16	39.82	23.35	-164.25	-303.35	212.80	1,797.13	1,769.91	27.22	66.029	
11,500.00	9,984.13	9,600.00	9,570.16	40.84	23.35	-165.12	-303.35	212.80	1,890.45	1,863.23	27.23	69.428	
11,600.00	9,982.35	9,600.00	9,570.16	41.90	23.35	-165.91	-303.35	212.80	1,984.43	1,957.19	27.25	72.832	
11,700.00	9,980.58	9,600.00	9,570.16	43.00	23.35	-166.62	-303.35	212.80	2,078.97	2,051.70	27.27	76.239	
11,800.00	9,978.81	9,600.00	9,570.16	44.12	23.35	-167.26	-303.35	212.80	2,174.00	2,146.71	27.30	79.647	
11,900.00	9,977.03	9,579.49	9,550.11	45.28	23.37	-167.83	-299.03	212.77	2,269.01	2,241.68	27.32	83.043	
12,000.00	9,975.26	9,575.32	9,546.01	46.46	23.37	-168.36	-298.24	212.76	2,364.64	2,337.28	27.36	86.434	
12,100.00	9,973.49	9,571.42	9,542.18	47.67	23.38	-168.86	-297.54	212.75	2,460.59	2,433.19	27.40	89.818	

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design North Wilson Deep Offsets - New Mexico O State NCT 1 #1 (P&A) - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 450-INC-ONLY												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	10.00	0.00	0.00	-24.63	1,733.55	-794.92	1,907.14				
100.00	100.00	90.00	100.00	0.82	3.82	-24.63	1,733.55	-794.92	1,907.12	1,904.91	2.21	863.847	
200.00	200.00	190.00	200.00	1.43	8.07	-24.63	1,733.55	-794.92	1,907.12	1,902.56	4.56	418.352	
300.00	300.00	290.00	300.00	1.88	12.32	-24.63	1,733.55	-794.92	1,907.12	1,900.25	6.86	277.893	
400.00	400.00	390.00	400.00	2.24	16.57	-24.63	1,733.55	-794.92	1,907.12	1,897.97	9.15	208.404	
500.00	500.00	490.01	500.00	2.56	19.86	-24.63	1,733.55	-794.92	1,907.12	1,895.85	11.27	169.271	
600.00	600.00	590.01	600.00	2.84	21.71	-24.63	1,733.55	-794.92	1,907.12	1,894.02	13.10	145.634	
700.00	700.00	692.95	702.94	3.10	23.63	-24.63	1,733.88	-794.92	1,907.41	1,892.48	14.93	127.748	
800.00	800.00	797.47	807.46	3.34	25.58	-24.63	1,733.56	-794.92	1,907.14	1,890.38	16.76	113.781	
838.11	838.11	828.13	838.11	3.43	26.05	-24.63	1,733.55	-794.92	1,907.12	1,889.81	17.31	110.186	
900.00	900.00	890.02	900.00	3.57	26.98	-24.63	1,733.55	-794.92	1,907.12	1,888.72	18.40	103.670	
1,000.00	1,000.00	992.43	1,002.41	3.78	28.54	-24.63	1,733.84	-794.92	1,907.38	1,887.21	20.17	94.579	
1,100.00	1,100.00	1,097.90	1,107.88	3.99	30.15	-24.63	1,733.53	-794.92	1,907.11	1,885.15	21.96	86.844	
1,132.15	1,132.15	1,122.17	1,132.15	4.05	30.59	-24.63	1,733.55	-794.92	1,907.12	1,884.69	22.42	85.054	
1,200.00	1,200.00	1,190.03	1,200.00	4.19	31.79	-24.63	1,733.55	-794.92	1,907.12	1,883.44	23.67	80.558	
1,300.00	1,300.00	1,290.15	1,300.12	4.38	33.56	-24.63	1,733.76	-794.92	1,907.31	1,881.80	25.51	74.779	
1,400.00	1,400.00	1,392.16	1,402.13	4.56	35.38	-24.63	1,733.70	-794.92	1,907.25	1,879.89	27.36	69.709	
1,500.00	1,500.00	1,490.04	1,500.00	4.74	37.13	-24.63	1,733.55	-794.92	1,907.12	1,877.97	29.15	65.428	
1,600.00	1,600.00	1,590.04	1,600.00	4.91	38.94	-24.63	1,733.55	-794.92	1,907.12	1,876.04	31.08	61.363	
1,700.00	1,700.00	1,695.00	1,704.95	5.08	40.84	-24.63	1,733.96	-794.92	1,907.49	1,874.40	33.09	57.641	
1,800.00	1,800.00	1,790.07	1,800.00	5.24	42.57	-24.63	1,733.55	-794.92	1,907.12	1,872.20	34.91	54.625	
1,900.00	1,900.00	1,890.07	1,900.00	5.40	44.49	-24.63	1,733.55	-794.92	1,907.12	1,870.25	36.87	51.729	
2,000.00	1,999.98	1,991.12	2,001.05	5.63	46.43	-24.66	1,734.18	-794.92	1,908.86	1,870.03	38.83	49.159	
2,100.00	2,099.84	2,097.27	2,107.20	6.19	48.47	-24.78	1,733.92	-794.92	1,912.17	1,871.27	40.90	46.748	
2,200.00	2,199.45	2,189.55	2,199.45	6.72	50.24	-24.98	1,733.55	-794.92	1,917.72	1,875.04	42.69	44.923	
2,300.00	2,298.91	2,289.01	2,298.91	7.01	52.09	-25.21	1,733.55	-794.92	1,924.81	1,880.24	44.56	43.192	
2,400.00	2,398.36	2,392.52	2,402.41	7.19	54.03	-25.43	1,734.03	-794.92	1,932.36	1,885.85	46.51	41.552	
2,500.00	2,497.82	2,499.26	2,509.15	7.39	56.03	-25.66	1,733.56	-794.92	1,939.10	1,890.60	48.50	39.979	
2,600.00	2,597.27	2,587.40	2,597.27	7.60	58.05	-25.88	1,733.55	-794.92	1,946.23	1,895.94	50.29	38.697	
2,700.00	2,696.73	2,686.85	2,696.73	7.83	60.32	-26.10	1,733.55	-794.92	1,953.43	1,901.11	52.32	37.338	
2,800.00	2,796.19	2,786.85	2,796.73	8.07	62.61	-26.32	1,734.13	-794.92	1,961.18	1,906.83	54.35	36.082	
2,900.00	2,895.64	2,889.26	2,899.13	8.33	64.96	-26.54	1,734.01	-794.92	1,968.34	1,911.90	56.44	34.877	
3,000.00	2,895.10	2,891.68	3,001.55	8.60	67.30	-26.76	1,733.73	-794.92	1,975.37	1,916.85	58.52	33.755	
3,100.00	3,094.55	3,084.74	3,094.55	8.88	69.38	-26.97	1,733.55	-794.92	1,982.52	1,922.08	60.44	32.801	
3,200.00	3,194.01	3,184.19	3,194.01	9.16	71.54	-27.19	1,733.55	-794.92	1,989.86	1,927.35	62.52	31.829	
3,300.00	3,293.46	3,290.63	3,300.43	9.46	73.85	-27.39	1,734.44	-794.92	1,998.04	1,933.30	64.74	30.863	
3,400.00	3,392.92	3,401.58	3,411.37	9.76	76.26	-27.61	1,733.65	-794.92	2,004.80	1,937.75	67.05	29.900	
3,500.00	3,492.38	3,482.62	3,492.38	10.07	77.83	-27.82	1,733.55	-794.92	2,012.05	1,943.36	68.69	29.291	
3,600.00	3,591.83	3,584.42	3,594.17	10.39	79.77	-28.02	1,734.01	-794.92	2,019.91	1,949.16	70.74	28.553	
3,700.00	3,691.29	3,692.65	3,702.39	10.71	81.83	-28.23	1,733.60	-794.92	2,027.05	1,954.13	72.92	27.800	
3,800.00	3,790.74	3,781.02	3,790.74	11.04	83.56	-28.43	1,733.55	-794.92	2,034.48	1,959.68	74.81	27.197	
3,900.00	3,890.20	3,893.72	3,903.43	11.38	85.77	-28.63	1,733.68	-794.92	2,042.17	1,964.95	77.22	26.447	
4,000.00	3,989.65	3,979.97	3,989.65	11.71	87.74	-28.84	1,733.55	-794.92	2,049.56	1,970.23	79.33	25.835	
4,100.00	4,089.11	4,079.43	4,089.11	12.06	90.09	-29.04	1,733.55	-794.92	2,057.14	1,975.30	81.84	25.137	
4,200.00	4,188.56	4,191.87	4,201.53	12.40	92.75	-29.23	1,734.08	-794.92	2,065.24	1,980.58	84.66	24.395	
4,300.00	4,288.02	4,278.50	4,288.02	12.75	94.93	-29.43	1,733.55	-794.92	2,072.37	1,985.40	86.97	23.829	
4,400.00	4,387.48	4,377.96	4,387.48	13.10	97.74	-29.63	1,733.55	-794.92	2,080.02	1,990.11	89.91	23.134	
4,500.00	4,486.93	4,495.76	4,505.22	13.46	101.07	-29.80	1,734.73	-794.92	2,088.80	1,995.40	93.39	22.366	
4,600.00	4,586.39	4,577.15	4,586.39	13.82	103.38	-30.01	1,733.55	-794.92	2,095.40	1,999.60	95.80	21.873	
4,700.00	4,685.84	4,676.60	4,685.84	14.18	106.27	-30.20	1,733.55	-794.92	2,103.12	2,004.44	98.68	21.313	
4,800.00	4,785.30	4,776.06	4,785.30	14.54	109.17	-30.39	1,733.55	-794.92	2,110.86	2,009.31	101.56	20.785	
4,900.00	4,884.75	4,887.03	4,896.20	14.91	112.41	-30.55	1,735.98	-794.92	2,120.75	2,015.99	104.77	20.243	

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design North Wilson Deep Offsets - New Mexico O State NCT 1 #1 (P&A) - Wellbore #1 - Surveys													Offset Site Error:	0.00 usft
Survey Program: 450-INC-ONLY													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance		Warning								
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,984.21	5,006.30	5,015.41	15.28	115.89	-30.75	1,734.59	-794.92	2,127.55	2,019.35	108.20	19.663		
5,100.00	5,083.67	5,074.76	5,083.67	15.64	117.79	-30.95	1,733.55	-794.92	2,134.24	2,024.13	110.11	19.383		
5,200.00	5,183.12	5,174.22	5,183.12	16.02	120.08	-31.14	1,733.55	-794.92	2,142.07	2,029.66	112.41	19.056		
5,300.00	5,282.58	5,282.35	5,291.22	16.39	122.58	-31.30	1,734.73	-794.92	2,150.95	2,036.04	114.91	18.719		
5,400.00	5,382.03	5,401.63	5,410.48	16.76	125.33	-31.50	1,733.53	-794.92	2,157.98	2,040.32	117.65	18.342		
5,500.00	5,481.49	5,472.67	5,481.49	17.14	126.92	-31.68	1,733.55	-794.92	2,165.71	2,046.46	119.25	18.161		
5,600.00	5,580.94	5,572.13	5,580.94	17.51	129.14	-31.86	1,733.55	-794.92	2,173.64	2,052.17	121.47	17.895		
5,700.00	5,680.40	5,674.97	5,683.78	17.89	131.45	-32.03	1,734.20	-794.92	2,182.13	2,058.37	123.76	17.632		
5,800.00	5,779.85	5,780.39	5,789.20	18.27	133.81	-32.21	1,733.84	-794.92	2,189.81	2,063.70	126.11	17.365		
5,900.00	5,879.31	5,870.58	5,879.31	18.65	135.81	-32.39	1,733.55	-794.92	2,197.53	2,069.41	128.12	17.152		
6,000.00	5,978.77	5,970.04	5,978.77	19.03	137.99	-32.56	1,733.55	-794.92	2,205.53	2,075.20	130.34	16.922		
6,100.00	6,078.22	6,082.46	6,091.16	19.42	140.46	-32.72	1,734.33	-794.92	2,214.25	2,081.41	132.84	16.669		
6,200.00	6,177.68	6,169.01	6,177.68	19.80	142.34	-32.91	1,733.55	-794.92	2,221.60	2,086.86	134.75	16.487		
6,300.00	6,277.13	6,268.47	6,277.13	20.18	144.29	-33.08	1,733.55	-794.92	2,229.67	2,092.97	136.70	16.310		
6,400.00	6,376.59	6,368.18	6,376.84	20.57	146.25	-33.23	1,734.22	-794.92	2,238.31	2,099.65	138.66	16.142		
6,500.00	6,476.04	6,474.01	6,482.67	20.95	148.33	-33.40	1,734.03	-794.92	2,246.26	2,105.52	140.74	15.960		
6,600.00	6,575.50	6,579.87	6,588.53	21.34	150.41	-33.58	1,733.47	-794.92	2,253.95	2,111.13	142.82	15.782		
6,700.00	6,674.95	6,666.33	6,674.95	21.73	152.18	-33.74	1,733.55	-794.92	2,262.12	2,117.59	144.53	15.651		
6,800.00	6,774.41	6,765.78	6,774.41	22.12	154.20	-33.91	1,733.55	-794.92	2,270.28	2,123.78	146.50	15.497		
6,900.00	6,873.87	6,869.18	6,877.80	22.50	156.31	-34.06	1,734.22	-794.92	2,279.02	2,130.48	148.54	15.343		
7,000.00	6,973.32	6,974.35	6,982.97	22.89	158.44	-34.23	1,733.85	-794.92	2,286.92	2,136.31	150.61	15.185		
7,100.00	7,072.78	7,064.19	7,072.78	23.28	160.29	-34.39	1,733.55	-794.92	2,294.87	2,142.48	152.39	15.060		
7,200.00	7,172.23	7,163.64	7,172.23	23.67	162.37	-34.55	1,733.55	-794.92	2,303.10	2,148.75	154.35	14.921		
7,300.00	7,271.69	7,263.10	7,271.69	24.06	164.45	-34.71	1,733.55	-794.92	2,311.35	2,155.03	156.32	14.786		
7,400.00	7,371.14	7,367.16	7,375.74	24.46	166.62	-34.86	1,734.26	-794.92	2,320.20	2,161.82	158.38	14.650		
7,500.00	7,470.60	7,471.86	7,480.44	24.85	168.81	-35.02	1,733.86	-794.92	2,328.18	2,167.73	160.45	14.511		
7,600.00	7,570.06	7,561.51	7,570.06	25.24	170.66	-35.18	1,733.55	-794.92	2,336.21	2,174.01	162.20	14.404		
7,700.00	7,669.51	7,660.96	7,669.51	25.63	172.70	-35.33	1,733.55	-794.92	2,344.52	2,180.44	164.08	14.289		
7,800.00	7,768.97	7,760.42	7,768.97	26.02	174.75	-35.48	1,733.55	-794.92	2,352.86	2,186.89	165.97	14.176		
7,900.00	7,868.42	7,863.20	7,871.74	26.42	176.85	-35.62	1,734.37	-794.92	2,361.88	2,193.96	167.92	14.066		
8,000.00	7,967.88	7,967.59	7,976.12	26.81	179.00	-35.78	1,734.05	-794.92	2,370.00	2,200.10	169.90	13.950		
8,100.00	8,067.33	8,071.99	8,080.53	27.21	181.14	-35.93	1,733.47	-794.92	2,377.94	2,206.06	171.88	13.835		
8,200.00	8,166.79	8,158.27	8,166.79	27.60	182.80	-36.08	1,733.55	-794.92	2,386.37	2,212.93	173.44	13.759		
8,300.00	8,266.24	8,257.73	8,266.24	27.99	184.73	-36.23	1,733.55	-794.92	2,394.78	2,219.53	175.25	13.665		
8,400.00	8,365.70	8,358.78	8,367.29	28.39	186.70	-36.37	1,734.08	-794.92	2,403.64	2,226.56	177.09	13.573		
8,500.00	8,465.16	8,461.70	8,470.21	28.79	188.70	-36.52	1,733.91	-794.92	2,411.95	2,233.00	178.96	13.478		
8,600.00	8,564.61	8,564.64	8,573.15	29.18	190.70	-36.66	1,733.55	-794.92	2,420.14	2,239.31	180.83	13.384		
8,700.00	8,664.07	8,655.57	8,664.07	29.58	192.45	-36.81	1,733.55	-794.92	2,428.60	2,246.12	182.49	13.308		
8,800.00	8,763.52	8,755.03	8,763.52	29.97	194.36	-36.95	1,733.55	-794.92	2,437.10	2,252.80	184.30	13.223		
8,900.00	8,862.98	8,855.71	8,864.20	30.37	196.30	-37.08	1,734.10	-794.92	2,446.04	2,259.90	186.14	13.141		
9,000.00	8,962.45	8,958.61	8,967.10	30.75	198.29	-37.22	1,733.94	-794.92	2,454.32	2,266.31	188.01	13.054		
9,100.00	9,062.15	9,061.77	9,070.26	31.15	200.27	-37.33	1,733.61	-794.92	2,460.32	2,270.42	189.89	12.956		
9,200.00	9,162.06	9,153.59	9,162.06	31.55	201.95	-37.39	1,733.55	-794.92	2,463.67	2,272.09	191.57	12.860		
9,300.00	9,262.05	9,253.58	9,262.05	31.66	203.77	-37.40	1,733.55	-794.92	2,464.35	2,270.98	193.37	12.744		
9,400.00	9,362.05	9,358.30	9,366.78	31.68	205.67	-37.39	1,733.83	-794.92	2,464.57	2,269.34	195.24	12.623		
9,500.00	9,462.04	9,453.58	9,462.04	31.68	207.39	-37.41	1,733.55	-794.92	2,463.68	2,266.74	196.95	12.509		
9,600.00	9,560.92	9,552.46	9,560.92	31.59	209.19	-37.61	1,733.55	-794.92	2,452.45	2,253.68	198.77	12.338		
9,700.00	9,655.85	9,652.54	9,661.00	31.49	211.01	-38.05	1,733.73	-794.92	2,427.93	2,227.32	200.61	12.103		
9,800.00	9,743.96	9,735.51	9,743.96	31.40	212.51	-38.73	1,733.55	-794.92	2,390.66	2,188.55	202.11	11.829		
9,900.00	9,822.56	9,814.12	9,822.56	31.34	213.93	-39.67	1,733.55	-794.92	2,342.56	2,139.07	203.49	11.512		
10,000.00	9,889.27	9,880.82	9,889.27	31.34	215.14	-40.84	1,733.55	-794.92	2,285.40	2,080.73	204.67	11.166		
10,100.00	9,942.06	9,933.61	9,942.06	31.41	216.09	-42.26	1,733.55	-794.92	2,221.44	2,015.82	205.62	10.804		

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design North Wilson Deep Offsets - New Mexico O State NCT 1 #1 (P&A) - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 450-INC-ONLY												Offset Well Error:	0.00 usft
Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
10,200.00	9,979.32	9,972.31	9,980.75	31.59	216.79	-43.89	1,734.31	-794.92	2,153.72	1,947.38	206.35	10.437	
10,300.00	9,999.93	9,993.69	10,002.13	31.88	217.18	-45.73	1,734.28	-794.92	2,083.75	1,876.93	206.81	10.076	
10,400.00	10,003.63	9,997.38	10,005.82	32.28	217.24	-47.75	1,734.28	-794.92	2,014.66	1,807.65	207.01	9.732	
10,500.00	10,001.86	9,995.38	10,003.82	32.77	217.21	-49.91	1,734.28	-794.92	1,948.15	1,741.00	207.15	9.404	
10,600.00	10,000.08	9,993.38	10,001.82	33.32	217.17	-52.21	1,734.28	-794.92	1,884.60	1,677.24	207.35	9.089	
10,700.00	9,998.31	9,991.40	9,999.84	33.95	217.14	-54.68	1,734.29	-794.92	1,824.31	1,616.70	207.62	8.787	
10,800.00	9,996.54	9,989.43	9,997.87	34.63	217.10	-57.31	1,734.29	-794.92	1,767.63	1,559.68	207.95	8.500	
10,900.00	9,994.76	9,987.47	9,995.91	35.37	217.06	-60.10	1,734.29	-794.92	1,714.91	1,506.55	208.35	8.231	
11,000.00	9,992.99	9,985.52	9,993.96	36.17	217.03	-63.07	1,734.29	-794.92	1,666.52	1,457.68	208.85	7.980	
11,100.00	9,991.22	9,983.59	9,992.03	37.01	216.99	-66.20	1,734.30	-794.92	1,622.86	1,413.44	209.42	7.749	
11,200.00	9,989.44	9,981.66	9,990.10	37.90	216.96	-69.50	1,734.30	-794.92	1,584.32	1,374.23	210.08	7.541	
11,300.00	9,987.67	9,979.74	9,988.18	38.84	216.93	-72.95	1,734.30	-794.92	1,551.26	1,340.44	210.82	7.358	
11,400.00	9,985.90	9,977.84	9,986.28	39.82	216.89	-76.54	1,734.30	-794.92	1,524.07	1,312.43	211.63	7.201	
11,500.00	9,984.13	9,975.94	9,984.38	40.84	216.86	-80.24	1,734.31	-794.92	1,503.04	1,290.54	212.50	7.073	
11,600.00	9,982.35	9,974.06	9,982.50	41.90	216.82	-84.03	1,734.31	-794.92	1,488.45	1,275.04	213.41	6.975	
11,700.00	9,980.58	9,972.19	9,980.63	43.00	216.79	-87.87	1,734.31	-794.92	1,480.48	1,266.15	214.33	6.908	
11,768.35	9,979.37	9,970.91	9,979.35	43.76	216.77	-90.52	1,734.31	-794.92	1,478.90	1,263.95	214.95	6.880 CC, ES	
11,800.00	9,978.81	9,970.32	9,978.76	44.12	216.75	-91.74	1,734.31	-794.92	1,479.24	1,264.01	215.23	6.873	
11,900.00	9,977.03	9,968.47	9,976.91	45.28	216.72	-95.60	1,734.31	-794.92	1,484.75	1,268.64	216.10	6.871 SF	
12,000.00	9,975.26	9,966.63	9,975.07	46.46	216.69	-99.42	1,734.31	-794.92	1,496.93	1,280.02	216.91	6.901	
12,100.00	9,973.49	9,964.80	9,973.24	47.67	216.65	-103.16	1,734.32	-794.92	1,515.62	1,297.98	217.64	6.964	
12,200.00	9,971.71	9,962.97	9,971.41	48.91	216.62	-106.79	1,734.32	-794.92	1,540.58	1,322.31	218.27	7.058	
12,300.00	9,969.94	9,961.16	9,969.60	50.17	216.59	-110.29	1,734.32	-794.92	1,571.53	1,352.72	218.81	7.182	
12,400.00	9,968.17	9,959.36	9,967.80	51.45	216.56	-113.64	1,734.32	-794.92	1,608.10	1,388.86	219.24	7.335	
12,500.00	9,966.39	9,957.57	9,966.01	52.75	216.52	-116.84	1,734.32	-794.92	1,649.93	1,430.35	219.58	7.514	
12,600.00	9,964.62	9,955.78	9,964.22	54.07	216.49	-119.87	1,734.32	-794.92	1,696.63	1,476.81	219.82	7.718	
12,700.00	9,962.85	9,954.01	9,962.45	55.41	216.46	-122.72	1,734.32	-794.92	1,747.80	1,527.82	219.98	7.945	
12,800.00	9,961.08	9,952.25	9,960.69	56.77	216.43	-125.41	1,734.32	-794.92	1,803.08	1,583.01	220.07	8.193	
12,900.00	9,959.30	9,950.49	9,958.93	58.14	216.40	-127.94	1,734.32	-794.92	1,862.08	1,641.98	220.10	8.460	
13,000.00	9,957.53	9,948.75	9,957.19	59.52	216.36	-130.30	1,734.32	-794.92	1,924.47	1,704.40	220.07	8.745	
13,100.00	9,955.76	9,947.01	9,955.45	60.92	216.33	-132.52	1,734.32	-794.92	1,989.93	1,769.94	220.00	9.045	
13,200.00	9,953.98	9,945.28	9,953.73	62.33	216.30	-134.58	1,734.32	-794.92	2,058.17	1,838.28	219.90	9.360	
13,300.00	9,952.21	9,943.57	9,952.01	63.75	216.27	-136.52	1,734.32	-794.92	2,128.92	1,909.16	219.77	9.687	
13,400.00	9,950.44	9,941.86	9,950.30	65.18	216.24	-138.33	1,734.32	-794.92	2,201.94	1,982.32	219.62	10.026	
13,500.00	9,948.66	9,940.16	9,948.60	66.63	216.21	-140.02	1,734.32	-794.92	2,277.01	2,057.55	219.45	10.376	
13,600.00	9,946.89	9,938.44	9,946.89	68.08	216.18	-141.61	1,733.55	-794.92	2,354.53	2,135.26	219.27	10.738	
13,700.00	9,945.12	9,936.67	9,945.12	69.54	216.15	-143.09	1,733.55	-794.92	2,433.14	2,214.05	219.09	11.106	

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design North Wilson Deep Offsets - Osudo 7 State Com #1 - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 264-INC-ONLY												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,300.00	9,916.75	9,909.11	9,916.75	93.81	219.64	-42.62	7,064.72	-991.47	2,427.10	2,212.48	214.62	11.309	
15,400.00	9,914.97	9,907.33	9,914.97	95.37	219.61	-44.25	7,064.72	-991.47	2,353.87	2,138.41	215.46	10.925	
15,500.00	9,913.20	9,905.56	9,913.20	96.93	219.58	-45.99	7,064.72	-991.47	2,282.67	2,066.27	216.40	10.548	
15,600.00	9,911.43	9,903.79	9,911.43	98.49	219.54	-47.83	7,064.72	-991.47	2,213.70	1,996.25	217.45	10.180	
15,700.00	9,909.66	9,902.01	9,909.66	100.06	219.51	-49.79	7,064.72	-991.47	2,147.16	1,928.55	218.61	9.822	
15,800.00	9,907.88	9,900.24	9,907.88	101.63	219.48	-51.88	7,064.72	-991.47	2,083.30	1,863.41	219.89	9.474	
15,900.00	9,906.11	9,898.47	9,906.11	103.20	219.44	-54.09	7,064.72	-991.47	2,022.38	1,801.08	221.30	9.139	
16,000.00	9,904.34	9,896.70	9,904.34	104.77	219.41	-56.44	7,064.72	-991.47	1,964.65	1,741.82	222.83	8.817	
16,100.00	9,902.56	9,894.92	9,902.56	106.35	219.37	-58.92	7,064.72	-991.47	1,910.41	1,685.93	224.49	8.510	
16,200.00	9,900.79	9,893.15	9,900.79	107.93	219.34	-61.54	7,064.72	-991.47	1,859.98	1,633.71	226.26	8.220	
16,300.00	9,899.02	9,891.38	9,899.02	109.51	219.31	-64.31	7,064.72	-991.47	1,813.65	1,585.51	228.14	7.950	
16,400.00	9,897.24	9,889.60	9,897.24	111.09	219.27	-67.21	7,064.72	-991.47	1,771.76	1,541.65	230.11	7.700	
16,500.00	9,895.47	9,887.83	9,895.47	112.68	219.24	-70.25	7,064.72	-991.47	1,734.63	1,502.49	232.14	7.472	
16,600.00	9,893.70	9,886.06	9,893.70	114.27	219.20	-73.40	7,064.72	-991.47	1,702.57	1,468.37	234.20	7.270	
16,700.00	9,891.92	9,884.28	9,891.92	115.86	219.17	-76.67	7,064.72	-991.47	1,675.87	1,439.62	236.25	7.094	
16,800.00	9,890.15	9,882.51	9,890.15	117.45	219.14	-80.03	7,064.72	-991.47	1,654.79	1,416.55	238.24	6.946	
16,900.00	9,888.38	9,880.74	9,888.38	119.04	219.10	-83.47	7,064.72	-991.47	1,639.55	1,399.43	240.12	6.828	
17,000.00	9,886.60	9,878.96	9,886.60	120.64	219.07	-86.96	7,064.72	-991.47	1,630.31	1,388.46	241.85	6.741	
17,100.00	9,884.83	9,877.19	9,884.83	122.24	219.03	-90.48	7,064.72	-991.47	1,627.17	1,383.78	243.39	6.686 CC	
17,104.45	9,884.75	9,877.11	9,884.75	122.31	219.03	-90.63	7,064.72	-991.47	1,627.17	1,383.72	243.45	6.684 ES	
17,200.00	9,883.06	9,875.42	9,883.06	123.83	219.00	-93.99	7,064.72	-991.47	1,630.17	1,385.48	244.69	6.662 SF	
17,300.00	9,881.29	9,873.64	9,881.29	125.43	218.97	-97.48	7,064.72	-991.47	1,639.27	1,393.54	245.73	6.671	
17,400.00	9,879.51	9,871.87	9,879.51	127.04	218.93	-100.92	7,064.72	-991.47	1,654.37	1,407.87	246.50	6.711	
17,500.00	9,877.74	9,870.10	9,877.74	128.64	218.90	-104.29	7,064.72	-991.47	1,675.32	1,428.32	247.00	6.783	
17,600.00	9,875.97	9,868.33	9,875.97	130.24	218.86	-107.56	7,064.72	-991.47	1,701.89	1,454.66	247.24	6.884	
17,700.00	9,874.19	9,866.55	9,874.19	131.85	218.83	-110.72	7,064.72	-991.47	1,733.83	1,486.60	247.23	7.013	
17,800.00	9,872.42	9,864.78	9,872.42	133.46	218.80	-113.76	7,064.72	-991.47	1,770.85	1,523.85	247.00	7.169	
17,900.00	9,870.65	9,863.01	9,870.65	135.06	218.76	-116.66	7,064.72	-991.47	1,812.63	1,566.04	246.59	7.351	
18,000.00	9,868.87	9,861.23	9,868.87	136.67	218.73	-119.43	7,064.72	-991.47	1,858.85	1,612.83	246.02	7.556	
18,100.00	9,867.10	9,859.46	9,867.10	138.28	218.70	-122.06	7,064.72	-991.47	1,909.20	1,663.87	245.33	7.782	
18,200.00	9,865.33	9,857.69	9,865.33	139.89	218.66	-124.55	7,064.72	-991.47	1,963.35	1,718.81	244.54	8.029	
18,300.00	9,863.55	9,855.91	9,863.55	141.51	218.63	-126.90	7,064.72	-991.47	2,021.00	1,777.32	243.68	8.294	
18,400.00	9,861.78	9,854.14	9,861.78	143.12	218.59	-129.11	7,064.72	-991.47	2,081.86	1,839.08	242.78	8.575	
18,500.00	9,860.01	9,852.37	9,860.01	144.73	218.56	-131.20	7,064.72	-991.47	2,145.65	1,903.81	241.84	8.872	
18,600.00	9,858.24	9,850.59	9,858.24	146.35	218.53	-133.16	7,064.72	-991.47	2,212.12	1,971.23	240.90	9.183	
18,700.00	9,856.46	9,848.82	9,856.46	147.97	218.49	-135.01	7,064.72	-991.47	2,281.04	2,041.10	239.95	9.506	
18,800.00	9,854.69	9,847.05	9,854.69	149.58	218.46	-136.75	7,064.72	-991.47	2,352.20	2,113.19	239.01	9.841	
18,900.00	9,852.92	9,845.28	9,852.92	151.20	218.42	-138.38	7,064.72	-991.47	2,425.38	2,187.29	238.09	10.187	

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 205-INC-ONLY												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
17,500.00	9,877.74	9,897.35	9,877.74	128.64	265.34	-30.36	9,614.83	-619.76	2,476.30	2,203.36	272.94	9.073	
17,600.00	9,875.97	9,895.57	9,875.97	130.24	265.28	-31.56	9,614.83	-619.76	2,390.10	2,116.45	273.64	8.734	
17,700.00	9,874.19	9,893.80	9,874.19	131.85	265.22	-32.84	9,614.83	-619.76	2,305.01	2,030.58	274.43	8.399	
17,800.00	9,872.42	9,892.03	9,872.42	133.46	265.16	-34.22	9,614.83	-619.76	2,221.15	1,945.85	275.30	8.068	
17,900.00	9,870.65	9,890.25	9,870.65	135.06	265.10	-35.70	9,614.83	-619.76	2,138.69	1,862.41	276.28	7.741	
18,000.00	9,868.87	9,888.48	9,868.87	136.67	265.04	-37.31	9,614.83	-619.76	2,057.78	1,780.42	277.37	7.419	
18,100.00	9,867.10	9,886.71	9,867.10	138.28	264.98	-39.04	9,614.83	-619.76	1,978.62	1,700.04	278.58	7.102	
18,200.00	9,865.33	9,884.93	9,865.33	139.89	264.92	-40.92	9,614.83	-619.76	1,901.41	1,621.48	279.93	6.792	
18,300.00	9,863.55	9,883.16	9,863.55	141.51	264.86	-42.95	9,614.83	-619.76	1,826.42	1,544.99	281.44	6.490	
18,400.00	9,861.78	9,881.39	9,861.78	143.12	264.80	-45.16	9,614.83	-619.76	1,753.93	1,470.83	283.10	6.195	
18,500.00	9,860.01	9,879.62	9,860.01	144.73	264.74	-47.55	9,614.83	-619.76	1,684.25	1,399.32	284.93	5.911	
18,600.00	9,858.24	9,877.84	9,858.24	146.35	264.68	-50.14	9,614.83	-619.76	1,617.75	1,330.82	286.94	5.638	
18,700.00	9,856.46	9,876.07	9,856.46	147.97	264.62	-52.95	9,614.83	-619.76	1,554.85	1,265.73	289.12	5.378	
18,800.00	9,854.69	9,874.30	9,854.69	149.58	264.56	-55.98	9,614.83	-619.76	1,495.98	1,204.54	291.45	5.133	
18,900.00	9,852.92	9,872.52	9,852.92	151.20	264.50	-59.26	9,614.83	-619.76	1,441.66	1,147.75	293.91	4.905	
19,000.00	9,851.14	9,870.75	9,851.14	152.82	264.44	-62.78	9,614.83	-619.76	1,392.40	1,095.94	296.46	4.697	
19,100.00	9,849.37	9,868.98	9,849.37	154.44	264.38	-66.54	9,614.83	-619.76	1,348.77	1,049.73	299.04	4.510	
19,200.00	9,847.60	9,867.20	9,847.60	156.06	264.32	-70.54	9,614.83	-619.76	1,311.32	1,009.78	301.54	4.349	
19,300.00	9,845.82	9,865.43	9,845.82	157.68	264.26	-74.74	9,614.83	-619.76	1,280.61	976.72	303.89	4.214	
19,400.00	9,844.05	9,863.66	9,844.05	159.30	264.20	-79.13	9,614.83	-619.76	1,257.11	951.17	305.94	4.109	
19,500.00	9,842.28	9,861.88	9,842.28	160.93	264.14	-83.66	9,614.83	-619.76	1,241.25	933.66	307.59	4.035	
19,600.00	9,840.50	9,860.11	9,840.50	162.55	264.07	-88.28	9,614.83	-619.76	1,233.31	924.57	308.74	3.995	
19,648.24	9,839.65	9,858.96	9,839.44	163.33	264.03	-90.52	9,614.86	-619.76	1,232.37	923.29	309.09	3.987 CC, ES, SF	
19,700.00	9,838.73	9,856.76	9,837.25	164.17	263.95	-92.92	9,614.91	-619.76	1,233.46	924.19	309.26	3.988	
19,800.00	9,836.96	9,852.76	9,833.25	165.80	263.81	-97.53	9,615.01	-619.76	1,241.67	932.50	309.16	4.016	
19,900.00	9,835.18	9,849.06	9,829.55	167.42	263.67	-102.05	9,615.09	-619.76	1,257.78	949.27	308.51	4.077	
20,000.00	9,833.41	9,845.62	9,826.11	169.05	263.55	-106.43	9,615.16	-619.76	1,281.51	974.16	307.36	4.169	
20,100.00	9,831.64	9,842.42	9,822.92	170.67	263.43	-110.63	9,615.23	-619.76	1,312.44	1,006.64	305.80	4.292	
20,200.00	9,829.87	9,839.44	9,819.93	172.30	263.32	-114.62	9,615.28	-619.76	1,350.08	1,046.13	303.95	4.442	
20,248.79	9,829.00	9,838.05	9,818.55	173.09	263.27	-116.48	9,615.31	-619.76	1,370.72	1,067.75	302.97	4.524	

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design North Wilson Deep Offsets - Packer 18 State Com #1 (SWD) - Wellbore #1 - Surveys													Offset Site Error:	0.00 usft
Survey Program: 231-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance				Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		Minimum Separation (usft)	Separation Factor	
12,000.00	9,975.26	9,975.75	9,975.26	46.46	296.42	-4.26	4,385.35	502.58	2,412.71	2,118.48	294.23	8.200		
12,100.00	9,973.49	9,973.98	9,973.49	47.67	296.35	-4.42	4,385.35	502.58	2,312.95	2,018.78	294.17	7.863		
12,200.00	9,971.71	9,972.21	9,971.71	48.91	296.29	-4.60	4,385.35	502.58	2,213.20	1,919.11	294.10	7.525		
12,300.00	9,969.94	9,970.44	9,969.94	50.17	296.23	-4.79	4,385.35	502.58	2,113.49	1,819.45	294.03	7.188		
12,400.00	9,968.17	9,968.66	9,968.17	51.45	296.17	-5.00	4,385.35	502.58	2,013.79	1,719.83	293.97	6.850		
12,500.00	9,966.39	9,966.89	9,966.39	52.75	296.10	-5.24	4,385.35	502.58	1,914.13	1,620.23	293.90	6.513		
12,600.00	9,964.62	9,965.12	9,964.62	54.07	296.04	-5.50	4,385.35	502.58	1,814.50	1,520.67	293.83	6.175		
12,700.00	9,962.85	9,963.34	9,962.85	55.41	295.98	-5.79	4,385.35	502.58	1,714.92	1,421.15	293.77	5.838		
12,800.00	9,961.08	9,961.57	9,961.08	56.77	295.91	-6.11	4,385.35	502.58	1,615.38	1,321.68	293.70	5.500		
12,900.00	9,959.30	9,959.80	9,959.30	58.14	295.85	-6.48	4,385.35	502.58	1,515.91	1,222.28	293.63	5.163		
13,000.00	9,957.53	9,958.02	9,957.53	59.52	295.79	-6.90	4,385.35	502.58	1,416.50	1,122.94	293.56	4.825		
13,100.00	9,955.76	9,956.25	9,955.76	60.92	295.73	-7.38	4,385.35	502.58	1,317.18	1,023.69	293.50	4.488		
13,200.00	9,953.98	9,954.48	9,953.98	62.33	295.66	-7.95	4,385.35	502.58	1,217.97	924.54	293.43	4.151		
13,300.00	9,952.21	9,952.70	9,952.21	63.75	295.60	-8.61	4,385.35	502.58	1,118.90	825.54	293.36	3.814		
13,400.00	9,950.44	9,950.93	9,950.44	65.18	295.54	-9.40	4,385.35	502.58	1,020.01	726.71	293.30	3.478		
13,500.00	9,948.66	9,949.16	9,948.66	66.63	295.47	-10.36	4,385.35	502.58	921.35	628.11	293.24	3.142		
13,600.00	9,946.89	9,947.38	9,946.89	68.08	295.41	-11.55	4,385.35	502.58	823.02	529.82	293.19	2.807		
13,700.00	9,945.12	9,945.61	9,945.12	69.54	295.35	-13.06	4,385.35	502.58	725.13	431.97	293.16	2.474		
13,800.00	9,943.34	9,943.84	9,943.34	71.01	295.29	-15.04	4,385.35	502.58	627.91	334.75	293.16	2.142		
13,900.00	9,941.57	9,942.07	9,941.57	72.49	295.22	-17.74	4,385.35	502.58	531.71	238.50	293.21	1.813		
14,000.00	9,939.80	9,948.33	9,947.90	73.97	295.44	-21.63	4,385.23	502.58	437.18	143.55	293.62	1.489	Level 1	
14,100.00	9,938.02	9,944.07	9,943.65	75.47	295.29	-27.60	4,385.31	502.58	345.83	51.82	294.00	1.176	Level 2	
14,200.00	9,936.25	9,940.17	9,939.74	76.97	295.16	-37.65	4,385.38	502.58	260.84	-34.19	295.04	0.884	Level 3	
14,300.00	9,934.48	9,936.57	9,936.15	78.47	295.04	-56.07	4,385.44	502.58	190.94	-107.12	298.06	0.641	Level 3	
14,400.00	9,932.71	9,933.24	9,932.82	79.98	294.92	-87.58	4,385.49	502.58	157.65	-139.94	297.59	0.530	Level 3, ES, SF	
14,408.09	9,932.56	9,932.98	9,932.56	80.11	294.91	-90.52	4,385.49	502.58	157.44	-139.55	296.99	0.530	Level 3, CC	
14,500.00	9,930.93	9,930.15	9,929.73	81.50	294.82	-120.78	4,385.53	502.58	182.28	-112.16	294.44	0.619	Level 3	
14,600.00	9,929.16	9,927.28	9,928.86	83.02	294.72	-141.14	4,385.56	502.58	248.16	-47.18	295.34	0.840	Level 3	
14,700.00	9,927.39	9,924.61	9,924.19	84.55	294.63	-152.17	4,385.59	502.58	331.55	35.48	296.07	1.120	Level 2	
14,800.00	9,925.61	9,922.10	9,921.69	86.09	294.54	-158.62	4,385.62	502.58	422.19	127.16	295.04	1.431	Level 1	
14,900.00	9,923.84	9,919.76	9,919.35	87.62	294.46	-162.76	4,385.64	502.58	516.29	221.92	294.37	1.754		
15,000.00	9,922.07	9,917.56	9,917.15	89.16	294.39	-165.62	4,385.66	502.58	612.26	318.33	293.92	2.083		
15,100.00	9,920.29	9,915.50	9,915.08	90.71	294.31	-167.69	4,385.68	502.58	709.33	415.73	293.60	2.416		
15,200.00	9,918.52	9,913.55	9,913.13	92.26	294.25	-169.27	4,385.69	502.58	807.11	513.75	293.36	2.751		
15,300.00	9,916.75	9,911.71	9,911.30	93.81	294.19	-170.50	4,385.70	502.58	905.37	612.21	293.16	3.088		
15,400.00	9,914.97	9,909.97	9,909.56	95.37	294.13	-171.50	4,385.71	502.58	1,003.97	710.96	293.01	3.426		
15,500.00	9,913.20	9,908.33	9,907.92	96.93	294.07	-172.31	4,385.72	502.58	1,102.82	809.94	292.87	3.765		
15,600.00	9,911.43	9,906.77	9,906.36	98.49	294.02	-172.99	4,385.73	502.58	1,201.85	909.09	292.76	4.105		
15,700.00	9,909.66	9,905.29	9,904.88	100.06	293.97	-173.57	4,385.74	502.58	1,301.03	1,008.37	292.66	4.446		
15,800.00	9,907.88	9,903.88	9,903.47	101.63	293.92	-174.06	4,385.74	502.58	1,400.33	1,107.76	292.57	4.786		
15,900.00	9,906.11	9,902.54	9,902.13	103.20	293.87	-174.49	4,385.74	502.58	1,499.72	1,207.22	292.50	5.127		
16,000.00	9,904.34	9,901.27	9,900.85	104.77	293.83	-174.87	4,385.75	502.58	1,599.18	1,306.75	292.43	5.469		
16,100.00	9,902.56	9,900.05	9,899.64	106.35	293.79	-175.20	4,385.75	502.58	1,698.70	1,406.34	292.36	5.810		
16,200.00	9,900.79	9,898.89	9,898.47	107.93	293.75	-175.50	4,385.75	502.58	1,798.28	1,505.97	292.30	6.152		
16,300.00	9,899.02	9,897.77	9,897.36	109.51	293.71	-175.76	4,385.75	502.58	1,897.90	1,605.64	292.25	6.494		
16,400.00	9,897.24	9,896.71	9,896.30	111.09	293.67	-176.00	4,385.75	502.58	1,997.55	1,705.35	292.20	6.836		
16,500.00	9,895.47	9,895.69	9,895.28	112.68	293.64	-176.21	4,385.75	502.58	2,097.24	1,805.08	292.16	7.178		
16,600.00	9,893.70	9,894.10	9,893.70	114.27	293.58	-176.41	4,385.35	502.58	2,197.36	1,905.26	292.09	7.523		
16,700.00	9,891.92	9,892.33	9,891.92	115.86	293.52	-176.59	4,385.35	502.58	2,297.10	2,005.07	292.03	7.866		
16,800.00	9,890.15	9,890.56	9,890.15	117.45	293.46	-176.75	4,385.35	502.58	2,396.86	2,104.89	291.96	8.209		
16,900.00	9,888.38	9,888.78	9,888.38	119.04	293.40	-176.90	4,385.35	502.58	2,496.63	2,204.73	291.90	8.553		

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design Section 6-21S-35E Cast Away 6 B2BW St Com Unit 1H - Cast Away 6 B2BW St Com Unit 1H - Original													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
18,600.00	9,858.24	17,431.25	9,884.00	146.35	127.88	-42.42	10,418.13	-1,059.42	2,492.81	2,361.90	130.91	19.042		
18,700.00	9,856.46	17,431.25	9,884.00	147.97	127.88	-44.00	10,418.13	-1,059.42	2,419.34	2,283.85	135.49	17.856		
18,800.00	9,854.69	17,431.25	9,884.00	149.58	127.88	-45.68	10,418.13	-1,059.42	2,347.83	2,207.55	140.27	16.737		
18,900.00	9,852.92	17,431.25	9,884.00	151.20	127.88	-47.47	10,418.13	-1,059.42	2,278.46	2,133.20	145.26	15.686		
19,000.00	9,851.14	17,431.25	9,884.00	152.82	127.88	-49.36	10,418.13	-1,059.42	2,211.44	2,061.00	150.44	14.700		
19,100.00	9,849.37	17,431.25	9,884.00	154.44	127.88	-51.37	10,418.13	-1,059.42	2,146.99	1,991.19	155.79	13.781		
19,200.00	9,847.60	17,431.25	9,884.00	156.06	127.88	-53.50	10,418.13	-1,059.42	2,085.34	1,924.03	161.31	12.927		
19,300.00	9,845.82	17,431.25	9,884.00	157.68	127.88	-55.76	10,418.13	-1,059.42	2,026.76	1,859.80	166.95	12.140		
19,400.00	9,844.05	17,431.25	9,884.00	159.30	127.88	-58.15	10,418.13	-1,059.42	1,971.51	1,798.82	172.68	11.417		
19,500.00	9,842.28	17,431.25	9,884.00	160.93	127.88	-60.67	10,418.13	-1,059.42	1,919.88	1,741.43	178.45	10.759		
19,600.00	9,840.50	17,431.25	9,884.00	162.55	127.88	-63.32	10,418.13	-1,059.42	1,872.17	1,688.00	184.18	10.165		
19,700.00	9,838.73	17,431.25	9,884.00	164.17	127.88	-66.11	10,418.13	-1,059.42	1,828.69	1,638.90	189.79	9.635		
19,800.00	9,836.96	17,431.25	9,884.00	165.80	127.88	-69.03	10,418.13	-1,059.42	1,789.75	1,594.55	195.20	9.169		
19,900.00	9,835.18	17,431.25	9,884.00	167.42	127.88	-72.07	10,418.13	-1,059.42	1,755.65	1,555.35	200.30	8.765		
20,000.00	9,833.41	17,431.25	9,884.00	169.05	127.88	-75.22	10,418.13	-1,059.42	1,726.67	1,521.70	204.98	8.424		
20,100.00	9,831.64	17,431.25	9,884.00	170.67	127.88	-78.46	10,418.13	-1,059.42	1,703.08	1,493.97	209.12	8.144		
20,200.00	9,829.87	17,431.25	9,884.00	172.30	127.88	-81.79	10,418.13	-1,059.42	1,685.11	1,472.49	212.62	7.926		
20,248.79	9,829.00	17,431.25	9,884.00	173.09	127.88	-83.44	10,418.13	-1,059.42	1,678.43	1,464.37	214.07	7.841	CC, ES, SF	

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



Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 usft
Section 6-21S-35E Cast Away 6 B2BW St Com Unit 1H - Pheasant Ridge 6 St Com 1 - Original Hole - C												Offset Well Error:	0.00 usft
Survey Program: 375-MWD													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
19,700.00	9,838.73	9,855.43	9,838.73	164.17	55.69	-48.30	11,303.98	-1,212.89	2,444.40	2,306.96	137.44	17.785	
19,800.00	9,836.96	9,853.66	9,836.96	165.80	55.68	-50.08	11,303.98	-1,212.89	2,378.36	2,236.99	141.37	16.823	
19,900.00	9,835.18	9,851.88	9,835.18	167.42	55.68	-51.96	11,303.98	-1,212.89	2,314.76	2,169.32	145.44	15.915	
20,000.00	9,833.41	9,850.11	9,833.41	169.05	55.67	-53.95	11,303.98	-1,212.89	2,253.80	2,104.17	149.64	15.062	
20,100.00	9,831.64	9,848.34	9,831.64	170.67	55.67	-56.05	11,303.98	-1,212.89	2,195.71	2,041.77	153.93	14.264	
20,200.00	9,829.87	9,846.56	9,829.87	172.30	55.66	-58.26	11,303.98	-1,212.89	2,140.70	1,982.40	158.30	13.523	
20,248.79	9,829.00	9,845.70	9,829.00	173.09	55.66	-59.37	11,303.98	-1,212.89	2,115.07	1,954.62	160.45	13.182	CC, ES, SF

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



Stryker Directional

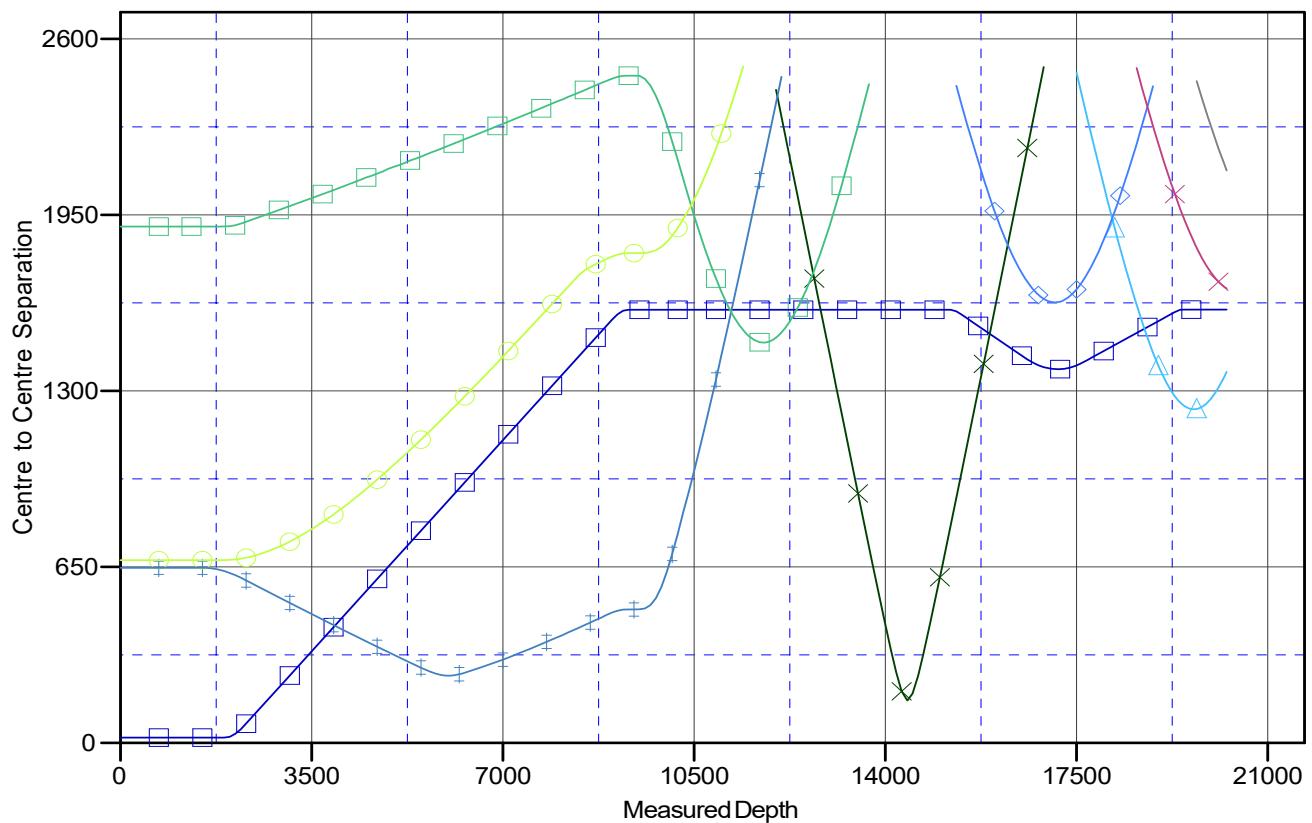
Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to RKB @ 3679.00usft (Patterson 560) Coordinates are relative to: North Wilson Deep Unit #9H
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Central Meridian is -104.333334 Grid Convergence at Surface is: 0.50°

Ladder Plot



LEGEND

#8H, Wellbore #1, Design #1 V0
 (SVD), Wellbore #1, Surveys V0
 Wellbore #1, Surveys V0

Dee Osborne 1930 State Com #124H, Wellbore #1, Plan for ACV0
 New Mexico O State NCT 1 #1 (P&A), Wellbore #1, Surveys V0
 Dee Osborne 1930 State Com #123H, Wellbore #1, Plan for ACV0

Osudo 7 State Com #1, Wellbore #1
 CastAway 6 B2BW St Com Unit 1H
 Pheasant Ridge 6 St Com 1, Original

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



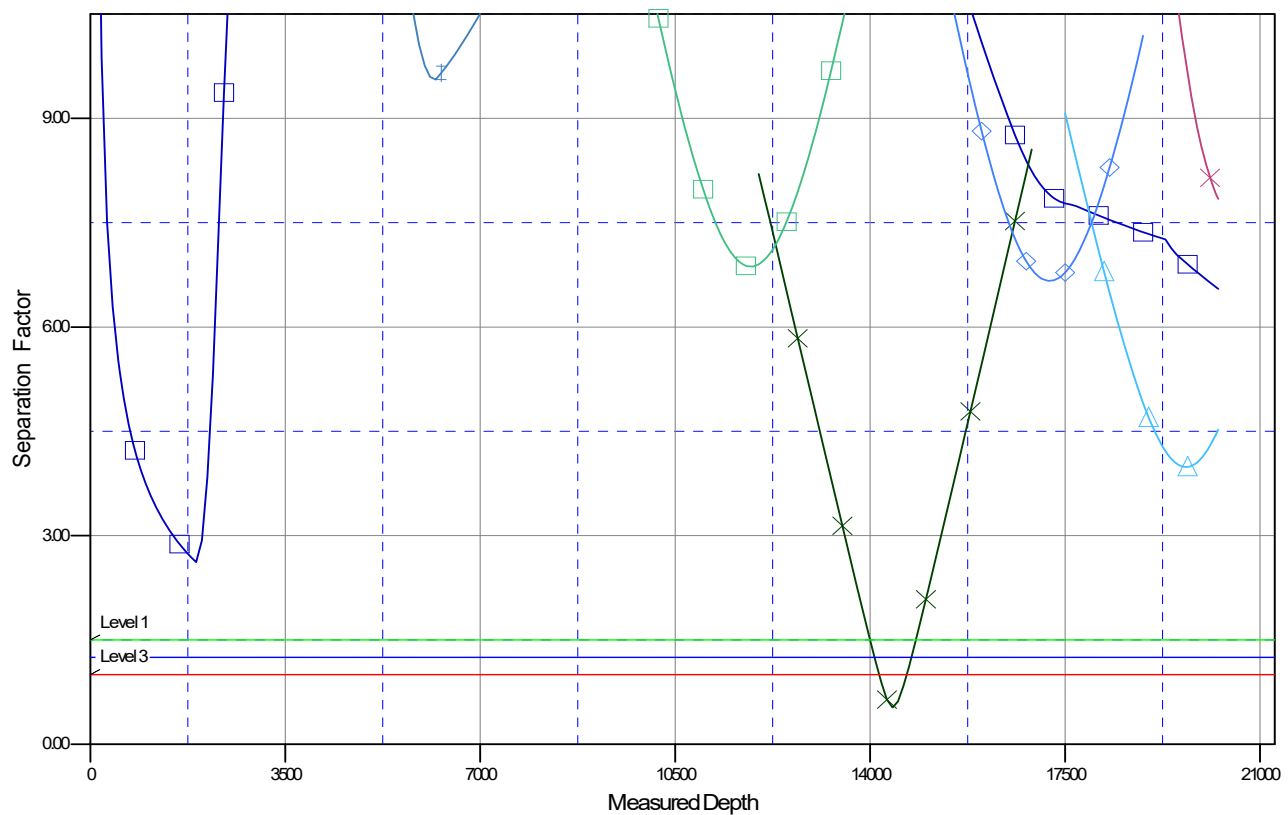
Stryker Directional Anticollision Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well North Wilson Deep Unit #9H
Project:	Lea County, NM (NAD83) NMEZ Grid	TVD Reference:	RKB @ 3679.00usft (Patterson 560)
Reference Site:	North Wilson Deep	MD Reference:	RKB @ 3679.00usft (Patterson 560)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	North Wilson Deep Unit #9H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000 Server
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to RKB @ 3679.00usft (Patterson 560) Coordinates are relative to: North Wilson Deep Unit #9H
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Central Meridian is -104.333334 Grid Convergence at Surface is: 0.50°

Separation Factor Plot



LEGEND

#8H, Wellbore #1, Design #1 V0	Dee Osborne 1930 State Com #124H, Wellbore #1, Plan for AC V0	Osudo 7 State Com #1, Wellbore #1, Plan for AC V0
(SWD), Wellbore #1, Surveys V0	New Mexico O State NCT 1 #1 (P&A), Wellbore #1, Surveys V0	CastAway 6 B2BW St Com Unit 1 H, Wellbore #1, Surveys V0
Wellbore #1, Surveys V0	Dee Osborne 1930 State Com #123H, Wellbore #1, Plan for AC V0	Pheasant Ridge 6 St Com 1, Original

Mewbourne Oil Company, North Wilson Deep Unit #9H

Sec 18, T21S, R35E

SHL: 240' FSL 1200' FEL (Sec 18)

BHL: 100' FNL 500' FEL (Sec 7)

Operator Name:	Property Name:	Well Number
Mewbourne Oil Company	North Wilson Deep Unit	#9H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
P	18	21	35	-	10'	FSL	500'	FEL	Lea
Latitude					Longitude			NAD	
32.471798					-103.3998630			83	

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
P	18	21	35	-	100'	FSL	500'	FEL	Lea
Latitude					Longitude			NAD	
32.47204486					-103.3998633			83	

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
A	7	21	35	-	100'	FNL	500'	FEL	Lea
Latitude					Longitude			NAD	
32.5005227					-103.3998732			83	

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

Y

Is this well an infill well?

N

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

State of New Mexico
Energy, Minerals and Natural Resources DepartmentSubmit Electronically
Via E-permittingOil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505**NATURAL GAS MANAGEMENT PLAN**

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

Section 1 – Plan Description**Effective May 25, 2021****I. Operator:** Mewbourne Oil Co. **OGRID:** 14744 **Date:** 4/2/24**II. Type:** ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
North Wilson Deep Unit 9H		P 18 21S 35E	240' FSL x 1200' FEL	2000	3500	3500

IV. Central Delivery Point Name: North Wilson Deep Unit 9H [See 19.15.27.9(D)(1) NMAC]**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
North Wilson Deep Unit 9H		7/2/24	8/2/24	9/2/24	9/17/24	9/17/24

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.**VII. Operational Practices:** ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.**VIII. Best Management Practices:** ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

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

Section 4 - Notices

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

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

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

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

Page 8

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

Signature:	<i>Bradley Bishop</i>
Printed Name:	BRADLEY BISHOP
Title:	REGULATORY MANAGER
E-mail Address:	BBISHOP@MEWBOURNE.COM
Date:	5-26/24
Phone:	575-393-5905
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)	
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

Mewbourne Oil Company

Natural Gas Management Plan – Attachment

- VI. Separation equipment will be sized by construction engineering staff based on stated manufacturer daily throughput capacities and anticipated daily production rates to ensure adequate capacity. Closed vent system piping, compression needs, and VRUs will be sized utilizing ProMax modelling software to ensure adequate capacity for anticipated production volumes and conditions.
- VII. Mewbourne Oil Company (MOC) will take following actions to comply with the regulations listed in 19.15.27.8 :
- A. MOC will maximize the recovery of natural gas by minimizing the waste, as defined by 19.15.2 NMAC, of natural gas through venting and flaring. MOC will ensure that well(s) will be connected to a natural gas gathering system with sufficient capacity to transport natural gas. If there is no adequate takeaway for the gas, well(s) will be shut in until the natural gas gathering system is available.
 - B. All drilling operations will be equipped with a rig flare located at least 100 ft from the nearest surface hole. Rig flare will be utilized to combust any natural gas that is brought to surface during normal drilling operations. In the case of emergency venting or flaring the volumes will be estimated and reported appropriately.
 - C. During completion operations any natural gas brought to surface will be flared. Immediately following the finish of completion operations, all well flow will be directed to permanent separation equipment. Produced natural gas from separation equipment will be sent to sales. It is not anticipated that gas will not meet pipeline standards. However, if natural gas does not meet gathering pipeline quality specifications, MOC will flare the natural gas for 60 days or until the natural gas meets the pipeline quality specifications, whichever is sooner. MOC will ensure that the flare is sized properly and is equipped with automatic igniter or continuous pilot. The gas sample will analyzed twice per week and the gas will be routed into a gathering system as soon as pipeline specifications are met.
 - D. Natural gas will not be flared with the exceptions and provisions listed in the 19.15.27.8 D.(1) through (4). If there is no adequate takeaway for the separator gas, well(s) will be shut in until the natural gas gathering system is available with exception of emergency or malfunction situations. Venting and/or flaring volumes will be estimated and reported appropriately.
 - E. MOC will comply with the performance standards requirements and provisions listed in 19.15.27.8 E.(1) through (8). All equipment will be designed and sized to handle maximum anticipated pressures and throughputs in order to minimize the waste. Production storage tanks constructed after May 25, 2021 will be equipped with automatic gauging system. Flares constructed after May 25, 2021 will be equipped with automatic igniter or continuous pilot. Flares will be located at least 100' from the well and storage tanks unless otherwise approved by the division. MOC will conduct AVO inspections as described in 19.15.27.8 E (5) (a) with frequencies specified in 19.15.27.8 E (5) (b) and (c). All emergencies will be resolved as quickly and safely as feasible to minimize waste.
 - F. The volume of natural gas that is vented or flared as the result of malfunction or emergency during drilling and completions operations will be estimated. The volume of natural gas that is vented, flared or beneficially used during production operations, will be measured or estimated. MOC will install equipment to measure

the volume of natural gas flared from existing process piping or a flowline piped from equipment such as high pressure separators, heater treaters, or vapor recovery units associated with a well or facility associated with a well authorized by an APD issued after May 25, 2021 that has an average daily production greater than 60 Mcf/day. If metering is not practicable due to circumstances such as low flow rate or low pressure venting and flaring, MOC will estimate the volume of vented or flared natural gas. Measuring equipment will conform to industry standards and will not be designed or equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.

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