

Results of Directional Survey

API number:	30-025-40442		
OGRID:		Operator:	MEWBOURNE OIL CO
		Property:	RED HILLS WEST 8 FEDERAL COM # 3H

surface	ULSTR:	M	08	T 26S	R 32E
				150 FSL	890 FWL

BH Loc	ULSTR:	D	08	T 26S	R 32E
13479	MD	8851.5	TVD	282 FNL	964 FWL
				4998 FSL	

Top Perf/OH	ULSTR:	M	08	T 26S	R 32E
9208	MD	8870.5	TVD	730 FSL	932 FWL

Bot Perf/OH	ULSTR:	D	08	T 26S	R 32E
13440	MD	8854.2	TVD	321 FNL	962 FWL
				4959 FSL	

	MD	N/S	E/W	VD
	9091	465.00	40.20	8852.9
TOP PERFS/OH	9208	580.45	41.65	8870.50
	9212	584.40	41.70	8871.10
	13432	4801.30	71.80	8854.80
BOT PERFS/OH	13440	4809.28	72.12	8854.24
	13479	4848.20	73.70	8851.50

NEXT TO LAST	13432	4801.30	71.80	8854.80
LAST READING	13479	4848.20	73.70	8851.50
TD	13479	4848.20	73.70	8851.50

Surface Location	150	FS	890	FW
Projected BHL	4998	FS	964	FW
Location of				
Top Perfs/OH	730	FS	932	FW
Bottom Perfs/OH	4959	FS	962	FW

SUMMARY of Subsurface Locations

Surface Location	M-08-26S-32E	150	FS	890	FW	Vert. Depth
Top Perfs/OH	M-08-26S-32E	730	FS	932	FW	8870.50
Bottom Perfs/OH	D-08-26S-32E	4959	FS	962	FW	8854.24
Projected TD	D-08-26S-32E	4998	FS	964	FW	8851.50

JUN 07 2012

OPERATOR
WELL/LEASE
COUNTY

MEWBOURNE OIL COMPANY
RED HILLS WEST UNIT 8 #3H
LEA

075-0084

Federal Com

STATE OF NEW MEXICO
DEVIATION REPORT

386	0.73
1,282	2.10
1,563	1.28
1,912	0.80
2,294	1.66
2,707	0.53
3,120	0.95
3,534	0.81
3,947	2.59
4,106	3.31
4,170	3.58
4,348	2.45
4,722	1.24
5,135	1.00
5,549	1.28
5,995	1.31
6,377	2.13
6,759	1.54
7,111	1.63
7,458	1.76

SUR: M-08-26s-32e, 150/S & 890/W
BHL: D-08-26s-32e, 4998/S & 964/W
API # 30-025-40442

STATE OF TEXAS

COUNTY OF MIDLAND

BY: *Kyle Hollingsworth*

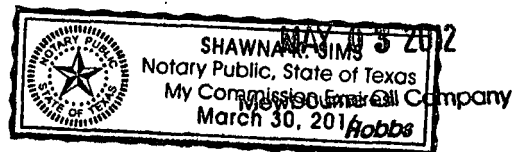
The foregoing instrument was acknowledged before me on 4/30/12, by
Kyle Hollingsworth on behalf of Patterson-UTL Drilling Company LLC.

Shawna K. Sims

Notary Public for Midland County, Texas

My Commission Expires:

Received





Company: Mewbourne Oil Co.
 Lease/Well: Red Hills West Unit 8 #3H
 Location: 30 Miles W Of Jal, New Mexico
 Rig Name: Patterson #75
 State/Country: New Mexico/Edm Lea
 Latitude: 32.05, Longitude: -103.70
 GRID North is 0.33 Degrees East of True North
 VS-Azi: 0.00 Degrees



SUR: M-08-26s-32e, 150/S & 890/W
 BHL: D-08-26s-32e, 4998/S & 964/W
 API # 30-025-40442

Depth Reference : RKB=23 Ft Elevation=3194 Ft

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: red hills west unit 8 #3h_ed.ut

Minimum Curvature Method

Report Date/Time: 3/24/2012 / 01:01

Vaughn Energy Services

Midland, TX

432-563-5444

Zach Garcia

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.31	354.32	100.00	0.27	-0.03	0.27	0.27	354.32	0.31
200.00	0.38	358.12	200.00	0.86	-0.06	0.86	0.86	355.76	0.07
300.00	0.53	5.17	299.99	1.65	-0.03	1.65	1.65	358.87	0.17
400.00	0.99	9.76	399.99	2.97	0.16	2.97	2.98	3.02	0.46
500.00	1.16	13.68	499.97	4.81	0.54	4.81	4.84	6.44	0.18
600.00	1.44	23.48	599.94	6.95	1.28	6.95	7.07	10.47	0.36
700.00	1.86	25.86	699.90	9.56	2.49	9.56	9.88	14.61	0.42
800.00	1.83	26.89	799.85	12.44	3.92	12.44	13.05	17.49	0.04
900.00	2.05	28.53	899.79	15.43	5.49	15.43	16.38	19.59	0.22
1000.00	2.21	30.53	999.72	18.66	7.33	18.66	20.05	21.43	0.18
1100.00	2.06	32.89	1099.65	21.83	9.28	21.83	23.72	23.03	0.17
1200.00	1.90	46.13	1199.59	24.50	11.46	24.50	27.04	25.06	0.48
1300.00	1.59	66.69	1299.55	26.20	13.93	26.20	29.67	28.00	0.70
1400.00	1.25	83.17	1399.52	26.88	16.28	26.88	31.42	31.21	0.53
1500.00	1.17	94.08	1499.50	26.93	18.38	26.93	32.61	34.32	0.24
1600.00	0.79	108.12	1599.48	26.64	20.06	26.64	33.35	36.97	0.44
1700.00	0.80	110.57	1699.47	26.18	21.37	26.18	33.80	39.22	0.03
1800.00	0.60	109.79	1799.46	25.76	22.51	25.76	34.21	41.15	0.20
1900.00	0.43	101.61	1899.46	25.51	23.37	25.51	34.60	42.50	0.19
2000.00	0.35	83.77	1999.46	25.47	24.04	25.47	35.02	43.35	0.14
2100.00	0.58	64.61	2099.45	25.72	24.80	25.72	35.73	43.96	0.27
2200.00	0.85	41.42	2199.45	26.49	25.75	26.49	36.94	44.19	0.40
2300.00	1.22	20.54	2299.43	28.04	26.61	28.04	38.66	43.50	0.52
2400.00	1.33	22.72	2399.41	30.11	27.43	30.11	40.73	42.34	0.12
2500.00	0.77	34.01	2499.39	31.73	28.26	31.73	42.49	41.68	0.59
2600.00	0.44	46.14	2599.38	32.56	28.91	32.56	43.54	41.60	0.35
2700.00	0.39	50.00	2699.38	33.05	29.45	33.05	44.27	41.71	0.06
2800.00	0.35	50.60	2799.38	33.46	29.95	33.46	44.90	41.83	0.05
2900.00	0.66	53.87	2899.37	33.99	30.64	33.99	45.76	42.04	0.31
3000.00	0.67	55.12	2999.37	34.66	31.58	34.66	46.89	42.34	0.02
3100.00	0.55	57.87	3099.36	35.24	32.46	35.24	47.92	42.65	0.12
3200.00	0.38	60.93	3199.36	35.66	33.16	35.66	48.69	42.92	0.17
3300.00	1.45	65.45	3299.34	36.35	34.60	36.35	50.18	43.59	1.07
3400.00	1.30	69.41	3399.32	37.27	36.81	37.27	52.38	44.65	0.17

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
3500.00	1.20	72.38	3499.29	37.98	38.87	37.98	54.35	45.66	0.13
3600.00	1.05	82.51	3599.27	38.42	40.77	38.42	56.02	46.70	0.24
3700.00	1.81	95.87	3699.24	38.38	43.25	38.38	57.82	48.42	0.82
3800.00	2.44	102.97	3799.17	37.74	46.90	37.74	60.20	51.17	0.68
3900.00	2.39	107.78	3899.08	36.63	50.95	36.63	62.75	54.29	0.21
4000.00	3.01	123.34	3998.97	34.55	55.13	34.55	65.06	57.93	0.96
4100.00	3.42	124.42	4098.82	31.41	59.79	31.41	67.54	62.28	0.41
4200.00	3.17	125.98	4198.65	28.10	64.49	28.10	70.35	66.46	0.27
4300.00	2.60	126.12	4298.52	25.13	68.57	25.13	73.03	69.87	0.57
4400.00	2.09	128.71	4398.44	22.66	71.82	22.66	75.31	72.49	0.52
4500.00	1.95	130.31	4498.38	20.42	74.54	20.42	77.29	74.68	0.15
4600.00	1.69	132.82	4598.33	18.31	76.92	18.31	79.07	76.61	0.27
4700.00	1.34	134.18	4698.29	16.50	78.84	16.50	80.55	78.18	0.35
4800.00	1.13	136.70	4798.27	14.96	80.36	14.96	81.74	79.45	0.21
4900.00	0.94	143.65	4898.25	13.58	81.52	13.58	82.64	80.54	0.23
5000.00	0.80	155.17	4998.24	12.29	82.30	12.29	83.21	81.51	0.23
5100.00	0.83	155.73	5098.23	11.00	82.89	11.00	83.62	82.44	0.03
5200.00	0.71	162.43	5198.22	9.75	83.37	9.75	83.94	83.33	0.15
5300.00	0.59	171.56	5298.21	8.65	83.63	8.65	84.08	84.09	0.16
5400.00	0.35	185.54	5398.21	7.84	83.68	7.84	84.05	84.65	0.26
5500.00	0.39	205.06	5498.21	7.22	83.51	7.22	83.82	85.06	0.13
5600.00	0.47	225.51	5598.21	6.63	83.07	6.63	83.33	85.44	0.17
5700.00	0.46	232.69	5698.20	6.09	82.46	6.09	82.68	85.77	0.06
5800.00	0.53	234.70	5798.20	5.58	81.76	5.58	81.95	86.09	0.07
5900.00	0.60	243.60	5898.19	5.08	80.91	5.08	81.07	86.41	0.11
6000.00	0.92	255.13	5998.18	4.64	79.67	4.64	79.80	86.66	0.35
6100.00	1.01	253.81	6098.17	4.19	78.04	4.19	78.16	86.93	0.10
6200.00	1.35	251.50	6198.15	3.57	76.08	3.57	76.16	87.31	0.34
6300.00	1.50	250.11	6298.12	2.75	73.74	2.75	73.79	87.86	0.15
6400.00	1.56	249.09	6398.08	1.82	71.24	1.82	71.26	88.53	0.07
6500.00	1.57	248.53	6498.05	0.84	68.69	0.84	68.70	89.30	0.02
6600.00	1.54	246.89	6598.01	-0.19	66.18	-0.19	66.18	90.17	0.05
6700.00	1.78	245.75	6697.97	-1.36	63.53	-1.36	63.54	91.22	0.24
6800.00	1.63	243.80	6797.92	-2.62	60.84	-2.62	60.90	92.47	0.16
6900.00	1.79	242.91	6897.88	-3.96	58.18	-3.96	58.31	93.89	0.16
7000.00	1.73	239.10	6997.83	-5.44	55.49	-5.44	55.76	95.60	0.13
7100.00	1.79	237.01	7097.78	-7.07	52.89	-7.07	53.36	97.61	0.09
7200.00	1.86	230.91	7197.73	-8.94	50.33	-8.94	51.11	100.07	0.21
7300.00	1.71	224.91	7297.68	-11.02	48.01	-11.02	49.26	102.93	0.24
7400.00	1.45	219.42	7397.65	-13.06	46.15	-13.06	47.96	105.80	0.31
7500.00	1.52	210.29	7497.61	-15.18	44.68	-15.18	47.19	108.77	0.25
7600.00	1.24	200.63	7597.58	-17.34	43.63	-17.34	46.95	111.68	0.36
7700.00	1.39	197.51	7697.56	-19.51	42.88	-19.51	47.11	114.47	0.16
7800.00	1.61	190.81	7797.52	-22.05	42.25	-22.05	47.66	117.55	0.28
7900.00	1.93	182.74	7897.48	-25.11	41.91	-25.11	48.85	120.92	0.41
8000.00	1.85	178.97	7997.42	-28.40	41.86	-28.40	50.58	124.16	0.15
8100.00	1.69	174.85	8097.37	-31.48	42.02	-31.48	52.50	126.84	0.21
8138.00	1.52	170.87	8135.36	-32.54	42.15	-32.54	53.24	127.67	0.52

HORIZONTAL DISPLACEMENT IS
53.24 FEET AT 127.67 DEGREES

Mewbourne Oil Co

Eddy County, New Mexico

Sec 8, T26S, R32E

Red Hills West 8 Federal Com #3H

Wellbore #1

SUR: M-08-26s-32e, 150/S & 890/W
BHL: D-08-26s-32e, 4998/S & 964/W
API # 30-025-40442

Survey: MWD

DDC Survey Report

09 April, 2012



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Red Hills West 8 Federal Com #3H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3212.0usft (Patterson #45)
Site:	Sec 8, T26S, R32E	MD Reference:	WELL @ 3212.0usft (Patterson #45)
Well:	Red Hills West 8 Federal Com #3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project	Eddy County, New Mexico		
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	Sec 8, T26S, R32E		
Site Position:		Northing:	382,678.18 usft
From:	Map	Easting:	696,810.11 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 3' 1.821 N
		Longitude:	103° 41' 53.190 W
		Grid Convergence:	0.34 °

Well	Red Hills West 8 Federal Com #3H		
Well Position	+N/-S	0.0 usft	Northing: 382,666.14 usft
	+E/-W	0.0 usft	Easting: 695,450.50 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 3' 1.780 N
		Longitude:	103° 42' 8.988 W
		Ground Level:	3,194.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010	3/13/2012	(°)
			7.54
			Dip Angle (°)
			59.98
			Field Strength (nT)
			48,424

Design	Wellbore #1		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0

Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	0.00

Survey Program	Date: 4/9/2012		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
100.0	8,138.0	GYRO (Wellbore #1)	Good_gyro
8,269.0	13,479.0	MWD (Wellbore #1)	MWD default
			Description:
			Good Gyro
			MWD - Standard

Survey										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate	
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	
Tie In @ 8138' MD / 8135' TVD										
8,138.0	1.52	170.87	8,135.4	-32.5	42.2	-32.5	0.00	0.00	0.00	
8,269.0	3.70	352.40	8,266.3	-30.0	41.9	-30.0	3.98	1.66	-136.24	
8,301.0	7.30	358.80	8,298.1	-27.0	41.7	-27.0	11.39	11.25	20.00	
8,333.0	10.30	3.90	8,329.8	-22.1	41.8	-22.1	9.68	9.38	15.94	
8,365.0	14.10	3.20	8,361.0	-15.4	42.3	-15.4	11.88	11.88	-2.19	
8,397.0	16.60	1.60	8,391.9	-6.9	42.6	-6.9	7.92	7.81	-5.00	
8,429.0	18.10	357.70	8,422.4	2.6	42.5	2.6	5.93	4.69	-12.19	
8,461.0	20.50	356.70	8,452.6	13.2	42.0	13.2	7.57	7.50	-3.13	
8,493.0	22.90	358.80	8,482.4	25.0	41.6	25.0	7.88	7.50	6.56	

DDC Survey Report



Company: Mewbourne Oil Co
Project: Eddy County, New Mexico
Site: Sec 8, T26S, R32E
Well: Red Hills West 8 Federal Com #3H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Red Hills West 8 Federal Com #3H
TVD Reference: WELL @ 3212.0usft (Patterson #45)
MD Reference: WELL @ 3212.0usft (Patterson #45)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000 1 Single User Db

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)
8,524.0	25.60	1.90	8,510.6	37.8	41.6	37.8	9.63	8.71	10.00
8,556.0	28.40	5.40	8,539.1	52.2	42.6	52.2	10.06	8.75	10.94
8,588.0	30.80	4.90	8,567.0	68.0	44.0	68.0	7.54	7.50	-1.56
8,619.0	33.30	3.50	8,593.2	84.4	45.2	84.4	8.41	8.06	-4.52
8,651.0	36.50	1.90	8,619.5	102.7	46.1	102.7	10.40	10.00	-5.00
8,682.0	39.40	0.20	8,643.9	121.7	46.4	121.7	9.94	9.35	-5.48
8,714.0	42.10	359.80	8,668.2	142.6	46.4	142.6	8.48	8.44	-1.25
8,744.0	45.20	359.80	8,689.9	163.3	46.3	163.3	10.33	10.33	0.00
Crossed Hard Line @ 8770' MD / 8708' TVD									
8,770.0	48.21	359.14	8,707.7	182.2	46.1	182.2	11.71	11.56	-2.53
8,776.0	48.90	359.00	8,711.7	186.7	46.1	186.7	11.71	11.57	-2.38
8,807.0	52.40	359.00	8,731.3	210.7	45.7	210.7	11.29	11.29	0.00
8,839.0	54.70	358.40	8,750.3	236.4	45.1	236.4	7.34	7.19	-1.88
8,870.0	57.20	358.30	8,767.7	262.1	44.3	262.1	8.07	8.06	-0.32
8,902.0	60.20	358.60	8,784.3	289.4	43.6	289.4	9.41	9.38	0.94
8,934.0	63.80	358.60	8,799.3	317.7	42.9	317.7	11.25	11.25	0.00
8,964.0	67.10	358.80	8,811.8	345.0	42.3	345.0	11.02	11.00	0.67
8,996.0	70.10	358.80	8,823.5	374.7	41.7	374.7	9.38	9.38	0.00
9,028.0	70.50	358.60	8,834.2	404.9	41.0	404.9	1.38	1.25	-0.63
9,059.0	72.50	359.10	8,844.1	434.3	40.4	434.3	6.63	6.45	1.61
9,091.0	75.40	0.20	8,852.9	465.0	40.2	465.0	9.65	9.06	3.44
9,212.0	87.30	1.20	8,871.1	584.4	41.7	584.4	9.87	9.83	0.83
9,243.0	91.20	0.90	8,871.5	615.4	42.2	615.4	12.62	12.58	-0.97
9,275.0	91.90	1.40	8,870.6	647.4	42.9	647.4	2.69	2.19	1.56
9,338.0	90.80	0.70	8,869.2	710.3	44.0	710.3	2.07	-1.75	-1.11
9,401.0	91.20	0.50	8,868.1	773.3	44.7	773.3	0.71	0.63	-0.32
9,466.0	90.20	0.70	8,867.3	838.3	45.4	838.3	1.57	-1.54	0.31
9,529.0	90.80	359.80	8,866.7	901.3	45.7	901.3	1.72	0.95	-1.43
9,593.0	90.30	0.50	8,866.1	965.3	45.8	965.3	1.34	-0.78	1.09
9,656.0	88.00	0.90	8,867.0	1,028.3	46.6	1,028.3	3.71	-3.65	0.63
9,720.0	88.00	0.70	8,869.3	1,092.2	47.5	1,092.2	0.31	0.00	-0.31
9,783.0	88.20	0.70	8,871.3	1,155.2	48.3	1,155.2	0.32	0.32	0.00
9,847.0	89.10	0.30	8,872.9	1,219.2	48.8	1,219.2	1.54	1.41	-0.63
9,910.0	88.70	359.30	8,874.1	1,282.2	48.6	1,282.2	1.71	-0.63	-1.59
9,973.0	90.60	358.60	8,874.5	1,345.2	47.4	1,345.2	3.21	3.02	-1.11
10,037.0	91.30	358.80	8,873.4	1,409.1	46.0	1,409.1	1.14	1.09	0.31
10,100.0	92.80	359.10	8,871.1	1,472.1	44.8	1,472.1	2.43	2.38	0.48
10,164.0	92.90	0.70	8,868.0	1,536.0	44.7	1,536.0	2.50	0.16	2.50
10,227.0	90.00	1.90	8,866.4	1,599.0	46.2	1,599.0	4.98	-4.60	1.90
10,291.0	90.20	1.20	8,866.2	1,662.9	47.9	1,662.9	1.14	0.31	-1.09
10,354.0	90.80	1.20	8,865.7	1,725.9	49.2	1,725.9	0.95	0.95	0.00
10,417.0	91.00	1.10	8,864.7	1,788.9	50.5	1,788.9	0.35	0.32	-0.16
10,481.0	89.90	0.50	8,864.2	1,852.9	51.4	1,852.9	1.96	-1.72	-0.94

DDC Survey Report



Company: Mewbourne Oil Co
Project: Eddy County, New Mexico
Site: Sec 8, T26S, R32E
Well: Red Hills West 8 Federal Com #3H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Red Hills West 8 Federal Com #3H
TVD Reference: WELL @ 3212.0usft (Patterson #45)
MD Reference: WELL @ 3212.0usft (Patterson #45)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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)
10,545.0	89.40	359.30	8,864.6	1,916.9	51.2	1,916.9	2.03	-0.78	-1.88
10,608.0	90.30	0.20	8,864.8	1,979.9	51.0	1,979.9	2.02	1.43	1.43
10,672.0	91.10	0.70	8,864.0	2,043.9	51.5	2,043.9	1.47	1.25	0.78
10,735.0	91.00	0.20	8,862.8	2,106.9	52.0	2,106.9	0.81	-0.16	-0.79
10,798.0	92.20	1.40	8,861.1	2,169.8	52.8	2,169.8	2.69	1.90	1.90
10,862.0	91.20	2.50	8,859.2	2,233.8	55.0	2,233.8	2.32	-1.56	1.72
10,925.0	88.00	1.80	8,859.6	2,296.7	57.4	2,296.7	5.20	-5.08	-1.11
10,989.0	88.00	0.90	8,861.8	2,360.6	58.9	2,360.6	1.41	0.00	-1.41
11,053.0	87.80	0.70	8,864.2	2,424.6	59.8	2,424.6	0.44	-0.31	-0.31
11,116.0	87.80	0.20	8,866.6	2,487.5	60.3	2,487.5	0.79	0.00	-0.79
11,179.0	88.80	359.60	8,868.5	2,550.5	60.2	2,550.5	1.85	1.59	-0.95
11,242.0	89.50	359.60	8,869.4	2,613.5	59.7	2,613.5	1.11	1.11	0.00
11,306.0	89.80	359.30	8,869.8	2,677.5	59.1	2,677.5	0.66	0.47	-0.47
11,369.0	91.20	359.00	8,869.3	2,740.5	58.2	2,740.5	2.27	2.22	-0.48
11,433.0	90.90	0.50	8,868.1	2,804.5	57.9	2,804.5	2.39	-0.47	2.34
11,497.0	88.20	0.20	8,868.6	2,868.5	58.3	2,868.5	4.24	-4.22	-0.47
11,560.0	87.20	359.60	8,871.1	2,931.4	58.2	2,931.4	1.85	-1.59	-0.95
11,624.0	89.60	0.30	8,872.9	2,995.4	58.1	2,995.4	3.91	3.75	1.09
11,688.0	89.90	0.20	8,873.2	3,059.4	58.4	3,059.4	0.49	0.47	-0.16
11,751.0	87.70	358.30	8,874.5	3,122.4	57.6	3,122.4	4.61	-3.49	-3.02
11,814.0	85.70	357.40	8,878.1	3,185.2	55.2	3,185.2	3.48	-3.17	-1.43
11,878.0	88.60	357.90	8,881.3	3,249.1	52.6	3,249.1	4.60	4.53	0.78
11,941.0	91.10	359.10	8,881.5	3,312.0	51.0	3,312.0	4.40	3.97	1.90
12,005.0	91.40	358.80	8,880.1	3,376.0	49.8	3,376.0	0.66	0.47	-0.47
12,068.0	91.80	358.40	8,878.3	3,439.0	48.2	3,439.0	0.90	0.63	-0.63
12,131.0	92.80	358.30	8,875.8	3,501.9	46.4	3,501.9	1.60	1.59	-0.16
12,195.0	92.60	0.50	8,872.8	3,565.8	45.8	3,565.8	3.45	-0.31	3.44
12,257.0	91.40	1.90	8,870.6	3,627.8	47.1	3,627.8	2.97	-1.94	2.26
12,321.0	91.50	1.60	8,869.0	3,691.7	49.0	3,691.7	0.49	0.16	-0.47
12,385.0	92.30	1.40	8,866.9	3,755.7	50.7	3,755.7	1.29	1.25	-0.31
12,448.0	89.30	1.60	8,866.0	3,818.6	52.3	3,818.6	4.77	-4.76	0.32
12,511.0	90.20	1.40	8,866.3	3,881.6	54.0	3,881.6	1.46	1.43	-0.32
12,575.0	90.80	1.80	8,865.7	3,945.6	55.8	3,945.6	1.13	0.94	0.63
12,639.0	90.50	1.80	8,865.0	4,009.5	57.8	4,009.5	0.47	-0.47	0.00
12,703.0	90.20	2.50	8,864.6	4,073.5	60.2	4,073.5	1.19	-0.47	1.09
12,766.0	86.20	1.20	8,866.6	4,136.4	62.2	4,136.4	6.68	-6.35	-2.06
12,830.0	87.30	0.50	8,870.2	4,200.3	63.2	4,200.3	2.04	1.72	-1.09
12,894.0	87.80	0.70	8,872.9	4,264.2	63.8	4,264.2	0.84	0.78	0.31
12,955.0	88.90	1.10	8,874.7	4,325.2	64.8	4,325.2	1.92	1.80	0.66
13,018.0	89.40	0.30	8,875.6	4,388.2	65.6	4,388.2	1.50	0.79	-1.27
13,050.0	90.00	0.50	8,875.8	4,420.2	65.8	4,420.2	1.98	1.88	0.63
13,082.0	89.50	0.30	8,875.9	4,452.2	66.0	4,452.2	1.68	-1.56	-0.63
13,114.0	89.80	0.50	8,876.1	4,484.2	66.2	4,484.2	1.13	0.94	0.63
13,146.0	91.70	0.20	8,875.7	4,516.2	66.4	4,516.2	6.01	5.94	-0.94

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Red Hills West 8 Federal Com #3H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3212.0usft (Patterson #45)
Site:	Sec 8, T26S, R32E	MD Reference:	WELL @ 3212.0usft (Patterson #45)
Well:	Red Hills West 8 Federal Com #3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)
13,178.0	93.30	0.00	8,874.3	4,548.1	66.5	4,548.1	5.04	5.00	-0.63
13,209.0	93.90	0.50	8,872.4	4,579.1	66.6	4,579.1	2.52	1.94	1.61
13,241.0	94.40	0.50	8,870.0	4,611.0	66.9	4,611.0	1.56	1.56	0.00
13,273.0	95.20	0.70	8,867.4	4,642.9	67.2	4,642.9	2.58	2.50	0.63
13,305.0	95.20	0.90	8,864.5	4,674.8	67.7	4,674.8	0.62	0.00	0.63
13,336.0	94.30	1.80	8,861.9	4,705.6	68.4	4,705.6	4.10	-2.90	2.90
13,368.0	94.30	2.10	8,859.5	4,737.5	69.5	4,737.5	0.93	0.00	0.94
13,400.0	94.30	1.90	8,857.1	4,769.4	70.6	4,769.4	0.62	0.00	-0.63
13,432.0	94.00	2.30	8,854.8	4,801.3	71.8	4,801.3	1.56	-0.94	1.25
TD @ 13479' MD / 8852' TVD									
13,479.0	94.00	2.30	8,851.5	4,848.2	73.7	4,848.2	0.00	0.00	0.00

Survey Annotations

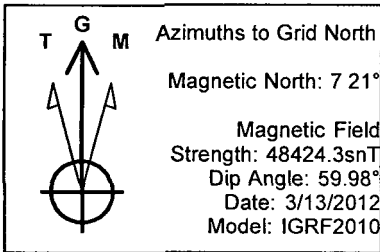
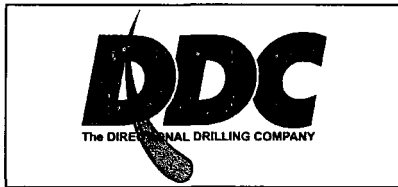
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
8,138.0	8,135.4	-32.5	42.2	Tie In @ 8138' MD / 8135' TVD
8,770.0	8,707.7	182.2	46.1	Crossed Hard Line @ 8770' MD / 8708' TVD
13,479.0	8,851.5	4,848.2	73.7	TD @ 13479' MD / 8852' TVD

Checked By: _____	Approved By: _____	Date: _____
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Company Name Mewbourne Oil Co
 Red Hills West 8 Federal Com #3H
 Eddy County, New Mexico
 Rig Patterson #45
 Created By Dina Chance
 Date 04/9/2012

Red Hills West 8 Federal Com #3H
 Eddy County, New Mexico
 Q110608 & WT-12177

Mewbourne Oil Company

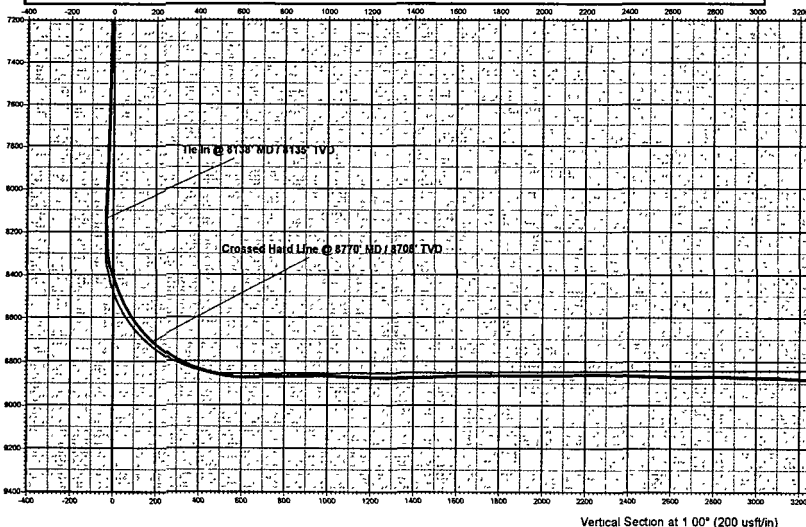


PROJECT DETAILS		Eddy County, New Mexico
Geodetic System:	US State Plane 1927 (Exact solution)	
Datum	NAD 1927 (NADCON CONUS)	
Ellipsoid	Clarke 1866	
Zone:	New Mexico East 3001	
System Datum	Mean Sea Level	

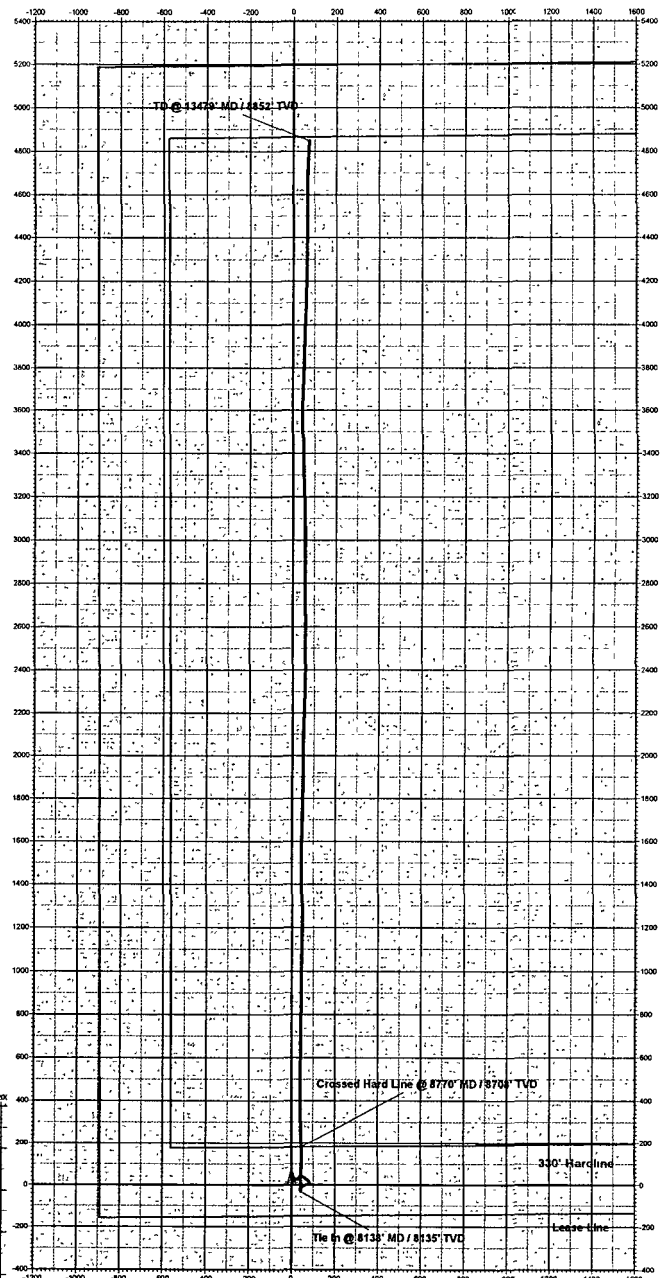
WELL DETAILS						Red Hills West 8 Federal Com #3H
						3194.0
+N-S	+E-W	Ground Level	North	East	Latitude	Longitude
0.0	0.0	382466.14	696450.50	32° 5' 1.700 N	103° 42' 9.888 W	

DESIGN TARGET DETAILS						
Name	TVD	+N-S	+E-W	North	East	Latitude
PBHL-Red Hills West 8 Federal Com #3H	8852.0	4866.3	86.8	357632.40	696595.30	32° 5' 48.952 N
- plan hits target center						
						103° 42' 7.672 W

ANNOTATIONS									
MD	Inc	Asl	TVD	+N-S	+E-W	Vsect	Departure	Annotation	
8135.0	1.52	170.87	8135.4	-32.5	42.2	-32.5	182.8	Tie in @ 8135' MD / 8135' TVD	
8770.0	48.21	359.14	8707.7	182.2	46.1	182.2	401.8	Crossed Hard Line @ 8770' MD / 8708' TVD	
13479.0	94.00	2.30	8851.6	4848.2	73.7	4848.2	5068.2	TD @ 13479' MD / 8852' TVD	



Vertical Section at 1 00° (200 usft/in)





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outside Mewbourne Oil Company

**Final
Schematic**

Prepared for Mr. Mickey Young		Company Mewbourne Oil Company		Date 9-Apr-12		
Well Name Red Hills West Unit -8- #3H		Type of Installation 19-Stage 4-1/2" StackFRAC® HD		Location Lea County, NM		
Depth	Drawing	Description		OD(in)	ID(in)	Length
REV_				Page 1 of 3		
KOP 8239						
TOL 8925.06'						
		Drillable FracPORT's to be shipped without handling pups				
		SNU0008832				
		7" 23-32 ppf x 3.875" Lower Bore x 4.75" Upper Bore SF Liner Hanger Packer PN: 108425-000004 (Shear Pins: 2 @ 482 plus 1 @ 241 : 1,205 psi setting pressure) SF Bottom Guide		5.875"	4.750	3.47
				5.850"	3.850	3.2
7" Shoe 9173		7" 26# P-110 LT&C Casing				
Stage 19		4-1/2" 13.50# P-110 LTC LINER JOINTS: 6		4.500"	3.92"	276.04
9207.77'		Packers Plus 4-1/2" Drillable FracPORT™ with 3.500" Seat for 3.625" High Pressure Ball		5.630"	3.500	2.65
346 BBLS		PN: 121332-000023 (5 shear pins at 314 psi each: 1,570 psi opening pressure)			3.840	
EA1013291		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3		4.500"	3.92"	138.53
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint		4.500"	3.92"	6.1
9355.05'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)		5.750"	3.875	5.25
SNU0008744		3' x 4-1/2" 13.50# P-110 LTC Pup Joint		4.500"	3.92"	3.07
Stage 18		4-1/2" 13.50# P-110 LTC LINER JOINTS: 2		4.500"	3.92"	92.29
9455.66'		Packers Plus 4-1/2" Drillable FracPORT™ with 3.375" Seat for 3.500" High Pressure Ball		5.630"	3.375	2.65
350 BBLS		PN: 121332-000022 (5 shear pins at 314 psi each: 1,570 psi opening pressure)			3.840	
EA1028404		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3		4.500"	3.92"	138.54
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint		4.500"	3.92"	6.1
9602.95'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)		5.750"	3.875	5.25
SNU0008804		3' x 4-1/2" 13.50# P-110 LTC Pup Joint		4.500"	3.92"	3.05
Stage 17		4-1/2" 13.50# P-110 LTC LINER JOINTS: 2		4.500"	3.92"	92.35
9703.60'		Packers Plus 4-1/2" Drillable FracPORT™ with 3.250" Seat for 3.375" High Pressure Ball		5.630"	3.250	2.65
354 BBLS		PN: 121332-000021 (5 shear pins at 314 psi each: 1,570 psi opening pressure)			3.840	
EA1025208		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3		4.500"	3.92"	138.56
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint		4.500"	3.92"	6.08
9850.89'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)		5.750"	3.875	5.25
SNU0008714		3' x 4-1/2" 13.50# P-110 LTC Pup Joint		4.500"	3.92"	3.08
Stage 16		4-1/2" 13.50# P-110 LTC LINER JOINTS: 2		4.500"	3.92"	92.31
9951.53'		Packers Plus 4-1/2" Drillable FracPORT™ with 3.125" Seat for 3.250" High Pressure Ball		5.630"	3.125	2.65
357 BBLS		PN: 121332-000020 (5 shear pins at 314 psi each: 1,570 psi opening pressure)			3.840	
EA1025147		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3		4.500"	3.92"	138.63
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint		4.500"	3.92"	6.1
10098.91'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)		5.750"	3.875	5.25
SNU0008724		3' x 4-1/2" 13.50# P-110 LTC Pup Joint		4.500"	3.92"	3.09
Stage 15		4-1/2" 13.50# P-110 LTC LINER JOINTS: 2		4.500"	3.92"	92.4
10199.65'		Packers Plus 4-1/2" Drillable FracPORT™ with 3.000" Seat for 3.125" High Pressure Ball		5.630"	3.000	2.65
361 BBLS		PN: 121332-000019 (5 shear pins at 314 psi each: 1,570 psi opening pressure)			3.840	
EA1024307		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3		4.500"	3.92"	138.46
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint		4.500"	3.92"	6.08
10346.84'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)		5.750"	3.875	5.25
SNU0008725		3' x 4-1/2" 13.50# P-110 LTC Pup Joint		4.500"	3.92"	3.11
		4-1/2" 13.50# P-110 LTC LINER JOINTS: 2		4.500"	3.92"	92.41
Service Center Midland, TX		Telephone 432-563-8024		Contact Scott Mabry		Telephone Chad Williams 405-255-3223



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outside Mewbourne Oil Company

**Final
Schematic**

Prepared for		Company	Date		
Mr. Mickey Young		Mewbourne Oil Company	9-Apr-12		
Well Name		Type of Installation	Location		
Red Hills West Unit -8- #3H		19-Stage 4-1/2" StackFRAC® HD	Lea County, NM		
Depth	Drawing	Description	OD(in)	ID(in)	Length
REV_			Page 2 of 3		
Stage 14		Packers Plus 4-1/2" Drillable FracPORT™ with 2.875" Seat for 3.000" High Pressure Ball	5 630"	2.875	2 65
10346 84'		PN: 121332-000018 (5 shear pins at 314 psi each; 1,570 psi opening pressure)		3.840	
363 BBLS		4-1/2" 13.50# P-110 LTC LINER	4 500"	3.92"	138.4
EA1024948		JOINTS: 3	4 500"	3.92"	6 08
		6' x 4-1/2" 13 50# P-110 LTC Pup Joint	5 750"	3.875	5 25
10447 61'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer			
SNU0008737		PN: 124929-000004 (4 shear pins at 522 psi each; 2,088 psi setting pressure)	4 500"	3.92"	3 1
		3' x 4-1/2" 13 50# P-110 LTC Pup Joint	4 500"	3.92"	92 42
		4-1/2" 13.50# P-110 LTC LINER	5 630"	2.750	2 65
Stage 13		Packers Plus 4-1/2" Drillable FracPORT™ with 2.750" Seat for 2.875" High Pressure Ball		3.840	
10594 74'		PN: 121332-000017 (5 shear pins at 314 psi each; 1,570 psi opening pressure)	4 500"	3.92"	138 59
367 BBLS		4-1/2" 13.50# P-110 LTC LINER	4 500"	3.92"	6.09
EA1025097		JOINTS: 3	5 750"	3.875	5 25
		6' x 4-1/2" 13 50# P-110 LTC Pup Joint			
10695 51'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	4 500"	3.92"	3 06
SNU0008785		PN: 124929-000004 (4 shear pins at 522 psi each; 2,088 psi setting pressure)	4 500"	3.92"	92.29
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint	5 630"	2.625	2.65
		4-1/2" 13.50# P-110 LTC LINER	4 500"	3.92"	
Stage 12		Packers Plus 4-1/2" Drillable FracPORT™ with 2.625" Seat for 2.750" High Pressure Ball	5 630"	2.625	
10842 84'		PN: 121332-000016 (5 shear pins at 314 psi each; 1,570 psi opening pressure)		3.840	
371 BBLS		4-1/2" 13.50# P-110 LTC LINER	4 500"	3.92"	138 48
EA3016999		JOINTS: 3	4 500"	3.92"	6 08
		6' x 4-1/2" 13 50# P-110 LTC Pup Joint	5 750"	3.875	5 25
10943 44'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer			
SNU0008722		PN: 124929-000004 (4 shear pins at 522 psi each; 2,088 psi setting pressure)	4 500"	3.92"	3 1
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint	4 500"	3.92"	92.37
		4-1/2" 13.50# P-110 LTC LINER	4 500"	3.92"	
Stage 11		Packers Plus 4-1/2" Drillable FracPORT™ with 2.500" Seat for 2.625" High Pressure Ball	5 630"	2.500	2.65
11090 65'		PN: 121332-000015 (5 shear pins at 314 psi each; 1,570 psi opening pressure)		3.840	
374 BBLS		4-1/2" 13.50# P-110 LTC LINER	4 500"	3.92"	92 27
EA1024807		JOINTS: 2	4 500"	3.92"	6 09
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint	5 750"	3.875	5 25
11191 37'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer			
SNU0008739		PN: 124929-000004 (4 shear pins at 522 psi each; 2,088 psi setting pressure)	4 500"	3.92"	3 1
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint	4 500"	3.92"	91 52
		4-1/2" 13.50# P-110 LTC LINER	4 500"	3.92"	
Stage 10		Packers Plus 4-1/2" Drillable FracPORT™ with 2.375" Seat for 2.500" High Pressure Ball	5 630"	2.375	2.65
11292 38'		PN: 121332-000014 (5 shear pins at 314 psi each; 1,570 psi opening pressure)		3.840	
377 BBLS		4-1/2" 13.50# P-110 LTC LINER	4 500"	3.92"	92.27
EA1024740		JOINTS: 2	4 500"	3.92"	6 09
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint	5 750"	3.875	5 25
11392 25'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer			
SNU0008723		PN: 124929-000004 (4 shear pins at 522 psi each; 2,088 psi setting pressure)	4 500"	3.92"	3.1
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint	4 500"	3.92"	92.3
		4-1/2" 13.50# P-110 LTC LINER	5 630"	2.250	2.65
Stage 9		Packers Plus 4-1/2" Drillable FracPORT™ with 2.250" Seat for 2.375" High Pressure Ball		3.840	
11493 26'		PN: 121332-000013 (5 shear pins at 314 psi each; 1,570 psi opening pressure)	4 500"	3.92"	138.29
380 BBLS		4-1/2" 13.50# P-110 LTC LINER	4 500"	3.92"	6 09
EA1024689		JOINTS: 3	5 750"	3.875	5 25
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint			
11593 91'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	4 500"	3.92"	3 09
SNU0008698		PN: 124929-000004 (4 shear pins at 522 psi each; 2,088 psi setting pressure)	4 500"	3.92"	92.24
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint	5 630"	2.125	2 65
		4-1/2" 13.50# P-110 LTC LINER	4 500"	3.92"	
Stage 8		Packers Plus 4-1/2" Drillable FracPORT™ with 2.125" Seat for 2.250" High Pressure Ball	5 630"	2.125	2 65
11740 94'		PN: 121332-000012 (5 shear pins at 314 psi each; 1,570 psi opening pressure)		3.840	
384 BBLS		4-1/2" 13.50# P-110 LTC LINER	4 500"	3.92"	91.63
EA1024638		JOINTS: 2	4 500"	3.92"	6.09
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint	5 750"	3.875	5.25
11841 52'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer			
SNU0008738		PN: 124929-000004 (4 shear pins at 522 psi each; 2,088 psi setting pressure)	4 500"	3.92"	3.06
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint	4 500"	3.92"	92.38
		4-1/2" 13.50# P-110 LTC LINER	5 630"	2.000	2 65
Stage 7		Packers Plus 4-1/2" Drillable FracPORT™ with 2.000" Seat for 2.125" High Pressure Ball		3.840	
12042 58'		PN: 121332-000011 (5 shear pins at 314 psi each; 1,570 psi opening pressure)	4 500"	3.92"	138.36
388 BBLS		4-1/2" 13.50# P-110 LTC LINER			
EA1022615		JOINTS: 3			
Service Center		Telephone	Contact		
Midland, TX		432-563-8024	Scott Mabry		
			Telephone		
			Chad Williams 405-255-3223		

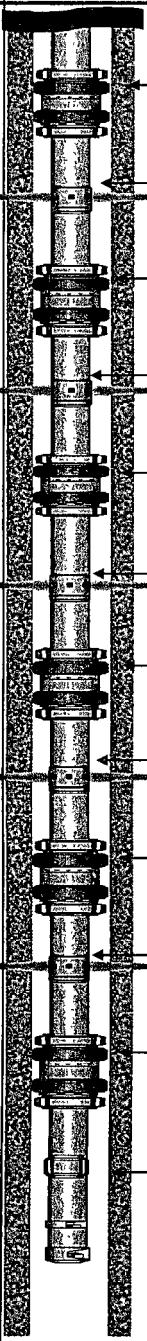


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Do It Right.

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Final
Schematic

Prepared for Mr. Mickey Young	Company Mewbourne Oil Company	Date 9-Apr-12
Well Name Red Hills West Unit -8- #3H	Type of Installation 19-Stage 4-1/2" StackFRAC® HD	Location Lea County, NM

Depth	Drawing	Description	OD(in)	ID(in)	Length
Page 3 of 3					
REV_		6' x 4-1/2" 13.50# P-110 LTC Pup Joint	4.500"	3.92"	6.09
12189.68'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	5.750"	3.875	5.25
SNU0008729		PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)			
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint	4.500"	3.92"	3.11
		4-1/2" 13.50# P-110 LTC LINER	4.500"	3.92"	92.38
Stage 6		Packers Plus 4-1/2" Drillable FracPORT™ with 1.875" Seat for 2.000" High Pressure Ball	5.630"	1.875	2.65
12290.42'		PN: 121332-000010 (5 shear pins at 314 psi each: 1,570 psi opening pressure)		3.840	
392 BBLS		4-1/2" 13.50# P-110 LTC LINER	4.500"	3.92"	92.09
EA1027859		6' x 4-1/2" 13.50# P-110 LTC Pup Joint	4.500"	3.92"	6.09
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	5.750"	3.875	5.25
12391.25'		PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)			
SNU0008727		3' x 4-1/2" 13.50# P-110 LTC Pup Joint	4.500"	3.92"	3.11
		4-1/2" 13.50# P-110 LTC LINER	4.500"	3.92"	92.06
Stage 5		Packers Plus 4-1/2" Drillable FracPORT™ with 1.750" Seat for 1.875" High Pressure Ball	5.630"	1.750	2.65
12491.67'		PN: 121332-000009 (5 shear pins at 314 psi each: 1,570 psi opening pressure)		3.840	
395 BBLS		4-1/2" 13.50# P-110 LTC LINER	4.500"	3.92"	138.55
EA1027860		6' x 4-1/2" 13.50# P-110 LTC Pup Joint	4.500"	3.92"	6.1
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	5.750"	3.875	5.25
12638.97'		PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)			
SNU0008747		3' x 4-1/2" 13.50# P-110 LTC Pup Joint	4.500"	3.92"	3.1
		4-1/2" 13.50# P-110 LTC LINER	4.500"	3.92"	92.4
Stage 4		Packers Plus 4-1/2" Drillable FracPORT™ with 1.625" Seat for 1.750" High Pressure Ball	5.630"	1.625	2.65
12739.72'		PN: 121332-000008 (5 shear pins at 314 psi each: 1,570 psi opening pressure)		3.840	
399 BBLS		4-1/2" 13.50# P-110 LTC LINER	4.500"	3.92"	138.12
EA3020123		6' x 4-1/2" 13.50# P-110 LTC Pup Joint	4.500"	3.92"	6.1
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	5.750"	3.875	5.25
12886.59'		PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)			
SNU0008715		3' x 4-1/2" 13.50# P-110 LTC Pup Joint	4.500"	3.92"	3.08
		4-1/2" 13.50# P-110 LTC LINER	4.500"	3.92"	92.18
Stage 3		Packers Plus 4-1/2" Drillable FracPORT™ with 1.500" Seat for 1.625" High Pressure Ball	5.630"	1.500	2.65
12987.71'		PN: 121332-000007 (5 shear pins at 314 psi each: 1,570 psi opening pressure)		3.840	
403 BBLS		4-1/2" 13.50# P-110 LTC LINER	4.500"	3.92"	138.54
EA1027919		6' x 4-1/2" 13.50# P-110 LTC Pup Joint	4.500"	3.92"	6.09
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	5.750"	3.875	5.25
13134.38'		PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)			
SNU0008648		3' x 4-1/2" 13.50# P-110 LTC Pup Joint	4.500"	3.92"	3.11
		4-1/2" 13.50# P-110 LTC LINER	4.500"	3.92"	92.2
Stage 2		Packers Plus 4-1/2" Drillable FracPORT™ with 1.375" Seat for 1.500" High Pressure Ball	5.630"	1.375	2.65
13234.94'		PN: 121332-000006 (5 shear pins at 314 psi each: 1,570 psi opening pressure)		3.840	
406 BBLS		4-1/2" 13.50# P-110 LTC LINER	4.500"	3.92"	92.31
EA1027991		6' x 4-1/2" 13.50# P-110 LTC Pup Joint	4.500"	3.92"	6.1
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	5.750"	3.875	5.25
1336'		PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)			
SNU0008678		3' x 4-1/2" 13.50# P-110 LTC Pup Joint	4.500"	3.92"	3.1
		4-1/2" 13.50# P-110 LTC LINER	4.500"	3.92"	92.25
Stage 1		Customer 4-1/2" Pump Off Sub			3.4
13440'		(Pinned above 4000 PSI)			
409 BBLS					
TMD					
13479					
Service Center Midland, TX			Telephone 432-563-8024		
Contact Scott Mabry			Telephone Chad Williams 405-255-3223		