

30-02539901

MEWBOURNE OIL

Wildcat Bone Springs

Lea County, NM

Red Hills West "22" Federal Com #1H

VH - Job #32K1210950

RECEIVED

MAR 23 2011

HOBBSOCD

Survey: Actual

SDI Standard Survey Report

08 December, 2010

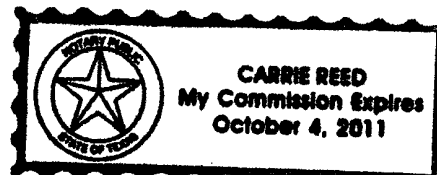
This survey is correct to the best of my knowledge and is supported by actual field data.

Richard Carter

Notorized this date 24th of December, 2010.

Carrie Reed

Notary Signature
County of Midland
State of Texas



KZ APR 14 2011
PETROLEUM ENGINEER

Scientific Drilling International, Inc.
SDI Standard Survey Report

Company:	MEWBOURNE OIL	Local Co-ordinate Reference:	Well Red Hills West "22" Federal Com #1H
Project:	Wildcat Bone Springs	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Red Hills West "22" Federal Com #1H	North Reference:	Grid
Wellbore:	VH - Job #32K1210950	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1210950	Database:	EDM-Regulatory

Project	Wildcat Bone Springs		
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	Lea County, NM		
Site Position:		Northing:	382,884.16 usft
From:	Lat/Long	Easting:	699,520.90 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"
		Latitude:	32° 3' 3.700 N
		Longitude:	103° 41' 21.680 W
		Grid Convergence:	0.34 °

Well	Red Hills West "22" Federal Com #1H, Directional (Baker)		
Well Position	+N/-S	0.0 usft	Northing: 376,874.40 usft
	+E/-W	0.0 usft	Easting: 705,650.56 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 2' 3.860 N
		Longitude:	103° 40' 10.890 W
		Ground Level:	0.0 usft

Wellbore	VH - Job #32K1210950				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	12/5/2010	7.73	60.01	48,605

Design	VH - Job #32K1210950			
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	179.55

Survey Program	Date 12/8/2010			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	9,623.0	Actual (VH - Job #32K1210950)	Keeper	Keeper Gyro

Survey								
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.0	
100.0	0.24	101.96	100.0	0.0	0.2	101.96	0.2	
200.0	0.15	91.40	200.0	-0.1	0.5	99.45	0.5	
300.0	0.26	84.65	300.0	-0.1	0.9	94.59	0.9	
400.0	0.26	133.98	400.0	-0.2	1.3	99.20	1.3	
500.0	0.36	169.05	500.0	-0.7	1.5	114.07	1.7	
600.0	0.58	161.80	600.0	-1.5	1.7	130.28	2.3	
700.0	0.62	168.52	700.0	-2.5	2.0	141.15	3.2	
800.0	0.71	162.76	800.0	-3.6	2.3	147.58	4.3	
900.0	0.77	177.61	900.0	-4.9	2.5	152.81	5.5	
1,000.0	1.02	185.90	1,000.0	-6.4	2.4	159.24	6.9	
1,100.0	0.88	175.02	1,099.9	-8.1	2.4	163.38	8.4	

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Site:	Lea County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Red Hills West "22" Federal Com #1H	North Reference:	Grid
Wellbore:	VH - Job #32K1210950	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1210950	Database:	EDM-Regulatory

Survey							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
1,200.0	0.93	184.39	1,199.9	-9.6	2.4	165.95	9.9
1,300.0	0.90	186.02	1,299.9	-11.2	2.3	168.58	11.5
1,400.0	0.97	184.22	1,399.9	-12.9	2.1	170.62	13.0
1,500.0	0.88	176.59	1,499.9	-14.5	2.1	171.72	14.6
1,600.0	0.98	177.18	1,599.9	-16.1	2.2	172.23	16.2
1,700.0	1.09	178.67	1,699.9	-17.9	2.3	172.81	18.0
1,800.0	1.14	181.68	1,799.8	-19.8	2.3	173.53	20.0
1,900.0	1.30	185.98	1,899.8	-22.0	2.1	174.53	22.1
2,000.0	1.36	189.40	1,999.8	-24.3	1.8	175.78	24.3
2,100.0	1.46	190.43	2,099.8	-26.7	1.4	177.07	26.7
2,200.0	1.47	191.03	2,199.7	-29.2	0.9	178.25	29.2
2,300.0	1.31	191.87	2,299.7	-31.6	0.4	179.25	31.6
2,400.0	1.41	191.13	2,399.7	-33.9	-0.1	180.10	33.9
2,500.0	1.31	201.99	2,499.6	-36.2	-0.7	181.15	36.2
2,600.0	1.67	207.74	2,599.6	-38.5	-1.8	182.73	38.6
2,700.0	1.53	204.21	2,699.6	-41.0	-3.1	184.26	41.1
2,800.0	1.50	196.98	2,799.5	-43.5	-4.0	185.24	43.7
2,900.0	1.40	197.44	2,899.5	-45.9	-4.7	185.89	46.2
3,000.0	0.90	170.90	2,999.5	-47.9	-5.0	185.94	48.1
3,100.0	1.21	113.46	3,099.5	-49.0	-3.9	184.53	49.2
3,200.0	1.64	88.28	3,199.4	-49.4	-1.5	181.72	49.4
3,300.0	1.73	70.96	3,299.4	-48.9	1.4	178.40	48.9
3,400.0	2.10	65.21	3,399.3	-47.6	4.5	174.65	47.8
3,500.0	2.06	64.98	3,499.3	-46.1	7.8	170.45	46.7
3,600.0	1.84	68.35	3,599.2	-44.7	10.9	166.34	46.0
3,700.0	1.70	70.03	3,699.2	-43.6	13.8	162.50	45.8
3,800.0	2.25	86.77	3,799.1	-43.0	17.1	158.31	46.3
3,900.0	2.72	96.18	3,899.0	-43.2	21.4	153.60	48.2
4,000.0	3.13	102.81	3,998.9	-44.0	26.5	149.01	51.4
4,100.0	3.97	113.89	4,098.7	-46.0	32.3	144.97	56.2
4,200.0	4.37	117.43	4,198.4	-49.2	38.8	141.72	62.7
4,300.0	3.84	112.72	4,298.2	-52.2	45.3	139.08	69.2
4,400.0	3.40	117.51	4,398.0	-54.9	51.0	137.11	75.0
4,500.0	2.97	122.35	4,497.8	-57.7	55.8	135.93	80.3
4,600.0	2.58	122.75	4,597.7	-60.3	59.9	135.17	85.0
4,700.0	2.52	124.33	4,697.6	-62.7	63.6	134.59	89.3
4,800.0	2.30	128.74	4,797.5	-65.2	67.0	134.23	93.5
4,900.0	2.03	134.38	4,897.4	-67.7	69.8	134.12	97.3
5,000.0	1.88	136.78	4,997.4	-70.2	72.2	134.17	100.7
5,100.0	1.91	134.71	5,097.3	-72.5	74.5	134.22	104.0
5,200.0	1.81	136.21	5,197.3	-74.8	76.8	134.25	107.2
5,300.0	1.84	140.83	5,297.2	-77.2	78.9	134.38	110.4
5,400.0	1.58	148.90	5,397.2	-79.6	80.6	134.64	113.3
5,500.0	1.50	148.97	5,497.2	-81.9	82.0	134.97	115.9

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SDI Standard Survey Report

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Site:	Lea County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Red Hills West "22" Federal Com #1H	North Reference:	Grid
Wellbore:	VH - Job #32K1210950	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1210950	Database:	EDM-Regulatory

Survey							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
5,600.0	1.48	150.92	5,597.1	-84.2	83.3	135.29	118.5
5,700.0	1.41	162.45	5,697.1	-86.5	84.3	135.73	120.8
5,800.0	1.19	157.89	5,797.1	-88.6	85.1	136.17	122.9
5,900.0	1.31	160.18	5,897.0	-90.7	85.9	136.56	124.9
6,000.0	1.21	161.92	5,997.0	-92.7	86.6	136.97	126.9
6,100.0	1.31	169.55	6,097.0	-94.9	87.1	137.44	128.8
6,200.0	1.39	172.42	6,197.0	-97.2	87.5	138.01	130.8
6,300.0	1.42	176.34	6,296.9	-99.6	87.7	138.64	132.8
6,400.0	1.41	174.33	6,396.9	-102.1	87.9	139.27	134.7
6,500.0	1.44	175.27	6,496.9	-104.6	88.2	139.87	136.8
6,600.0	1.39	178.30	6,596.8	-107.0	88.3	140.48	138.8
6,700.0	1.47	181.31	6,696.8	-109.5	88.3	141.13	140.7
6,800.0	1.42	182.97	6,796.8	-112.1	88.2	141.79	142.6
6,900.0	1.42	182.86	6,896.7	-114.5	88.1	142.44	144.5
7,000.0	1.48	182.23	6,996.7	-117.1	88.0	143.08	146.4
7,100.0	1.47	183.82	7,096.7	-119.6	87.8	143.71	148.4
7,200.0	1.49	186.52	7,196.6	-122.2	87.6	144.37	150.4
7,300.0	1.44	183.92	7,296.6	-124.7	87.4	144.99	152.3
7,400.0	1.64	181.36	7,396.6	-127.4	87.2	145.60	154.4
7,500.0	1.60	181.44	7,496.5	-130.3	87.2	146.21	156.7
7,600.0	1.46	184.17	7,596.5	-132.9	87.0	146.78	158.9
7,700.0	1.28	177.95	7,696.5	-135.3	87.0	147.26	160.9
7,800.0	1.36	179.29	7,796.4	-137.6	87.1	147.68	162.8
7,900.0	1.38	182.61	7,896.4	-140.0	87.0	148.14	164.8
8,000.0	1.39	173.93	7,996.4	-142.4	87.1	148.55	166.9
8,100.0	1.32	177.53	8,096.4	-144.8	87.3	148.92	169.0
8,200.0	1.14	182.64	8,196.3	-146.9	87.3	149.29	170.9
8,300.0	1.19	185.29	8,296.3	-148.9	87.1	149.67	172.6
8,400.0	1.15	194.79	8,396.3	-150.9	86.8	150.11	174.1
8,500.0	1.23	204.45	8,496.3	-152.9	86.1	150.62	175.5
8,600.0	1.25	215.58	8,596.3	-154.8	85.0	151.22	176.6
8,700.0	1.16	239.05	8,696.2	-156.2	83.5	151.87	177.1
8,800.0	1.14	245.55	8,796.2	-157.1	81.7	152.52	177.1
8,900.0	1.22	235.08	8,896.2	-158.1	79.9	153.18	177.2
9,000.0	1.28	219.46	8,996.2	-159.6	78.4	153.85	177.8
9,100.0	1.32	218.02	9,096.1	-161.4	76.9	154.51	178.8
9,200.0	1.25	182.22	9,196.1	-163.4	76.2	155.00	180.2
9,300.0	0.98	218.73	9,296.1	-165.1	75.6	155.40	181.6
9,400.0	0.63	177.75	9,396.1	-166.3	75.1	155.70	182.5
9,500.0	0.46	244.61	9,496.1	-167.1	74.8	155.89	183.0
9,600.0	0.58	239.06	9,596.1	-167.5	74.0	156.17	183.1
9,623.0	0.52	206.87	9,619.1	-167.6	73.8	156.24	183.2



Scientific Drilling
Directional Drilling Operations

Project: Wildcat Bone Springs
Lea County, NM
Well: Red Hills West "22" Federal Com #1H
Wellbore: VH - Job #32K1210950
Design: VH - Job #32K1210950



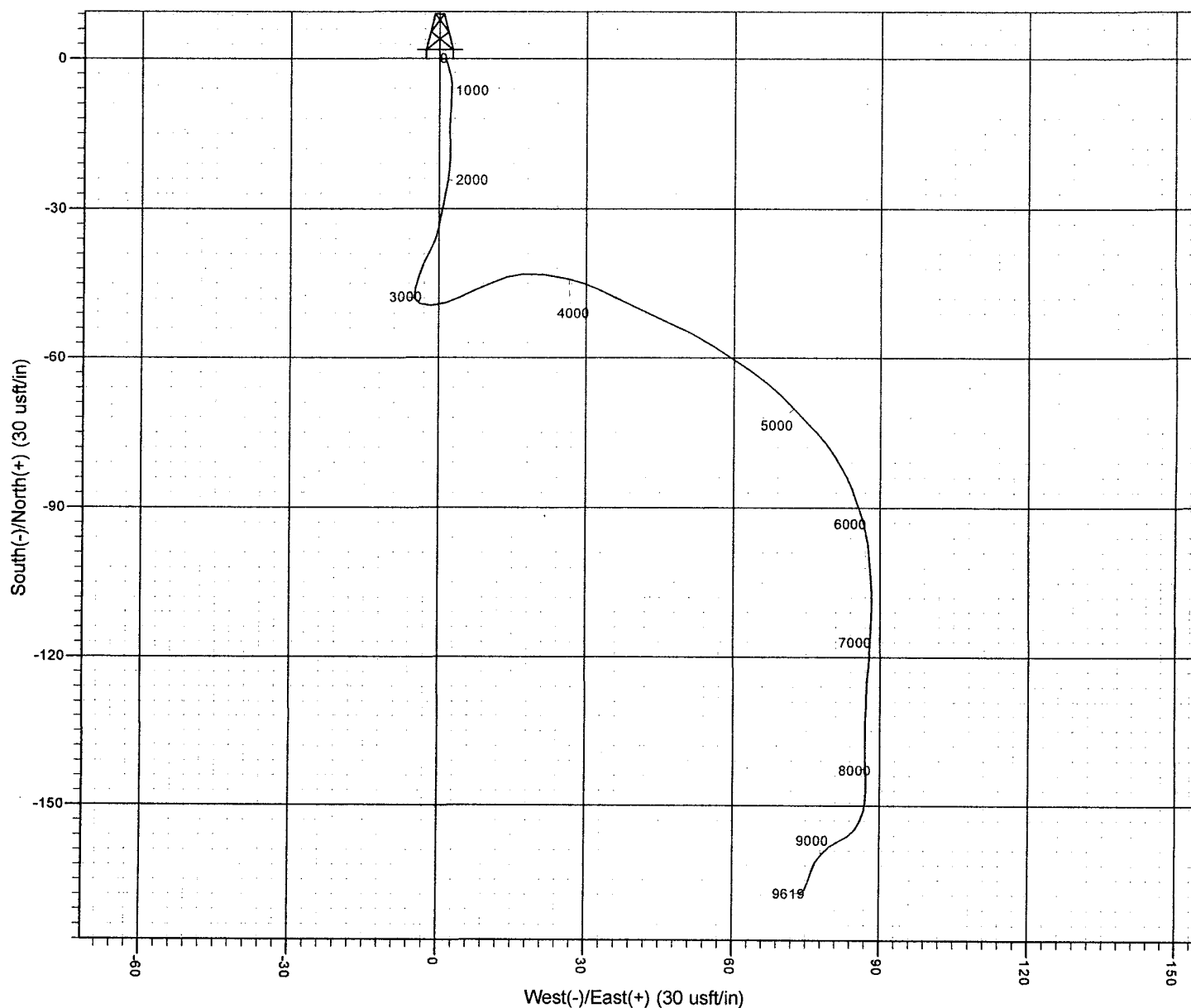
Azimuths to Grid North
True North: -0.35°
Magnetic North: 7.38°

Magnetic Field
Strength: 48604.5snT
Dip Angle: 60.01°
Date: 12/5/2010
Model: BGGM2010

WELL DETAILS: Red Hills West "22" Federal Com #1H
WELL @ 0.0usft (Original Well Elev)

Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	376874.40	705650.56	32° 2' 3.860 N	103° 40' 10.890 W	



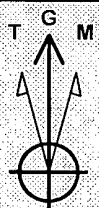
PROJECT DETAILS: Wildcat Bone Springs
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

SITE DETAILS: Lea County, NM
Site Centre Latitude: 32° 3' 3.700 N
Longitude: 103° 41' 21.680 W
Positional Uncertainty: 0.0
Convergence: 0.34
Local North: Grid

Red Hills West 22 Federal Com #1H
Lea County, NM
Q100829 & WT-10583

Mewbourne Oil Company

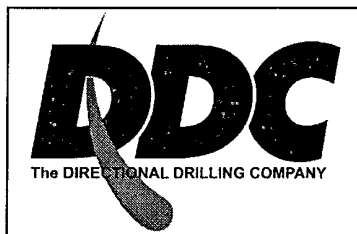
Company Name: Mewbourne Oil Co
Red Hills West 22 Federal Com #1H
Lea County, NM
Rig: Patterson #45
Created By: Shane Robbins
Date: 12/30/2010



Azimuths to Grid North

Correction: 7.33°

Magnetic Field
Strength: 48546.1snT
Dip Angle: 60.01°
Date: 12/3/2010
Model: IGRF2010



PROJECT DETAILS: Lea County, NM

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 22 Federal Com #1H

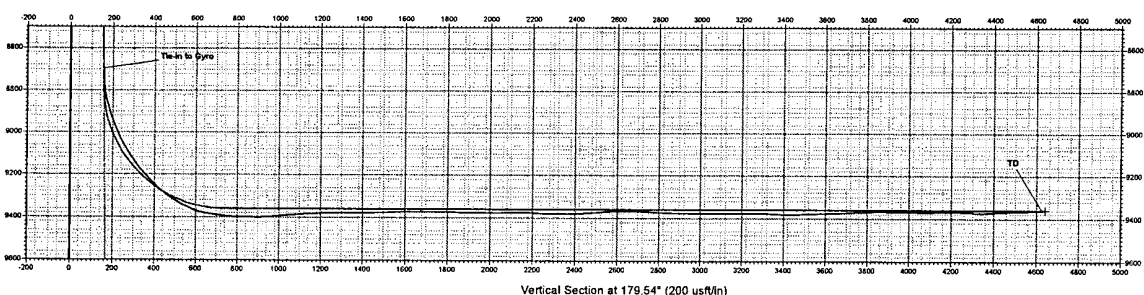
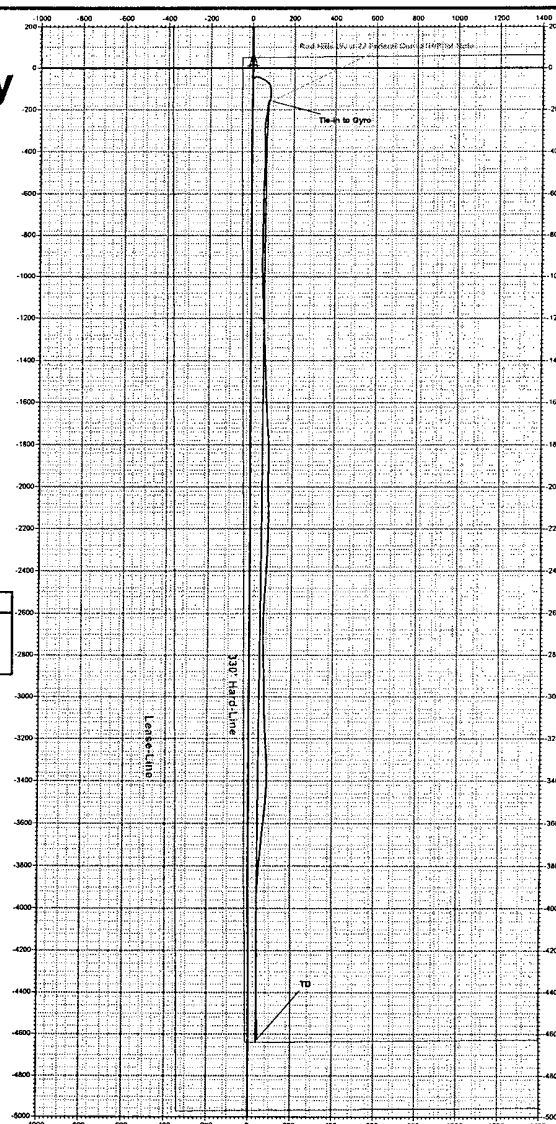
Ground Level: 3148.0		Latitude		Longitude	
+N/-S	+E/-W	North	East	32° 2' 3.856 N	103° 40' 10.894 W
0.0	0.0	378874.23	705650.25		

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
8700.0	1.18	235.05	8696.2	-156.2	83.5	196.8	229.2	Tie-in to Gyro
13592.0	91.70	178.50	9362.3	-4626.3	43.8	4626.5	4706.0	TD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	North	East	Latitude	Longitude
PSHL, Red Hills West 22 Federal Com #1H plan hills target center	9360.0	-4640.3	35.9	372233.90	705687.10	32° 1' 17.935 N	103° 40' 10.797 W



Vertical Section at 179.54° (200 usf/m)

30-025-39901

Mewbourne Oil Co

Lea County, NM

Sec. 22, T26S, R32E, N.M.P.M

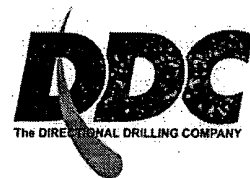
Red Hills West 22 Federal Com #1H

Wellbore #1

Survey: Red Hills West 22 Fed Com #1H

DDC Survey Report

30 December, 2010



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Red Hills West 22 Federal Com #1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3166.0usft (Patterson #45)
Site:	Sec. 22, T26S, R32E, N.M.P.M	MD Reference:	WELL @ 3166.0usft (Patterson #45)
Well:	Red Hills West 22 Federal Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project	Lea County, NM		
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. 22, T26S, R32E, N.M.P.M		
Site Position:		Northing:	376,874.23 usft
From:	Map	Easting:	705,650.24 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 2' 3.858 N
		Longitude:	103° 40' 10.894 W
		Grid Convergence:	0.35 °

Well	Red Hills West 22 Federal Com #1H		
Well Position	+N/-S	0.0 usft	Northing: 376,874.23 usft
	+E/-W	0.0 usft	Easting: 705,650.24 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 2' 3.858 N
		Longitude:	103° 40' 10.894 W
		Ground Level:	3,148.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	12/3/2010	7.68
			Dip Angle (°)
			60.01
			Field Strength (nT)
			48,546

Design	Wellbore #1		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.0	0.0	0.0
			Direction (°)
			179.54

Survey Program	Date 12/30/2010		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
100.0	8,700.0	GYRO (Wellbore #1)	Good_gyro
8,724.0	13,592.0	Red Hills West 22 Fed Com #1H (Wellbore #1)	MWD default
			Description
			Good Gyro
			MWD - Standard

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)	
Tie-in to Gyro										
8,700.0	1.16	239.05	8,696.2	-156.2	83.5	156.8	0.00	0.00	0.00	
8,724.0	2.30	217.90	8,720.2	-156.7	83.0	157.3	5.37	4.75	-88.13	
8,755.0	4.40	205.40	8,751.2	-158.2	82.1	158.9	7.13	6.77	-40.32	
8,785.0	7.10	200.50	8,781.0	-161.0	81.0	161.7	9.14	9.00	-16.33	
8,817.0	10.00	197.20	8,812.7	-165.5	79.4	166.2	9.19	9.06	-10.31	
8,847.0	12.90	197.30	8,842.1	-171.2	77.7	171.8	9.67	9.67	0.33	
8,879.0	15.30	192.10	8,873.1	-178.7	75.7	179.3	8.47	7.50	-16.25	
8,910.0	17.40	185.40	8,902.8	-187.4	74.4	188.0	9.09	6.77	-21.61	
8,942.0	19.40	185.40	8,933.2	-197.4	73.5	198.0	6.25	6.25	0.00	

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Red Hills West 22 Federal Com #1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3166.0usft (Patterson #45)
Site:	Sec. 22, T26S, R32E, N.M.P.M	MD Reference:	WELL @ 3166.0usft (Patterson #45)
Well:	Red Hills West 22 Federal Com #1H	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)
8,974.0	21.40	187.90	8,963.2	-208.5	72.2	209.1	6.82	6.25	7.81
9,005.0	23.10	188.70	8,991.9	-220.1	70.5	220.7	5.57	5.48	2.58
9,037.0	25.30	188.40	9,021.1	-233.1	68.5	233.6	6.89	6.88	-0.94
9,067.0	28.00	188.00	9,047.9	-246.4	66.6	246.9	9.02	9.00	-1.33
9,098.0	30.70	186.10	9,074.9	-261.5	64.8	262.0	9.21	8.71	-6.13
9,130.0	32.90	182.40	9,102.1	-278.3	63.5	278.8	9.18	6.88	-11.56
9,162.0	35.00	179.60	9,128.6	-296.1	63.2	296.6	8.18	6.56	-8.75
9,191.0	37.30	178.00	9,152.1	-313.2	63.6	313.7	8.57	7.93	-5.52
9,222.0	39.80	177.80	9,176.3	-332.6	64.3	333.1	8.07	8.06	-0.65
9,253.0	42.20	178.40	9,199.7	-352.9	65.0	353.4	7.85	7.74	1.94
9,285.0	44.70	178.20	9,222.9	-374.9	65.6	375.4	7.82	7.81	-0.63
9,317.0	46.60	178.90	9,245.3	-397.7	66.2	398.3	6.14	5.94	2.19
9,348.0	49.60	180.10	9,266.0	-420.8	66.4	421.3	10.10	9.68	3.87
9,380.0	52.40	182.40	9,286.1	-445.7	65.8	446.2	10.38	8.75	7.19
9,411.0	55.60	183.80	9,304.3	-470.7	64.5	471.2	10.95	10.32	4.52
9,442.0	59.00	184.00	9,321.1	-496.7	62.7	497.2	10.98	10.97	0.65
9,473.0	62.10	184.00	9,336.3	-523.7	60.8	524.1	10.00	10.00	0.00
9,505.0	64.90	182.90	9,350.6	-552.2	59.1	552.7	9.27	8.75	-3.44
9,537.0	68.10	181.50	9,363.4	-581.6	58.0	582.0	10.77	10.00	-4.38
9,568.0	73.10	180.70	9,373.7	-610.8	57.4	611.2	16.31	16.13	-2.58
9,599.0	79.40	179.60	9,381.0	-640.9	57.4	641.3	20.61	20.32	-3.55
9,638.0	83.20	180.70	9,386.9	-679.4	57.2	679.9	10.13	9.74	2.82
9,669.0	82.60	180.80	9,390.8	-710.2	56.8	710.6	1.96	-1.94	0.32
9,700.0	84.00	180.70	9,394.4	-741.0	56.4	741.4	4.53	4.52	-0.32
9,732.0	86.30	180.80	9,397.1	-772.8	56.0	773.3	7.19	7.19	0.31
9,764.0	89.50	181.00	9,398.2	-804.8	55.5	805.2	10.02	10.00	0.63
9,796.0	89.00	180.50	9,398.7	-836.8	55.1	837.2	2.21	-1.56	-1.56
9,828.0	88.40	180.50	9,399.4	-868.8	54.8	869.2	1.88	-1.88	0.00
9,860.0	89.70	180.50	9,399.9	-900.8	54.5	901.2	4.06	4.06	0.00
9,891.0	92.90	180.10	9,399.2	-931.8	54.4	932.2	10.40	10.32	-1.29
9,923.0	94.50	179.40	9,397.2	-963.7	54.5	964.1	5.46	5.00	-2.19
9,955.0	95.50	179.40	9,394.4	-995.6	54.9	996.0	3.13	3.13	0.00
9,987.0	95.70	179.20	9,391.2	-1,027.4	55.2	1,027.8	0.88	0.63	-0.63
10,019.0	94.70	177.10	9,388.3	-1,059.3	56.3	1,059.7	7.24	-3.13	-6.56
10,050.0	93.00	178.40	9,386.3	-1,090.2	57.5	1,090.6	6.90	-5.48	4.19
10,082.0	92.70	178.40	9,384.7	-1,122.1	58.4	1,122.6	0.94	-0.94	0.00
10,114.0	92.50	178.40	9,383.2	-1,154.1	59.3	1,154.5	0.63	-0.63	0.00
10,146.0	92.80	177.50	9,381.7	-1,186.0	60.4	1,186.5	2.96	0.94	-2.81
10,177.0	92.90	177.10	9,380.2	-1,217.0	61.9	1,217.4	1.33	0.32	-1.29
10,209.0	91.50	178.00	9,379.0	-1,248.9	63.2	1,249.4	5.20	-4.38	2.81
10,241.0	90.50	177.30	9,378.4	-1,280.9	64.6	1,281.4	3.81	-3.13	-2.19
10,273.0	90.30	177.30	9,378.2	-1,312.8	66.1	1,313.3	0.63	-0.63	0.00
10,304.0	89.70	177.10	9,378.2	-1,343.8	67.6	1,344.3	2.04	-1.94	-0.65

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Red Hills West 22 Federal Com #1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3166.0usft (Patterson #45)
Site:	Sec. 22, T26S, R32E, N.M.P.M	MD Reference:	WELL @ 3166.0usft (Patterson #45)
Well:	Red Hills West 22 Federal Com #1H	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)	Bulld Rate (°/100usft)	Turn Rate (°/100usft)
10,336.0	90.10	177.80	9,378.2	-1,375.8	69.0	1,376.3	2.52	1.25	2.19
10,368.0	89.40	177.30	9,378.4	-1,407.7	70.4	1,408.3	2.69	-2.19	-1.56
10,400.0	91.40	177.80	9,378.2	-1,439.7	71.7	1,440.2	6.44	6.25	1.56
10,432.0	92.40	178.40	9,377.1	-1,471.7	72.8	1,472.2	3.64	3.13	1.88
10,463.0	92.40	177.70	9,375.8	-1,502.6	73.9	1,503.2	2.26	0.00	-2.26
10,495.0	92.50	177.50	9,374.4	-1,534.6	75.2	1,535.1	0.70	0.31	-0.63
10,526.0	92.50	177.80	9,373.1	-1,565.5	76.5	1,566.1	0.97	0.00	0.97
10,558.0	90.90	177.70	9,372.1	-1,597.5	77.7	1,598.1	5.01	-5.00	-0.31
10,591.0	90.20	177.50	9,371.8	-1,630.4	79.1	1,631.0	2.21	-2.12	-0.61
10,622.0	90.20	177.00	9,371.7	-1,661.4	80.6	1,662.0	1.61	0.00	-1.61
10,654.0	89.40	176.40	9,371.8	-1,693.4	82.4	1,694.0	3.12	-2.50	-1.88
10,685.0	89.00	175.70	9,372.3	-1,724.3	84.6	1,724.9	2.60	-1.29	-2.26
10,717.0	89.00	177.00	9,372.8	-1,756.2	86.6	1,756.9	4.06	0.00	4.06
10,749.0	88.40	177.80	9,373.5	-1,788.2	88.0	1,788.8	3.12	-1.88	2.50
10,780.0	88.50	179.10	9,374.4	-1,819.1	88.9	1,819.8	4.20	0.32	4.19
10,812.0	87.80	179.80	9,375.4	-1,851.1	89.2	1,851.8	3.09	-2.19	2.19
10,844.0	88.50	180.50	9,376.4	-1,883.1	89.1	1,883.8	3.09	2.19	2.19
10,876.0	90.80	181.20	9,376.6	-1,915.1	88.6	1,915.8	7.51	7.19	2.19
10,907.0	90.50	180.50	9,376.3	-1,946.1	88.2	1,946.7	2.46	-0.97	-2.26
10,939.0	89.70	180.30	9,376.2	-1,978.1	88.0	1,978.7	2.58	-2.50	-0.63
10,970.0	89.70	179.90	9,376.4	-2,009.1	87.9	2,009.7	1.29	0.00	-1.29
11,002.0	90.70	179.60	9,376.3	-2,041.1	88.0	2,041.7	3.26	3.13	-0.94
11,065.0	91.40	179.20	9,375.1	-2,104.1	88.7	2,104.7	1.28	1.11	-0.63
11,129.0	87.80	180.30	9,375.6	-2,168.1	89.0	2,168.7	5.88	-5.63	1.72
11,193.0	86.40	181.20	9,378.8	-2,232.0	88.1	2,232.6	2.60	-2.19	1.41
11,256.0	89.80	183.30	9,380.9	-2,294.9	85.7	2,295.5	6.34	5.40	3.33
11,288.0	89.70	182.80	9,381.0	-2,326.8	84.0	2,327.4	1.59	-0.31	-1.56
11,320.0	90.20	182.90	9,381.1	-2,358.8	82.4	2,359.4	1.59	1.56	0.31
11,352.0	91.70	182.60	9,380.5	-2,390.8	80.8	2,391.3	4.78	4.69	-0.94
11,383.0	92.20	182.90	9,379.5	-2,421.7	79.4	2,422.3	1.88	1.61	0.97
11,415.0	93.90	184.30	9,377.8	-2,453.6	77.3	2,454.1	6.88	5.31	4.38
11,447.0	93.90	184.30	9,375.6	-2,485.4	75.0	2,485.9	0.00	0.00	0.00
11,479.0	93.60	183.80	9,373.5	-2,517.3	72.7	2,517.8	1.82	-0.94	-1.56
11,511.0	93.60	183.50	9,371.5	-2,549.2	70.7	2,549.6	0.94	0.00	-0.94
11,543.0	92.50	182.40	9,369.8	-2,581.1	69.0	2,581.5	4.86	-3.44	-3.44
11,575.0	90.10	181.70	9,369.1	-2,613.0	67.9	2,613.5	7.81	-7.50	-2.19
11,607.0	89.80	180.50	9,369.1	-2,645.0	67.3	2,645.5	3.87	-0.94	-3.75
11,638.0	89.60	179.90	9,369.3	-2,676.0	67.2	2,676.5	2.04	-0.65	-1.94
11,669.0	88.80	179.60	9,369.7	-2,707.0	67.3	2,707.5	2.76	-2.58	-0.97
11,700.0	88.00	179.20	9,370.6	-2,738.0	67.6	2,738.5	2.89	-2.58	-1.29
11,732.0	87.70	178.50	9,371.8	-2,770.0	68.3	2,770.4	2.38	-0.94	-2.19
11,764.0	87.30	179.20	9,373.2	-2,801.9	68.9	2,802.4	2.52	-1.25	2.19
11,796.0	87.10	179.10	9,374.7	-2,833.9	69.4	2,834.4	0.70	-0.63	-0.31

DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Red Hills West 22 Federal Com #1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3166.0usft (Patterson #45)
Site:	Sec. 22, T26S, R32E, N.M.P.M	MD Reference:	WELL @ 3166.0usft (Patterson #45)
Well:	Red Hills West 22 Federal Com #1H	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)
11,828.0	88.50	178.50	9,375.9	-2,865.9	70.0	2,866.3	4.76	4.38	-1.88
11,860.0	89.20	178.70	9,376.6	-2,897.8	70.8	2,898.3	2.27	2.19	0.63
11,890.0	88.50	178.50	9,377.2	-2,927.8	71.6	2,928.3	2.43	-2.33	-0.67
11,922.0	89.10	178.40	9,377.9	-2,959.8	72.4	2,960.3	1.90	1.88	-0.31
11,954.0	89.10	178.40	9,378.4	-2,991.8	73.3	2,992.3	0.00	0.00	0.00
11,986.0	90.60	178.90	9,378.4	-3,023.8	74.1	3,024.3	4.94	4.69	1.56
12,018.0	91.00	179.40	9,378.0	-3,055.8	74.5	3,056.3	2.00	1.25	1.56
12,049.0	89.80	177.80	9,377.8	-3,086.8	75.3	3,087.3	6.45	-3.87	-5.16
12,081.0	88.30	176.60	9,378.3	-3,118.7	76.9	3,119.2	6.00	-4.69	-3.75
12,113.0	90.20	177.00	9,378.7	-3,150.7	78.6	3,151.2	6.07	5.94	1.25
12,145.0	91.70	177.30	9,378.2	-3,182.6	80.2	3,183.2	4.78	4.69	0.94
12,177.0	91.10	177.10	9,377.4	-3,214.6	81.8	3,215.1	1.98	-1.88	-0.63
12,208.0	91.00	176.60	9,376.9	-3,245.5	83.5	3,246.1	1.64	-0.32	-1.61
12,240.0	89.50	175.90	9,376.7	-3,277.5	85.6	3,278.0	5.17	-4.69	-2.19
12,272.0	87.80	176.60	9,377.5	-3,309.4	87.7	3,310.0	5.74	-5.31	2.19
12,304.0	86.70	178.00	9,379.0	-3,341.3	89.2	3,341.9	5.56	-3.44	4.38
12,336.0	86.70	180.50	9,380.8	-3,373.2	89.6	3,373.9	7.80	0.00	7.81
12,368.0	88.00	182.20	9,382.3	-3,405.2	88.9	3,405.8	6.68	4.06	5.31
12,399.0	90.50	184.20	9,382.7	-3,436.1	87.1	3,436.7	10.33	8.06	6.45
12,431.0	92.80	185.20	9,381.8	-3,468.0	84.5	3,468.6	7.84	7.19	3.13
12,463.0	92.90	185.60	9,380.2	-3,499.8	81.5	3,500.4	1.29	0.31	1.25
12,495.0	92.00	185.40	9,378.9	-3,531.7	78.4	3,532.2	2.88	-2.81	-0.63
12,526.0	91.80	185.60	9,377.8	-3,562.5	75.5	3,563.0	0.91	-0.65	0.65
12,558.0	91.60	185.60	9,376.9	-3,594.3	72.3	3,594.8	0.63	-0.63	0.00
12,590.0	92.40	185.70	9,375.8	-3,626.2	69.2	3,626.6	2.52	2.50	0.31
12,622.0	92.00	185.90	9,374.5	-3,658.0	66.0	3,658.4	1.40	-1.25	0.63
12,653.0	92.00	185.60	9,373.4	-3,688.8	62.9	3,689.2	0.97	0.00	-0.97
12,685.0	91.50	185.20	9,372.5	-3,720.6	59.9	3,721.0	2.00	-1.56	-1.25
12,718.0	92.00	185.60	9,371.5	-3,753.5	56.7	3,753.8	1.94	1.52	1.21
12,749.0	92.50	186.10	9,370.2	-3,784.3	53.6	3,784.6	2.28	1.61	1.61
12,779.0	92.00	185.60	9,369.1	-3,814.1	50.5	3,814.4	2.36	-1.67	-1.67
12,811.0	90.40	184.50	9,368.4	-3,846.0	47.7	3,846.2	6.07	-5.00	-3.44
12,843.0	89.90	183.60	9,368.3	-3,877.9	45.5	3,878.1	3.22	-1.56	-2.81
12,874.0	88.60	182.80	9,368.7	-3,908.9	43.7	3,909.1	4.92	-4.19	-2.58
12,906.0	88.50	181.70	9,369.5	-3,940.8	42.5	3,941.0	3.45	-0.31	-3.44
12,938.0	90.00	181.50	9,369.9	-3,972.8	41.6	3,973.0	4.73	4.69	-0.63
12,970.0	90.00	180.80	9,369.9	-4,004.8	40.9	4,005.0	2.19	0.00	-2.19
13,002.0	89.50	180.70	9,370.1	-4,036.8	40.5	4,037.0	1.59	-1.56	-0.31
13,033.0	89.50	179.90	9,370.4	-4,067.8	40.4	4,068.0	2.58	0.00	-2.58
13,065.0	90.70	180.70	9,370.3	-4,099.8	40.2	4,100.0	4.51	3.75	2.50
13,097.0	90.70	180.50	9,369.9	-4,131.8	39.9	4,132.0	0.62	0.00	-0.63
13,129.0	91.00	180.10	9,369.4	-4,163.8	39.7	4,164.0	1.56	0.94	-1.25
13,160.0	91.30	180.30	9,368.8	-4,194.8	39.6	4,195.0	1.16	0.97	0.65
13,192.0	89.80	180.50	9,368.5	-4,226.8	39.4	4,227.0	4.73	-4.69	0.63

DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Red Hills West 22 Federal Com #1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3166.0usft (Patterson #45)
Site:	Sec. 22, T26S, R32E, N.M.P.M	MD Reference:	WELL @ 3166.0usft (Patterson #45)
Well:	Red Hills West 22 Federal Com #1H	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)
13,224.0	86.90	179.40	9,369.4	-4,258.8	39.4	4,258.9	9.69	-9.06	-3.44
13,256.0	86.30	179.60	9,371.3	-4,290.7	39.7	4,290.9	1.98	-1.88	0.63
13,288.0	87.40	179.80	9,373.1	-4,322.6	39.8	4,322.8	3.49	3.44	0.63
13,320.0	90.70	179.40	9,373.6	-4,354.6	40.1	4,354.8	10.39	10.31	-1.25
13,351.0	92.90	180.30	9,372.6	-4,385.6	40.1	4,385.8	7.67	7.10	2.90
13,383.0	92.90	180.50	9,371.0	-4,417.6	39.9	4,417.8	0.62	0.00	0.63
13,415.0	92.90	179.60	9,369.4	-4,449.5	39.9	4,449.7	2.81	0.00	-2.81
13,446.0	93.00	179.10	9,367.8	-4,480.5	40.2	4,480.7	1.64	0.32	-1.61
13,478.0	93.10	178.20	9,366.1	-4,512.4	41.0	4,512.6	2.83	0.31	-2.81
13,510.0	91.80	178.90	9,364.7	-4,544.4	41.8	4,544.6	4.61	-4.06	2.19
13,542.0	91.70	178.50	9,363.8	-4,576.4	42.5	4,576.6	1.29	-0.31	-1.25
TD									
13,592.0	91.70	178.50	9,362.3	-4,626.3	43.8	4,626.5	0.00	0.00	0.00

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
8,700.0	8,696.2	-156.2	83.5	Tie-in to Gyro
13,592.0	9,362.3	-4,626.3	43.8	TD

Checked By: _____ Approved By: _____ Date: _____

Packers Plus		Do It Once. Do It Right.		Confidential Information - not to be disclosed outside Mewbourne Oil Company		Final Completion	
Prepared for Mr. Mickey Young		Company Mewbourne Oil Company		Date 28-Dec-10			
Well Name Red Hill West -22- Fed Com #1H		Type of installation 20-Stage 4-1/2" StackFRAC® HD		Location Lea County, NM			
Depth		Drawing		Description		Page 1 of 2	
REV_		9363					
TVD		8711					
KOP							
				Drillable FracPORT's to be shipped without handling pups			
9443.87 362 BBLS		Latched Seal Assembly 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 3' x 4-1/2" 11.6# P-110 LTC Pup Joint 7" 26# P-110 LT&C/BTC Casing		JOINTS: 5.875" 3.875" 5.850" 4.500"		4.750 3.850 3.850 4.000	
9648		4-1/2" 11.60# P-110 LTC LINER		JOINTS:		4.500" 4.000 213.75	
Stage 20 9664.22' 365 bbls		Packers Plus 4-1/2" Drillable FracPORT™ with 3.625" Seat for 3.750" High Pressure Ball PN: 121332-000024 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0031107		JOINTS:		5.630" 3.625 2.65 3.720	
9755.25'		4-1/2" 11.60# P-110 LTC LINER 6' x 4-1/2" 11.6# P-110 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039736 3' x 4-1/2" 11.6# P-110 LTC Pup Joint 4-1/2" 11.60# P-110 LTC LINER		JOINTS:		4.500" 4.000 82.4 4.500" 4.000 5.98 5.750" 3.750 5.25 4.500" 4.000 2.97 4.500" 4.000 84.05	
Stage 19 9847.52' 368 bbls		Packers Plus 4-1/2" Drillable FracPORT™ with 3.500" Seat for 3.625" High Pressure Ball PN: 121332-000023 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0038881		JOINTS:		5.630" 3.500 2.65 3.720	
9982.07'		4-1/2" 11.60# P-110 LTC LINER 6' x 4-1/2" 11.6# P-110 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039722 3' x 4-1/2" 11.6# P-110 LTC Pup Joint 4-1/2" 11.60# P-110 LTC LINER		JOINTS:		4.500" 4.000 125.92 4.500" 4.000 5.98 5.750" 3.750 5.25 4.500" 4.000 2.98 4.500" 4.000 85.29	
Stage 18 10075.33' 372 bbls		Packers Plus 4-1/2" Drillable FracPORT™ with 3.375" Seat for 3.250" High Pressure Ball PN: 108482-000060 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0042737		JOINTS:		5.630" 3.375 2.65 3.720	
10169.74'		4-1/2" 11.60# P-110 LTC LINER 6' x 4-1/2" 11.6# P-110 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039720 3' x 4-1/2" 11.6# P-110 LTC Pup Joint 4-1/2" 11.60# P-110 LTC LINER		JOINTS:		4.500" 4.000 85.54 4.500" 4.000 5.96 5.750" 3.750 5.25 4.500" 4.000 2.96 4.500" 4.000 84.8	
Stage 17 10262.75' 375 bbls		Packers Plus 4-1/2" Drillable FracPORT™ with 3.250" Seat for 3.375" High Pressure Ball PN: 108482-000059 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0045767		JOINTS:		5.630" 3.250 2.65 3.720	
10395.21'		4-1/2" 11.60# P-110 LTC LINER 6' x 4-1/2" 11.6# P-110 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039548 3' x 4-1/2" 11.6# P-110 LTC Pup Joint 4-1/2" 11.60# P-110 LTC LINER		JOINTS:		4.500" 4.000 123.81 4.500" 4.000 6 5.750" 3.750 5.25 4.500" 4.000 2.98 4.500" 4.000 82.06	
Stage 16 10486.5' 378 bbls		Packers Plus 4-1/2" Drillable FracPORT™ with 3.125" Seat for 3.250" High Pressure Ball PN: 108482-000058 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0042659		JOINTS:		5.630" 3.125 2.65 3.720	
10578.49'		4-1/2" 11.60# P-110 LTC LINER 6' x 4-1/2" 11.6# P-110 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039546 3' x 4-1/2" 11.6# P-110 LTC Pup Joint 4-1/2" 11.60# P-110 LTC LINER		JOINTS:		4.500" 4.000 84.37 4.500" 4.000 5.97 5.750" 3.750 5.25 4.500" 4.000 2.98 4.500" 4.000 125.07	
Stage 15 10711.70' 382 bbls		Packers Plus 4-1/2" Drillable FracPORT™ with 3.000" Seat for 3.125" High Pressure Ball PN: 108482-000057 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0044209		JOINTS:		5.630" 3.000 2.65 3.720	
10805.69'		4-1/2" 11.60# P-110 LTC LINER 6' x 4-1/2" 11.6# P-110 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039724 3' x 4-1/2" 11.6# P-110 LTC Pup Joint 4-1/2" 11.60# P-110 LTC LINER		JOINTS:		4.500" 4.000 85.28 4.500" 4.000 5.97 5.750" 3.750 5.25 4.500" 4.000 2.97 4.500" 4.000 82.98	
Stage 14 10896.83' 385 bbls		Packers Plus 4-1/2" Drillable FracPORT™ with 2.875" Seat for 3.000" High Pressure Ball PN: 108482-000056 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0045147		JOINTS:		5.630" 2.875 2.65 3.720	
11029.45'		4-1/2" 11.60# P-110 LTC LINER 6' x 4-1/2" 11.6# P-110 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039716 3' x 4-1/2" 11.6# P-110 LTC Pup Joint 4-1/2" 11.60# P-110 LTC LINER		JOINTS:		4.500" 4.000 123.94 4.500" 4.000 5.97 5.750" 3.750 5.25 4.500" 4.000 2.98 4.500" 4.000 82.3	
Stage 13 11119.98' 388 bbls		Packers Plus 4-1/2" Drillable FracPORT™ with 2.750" Seat for 2.875" High Pressure Ball PN: 108482-000055 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0045959		JOINTS:		5.630" 2.750 2.65 3.720	
11211.52'		4-1/2" 11.60# P-110 LTC LINER 6' x 4-1/2" 11.6# P-110 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039714 3' x 4-1/2" 11.6# P-110 LTC Pup Joint 4-1/2" 11.60# P-110 LTC LINER		JOINTS:		4.500" 4.000 82.91 4.500" 4.000 5.98 5.750" 3.750 5.25 4.500" 4.000 2.97 4.500" 4.000 127.96	
Stage 12 11347.7' 392 bbls		Packers Plus 4-1/2" Drillable FracPORT™ with 2.625" Seat for 2.750" High Pressure Ball PN: 108482-000054 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0037107		JOINTS:		5.630" 2.625 2.65 3.720	
11440.74'		4-1/2" 11.60# P-110 LTC LINER 6' x 4-1/2" 11.6# P-110 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039720 3' x 4-1/2" 11.6# P-110 LTC Pup Joint		JOINTS:		4.500" 4.000 84.42 4.500" 4.000 5.97 5.750" 3.750 5.25 4.500" 4.000 2.97	
Service Center		Telephone		Contact		Telephone	
Midland, TX		432-563-8024		Keith Martin		Chad Williams 405-255-3222	

Packers Plus		Do It Once. Do It Right.		Confidential Information - not to be disclosed outside Mewbourne Oil Company		Final Completion	
Prepared for Mr. Mickey Young		Company Mewbourne Oil Company		Date 28-Dec-10			
Well Name Red Hill West -22- Fed Com #1H		Type of Installation 20-Stage 4-1/2" StackFRAC® HD		Location Lea County, NM			
Depth	Drawing	Description		OD(in)	ID(in)	Length	
Page 2 of 2							
REV_		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	89	
Stage 11 11538.37 394 bbls		Packers Plus 4-1/2" Drilable FracPORT™ with 2.500" Seat for 2.625" High Pressure Ball PN: 108482-000053 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0044121		5.630"	2.500 3.720	2.65	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	84.78	
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	5.99	
11631.65		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039726		5.750"	3.750	5.25	
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	2.98	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	86.34	
Stage 10 11725.93 397 bbls		Packers Plus 4-1/2" Drilable FracPORT™ with 2.375" Seat for 2.500" High Pressure Ball PN: 108482-000052 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0045365		5.630"	2.375 3.720	2.65	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	84.99	
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	5.96	
11819.59		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039738		5.750"	3.750	5.25	
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	2.92	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	42.92	
Stage 9 11870.78 400 bbls		Packers Plus 4-1/2" Drilable FracPORT™ with 2.250" Seat for 2.375" High Pressure Ball PN: 108482-000051 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0045299		5.630"	2.250 3.720	2.65	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	128.58	
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	5.96	
12007.68		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039728		5.750"	3.750	5.25	
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	2.91	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	84.91	
Stage 8 12100.84 403 bbls		Packers Plus 4-1/2" Drilable FracPORT™ with 2.125" Seat for 2.250" High Pressure Ball PN: 108482-000050 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0044257		5.630"	2.125 3.720	2.65	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	84.19	
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	5.95	
12193.66		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039550		5.750"	3.750	5.25	
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	3	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	84.28	
Stage 7 12287 406 bbls		Packers Plus 4-1/2" Drilable FracPORT™ with 2.000" Seat for 2.125" High Pressure Ball PN: 108482-000049 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0041471		5.630"	2.000 3.720	2.65	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	85.25	
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	5.97	
12380.86		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039710		5.750"	3.750	5.25	
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	2.97	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	125.63	
Stage 6 12514.71 410 bbls		Packers Plus 4-1/2" Drilable FracPORT™ with 1.875" Seat for 2.000" High Pressure Ball PN: 108482-000048 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0042059		5.630"	1.875 3.720	2.65	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	84.33	
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	5.97	
12609.56		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039718		5.750"	3.750	5.25	
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	2.96	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	127.28	
Stage 5 12745.09 413 bbls		Packers Plus 4-1/2" Drilable FracPORT™ with 1.750" Seat for 1.875" High Pressure Ball PN: 108482-000047 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0043559		5.630"	1.750 3.720	2.65	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	85.31	
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	5.97	
12839.05		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039558		5.750"	3.750	5.25	
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	2.97	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	85.15	
Stage 4 12932.49 416 bbls		Packers Plus 4-1/2" Drilable FracPORT™ with 1.625" Seat for 1.750" High Pressure Ball PN: 108482-000046 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0044825		5.630"	1.625 3.720	2.65	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	85.66	
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	5.98	
13026.96		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039560		5.750"	3.750	5.25	
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	2.95	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	83.64	
Stage 3 13120.9 419 bbls		Packers Plus 4-1/2" Drilable FracPORT™ with 1.500" Seat for 1.625" High Pressure Ball PN: 108482-000045 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0044773		5.630"	1.500 3.720	2.65	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	124.45	
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	5.98	
13254.02		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039564		5.750"	3.750	5.25	
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	2.97	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	92.83	
Stage 2 13345.71 422 bbls		Packers Plus 4-1/2" Drilable FracPORT™ with 1.375" Seat for 1.500" High Pressure Ball PN: 108482-000044 (5 shear pins at 315 psi each: 1,575 psi opening pressure)SN EM0037907		5.630"	1.375 3.720	2.65	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	81.99	
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	6.01	
13439.02		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 121381-000001 (6 shear pins at 324 psi each: 1,950 psi setting pressure)SN EA0039580		5.750"	3.750	5.25	
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	2.98	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	86.08	
Stage 1 13540.86 426 bbls		Packers Plus 4-1/2" Dual Hydraulic FracPORT™ Centralized PN: 105900-000002 (11 pins at 391 psi each: 4,301 psi Upper) / (7 pins at 630 psi each: 4,410 psi Lower) SN EA0034533		5.630"	3.750	4.34	
		4-1/2" 11.60# P-110 LTC LINER JOINTS:		4.500"	4.000	2.73	
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	5.97	
13553.9		Packers Plus 4-1/2" Toe Circulating Sub w/ 1.00" Seat for 1.25" High Pressure Ball PN: 103039-000011 (3 pins at 366 psi each: 1,098 psi closing pressure)SN 0044437		5.500"	NA	2.72	
		4-1/2" LTC Single Valve Float Collar PN: 104733		5.000"	NA	1.33	
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint		4.500"	4.000	5.97	
		4-1/2" LTC Single Valve Float Collar PN: 104733		5.000"	NA	1.33	
13566		4-1/2" LTC Guide Shoe PN: 121704-000001		5.500"	2.250	0.75	
Service Center Midland, TX		Telephone 432-563-8024		Contact Keith Martin		Telephone Chad Williams 405-255-3222	