

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

HOBBS OCD

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

MAY 08 2018

RECEIVED

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other		5. Lease Serial No. NMNM105560	
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr. Other		6. Indian, Allottee or Tribe Name	
2. Name of Operator MEWBOURNE OIL COMPANY		7. Unit or CA Agreement Name and No.	
Contact: JACKIE LATHAN E-Mail: jlathan@mewbourne.com		8. Lease Name and Well No. RED HILLS WEST UNIT 18H	
3. Address P O BOX 5270 HOBBS, NM 88241		9. API Well No. 30-025-43913-00-S1	
3a. Phone No. (include area code) Ph: 575-393-5905		10. Field and Pool, or Exploratory WC025G08S263205N-UP WOLFCAMP	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface SWSW 100FSL 330FWL 32.050476 N Lat, 103.704781 W Lon At top prod interval reported below SWSW 370FSL 364FWL At total depth NWNW 330FNL 389FWL		11. Sec., T., R., M., or Block and Survey or Area Sec 8 T26S R32E Mer NMP	
14. Date Spudded 09/10/2017		15. Date T.D. Reached 10/02/2017	
16. Date Completed ☐ D & A ☒ Ready to Prod. 02/02/2018		17. Elevations (DF, KB, RT, GL)* 3195 GL	
18. Total Depth: MD 16635 TVD 11914	19. Plug Back T.D.: MD 16600 TVD 11913	20. Depth Bridge Plug Set: MD TVD	
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) CBL CCL GR&CNL		22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit analysis) Directional Survey? ☐ No ☒ Yes (Submit analysis)	

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17.500	13.375 J55	54.5	0	1105		950	280	0	
12.250	9.625 N80	40.0	0	4290		900	355	0	
8.750	7.000 P110	29.0	0	12023		950	326	0	
6.125	4.500 P110	13.5	11310	16595		300	133	0	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WOLFCAMP	11614	11635	11982 TO 16595	0.000	1008	OPEN
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
11982 TO 16595	41,713,758 GALS SLICKWATER, CARRYING 7,204,680# 100 MESH SAND & 4,248,730# 40/70 WHITE SAND

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
02/02/2018	02/05/2018	24	→	357.0	1253.0	2041.0	50.4	0.77	PGW
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
20/64	SI	3950.0	→	357	1253	2041	3509	PGW	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
	SI		→						

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #404047 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

Reclamation due: 08/02/2018

K



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

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised August 1, 2011

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

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Mewbourne Oil Company PO Box 5270 Hobbs, NM 88241		² OGRID Number 14744
⁴ API Number 30 - 025 - 43913		³ Reason for Filing Code/ Effective Date NW / 02/02/18
⁵ Pool Name WC-025 G-08 S263205N; Upper Wolfcamp		⁶ Pool Code 98065
⁷ Property Code 39542	⁸ Property Name Red Hills West Unit	⁹ Well Number 018H

II. ¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
M	8	26S	32E		100	South	330	West	Lea

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	8	26S	32E		330	North	389	West	Lea

¹² Lse Code F	¹³ Producing Method Code Flowing	¹⁴ Gas Connection Date 02/02/18	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date
-----------------------------	---	--	-----------------------------------	------------------------------------	-------------------------------------

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
35246	Shell Trading US Co PO Box 4604 Houston, TX 77210-4604	O
285689	Delaware Basin Midstream, LLC PO Box 1330 Houston, TX 77251-1330	G

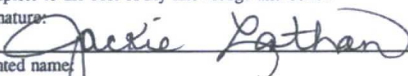
IV. Well Completion Data We are asking for an exemption from tubing at this time.

²¹ Spud Date 09/10/17	²² Ready Date 02/02/18	²³ TD 16635' MD 11914' TVD	²⁴ PBD 16600'	²⁵ Perforations 11982' - 16595'	²⁶ DHC, MC NA
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
17 1/2"	13 3/4"	1105	950		
12 1/4"	9 5/8"	4290'	900		
8 3/4"	7"	12023'	950		
6 1/2"	4 1/2"	11310' - 16595'	300		

V. Well Test Data

³¹ Date New Oil 02/04/18	³² Gas Delivery Date 02/02/18	³³ Test Date 02/05/18	³⁴ Test Length 24 hrs	³⁵ Tbg. Pressure	³⁶ Csg. Pressure 3850
³⁷ Choke Size 20/64"	³⁸ Oil 357	³⁹ Water 2041	⁴⁰ Gas 1253		⁴¹ Test Method Production

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: 

Printed name:
Jackie Lathan

Title:
Regulatory

E-mail Address:
jlathan@mewbourne.com

Date:
02/09/18

Phone:
575-393-5905

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

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 30-025-43913	² Pool Code 98065	³ Pool Name WC-025 G-08 5263205N; Upper Wolfcamp
⁴ Property Code 39542	⁵ Property Name RED HILLS WEST UNIT	
⁷ OGRID NO. 14744	⁸ Operator Name MEWBOURNE OIL COMPANY	⁶ Well Number 018H
		⁹ Elevation 3195'

¹⁰ Surface Location

UL or lot no. M	Section 8	Township 26S	Range 32E	Lot Idn	Feet from the 100	North/South line SOUTH	Feet From the 330	East/West line WEST	County LEA
--------------------	--------------	-----------------	--------------	---------	----------------------	---------------------------	----------------------	------------------------	---------------

¹¹ Bottom Hole Location If Different From Surface

UL or lot no. D	Section 8	Township 26S	Range 32E	Lot Idn	Feet from the 330	North/South line NORTH	Feet from the 389	East/West line WEST	County LEA
--------------------	--------------	-----------------	--------------	---------	----------------------	---------------------------	----------------------	------------------------	---------------

¹² Dedicated Acres 160	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.

¹⁶ 330' B. H. GEODETIC DATA NAD 83 GRID - NM EAST SURFACE LOCATION N: 382667.9 - E: 736076.9 LAT: 32.05047576° N LONG: 103.70477840° W BOTTOM HOLE N: 387583.4 - E: 736057.4 LAT: 32.06398774° N LONG: 103.70474891° W		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: Jackie Lathan Date: 2/8/18 Printed Name: Jackie Lathan E-mail Address:	
DETAIL "A" 3202.1' 600' 3199.3' 600' S. L. 3195.7' 3192.6'		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. 2-14-2017 Date of Survey Signature and Seal of Professional Surveyor 19680 Certificate Number	
SEE DETAIL "A" 330' S. L. 100' S 89°29'43" W 2672.64'		19680 Certificate Number	

RRC - Firm No.: TX 10193838 NM 4655451 - Job No.: LS1701045



COMPANY: Mewbourne Oil Company
 WELL: Red Hills West Unit 018H
 COUNTY: Lea County N.M.
 DATUM: NAD 1927 (NADCON CONUS)
 RIG: Patterson Patterson 231



Grid Correction MWD: To convert a Magnetic Direction to a Grid Direction, Add 6.65°

OFFICE: 936.582.7294

GEODETIC ZONE: New Mexico East 3001
 3195 + 27 @ 3222.0usft (Patterson 231)
 GROUND ELEVATION: 3195.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	382610.60	694890.20	32° 3' 1.263 N	103° 42' 15.502 W	

PLAN SECTIONS

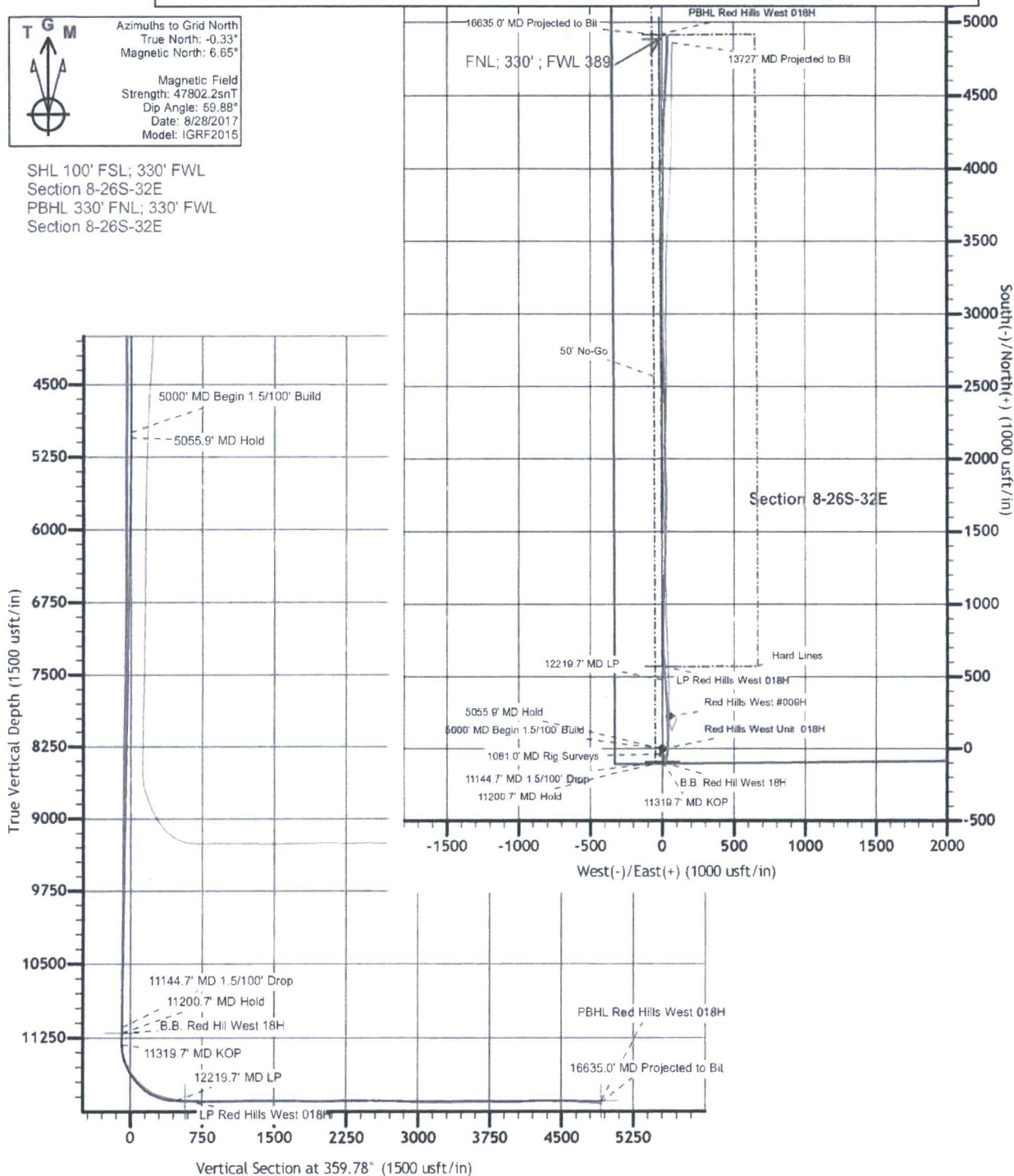
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	5000.0	0.00	0.00	5000.0	0.0	0.0	0.00	0.00	0.0	
3	5055.9	0.84	179.77	5055.9	-0.4	0.0	1.50	179.77	-0.4	
4	11144.7	0.84	179.77	11144.1	-89.6	0.4	0.00	0.00	-89.6	
5	11200.7	0.00	0.00	11200.0	-90.0	0.4	1.50	180.00	-90.0	B.B. Red Hill West 18H
6	11319.7	0.00	0.00	11319.0	-90.0	0.4	0.00	0.00	-90.0	
7	12219.7	90.00	359.77	11892.0	483.0	-1.9	10.00	359.77	483.0	
8	16652.1	90.00	359.77	11892.0	4915.3	-19.3	0.00	0.00	4915.3	PBHL Red Hills West 018H



Azimuths to Grid North
 True North: -0.33°
 Magnetic North: 6.65°

Magnetic Field
 Strength: 47802.2snT
 Dip Angle: 59.88°
 Date: 8/28/2017
 Model: IGRF2015

SHL 100' FSL; 330' FWL
 Section 8-26S-32E
 PBHL 330' FNL; 330' FWL
 Section 8-26S-32E





Mewbourne Oil Company

Lea County N.M.

Section 8-26S-32E Red Hills West Unit 018H

Red Hills West Unit 018H

Original Hole

Design: Original Hole

Standard Survey Report

03 October, 2017



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West Unit 018H
Well: Red Hills West Unit 018H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 018H
TVD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
MD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Project	Lea County N.M.		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site		Section 8-26S-32E Red Hills West Unit 018H			
Site Position:		Northing:	382,610.60 usft	Latitude:	32° 3' 1.263 N
From:	Map	Easting:	694,890.20 usft	Longitude:	103° 42' 15.502 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.33 °

Well	Red Hills West Unit 018H					
Well Position	+N/-S	0.0 usft	Northing:	382,610.60 usft	Latitude:	32° 3' 1.263 N
	+E/-W	0.0 usft	Easting:	694,890.20 usft	Longitude:	103° 42' 15.502 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	3,195.0 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/28/2017	6.98	59.88	47,802.20323337

Design	Original Hole				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	202.78	

Survey Program		Date	10/3/2017	
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
102.0	1,081.0	Rig Survey (Original Hole)	MWD	MWD v3:standard declination
1,122.0	16,635.0	MWD Survey (Original Hole)	MWD	MWD v3:standard declination

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
102.0	0.20	121.70	102.0	-0.1	0.2	0.0	0.20	0.20	0.00
164.0	0.10	138.60	164.0	-0.2	0.3	0.1	0.17	-0.16	27.26
225.0	0.30	116.70	225.0	-0.3	0.5	0.1	0.35	0.33	-35.90
285.0	0.70	201.60	285.0	-0.7	0.5	0.5	1.23	0.67	141.50
345.0	1.00	194.60	345.0	-1.6	0.2	1.4	0.53	0.50	-11.67
405.0	1.30	190.60	405.0	-2.7	-0.1	2.5	0.52	0.50	-6.67
465.0	1.20	200.60	465.0	-4.0	-0.4	3.8	0.40	-0.17	16.67
525.0	1.40	201.60	524.9	-5.3	-0.9	5.2	0.34	0.33	1.67
585.0	1.30	207.60	584.9	-6.5	-1.5	6.6	0.29	-0.17	10.00



Microsoft Survey Report



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West Unit 018H
Well: Red Hills West Unit 018H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 018H
TVD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
MD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
645.0	3.00	205.60	644.9	-8.6	-2.5	8.9	2.84	2.83	-3.33
705.0	3.90	207.60	704.8	-11.8	-4.1	12.5	1.51	1.50	3.33
765.0	4.70	205.00	764.6	-15.8	-6.1	16.9	1.37	1.33	-4.33
825.0	4.70	203.60	824.4	-20.3	-8.1	21.9	0.19	0.00	-2.33
920.0	4.50	203.60	919.1	-27.3	-11.2	29.5	0.21	-0.21	0.00
1,050.0	4.30	204.60	1,048.7	-36.4	-15.2	39.5	0.16	-0.15	0.77
1,081.0	4.20	203.60	1,079.6	-38.5	-16.2	41.7	0.40	-0.32	-3.23
1081.0' MD Rig Surveys									
1,122.0	4.10	199.10	1,120.5	-41.3	-17.2	44.7	0.83	-0.24	-10.98
1,217.0	1.50	167.20	1,215.4	-45.7	-18.1	49.1	3.09	-2.74	-33.58
1,312.0	1.40	128.40	1,310.4	-47.6	-16.9	50.4	1.02	-0.11	-40.84
1,407.0	0.90	114.10	1,405.4	-48.6	-15.3	50.8	0.60	-0.53	-15.05
1,503.0	0.50	100.60	1,501.4	-49.0	-14.2	50.7	0.45	-0.42	-14.06
1,598.0	0.50	85.20	1,596.4	-49.1	-13.4	50.4	0.14	0.00	-16.21
1,693.0	0.40	89.20	1,691.3	-49.0	-12.6	50.1	0.11	-0.11	4.21
1,788.0	0.60	65.50	1,786.3	-48.8	-11.9	49.6	0.30	0.21	-24.95
1,882.0	0.30	20.40	1,880.3	-48.4	-11.3	49.0	0.47	-0.32	-47.98
1,978.0	0.50	28.40	1,976.3	-47.8	-11.0	48.3	0.22	0.21	8.33
2,073.0	0.70	38.00	2,071.3	-46.9	-10.5	47.3	0.23	0.21	10.11
2,167.0	0.70	80.30	2,165.3	-46.4	-9.6	46.5	0.54	0.00	45.00
2,265.0	0.90	89.40	2,263.3	-46.3	-8.2	45.9	0.24	0.20	9.29
2,360.0	1.30	99.30	2,358.3	-46.5	-6.4	45.3	0.46	0.42	10.42
2,455.0	1.50	94.50	2,453.3	-46.7	-4.1	44.7	0.24	0.21	-5.05
2,550.0	0.30	36.90	2,548.3	-46.6	-2.7	44.0	1.43	-1.26	-60.63
2,646.0	0.40	294.00	2,644.3	-46.3	-2.9	43.8	0.57	0.10	-107.19
2,741.0	0.50	289.90	2,739.3	-46.0	-3.6	43.8	0.11	0.11	-4.32
2,835.0	0.50	295.30	2,833.3	-45.7	-4.3	43.8	0.05	0.00	5.74
2,929.0	0.40	307.10	2,927.2	-45.3	-4.9	43.7	0.14	-0.11	12.55
3,024.0	0.30	312.20	3,022.2	-45.0	-5.4	43.5	0.11	-0.11	5.37
3,120.0	0.20	280.00	3,118.2	-44.8	-5.7	43.5	0.18	-0.10	-33.54
3,215.0	0.00	277.00	3,213.2	-44.7	-5.9	43.5	0.21	-0.21	0.00
3,310.0	0.40	52.10	3,308.2	-44.5	-5.6	43.2	0.42	0.42	0.00
3,405.0	0.60	61.10	3,403.2	-44.1	-4.9	42.6	0.23	0.21	9.47
3,500.0	0.40	39.80	3,498.2	-43.6	-4.3	41.9	0.28	-0.21	-22.42
3,595.0	0.40	21.50	3,593.2	-43.0	-4.0	41.2	0.13	0.00	-19.26
3,690.0	0.30	67.30	3,688.2	-42.6	-3.6	40.7	0.30	-0.11	48.21
3,784.0	0.70	102.50	3,782.2	-42.7	-2.8	40.4	0.52	0.43	37.45
3,879.0	0.70	101.20	3,877.2	-42.9	-1.7	40.2	0.02	0.00	-1.37
3,974.0	1.20	115.00	3,972.2	-43.4	-0.2	40.1	0.58	0.53	14.53
4,069.0	1.70	127.90	4,067.2	-44.7	1.8	40.5	0.63	0.53	13.58
4,164.0	0.90	86.70	4,162.2	-45.5	3.7	40.6	1.24	-0.84	-43.37
4,250.0	1.00	28.00	4,248.1	-44.8	4.7	39.5	1.09	0.12	-68.26
4,385.0	1.20	24.80	4,383.1	-42.5	5.8	36.9	0.15	0.15	-2.37

Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West Unit 018H
Well: Red Hills West Unit 018H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 018H
TVD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
MD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,480.0	0.60	101.30	4,478.1	-41.7	6.7	35.8	1.27	-0.63	80.53
4,575.0	0.70	135.20	4,573.1	-42.2	7.6	36.0	0.41	0.11	35.68
4,670.0	0.90	143.10	4,668.1	-43.2	8.5	36.6	0.24	0.21	8.32
4,765.0	0.90	153.50	4,763.1	-44.5	9.3	37.4	0.17	0.00	10.95
4,860.0	0.40	177.20	4,858.1	-45.5	9.6	38.2	0.59	-0.53	24.95
4,956.0	0.30	195.50	4,954.1	-46.1	9.6	38.8	0.15	-0.10	19.06
5,051.0	0.10	184.10	5,049.1	-46.4	9.5	39.1	0.21	-0.21	-12.00
5,146.0	0.20	168.40	5,144.1	-46.6	9.5	39.3	0.11	0.11	-16.53
5,241.0	0.10	184.80	5,239.1	-46.9	9.5	39.5	0.11	-0.11	17.26
5,336.0	0.00	5.30	5,334.1	-47.0	9.5	39.6	0.11	-0.11	0.00
5,432.0	0.00	307.10	5,430.1	-47.0	9.5	39.6	0.00	0.00	0.00
5,527.0	0.20	329.60	5,525.1	-46.8	9.5	39.5	0.21	0.21	0.00
5,622.0	0.20	297.50	5,620.1	-46.6	9.2	39.4	0.12	0.00	-33.79
5,716.0	0.30	282.50	5,714.1	-46.5	8.8	39.4	0.13	0.11	-15.96
5,812.0	0.20	323.40	5,810.1	-46.3	8.5	39.4	0.21	-0.10	42.60
5,906.0	0.30	331.30	5,904.1	-45.9	8.3	39.1	0.11	0.11	8.40
6,001.0	0.20	338.30	5,999.1	-45.6	8.1	38.9	0.11	-0.11	7.37
6,096.0	0.20	34.80	6,094.1	-45.3	8.1	38.6	0.20	0.00	59.47
6,192.0	0.40	85.30	6,190.1	-45.1	8.6	38.3	0.33	0.21	52.60
6,287.0	0.40	105.90	6,285.1	-45.2	9.2	38.1	0.15	0.00	21.68
6,382.0	0.40	131.50	6,380.1	-45.5	9.8	38.1	0.19	0.00	26.95
6,477.0	0.40	135.80	6,475.1	-45.9	10.3	38.4	0.03	0.00	4.53
6,572.0	0.40	147.70	6,570.1	-46.4	10.7	38.7	0.09	0.00	12.53
6,667.0	0.40	167.70	6,665.1	-47.1	10.9	39.2	0.15	0.00	21.05
6,762.0	0.10	258.20	6,760.1	-47.4	10.9	39.5	0.43	-0.32	95.26
6,857.0	0.20	167.10	6,855.1	-47.6	10.9	39.7	0.24	0.11	-95.89
6,952.0	0.40	178.00	6,950.1	-48.1	10.9	40.1	0.22	0.21	11.47
7,047.0	0.50	158.40	7,045.1	-48.8	11.1	40.7	0.19	0.11	-20.63
7,142.0	0.80	140.50	7,140.0	-49.7	11.6	41.3	0.38	0.32	-18.84
7,236.0	0.90	144.40	7,234.0	-50.8	12.5	42.0	0.12	0.11	4.15
7,331.0	1.10	150.10	7,329.0	-52.2	13.4	42.9	0.23	0.21	6.00
7,426.0	1.40	207.80	7,424.0	-54.0	13.3	44.6	1.30	0.32	60.74
7,520.0	1.30	231.80	7,518.0	-55.7	11.9	46.7	0.61	-0.11	25.53
7,615.0	0.60	229.90	7,613.0	-56.7	10.7	48.1	0.74	-0.74	-2.00
7,709.0	0.60	218.70	7,707.0	-57.4	10.0	49.0	0.12	0.00	-11.91
7,804.0	0.60	188.00	7,802.0	-58.2	9.6	50.0	0.33	0.00	-32.32
7,900.0	0.80	203.90	7,897.9	-59.4	9.3	51.1	0.29	0.21	16.56
7,994.0	0.90	202.70	7,991.9	-60.6	8.7	52.5	0.11	0.11	-1.28
8,090.0	1.00	192.00	8,087.9	-62.2	8.3	54.1	0.21	0.10	-11.15
8,185.0	0.70	191.00	8,182.9	-63.5	8.0	55.5	0.32	-0.32	-1.05
8,280.0	0.70	185.10	8,277.9	-64.7	7.8	56.6	0.08	0.00	-6.21
8,376.0	0.90	192.20	8,373.9	-66.0	7.6	57.9	0.23	0.21	7.40
8,471.0	1.10	189.00	8,468.9	-67.6	7.3	59.5	0.22	0.21	-3.37

Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West Unit 018H
Well: Red Hills West Unit 018H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 018H
TVD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
MD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,567.0	0.90	191.00	8,564.9	-69.3	7.0	61.2	0.21	-0.21	2.08
8,661.0	1.00	194.60	8,658.9	-70.8	6.7	62.7	0.12	0.11	3.83
8,756.0	0.60	114.80	8,753.8	-71.8	6.9	63.5	1.13	-0.42	-84.00
8,851.0	1.00	116.90	8,848.8	-72.4	8.1	63.6	0.42	0.42	2.21
8,946.0	0.90	132.60	8,943.8	-73.3	9.4	63.9	0.29	-0.11	16.53
9,041.0	1.00	163.50	9,038.8	-74.6	10.2	64.8	0.54	0.11	32.53
9,136.0	0.50	224.10	9,133.8	-75.7	10.1	65.8	0.92	-0.53	63.79
9,231.0	0.70	239.40	9,228.8	-76.3	9.3	66.7	0.27	0.21	16.11
9,327.0	1.10	215.90	9,324.8	-77.3	8.3	68.1	0.56	0.42	-24.48
9,422.0	0.40	281.40	9,419.8	-78.0	7.4	69.0	1.06	-0.74	68.95
9,517.0	0.50	275.20	9,514.8	-77.9	6.7	69.2	0.12	0.11	-6.53
9,612.0	0.80	259.30	9,609.8	-78.0	5.6	69.7	0.37	0.32	-16.74
9,706.0	0.70	261.70	9,703.8	-78.2	4.4	70.4	0.11	-0.11	2.55
9,801.0	0.80	260.50	9,798.8	-78.4	3.2	71.0	0.11	0.11	-1.26
9,896.0	1.10	249.70	9,893.7	-78.8	1.7	72.0	0.37	0.32	-11.37
9,992.0	0.50	194.50	9,989.7	-79.5	0.7	73.0	0.95	-0.63	-57.50
10,087.0	0.50	161.00	10,084.7	-80.3	0.7	73.7	0.30	0.00	-35.26
10,182.0	0.40	133.90	10,179.7	-80.9	1.1	74.2	0.24	-0.11	-28.53
10,277.0	0.70	137.60	10,274.7	-81.6	1.8	74.5	0.32	0.32	3.89
10,372.0	1.20	149.60	10,369.7	-82.9	2.6	75.4	0.56	0.53	12.63
10,467.0	1.30	169.60	10,464.7	-84.8	3.3	76.9	0.47	0.11	21.05
10,562.0	1.10	149.80	10,559.7	-86.6	4.0	78.3	0.48	-0.21	-20.84
10,657.0	2.50	88.70	10,654.6	-87.4	6.5	78.0	2.31	1.47	-64.32
10,752.0	2.70	94.30	10,749.5	-87.5	10.8	76.5	0.34	0.21	5.89
10,847.0	2.10	91.50	10,844.4	-87.7	14.8	75.1	0.64	-0.63	-2.95
10,942.0	1.80	82.90	10,939.4	-87.6	18.0	73.8	0.44	-0.32	-9.05
11,036.0	1.50	86.20	11,033.3	-87.3	20.7	72.5	0.33	-0.32	3.51
11,132.0	0.70	131.30	11,129.3	-87.6	22.4	72.1	1.17	-0.83	46.98
11,202.6	0.66	167.19	11,199.9	-88.3	22.8	72.6	0.60	-0.06	50.84
B.B. Red Hil West 18H									
11,226.0	0.70	178.40	11,223.3	-88.6	22.9	72.8	0.60	0.18	47.89
11,257.0	0.90	196.40	11,254.3	-89.0	22.8	73.2	1.03	0.65	58.06
11,288.0	0.90	220.00	11,285.3	-89.4	22.6	73.7	1.19	0.00	76.13
11,320.0	1.20	31.30	11,317.3	-89.3	22.6	73.6	6.54	0.94	535.31
11,352.0	4.00	40.80	11,349.3	-88.2	23.5	72.2	8.82	8.75	29.69
11,384.0	6.90	19.00	11,381.1	-85.5	24.8	69.2	10.98	9.06	-68.13
11,416.0	11.20	8.10	11,412.7	-80.6	25.9	64.3	14.41	13.44	-34.06
11,447.0	15.60	9.70	11,442.9	-73.5	27.0	57.3	14.24	14.19	5.16
11,479.0	21.10	11.70	11,473.2	-63.6	28.9	47.5	17.30	17.19	6.25
11,510.0	21.80	9.90	11,502.1	-52.5	31.0	36.4	3.10	2.26	-5.81
11,542.0	23.60	7.40	11,531.6	-40.3	32.9	24.4	6.38	5.63	-7.81
11,574.0	28.30	6.80	11,560.4	-26.4	34.6	10.9	14.71	14.69	-1.88
11,605.0	33.40	5.00	11,587.0	-10.6	36.2	-4.3	16.72	16.45	-5.81
11,637.0	37.00	3.80	11,613.1	7.8	37.6	-21.8	11.46	11.25	-3.75

Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West Unit 018H
Well: Red Hills West Unit 018H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 018H
TVD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
MD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,669.0	38.50	2.70	11,638.4	27.3	38.7	-40.2	5.14	4.69	-3.44
11,701.0	39.90	2.50	11,663.2	47.6	39.7	-59.2	4.39	4.38	-0.63
11,733.0	41.80	1.60	11,687.4	68.5	40.4	-78.8	6.22	5.94	-2.81
11,764.0	46.50	357.70	11,709.7	90.0	40.2	-98.6	17.51	15.16	-12.58
11,796.0	48.70	358.40	11,731.3	113.7	39.4	-120.1	7.06	6.88	2.19
11,827.0	49.20	357.20	11,751.6	137.0	38.5	-141.3	3.34	1.61	-3.87
11,859.0	53.00	359.00	11,771.7	161.9	37.7	-163.9	12.66	11.88	5.63
11,891.0	58.60	0.10	11,789.7	188.4	37.5	-188.2	17.73	17.50	3.44
11,922.0	63.50	358.70	11,804.7	215.5	37.2	-213.1	16.29	15.81	-4.52
11,954.0	65.80	357.20	11,818.4	244.4	36.2	-239.3	8.34	7.19	-4.69
11,990.0	68.80	356.20	11,832.3	277.5	34.3	-269.1	8.72	8.33	-2.78
12,062.0	74.10	356.50	11,855.2	345.6	29.9	-330.2	7.37	7.36	0.42
12,094.0	76.00	356.00	11,863.4	376.5	27.9	-357.9	6.13	5.94	-1.56
12,125.0	78.50	356.30	11,870.3	406.6	25.9	-384.9	8.12	8.06	0.97
12,157.0	80.40	355.90	11,876.1	438.0	23.8	-413.0	6.06	5.94	-1.25
12,189.0	81.90	354.60	11,881.1	469.5	21.1	-441.1	6.17	4.69	-4.06
12,220.0	84.50	354.90	11,884.7	500.2	18.3	-468.2	8.44	8.39	0.97
12,252.0	87.00	355.30	11,887.1	532.0	15.6	-496.5	7.91	7.81	1.25
12,294.3	87.95	355.80	11,889.0	574.1	12.3	-534.1	2.52	2.23	1.17
LP Red Hills West 018H									
12,346.0	89.10	356.40	11,890.3	625.7	8.8	-580.3	2.52	2.23	1.17
12,441.0	87.10	358.90	11,893.4	720.5	4.9	-666.2	3.37	-2.11	2.63
12,536.0	89.30	0.50	11,896.4	815.5	4.4	-753.5	2.86	2.32	1.68
12,631.0	92.40	1.60	11,895.0	910.4	6.1	-841.8	3.46	3.26	1.16
12,726.0	91.00	1.40	11,892.2	1,005.3	8.6	-930.2	1.49	-1.47	-0.21
12,821.0	91.30	1.90	11,890.3	1,100.3	11.4	-1,018.8	0.61	0.32	0.53
12,916.0	90.20	2.00	11,889.0	1,195.2	14.6	-1,107.6	1.16	-1.16	0.11
13,011.0	89.30	1.90	11,889.5	1,290.2	17.8	-1,196.4	0.95	-0.95	-0.11
13,106.0	88.70	0.60	11,891.1	1,385.1	19.9	-1,284.8	1.51	-0.63	-1.37
13,201.0	90.10	0.80	11,892.1	1,480.1	21.1	-1,372.8	1.49	1.47	0.21
13,296.0	90.80	2.10	11,891.4	1,575.1	23.5	-1,461.3	1.55	0.74	1.37
13,390.0	91.20	0.10	11,889.7	1,669.0	25.3	-1,548.6	2.17	0.43	-2.13
13,486.0	87.30	359.90	11,891.0	1,765.0	25.3	-1,637.1	4.07	-4.06	-0.21
13,581.0	87.00	357.80	11,895.7	1,859.9	23.4	-1,723.8	2.23	-0.32	-2.21
13,676.0	89.70	357.10	11,898.4	1,954.7	19.1	-1,809.6	2.94	2.84	-0.74
13,771.0	93.70	0.10	11,895.6	2,049.6	16.8	-1,896.2	5.26	4.21	3.16
13,864.0	93.50	0.50	11,889.8	2,142.4	17.3	-1,982.0	0.48	-0.22	0.43
13,959.0	88.60	359.90	11,888.0	2,237.4	17.6	-2,069.6	5.20	-5.16	-0.63
14,054.0	91.00	359.60	11,888.4	2,332.4	17.2	-2,157.1	2.55	2.53	-0.32
14,149.0	87.20	357.60	11,889.9	2,427.3	14.9	-2,243.7	4.52	-4.00	-2.11
14,244.0	93.10	359.00	11,889.6	2,522.2	12.1	-2,330.1	6.38	6.21	1.47
14,339.0	89.80	357.40	11,887.2	2,617.1	9.1	-2,416.5	3.86	-3.47	-1.68
14,404.0	88.50	357.60	11,888.2	2,682.1	6.3	-2,475.2	2.02	-2.00	0.31

Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West Unit 018H
Well: Red Hills West Unit 018H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 018H
TVD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
MD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,498.0	87.20	358.00	11,891.7	2,775.9	2.7	-2,560.4	1.45	-1.38	0.43
14,594.0	87.70	357.90	11,896.0	2,871.8	-0.8	-2,647.4	0.53	0.52	-0.10
14,688.0	87.20	358.70	11,900.2	2,965.6	-3.6	-2,732.9	1.00	-0.53	0.85
14,783.0	89.20	359.00	11,903.1	3,060.6	-5.5	-2,819.7	2.13	2.11	0.32
14,814.0	90.20	359.60	11,903.3	3,091.6	-5.8	-2,848.1	3.76	3.23	1.94
14,846.0	91.10	0.00	11,902.9	3,123.6	-6.0	-2,877.5	3.08	2.81	1.25
14,878.0	91.00	0.20	11,902.4	3,155.6	-5.9	-2,907.1	0.70	-0.31	0.63
14,910.0	90.40	0.20	11,902.0	3,187.6	-5.8	-2,936.6	1.88	-1.88	0.00
14,972.0	90.50	0.10	11,901.5	3,249.6	-5.6	-2,993.8	0.23	0.16	-0.16
15,068.0	92.00	1.30	11,899.4	3,345.5	-4.4	-3,082.8	2.00	1.56	1.25
15,163.0	90.90	1.00	11,897.0	3,440.5	-2.5	-3,171.0	1.20	-1.16	-0.32
15,258.0	91.10	1.90	11,895.3	3,535.4	-0.1	-3,259.5	0.97	0.21	0.95
15,353.0	89.10	1.90	11,895.2	3,630.4	3.0	-3,348.3	2.11	-2.11	0.00
15,448.0	89.90	1.40	11,896.0	3,725.3	5.7	-3,436.9	0.99	0.84	-0.53
15,543.0	88.70	359.40	11,897.1	3,820.3	6.4	-3,524.7	2.45	-1.26	-2.11
15,639.0	89.20	359.90	11,898.9	3,916.3	5.8	-3,613.0	0.74	0.52	0.52
15,734.0	92.30	359.80	11,897.7	4,011.3	5.6	-3,700.4	3.26	3.26	-0.11
15,829.0	93.70	1.60	11,892.7	4,106.1	6.7	-3,788.3	2.40	1.47	1.89
15,924.0	91.30	1.30	11,888.5	4,201.0	9.1	-3,876.7	2.55	-2.53	-0.32
16,019.0	90.90	1.70	11,886.7	4,295.9	11.6	-3,965.3	0.60	-0.42	0.42
16,114.0	90.50	3.00	11,885.6	4,390.9	15.5	-4,054.3	1.43	-0.42	1.37
16,210.0	88.70	3.30	11,886.2	4,486.7	20.8	-4,144.7	1.90	-1.88	0.31
16,242.0	88.00	3.40	11,887.2	4,518.6	22.7	-4,174.8	2.21	-2.19	0.31
16,305.0	86.50	3.00	11,890.2	4,581.5	26.2	-4,234.1	2.46	-2.38	-0.63
16,336.0	86.40	3.30	11,892.1	4,612.4	27.9	-4,263.3	1.02	-0.32	0.97
16,400.0	87.70	2.50	11,895.4	4,676.2	31.1	-4,323.4	2.38	2.03	-1.25
16,494.0	86.30	2.30	11,900.3	4,770.0	35.0	-4,411.4	1.50	-1.49	-0.21
16,584.0	84.00	1.60	11,907.9	4,859.6	38.1	-4,495.2	2.67	-2.56	-0.78
16,635.0	84.00	1.60	11,913.3	4,910.3	39.5	-4,542.5	0.00	0.00	0.00

16635.0' MD Projected to Bit - PBHL Red Hills West 018H

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
1,081.0	1,079.6	-38.5	-16.2	1081.0' MD Rig Surveys
16,635.0	11,913.3	4,910.3	39.5	16635.0' MD Projected to Bit



November 7, 2017

Survey Certification Report

STATE OF TEXAS

COUNTY OF Montgomery

I, Todd Estes, certify that I am employed by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C., and that I did on the day(s) of September 13, 2017, through October 03, 2017 conduct or supervise the taking of a SEDS Original Hole MWD Survey from a depth of 1,122 feet to a depth of 16,584 feet; that I am authorized and qualified to make this report; that this survey was conducted at the request of Mewbourne Oil Company, for the Red Hills West Unit #018H well, API # 30-025-43913 in Lea County, New Mexico; and that I have reviewed this report and find that it conforms to the principles as set forth by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

Todd Estes

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

P.O. Box 1250

Montgomery, TX 77356

Office (936) 582-7296 * Fax (936)-588-4163



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West Unit 018H
Well: Red Hills West Unit 018H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 018H
TVD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
MD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Project Lea County N.M.

Map System: US State Plane 1927 (Exact solution)
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: New Mexico East 3001

System Datum: Mean Sea Level

Site Section 8-26S-32E Red Hills West Unit 018H

Site Position:		Northing:	382,610.60 usft	Latitude:	32° 3' 1.263 N
From:	Map	Easting:	694,890.20 usft	Longitude:	103° 42' 15.502 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.33 °

Well Red Hills West Unit 018H

Well Position	+N/-S	0.0 usft	Northing:	382,610.60 usft	Latitude:	32° 3' 1.263 N
	+E/-W	0.0 usft	Easting:	694,890.20 usft	Longitude:	103° 42' 15.502 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,195.0 usft

Wellbore Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	6/28/2017	6.98	59.88	47,802.20323338

Design Original Hole

Audit Notes:		Phase:	ACTUAL	Tie On Depth:	0.0
Version:	1.0				
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	202.78	



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lee County N.M.
Site: Section 8-26S-32E Red Hills West Unit 018H
Well: Red Hills West Unit 018H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 018H
TVD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
MD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey Program Date 10/3/2017

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
102.0	1,081.0	Rlg Survey (Original Hole)	MWD	MWD v3: standard declination
1,122.0	16,835.0	MWD Survey (Original Hole)	MWD	MWD v3: standard declination

Survey

MD (usft)	Inc (")	Azi (azimuth) (")	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (")
1,081.0	4.20	203.60	1,079.6	-38.5	-16.2	41.7	202.78
1,122.0	4.10	199.10	1,120.5	-41.3	-17.2	44.7	202.89
1,217.0	1.50	167.20	1,215.4	-45.7	-18.1	49.1	201.60
1,312.0	1.40	128.40	1,310.4	-47.6	-16.9	50.5	199.54
1,407.0	0.90	114.10	1,405.4	-48.6	-15.3	51.0	197.47
1,503.0	0.50	100.60	1,501.4	-49.0	-14.2	51.0	196.16
1,598.0	0.50	85.20	1,596.4	-49.1	-13.4	50.9	195.26
1,693.0	0.40	89.20	1,691.3	-49.0	-12.6	50.6	194.46
1,786.0	0.60	65.50	1,786.3	-48.8	-11.9	50.2	193.66
1,882.0	0.30	20.40	1,880.3	-48.4	-11.3	49.7	193.18
1,978.0	0.50	28.40	1,976.3	-47.8	-11.0	49.0	193.01
2,073.0	0.70	38.00	2,071.3	-46.9	-10.5	48.1	192.59
2,167.0	0.70	80.30	2,165.3	-46.4	-9.6	47.4	191.85
2,265.0	0.90	69.40	2,263.3	-46.3	-8.2	47.0	190.05
2,360.0	1.30	99.30	2,358.3	-46.5	-8.4	46.9	187.84
2,455.0	1.50	94.50	2,453.3	-46.7	-4.1	46.9	185.01
2,550.0	0.30	36.90	2,548.3	-46.6	-2.7	46.7	183.32
2,646.0	0.40	294.00	2,644.3	-46.3	-2.9	46.4	183.53
2,741.0	0.50	289.90	2,739.3	-46.0	-3.6	46.2	184.41
2,835.0	0.50	295.30	2,833.3	-45.7	-4.3	45.9	185.39
2,929.0	0.40	307.10	2,927.2	-45.3	-4.9	45.6	186.22



November 7, 2017

New Mexico Energy, Minerals and Natural Resources Department
Attn: Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Attn: Jackie Lathan

Re: Mewbourne Oil Company
Red Hills West Unit #018H
WC-025 G-08 S263205N; Upper Wolfcamp
Lea County, New Mexico
API# 30-025-43913

Enclosed please find the original and one (1) copy of the survey performed on the reference well by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C. Other information required by your office is as follows:

<u>Name & Title</u>	<u>Drainhole No.</u>	<u>Survey Depths</u>	<u>Dates Performed</u>	<u>Type Survey</u>
Keith Broussard	Original Hole	1,122ft. to 16,584ft.	09-13-17 to 10-03-17	MWD Survey

A certified plat on which the bottom-hole location is oriented to both surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.


Todd Estes

Enclosures

CC:

Mewbourne Oil Company
Attn: Frosty Lathan
P.O. Box 5720
Hobbs, NM 88241

Mewbourne Oil Company
Attn: Robin Terrell
P.O. Box 5720
Hobbs, NM 88241

NMEMaNRD\Mewbourne Oil Company\Red Hills West Unit #018\M171080

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.
P.O. Box 1250
Montgomery, TX 77356
Office (936) 582-7296 * Fax (936)-588-4163



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West Unit 018H
Well: Red Hills West Unit 018H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 018H
TVD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
MD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
3,024.0	0.30	312.20	3,022.2	-45.0	-5.4	45.3	188.84
3,120.0	0.20	280.00	3,118.2	-44.8	-5.7	45.1	187.31
3,215.0	0.00	277.00	3,213.2	-44.7	-5.9	45.1	187.52
3,310.0	0.40	52.10	3,308.2	-44.5	-5.6	44.9	187.22
3,405.0	0.60	61.10	3,403.2	-44.1	-4.9	44.4	186.40
3,500.0	0.40	39.80	3,498.2	-43.6	-4.3	43.8	185.63
3,595.0	0.40	21.50	3,593.2	-43.0	-4.0	43.2	185.26
3,690.0	0.30	67.30	3,688.2	-42.6	-3.6	42.8	184.84
3,784.0	0.70	102.50	3,782.2	-42.7	-2.8	42.7	183.79
3,879.0	0.70	101.20	3,877.2	-42.9	-1.7	42.9	182.26
3,974.0	1.20	115.00	3,972.2	-43.4	-0.2	43.4	180.29
4,069.0	1.70	127.90	4,067.2	-44.7	1.8	44.7	177.70
4,164.0	0.90	86.70	4,162.2	-45.5	3.7	45.7	175.41
4,250.0	1.00	28.00	4,248.1	-44.8	4.7	45.1	174.04
4,385.0	1.20	24.80	4,383.1	-42.5	5.8	42.9	172.20
4,480.0	0.60	101.30	4,478.1	-41.7	6.7	42.2	170.83
4,575.0	0.70	135.20	4,573.1	-42.2	7.6	42.9	169.76
4,670.0	0.90	143.10	4,666.1	-43.2	8.5	44.0	168.89
4,765.0	0.90	153.50	4,763.1	-44.5	9.3	45.4	168.24
4,860.0	0.40	177.20	4,858.1	-45.5	9.6	46.5	168.07
4,956.0	0.30	195.50	4,954.1	-46.1	9.6	47.0	168.27
5,051.0	0.10	184.10	5,049.1	-46.4	9.5	47.3	168.44
5,146.0	0.20	168.40	5,144.1	-46.6	9.5	47.6	168.46
5,241.0	0.10	184.80	5,239.1	-46.9	9.5	47.8	168.49
5,336.0	0.00	5.30	5,334.1	-47.0	9.5	47.9	168.52
5,432.0	0.00	307.10	5,430.1	-47.0	9.5	47.9	168.52
5,527.0	0.20	329.60	5,525.1	-46.8	9.5	47.8	168.58



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West Unit 018H
Well: Red Hills West Unit 018H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 018H
TVD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
MD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
5,622.0	0.20	297.50	5,620.1	-46.6	9.2	47.5	168.80
5,716.0	0.30	282.50	5,714.1	-46.5	8.8	47.3	169.23
5,812.0	0.20	323.40	5,810.1	-46.3	8.5	47.0	169.80
5,906.0	0.30	331.30	5,904.1	-45.9	8.3	46.7	169.79
6,001.0	0.20	336.30	5,999.1	-45.6	8.1	46.3	169.92
6,096.0	0.20	34.80	6,094.1	-45.3	8.1	46.0	169.82
6,192.0	0.40	85.30	6,190.1	-45.1	8.6	45.9	169.26
6,287.0	0.40	105.90	6,285.1	-45.2	9.2	46.1	168.48
6,382.0	0.40	131.50	6,380.1	-45.5	9.6	46.5	167.87
6,477.0	0.40	135.80	6,475.1	-45.9	10.3	47.1	167.42
6,572.0	0.40	147.70	6,570.1	-48.4	10.7	47.7	167.07
6,667.0	0.40	167.70	6,665.1	-47.1	10.9	48.3	166.95
6,762.0	0.10	258.20	6,760.1	-47.4	10.9	48.6	167.05
6,857.0	0.20	167.10	6,855.1	-47.6	10.9	48.8	167.15
6,952.0	0.40	178.00	6,950.1	-48.1	10.9	49.3	167.22
7,047.0	0.50	158.40	7,045.1	-48.8	11.1	50.0	167.22
7,142.0	0.60	140.50	7,140.0	-49.7	11.6	51.0	166.81
7,236.0	0.90	144.40	7,234.0	-50.8	12.5	52.3	166.18
7,331.0	1.10	150.10	7,329.0	-52.2	13.4	53.9	165.62
7,426.0	1.40	207.80	7,424.0	-54.0	13.3	55.6	166.17
7,520.0	1.30	231.80	7,518.0	-55.7	11.9	56.9	167.92
7,615.0	0.60	229.90	7,613.0	-56.7	10.7	57.7	169.32
7,709.0	0.60	218.70	7,707.0	-57.4	10.0	58.2	170.10
7,804.0	0.60	188.00	7,802.0	-58.2	9.6	59.0	170.62
7,900.0	0.80	203.90	7,897.9	-59.4	9.3	60.1	171.11
7,994.0	0.90	202.70	7,991.9	-60.6	8.7	61.3	171.80
8,090.0	1.00	192.00	8,087.9	-62.2	8.3	62.7	172.42



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West Unit 018H
Well: Red Hills West Unit 018H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 018H
TVD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
MD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
8,185.0	0.70	191.00	8,182.9	-63.5	8.0	64.0	172.84
8,260.0	0.70	185.10	8,277.9	-64.7	7.8	65.2	173.10
8,376.0	0.90	192.20	8,373.9	-66.0	7.6	66.4	173.42
8,471.0	1.10	189.00	8,468.9	-67.6	7.3	68.0	173.83
8,567.0	0.80	191.00	8,564.9	-69.3	7.0	69.6	174.21
8,661.0	1.00	194.60	8,658.9	-70.8	6.7	71.1	174.61
8,756.0	0.60	114.80	8,753.8	-71.8	6.9	72.1	174.50
8,851.0	1.00	116.90	8,848.8	-72.4	8.1	72.8	173.61
8,946.0	0.90	132.60	8,943.8	-73.3	9.4	73.9	172.69
9,041.0	1.00	163.50	9,038.8	-74.6	10.2	75.3	172.22
9,136.0	0.50	224.10	9,133.8	-75.7	10.1	76.3	172.37
9,231.0	0.70	239.40	9,228.8	-76.3	9.3	76.8	173.02
9,327.0	1.10	215.90	9,324.8	-77.3	8.3	77.7	173.87
9,422.0	0.40	281.40	9,419.8	-78.0	7.4	78.3	174.55
9,517.0	0.50	275.20	9,514.8	-77.9	6.7	78.2	175.08
9,612.0	0.80	259.30	9,609.8	-78.0	5.6	78.2	175.87
9,706.0	0.70	261.70	9,703.8	-78.2	4.4	78.3	176.76
9,801.0	0.80	260.50	9,798.8	-78.4	3.2	78.4	177.67
9,896.0	1.10	249.70	9,893.7	-78.8	1.7	78.8	178.78
9,992.0	0.50	194.50	9,989.7	-79.5	0.7	79.6	179.46
10,087.0	0.50	161.00	10,084.7	-80.3	0.7	80.3	179.47
10,182.0	0.40	133.90	10,179.7	-80.9	1.1	80.9	179.21
10,277.0	0.70	137.60	10,274.7	-81.6	1.8	81.6	178.77
10,372.0	1.20	149.80	10,369.7	-82.9	2.6	82.9	178.17
10,467.0	1.30	169.60	10,464.7	-84.8	3.3	84.9	177.74
10,562.0	1.10	149.80	10,559.7	-86.6	4.0	86.7	177.36
10,657.0	2.50	88.70	10,654.6	-87.4	6.5	87.6	175.73



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West Unit 018H
Well: Red Hills West Unit 018H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 018H
TVD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
MD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
10,752.0	2.70	94.30	10,749.5	-87.5	10.8	88.2	172.94
10,847.0	2.10	91.50	10,844.4	-87.7	14.8	88.9	170.42
10,942.0	1.80	82.90	10,939.4	-87.6	16.0	89.4	168.37
11,036.0	1.50	86.20	11,033.3	-87.3	20.7	89.7	166.65
11,132.0	0.70	131.30	11,129.3	-87.6	22.4	90.4	165.65
11,202.6	0.65	167.19	11,199.9	-88.3	22.8	91.2	165.51
B.B. Red Hill West 18H							
11,226.0	0.70	178.40	11,223.3	-88.6	22.9	91.5	165.53
11,257.0	0.90	196.40	11,254.3	-89.0	22.8	91.9	165.63
11,288.0	0.90	220.00	11,285.3	-89.4	22.6	92.2	165.83
11,320.0	1.20	31.30	11,317.3	-89.3	22.6	92.1	165.81
11,352.0	4.00	40.80	11,349.3	-88.2	23.5	91.3	165.09
11,384.0	6.90	19.00	11,381.1	-85.5	24.8	89.1	163.80
11,416.0	11.20	8.10	11,412.7	-80.6	25.9	84.7	162.19
11,447.0	15.60	9.70	11,442.9	-73.5	27.0	78.3	159.82
11,479.0	21.10	11.70	11,473.2	-63.6	28.9	69.9	155.56
11,510.0	21.80	9.90	11,502.1	-52.5	31.0	61.0	149.40
11,542.0	23.60	7.40	11,531.6	-40.3	32.9	52.0	140.76
11,574.0	28.30	6.80	11,560.4	-26.4	34.6	43.5	127.34
11,605.0	33.40	5.00	11,587.0	-10.6	36.2	37.7	106.30
11,637.0	37.00	3.80	11,613.1	7.8	37.6	38.4	78.31
11,669.0	38.50	2.70	11,638.4	27.3	38.7	47.4	54.78
11,701.0	39.90	2.50	11,663.2	47.6	39.7	61.9	39.83
11,733.0	41.80	1.60	11,687.4	68.5	40.4	79.5	30.55
11,764.0	46.50	357.70	11,709.7	90.0	40.2	98.6	24.08
11,795.0	48.70	358.40	11,731.3	113.7	39.4	120.3	19.14
11,827.0	49.20	357.20	11,751.6	137.0	38.5	142.3	15.71



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West Unit 018H
Well: Red Hills West Unit 018H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 018H
TVD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
MD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
11,859.0	53.00	359.00	11,771.7	161.9	37.7	166.2	13.12
11,891.0	58.60	0.10	11,789.7	188.4	37.5	192.1	11.27
11,922.0	63.60	358.70	11,804.7	215.5	37.2	218.7	9.80
11,954.0	65.80	357.20	11,818.4	244.4	36.2	247.0	8.43
11,990.0	68.80	356.20	11,832.3	277.5	34.3	279.6	7.04
12,062.0	74.10	356.50	11,855.2	345.6	29.9	346.9	4.95
12,094.0	76.00	356.00	11,863.4	376.5	27.9	377.5	4.24
12,125.0	78.50	356.30	11,870.3	406.6	25.9	407.5	3.64
12,157.0	80.40	355.90	11,876.1	438.0	23.8	438.7	3.10
12,189.0	81.90	354.60	11,881.1	469.5	21.1	470.0	2.58
12,220.0	84.50	354.90	11,884.7	500.2	18.3	500.5	2.10
12,252.0	87.00	355.30	11,887.1	532.0	15.6	532.2	1.68
12,294.3	87.95	355.80	11,889.0	574.1	12.3	574.3	1.23
LP Red Hills West 018H							
12,346.0	89.10	356.40	11,890.3	625.7	8.8	625.7	0.81
12,441.0	87.10	358.90	11,893.4	720.5	4.9	720.5	0.36
12,536.0	89.30	0.50	11,896.4	815.5	4.4	815.5	0.31
12,631.0	92.40	1.60	11,895.0	910.4	6.1	910.4	0.39
12,726.0	91.00	1.40	11,892.2	1,005.3	8.6	1,005.4	0.49
12,821.0	91.30	1.90	11,890.3	1,100.3	11.4	1,100.3	0.59
12,916.0	90.20	2.00	11,889.0	1,195.2	14.6	1,195.3	0.70
13,011.0	89.30	1.90	11,889.5	1,290.2	17.6	1,290.3	0.79
13,106.0	88.70	0.60	11,891.1	1,385.1	19.9	1,385.3	0.82
13,201.0	90.10	0.80	11,892.1	1,480.1	21.1	1,480.3	0.82
13,296.0	90.80	2.10	11,891.4	1,575.1	23.5	1,575.3	0.85
13,390.0	91.20	0.10	11,889.7	1,669.0	25.3	1,669.2	0.87
13,486.0	87.30	359.90	11,891.0	1,765.0	25.3	1,765.2	0.82



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West Unit 018H
Well: Red Hills West Unit 018H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 018H
TVD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
MD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
13,581.0	87.00	357.60	11,895.7	1,859.9	23.4	1,860.0	0.72
13,676.0	89.70	357.10	11,898.4	1,954.7	19.1	1,954.8	0.56
13,771.0	93.70	0.10	11,895.6	2,049.6	16.8	2,049.7	0.47
13,864.0	93.50	0.50	11,889.8	2,142.4	17.3	2,142.5	0.46
13,959.0	88.60	359.90	11,888.0	2,237.4	17.6	2,237.5	0.45
14,054.0	91.00	359.60	11,888.4	2,332.4	17.2	2,332.5	0.42
14,149.0	87.20	357.60	11,889.9	2,427.3	14.9	2,427.4	0.35
14,244.0	93.10	359.00	11,889.6	2,522.2	12.1	2,522.3	0.27
14,339.0	89.80	357.40	11,887.2	2,617.1	9.1	2,617.2	0.20
14,404.0	88.60	357.60	11,886.2	2,682.1	6.3	2,682.1	0.13
14,498.0	87.20	358.00	11,891.7	2,775.9	2.7	2,775.9	0.05
14,594.0	87.70	357.90	11,896.0	2,871.8	-0.8	2,871.8	359.98
14,688.0	87.20	358.70	11,900.2	2,965.6	-3.6	2,965.6	359.93
14,783.0	89.20	359.00	11,903.1	3,060.6	-5.5	3,060.6	359.90
14,814.0	90.20	359.60	11,903.3	3,091.6	-5.8	3,091.6	359.89
14,846.0	91.10	0.00	11,902.9	3,123.6	-6.0	3,123.6	359.89
14,878.0	91.00	0.20	11,902.4	3,155.6	-5.9	3,155.6	359.89
14,910.0	90.40	0.20	11,902.0	3,187.6	-5.6	3,187.6	359.90
14,972.0	90.50	0.10	11,901.5	3,249.6	-5.6	3,249.6	359.90
15,068.0	92.00	1.30	11,899.4	3,345.5	-4.4	3,345.5	359.92
15,163.0	90.90	1.00	11,897.0	3,440.5	-2.5	3,440.5	359.96
15,258.0	91.10	1.90	11,896.3	3,535.4	-0.1	3,535.4	360.00
15,353.0	89.10	1.90	11,895.2	3,630.4	3.0	3,630.4	0.05
15,448.0	89.90	1.40	11,896.0	3,725.3	5.7	3,725.3	0.09
15,543.0	88.70	359.40	11,897.1	3,820.3	6.4	3,820.3	0.10
15,639.0	89.20	359.90	11,898.9	3,916.3	5.8	3,916.3	0.09
15,734.0	92.30	359.60	11,897.7	4,011.3	5.6	4,011.3	0.08



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-28S-32E Red Hills West Unit 018H
Well: Red Hills West Unit 018H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 018H
TVD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
MD Reference: 3195 + 27 @ 3222.0usft (Patterson 231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
15,829.0	93.70	1.80	11,892.7	4,106.1	6.7	4,106.1	0.09
15,924.0	91.30	1.30	11,886.5	4,201.0	9.1	4,201.0	0.12
16,019.0	90.90	1.70	11,886.7	4,295.9	11.8	4,296.0	0.16
16,114.0	90.50	3.00	11,885.6	4,390.9	15.5	4,390.9	0.20
16,210.0	88.70	3.30	11,886.2	4,486.7	20.8	4,486.8	0.27
16,242.0	88.00	3.40	11,887.2	4,518.6	22.7	4,518.7	0.29
16,305.0	88.50	3.00	11,890.2	4,581.5	26.2	4,581.5	0.33
16,336.0	88.40	3.30	11,892.1	4,612.4	27.9	4,612.4	0.35
16,400.0	87.70	2.50	11,895.4	4,676.2	31.1	4,676.3	0.38
16,494.0	88.30	2.30	11,900.3	4,770.0	35.0	4,770.1	0.42
16,584.0	84.00	1.60	11,907.9	4,859.6	38.1	4,859.7	0.45
16,635.0	84.00	1.60	11,913.3	4,910.3	39.5	4,910.5	0.46

16635.0' MD Projected to Bit - PBHL Red Hills West 018H

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N-S (usft)	+E-W (usft)	Comment
16,635.0	11,913.3	4,910.3	39.5	16635.0' MD Projected to Bit