

Results of Directional Survey

API number:	30-025-39902		
OGRID:		Operator:	MEWBOURNE OIL CO
		Property:	RED HILLS WEST 8 FEDERAL # 1H

surface	ULSTR:	P	08	T 26S	R 32E
				330 FSL	380 FEL

BH Loc	ULSTR:	A	08	T 26S	R 32E
13513	MD	8932.5	TVD	4982 FSL	552 FEL

Top Perf/OH	ULSTR:	P	08	T 26S	R 32E
8932	MD	8953.1	TVD	890 FSL	478 FEL

Bot Perf/OH	ULSTR:	A	08	T 26S	R 32E
13460	MD	8932.1	TVD	4929 FSL	538 FEL

	MD	N/S	E/W	VD
	9378	528.76	-98.29	8953.45
TOP PERFS/OH	9409	559.79	-97.97	8953.12
	9409	559.79	-97.97	8953.12
	13440	4579.26	-153.25	8931.95
BOT PERFS/OH	13460	4599.14	-158.32	8932.11
	13472	4611.07	-161.36	8932.20

NEXT TO LAST	13440	4579.26	-153.25	8931.95
LAST READING	13472	4611.07	-161.36	8932.20
TD	13513	4651.83	-171.75	8932.52

Surface Location	330	FS	380	FE
Projected BHL	4982	FS	552	FE
Location of				
Top Perfs/OH	890	FS	478	FE
Bottom Perfs/OH	4929	FS	538	FE

SUMMARY of Subsurface Locations

Surface Location	P-08-26S-32E	330	FS	380	FE	Vert. Depth
Top Perfs/OH	P-08-26S-32E	890	FS	478	FE	8953.12
Bottom Perfs/OH	A-08-26S-32E	4929	FS	538	FE	8932.11
Projected TD	A-08-26S-32E	4982	FS	552	FE	8932.52

OPERATOR
WELL/LEASE
COUNTY

MEWBOURNE OIL COMPANY
RED HILLS WEST 8 FEDERAL COM 1H

STATE OF NEW MEXICO
DEVIATION REPORT

235	0.41
474	0.41
755	0.48
1,096	0.86
1,104	1.46
1,366	0.77
1,619	0.67
1,865	1.58
2,104	2.15
2,435	2.29
2,593	0.94
2,783	0.67
3,005	0.84
3,282	0.76
3,534	1.09
3,947	2.28
4,169	3.89
4,232	3.65
4,327	2.64
4,422	2.43
4,551	2.60
4,646	1.96
4,753	1.76
5,042	1.35
5,392	0.89
5,772	0.38
6,184	0.74
6,628	0.76
6,976	1.34
7,198	0.85
7,580	1.20
7,833	1.81
8,117	1.87

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JAN 18 2011
HOBBSOCD

SUR @ P-8-26s-32e, 330/S & 380/E
BHL @ A-8-26s-32e, 4982/S & 552/E
API # 30-025-39902

STATE OF TEXAS

BY: Linda Robinson

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on 12/09/10, by Linda Robinson on behalf of Patterson-UTI Drilling Company LLC.

[Signature]
Notary Public for Midland County, Texas
My Commission Expires:

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DEC 20 2010

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JAN 18 2011

HOBBSOCD

MEWBOURNE OIL

Wildcat Bone Springs

Lea County, NM

Red Hills West "8" Federal #1H

VH - Job #32K1010821

SUR @ P-8-26s-32e, 330/S & 380/E
BHL @ A-8-26s-32e, 4982/S & 552/E
API # 30-025-39902

Survey: Actual

SDI Standard Survey Report

14 November, 2010

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

Richard

Notorized this date 14th of November, 2010.

Carrie Reed

Notary Signature
County of Midland
State of Texas



Scientific Drilling International, Inc.
SDI Standard Survey Report

Company:	MEWBOURNE OIL	Local Co-ordinate Reference:	Well Red Hills West "8" Federal #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 "8" Federal #1H	North Reference:	Grid
Wellbore:	VH - Job #32K1010821	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1010821	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	Latitude:	32° 3' 3.700 N
From:	Lat/Long	Easting:	699,520.90 usft	Longitude:	103° 41' 21.680 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.34 °

Well	Red Hills West "8" Federal #1H, Directional (Baker Inteq)					
Well Position	+N/-S	0.0 usft	Northing:	382,884.16 usft	Latitude:	32° 3' 3.700 N
	+E/-W	0.0 usft	Easting:	699,520.90 usft	Longitude:	103° 41' 21.680 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	0.0 usft

Wellbore	VH - Job #32K1010821				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	10/23/2010	7.76	60.02	48,625

Design	VH- Job #32K1010821				
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	359.50	

Survey Program		Date	11/14/2010		
From (usft)	To (usft)	Survey (Wellbore)		Tool Name	Description
100.0	9,475.0	Actual (VH - Job #32K1010821)		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	0.22	130.11	100.0	-0.1	0.1	130.11	0.2
200.0	0.12	158.20	200.0	-0.3	0.3	136.02	0.5
300.0	0.23	227.05	300.0	-0.6	0.2	158.79	0.6
400.0	0.28	215.30	400.0	-0.9	-0.1	183.98	0.9
500.0	0.50	196.61	500.0	-1.5	-0.3	192.14	1.6
600.0	0.68	194.59	600.0	-2.5	-0.6	193.45	2.6
700.0	0.75	186.83	700.0	-3.7	-0.8	192.50	3.8
800.0	0.75	200.98	800.0	-5.0	-1.1	192.85	5.1
900.0	1.24	185.23	900.0	-6.7	-1.5	192.43	6.9
1,000.0	1.09	216.05	999.9	-8.5	-2.1	194.03	8.8
1,100.0	1.24	181.19	1,099.9	-10.4	-2.7	194.65	10.7

Scientific Drilling International, Inc.
SDI Standard Survey Report

Company:	MEWBOURNE OIL	Local Co-ordinate Reference:	Well Red Hills West "8" Federal #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 "8" Federal #1H	North Reference:	Grid
Wellbore:	VH - Job #32K1010821	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1010821	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	1.40	161.00	1,199.9	-12.6	-2.3	190.50	12.8
1,300.0	1.42	149.03	1,299.9	-14.9	-1.3	185.03	14.9
1,400.0	1.30	148.11	1,399.8	-16.9	-0.1	180.24	16.9
1,500.0	1.11	144.70	1,499.8	-18.6	1.1	176.65	18.7
1,600.0	0.86	198.82	1,599.8	-20.1	1.4	176.00	20.2
1,700.0	1.81	210.40	1,699.8	-22.2	0.4	179.06	22.2
1,800.0	1.83	205.25	1,799.7	-25.0	-1.1	182.55	25.0
1,900.0	2.09	196.23	1,899.7	-28.2	-2.3	184.67	28.3
2,000.0	2.04	199.10	1,999.6	-31.6	-3.4	186.13	31.8
2,100.0	1.86	191.47	2,099.5	-34.9	-4.3	187.03	35.2
2,200.0	1.84	189.97	2,199.5	-38.1	-4.9	187.34	38.4
2,300.0	2.04	190.61	2,299.4	-41.4	-5.5	187.58	41.8
2,400.0	1.87	193.12	2,399.4	-44.7	-6.2	187.90	45.2
2,500.0	1.52	199.86	2,499.3	-47.6	-7.0	188.40	48.1
2,600.0	1.11	200.13	2,599.3	-49.7	-7.8	188.92	50.4
2,700.0	0.99	203.56	2,699.3	-51.4	-8.5	189.37	52.1
2,800.0	1.03	206.53	2,799.3	-53.0	-9.2	189.88	53.8
2,900.0	0.82	199.08	2,899.3	-54.5	-9.9	190.26	55.4
3,000.0	0.81	196.52	2,999.2	-55.9	-10.3	190.45	56.8
3,100.0	0.70	155.46	3,099.2	-57.1	-10.3	190.18	58.0
3,200.0	0.58	110.63	3,199.2	-57.8	-9.5	189.35	58.6
3,300.0	1.37	67.13	3,299.2	-57.6	-8.0	187.87	58.1
3,400.0	1.41	65.56	3,399.2	-56.6	-5.7	185.78	56.9
3,500.0	1.28	64.65	3,499.2	-55.6	-3.6	183.71	55.7
3,600.0	1.29	71.53	3,599.1	-54.8	-1.5	181.59	54.8
3,700.0	1.91	97.18	3,699.1	-54.6	1.2	178.74	54.6
3,800.0	2.77	109.23	3,799.0	-55.6	5.1	174.73	55.9
3,900.0	2.82	110.41	3,898.9	-57.3	9.7	170.37	58.1
4,000.0	3.49	113.75	3,998.7	-59.4	14.8	165.99	61.2
4,100.0	3.75	118.74	4,098.5	-62.2	20.5	161.78	65.4
4,200.0	3.50	119.43	4,198.3	-65.2	26.0	158.27	70.2
4,300.0	2.73	122.11	4,298.2	-68.0	30.7	155.72	74.6
4,400.0	2.25	115.31	4,398.1	-70.1	34.5	153.82	78.1
4,500.0	2.04	117.50	4,498.0	-71.8	37.8	152.21	81.1
4,600.0	1.82	117.38	4,598.0	-73.3	40.8	150.90	83.9
4,700.0	1.58	115.64	4,697.9	-74.6	43.5	149.79	86.4
4,800.0	1.44	118.79	4,797.9	-75.8	45.8	148.87	88.6
4,900.0	1.17	120.83	4,897.9	-77.0	47.8	148.17	90.6
5,000.0	1.17	121.95	4,997.8	-78.0	49.5	147.60	92.4
5,100.0	1.15	128.82	5,097.8	-79.2	51.2	147.14	94.3
5,200.0	1.01	128.18	5,197.8	-80.4	52.6	146.78	96.1
5,300.0	0.95	136.74	5,297.8	-81.5	53.9	146.53	97.7
5,400.0	0.68	152.60	5,397.8	-82.7	54.7	146.48	99.1
5,500.0	0.69	166.60	5,497.8	-83.8	55.2	146.64	100.3

Scientific Drilling International, Inc.
SDI Standard Survey Report

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Site:	Lea County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Red Hills West "8" Federal #1H	North Reference:	Grid
Wellbore:	VH - Job #32K1010821	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1010821	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	0.59	186.72	5,597.8	-84.9	55.2	146.94	101.3
5,700.0	0.59	196.58	5,697.8	-85.9	55.0	147.35	102.0
5,800.0	0.58	197.02	5,797.8	-86.8	54.7	147.78	102.7
5,900.0	0.53	194.87	5,897.8	-87.8	54.5	148.18	103.3
6,000.0	0.55	193.60	5,997.8	-88.7	54.2	148.55	104.0
6,100.0	0.54	193.92	6,097.7	-89.6	54.0	148.92	104.6
6,200.0	0.56	185.71	6,197.7	-90.6	53.8	149.26	105.4
6,300.0	0.59	195.59	6,297.7	-91.5	53.7	149.62	106.1
6,400.0	0.69	214.63	6,397.7	-92.5	53.2	150.11	106.7
6,500.0	0.71	207.31	6,497.7	-93.6	52.6	150.68	107.3
6,600.0	0.76	214.93	6,597.7	-94.7	51.9	151.27	108.0
6,700.0	1.02	206.67	6,697.7	-96.0	51.1	151.97	108.8
6,800.0	1.15	215.37	6,797.7	-97.6	50.1	152.82	109.7
6,900.0	1.10	210.44	6,897.7	-99.3	49.1	153.70	110.7
7,000.0	1.20	213.30	6,997.6	-101.0	48.0	154.57	111.8
7,100.0	1.26	220.06	7,097.6	-102.7	46.7	155.54	112.8
7,200.0	1.26	225.85	7,197.6	-104.3	45.2	156.56	113.7
7,300.0	1.29	227.78	7,297.6	-105.8	43.6	157.61	114.4
7,400.0	1.53	224.24	7,397.5	-107.5	41.8	158.74	115.4
7,500.0	1.53	217.56	7,497.5	-109.5	40.1	159.90	116.6
7,600.0	1.60	215.97	7,597.5	-111.7	38.5	161.01	118.2
7,700.0	1.66	213.44	7,697.4	-114.1	36.8	162.10	119.9
7,800.0	1.56	213.03	7,797.4	-116.4	35.3	163.13	121.7
7,900.0	1.70	215.72	7,897.4	-118.8	33.7	164.16	123.5
8,000.0	1.72	215.79	7,997.3	-121.2	31.9	165.23	125.3
8,100.0	1.65	214.87	8,097.3	-123.6	30.2	166.25	127.2
8,200.0	1.52	218.03	8,197.2	-125.8	28.6	167.19	129.0
8,300.0	1.51	217.18	8,297.2	-127.9	27.0	168.08	130.7
8,400.0	1.39	224.07	8,397.2	-129.8	25.4	168.95	132.3
8,500.0	1.55	228.79	8,497.1	-131.6	23.5	169.88	133.7
8,600.0	1.57	222.61	8,597.1	-133.5	21.5	170.83	135.2
8,700.0	2.02	235.13	8,697.0	-135.5	19.2	171.95	136.9
8,800.0	2.15	242.65	8,797.0	-137.4	16.1	173.33	138.3
8,900.0	2.14	243.60	8,896.9	-139.1	12.7	174.77	139.6
9,000.0	1.72	236.13	8,996.8	-140.7	9.8	176.02	141.1
9,100.0	1.48	216.37	9,096.8	-142.6	7.8	176.87	142.8
9,200.0	1.66	204.31	9,196.8	-145.0	6.4	177.46	145.1
9,300.0	2.48	181.99	9,296.7	-148.5	5.8	177.78	148.6
9,400.0	2.81	179.11	9,396.6	-153.1	5.7	177.86	153.2
9,475.0	2.64	181.74	9,471.5	-156.6	5.7	177.92	156.7



Scientific Drilling
Directional Drilling Operations

Project: Wildcat Bone Springs
Lea County, NM
Well: Red Hills West "8" Federal #1H
Wellbore: VH - Job #32K1010821
Design: VH - Job #32K1010821

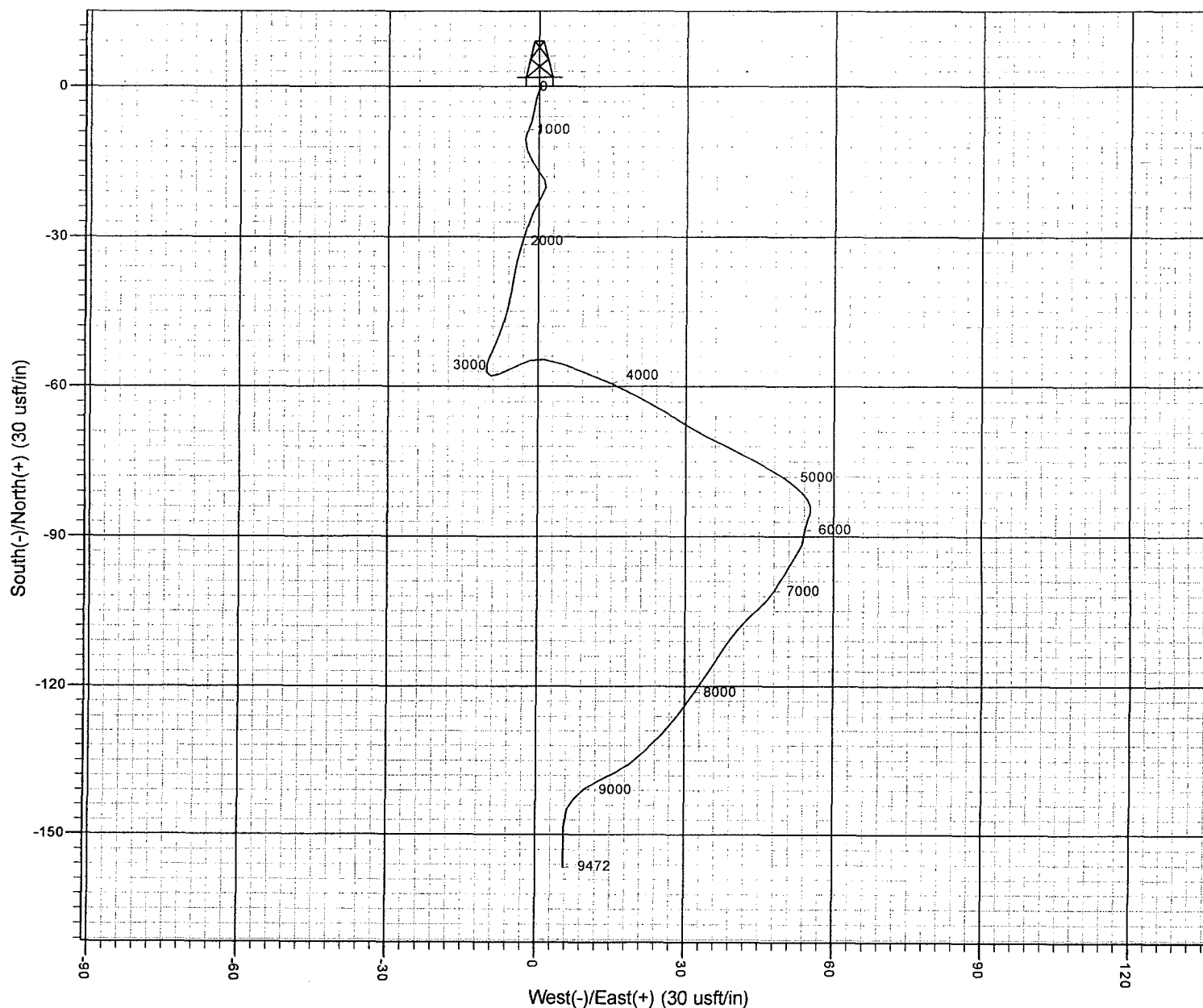


Azimuths to Grid North
True North: -0.34°
Magnetic North: 7.42°

Magnetic Field
Strength: 48625.0nT
Dip Angle: 60.02°
Date: 10/23/2010
Model: BGGM2010

WELL DETAILS: Red Hills West "8" Federal #1H
WELL @ 0.0usft (Original Well Elev)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	382884.16	699520.90	32° 3' 3.700 N	103° 41' 21.680 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

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Mewbourne Oil Company

Location: Lea County, NM
Field: (Red West) Sec 8, T26S, R32E
Facility: Red Hills West 8 Fed Com No. 1H

Slot: No. 1H SHL
Well: No. 1H
Wellbore: No. 1H PWB



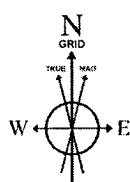
Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	8300.00	1.51	217.180	8297.19	-127.91	26.99	0.00	-128.13
EST. KOP	8373.00	1.51	217.180	8370.17	-129.44	25.83	0.00	-129.66
END OF CURVE	9285.02	90.00	359.323	8955.03	443.30	9.60	10.00	443.20
No. 1H PBHL	13525.32	90.00	359.323	8955.00	4683.31	-40.48	0.00	4683.49

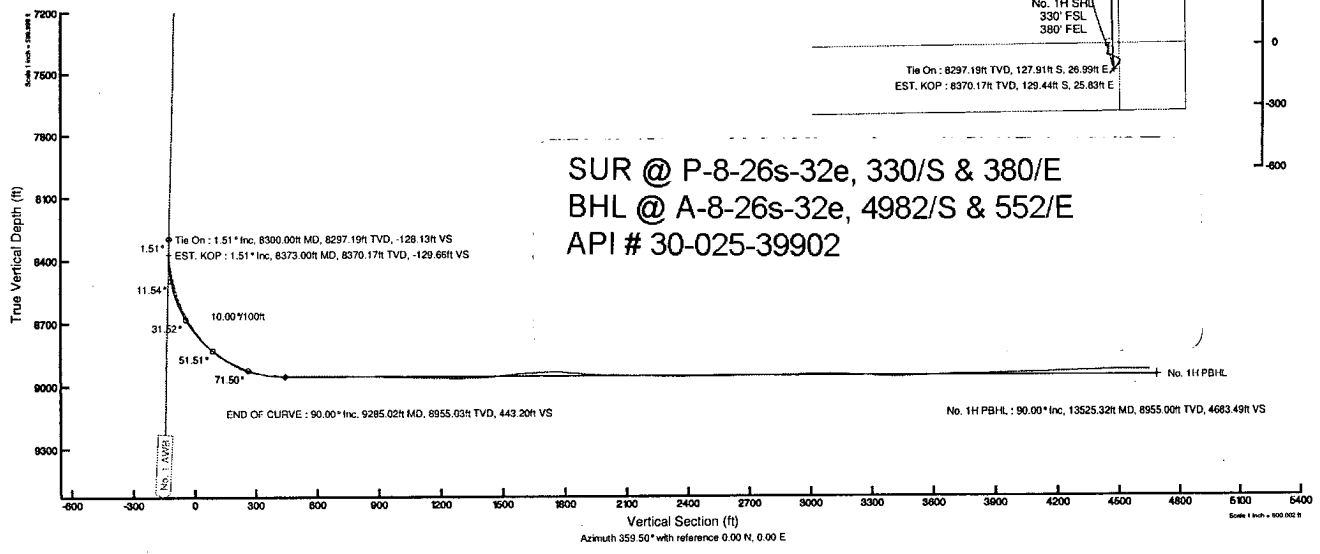
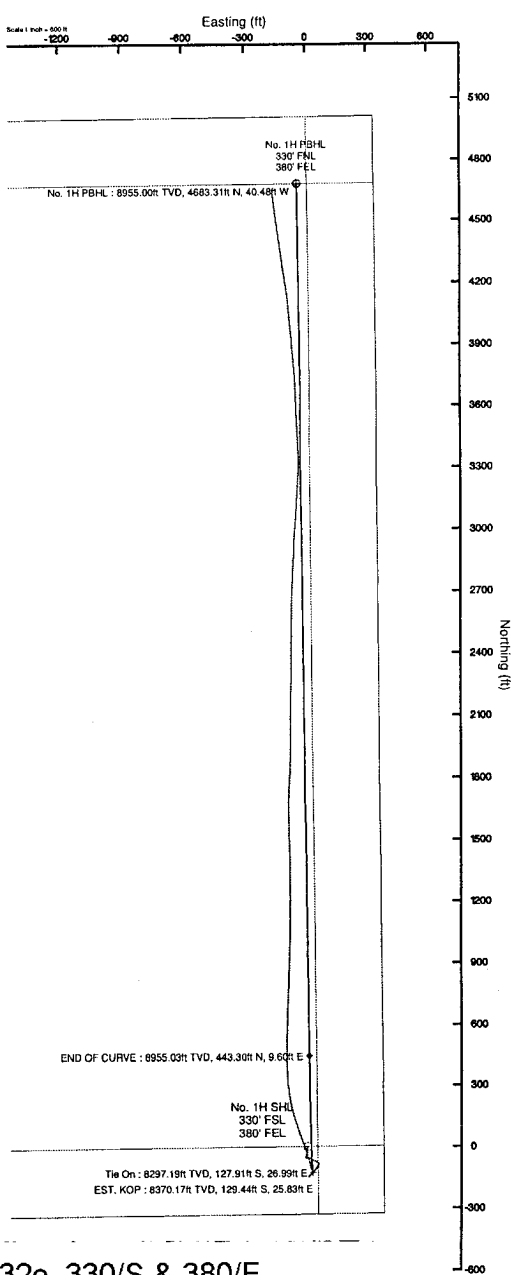


Mewbourne Oil Company

Plot reference wellpath is Plan #1	Grid System: NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet
True vertical depths are referenced to Rig on No. 1H SHL (KB)	North Reference: Grid north
Measured depths are referenced to Rig on No. 1H SHL (KB)	Scale: True distance
Rig on No. 1H SHL (KB) to Mean Sea Level: 3211 feet	Depths are in feet
Mean Sea Level to Mudline (Facility: Red Hills West 8 Fed Com No. 1H): 3193 feet	Created by: Victor Hernandez on 10/26/2010
Coordinates are in feet referenced to Skit	



BGGM (1945.0 to 2011.0) Dip: 60.04° Field: 48664.1 nT
Magnetic North is 7.78 degrees East of True North (at 6/14/2010)
Grid North is 0.34 degrees East of True North
To correct azimuth from True to Grid subtract 0.34 degrees
To correct azimuth from Magnetic to Grid add 7.44 degrees
For example: If the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.44 = 97.44



SUR @ P-8-26s-32e, 330/S & 380/E
BHL @ A-8-26s-32e, 4982/S & 552/E
API # 30-025-39902

Actual Wellpath Report

No. 1H AWP

Page 1 of 7

INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(Red West) Sec 8, T26S, R32E	Wellbore	No. 1H AWB
Facility	Red Hills West 8 Fed Com No. 1H	Sidetrack from	No. 1 AWB at 8300.00 MD

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Gomeoscr
Scale	0.999955	Report Generated	11/22/2010 at 7:57:21 AM
Convergence at slot	0.34° East	Database/Source file	WA Midland/No. 1H_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	699521.08	382884.11	32°03'03.699"N	103°41'21.678"W
Facility Reference Pt			699521.08	382884.11	32°03'03.699"N	103°41'21.678"W
Field Reference Pt			699521.08	382884.11	32°03'03.699"N	103°41'21.678"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 1H SHL (KB) to GL	18.00ft
Horizontal Reference Pt	Slot	Rig on No. 1H SHL (KB) to Mean Sea Level	3211.00ft
Vertical Reference Pt	Rig on No. 1H SHL (KB)	GL to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 1H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.50°

Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(Red West) Sec 8, T26S, R32E	Wellbore	No. 1H AWB
Facility	Red Hills West 8 Fed Com No. 1H	Sidetrack from	No. 1 AWB at 8300.00 MD

WELLPATH DATA (241 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
0.00	0.000	130.110	0.00	0.00	0.00	0.00	699521.08	382884.11	32°03'03.699"N	103°41'21.678"W	0.00
100.00	0.220	130.110	100.00	-0.12	-0.12	0.15	699521.23	382883.99	32°03'03.698"N	103°41'21.676"W	0.22
200.00	0.120	158.200	200.00	-0.35	-0.34	0.33	699521.41	382883.77	32°03'03.696"N	103°41'21.674"W	0.13
300.00	0.230	227.050	300.00	-0.58	-0.58	0.22	699521.30	382883.53	32°03'03.694"N	103°41'21.675"W	0.22
400.00	0.280	215.300	400.00	-0.91	-0.91	-0.06	699521.02	382883.20	32°03'03.690"N	103°41'21.679"W	0.07
500.00	0.500	196.610	500.00	-1.53	-1.53	-0.33	699520.75	382882.58	32°03'03.684"N	103°41'21.682"W	0.25
600.00	0.680	194.590	599.99	-2.52	-2.52	-0.60	699520.48	382881.59	32°03'03.675"N	103°41'21.685"W	0.18
700.00	0.750	186.830	699.98	-3.74	-3.75	-0.83	699520.25	382880.36	32°03'03.662"N	103°41'21.688"W	0.12
800.00	0.750	200.980	799.97	-5.00	-5.01	-1.14	699519.94	382879.10	32°03'03.650"N	103°41'21.692"W	0.18
900.00	1.240	185.230	899.96	-6.69	-6.70	-1.48	699519.60	382877.41	32°03'03.633"N	103°41'21.696"W	0.56
1000.00	1.090	216.050	999.94	-8.53	-8.54	-2.13	699518.95	382875.57	32°03'03.615"N	103°41'21.703"W	0.64
1100.00	1.240	181.190	1099.92	-10.37	-10.40	-2.72	699518.36	382873.71	32°03'03.597"N	103°41'21.710"W	0.71
1200.00	1.400	161.000	1199.89	-12.61	-12.63	-2.34	699518.74	382871.48	32°03'03.575"N	103°41'21.706"W	0.49
1300.00	1.420	149.030	1299.86	-14.84	-14.85	-1.31	699519.77	382869.26	32°03'03.553"N	103°41'21.694"W	0.29
1400.00	1.300	148.110	1399.84	-16.87	-16.88	-0.07	699521.01	382867.24	32°03'03.532"N	103°41'21.680"W	0.12
1500.00	1.110	144.700	1499.81	-18.64	-18.63	1.09	699522.17	382865.48	32°03'03.515"N	103°41'21.667"W	0.20
1600.00	0.860	198.820	1599.80	-20.14	-20.13	1.41	699522.49	382863.98	32°03'03.500"N	103°41'21.663"W	0.92
1700.00	1.810	210.400	1699.77	-22.20	-22.20	0.37	699521.45	382861.91	32°03'03.480"N	103°41'21.675"W	0.98
1800.00	1.830	205.250	1799.72	-25.00	-25.01	-1.11	699519.97	382859.10	32°03'03.452"N	103°41'21.693"W	0.16
1900.00	2.090	196.230	1899.66	-28.18	-28.20	-2.30	699518.78	382855.91	32°03'03.421"N	103°41'21.707"W	0.40
2000.00	2.040	199.100	1999.60	-31.61	-31.64	-3.40	699517.68	382852.47	32°03'03.387"N	103°41'21.720"W	0.11
2100.00	1.860	191.470	2099.54	-34.87	-34.91	-4.30	699516.78	382849.20	32°03'03.354"N	103°41'21.730"W	0.32
2200.00	1.840	189.970	2199.49	-38.04	-38.08	-4.90	699516.18	382846.03	32°03'03.323"N	103°41'21.738"W	0.05
2300.00	2.040	190.610	2299.43	-41.36	-41.41	-5.51	699515.57	382842.70	32°03'03.290"N	103°41'21.745"W	0.20
2400.00	1.870	193.120	2399.37	-44.69	-44.75	-6.21	699514.87	382839.36	32°03'03.257"N	103°41'21.753"W	0.19
2500.00	1.520	199.860	2499.33	-47.52	-47.59	-7.03	699514.05	382836.53	32°03'03.229"N	103°41'21.763"W	0.40
2600.00	1.110	200.130	2599.30	-49.67	-49.74	-7.81	699513.27	382834.37	32°03'03.208"N	103°41'21.772"W	0.41
2700.00	0.990	203.560	2699.29	-51.37	-51.44	-8.49	699512.59	382832.67	32°03'03.191"N	103°41'21.780"W	0.14
2800.00	1.030	206.530	2799.27	-52.96	-53.04	-9.24	699511.84	382831.07	32°03'03.175"N	103°41'21.789"W	0.07
2900.00	0.820	199.080	2899.26	-54.43	-54.52	-9.87	699511.21	382829.59	32°03'03.161"N	103°41'21.796"W	0.24
3000.00	0.810	196.520	2999.25	-55.78	-55.87	-10.31	699510.77	382828.24	32°03'03.147"N	103°41'21.802"W	0.04
3100.00	0.700	155.460	3099.24	-57.02	-57.11	-10.25	699510.83	382827.00	32°03'03.135"N	103°41'21.801"W	0.54
3200.00	0.580	110.630	3199.23	-57.76	-57.84	-9.53	699511.55	382826.27	32°03'03.128"N	103°41'21.793"W	0.50
3300.00	1.370	67.130	3299.22	-57.48	-57.56	-7.95	699513.13	382826.56	32°03'03.130"N	103°41'21.774"W	1.03
3400.00	1.410	65.560	3399.19	-56.53	-56.58	-5.73	699515.35	382827.53	32°03'03.140"N	103°41'21.748"W	0.06
3500.00	1.280	64.650	3499.16	-55.56	-55.59	-3.60	699517.48	382828.52	32°03'03.150"N	103°41'21.724"W	0.13
3600.00	1.290	71.530	3599.14	-54.74	-54.76	-1.52	699519.56	382829.35	32°03'03.158"N	103°41'21.699"W	0.15
3700.00	1.910	97.180	3699.10	-54.62	-54.61	1.20	699522.28	382829.50	32°03'03.159"N	103°41'21.668"W	0.93
3800.00	2.770	109.230	3799.02	-55.66	-55.62	5.13	699526.21	382828.50	32°03'03.149"N	103°41'21.622"W	0.99
3900.00	2.820	110.410	3898.90	-57.35	-57.27	9.72	699530.80	382826.84	32°03'03.132"N	103°41'21.569"W	0.08
4000.00	3.490	113.750	3998.74	-59.48	-59.35	14.81	699535.89	382824.76	32°03'03.111"N	103°41'21.510"W	0.69
4100.00	3.750	118.740	4098.54	-62.33	-62.15	20.46	699541.54	382821.96	32°03'03.083"N	103°41'21.444"W	0.41
4200.00	3.500	119.430	4198.34	-65.45	-65.22	25.99	699547.07	382818.89	32°03'03.053"N	103°41'21.380"W	0.25
4300.00	2.730	122.110	4298.20	-68.25	-67.99	30.67	699551.74	382816.12	32°03'03.025"N	103°41'21.326"W	0.78
4400.00	2.250	115.310	4398.10	-70.39	-70.09	34.46	699555.54	382814.02	32°03'03.004"N	103°41'21.282"W	0.56

Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(Red West) Sec 8, T26S, R32E	Wellbore	No. 1H AWB
Facility	Red Hills West 8 Fed Com No. 1H	Sidetrack from	No. 1 AWB at 8300.00 MD

WELLPATH DATA (241 stations)											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
4500.00	2.040	117.500	4498.03	-72.08	-71.76	37.81	699558.89	382812.36	32°03'02.987"N	103°41'21.244"W	0.23
4600.00	1.820	117.380	4597.97	-73.66	-73.31	40.80	699561.88	382810.81	32°03'02.972"N	103°41'21.209"W	0.22
4700.00	1.580	115.640	4697.93	-75.01	-74.63	43.45	699564.53	382809.48	32°03'02.958"N	103°41'21.178"W	0.25
4800.00	1.440	118.790	4797.90	-76.23	-75.84	45.80	699566.87	382808.28	32°03'02.946"N	103°41'21.151"W	0.16
4900.00	1.170	120.830	4897.87	-77.37	-76.96	47.77	699568.85	382807.15	32°03'02.935"N	103°41'21.128"W	0.27
5000.00	1.170	121.950	4997.85	-78.45	-78.03	49.52	699570.60	382806.09	32°03'02.924"N	103°41'21.108"W	0.02
5100.00	1.150	128.820	5097.83	-79.64	-79.20	51.17	699572.24	382804.92	32°03'02.913"N	103°41'21.089"W	0.14
5200.00	1.010	128.180	5197.81	-80.82	-80.37	52.64	699573.72	382803.74	32°03'02.901"N	103°41'21.072"W	0.14
5300.00	0.950	136.740	5297.80	-81.98	-81.52	53.90	699574.98	382802.59	32°03'02.890"N	103°41'21.057"W	0.16
5400.00	0.680	152.600	5397.79	-83.12	-82.65	54.74	699575.82	382801.46	32°03'02.878"N	103°41'21.048"W	0.35
5500.00	0.690	166.600	5497.78	-84.24	-83.76	55.16	699576.23	382800.35	32°03'02.867"N	103°41'21.043"W	0.17
5600.00	0.590	186.720	5597.77	-85.33	-84.86	55.23	699576.31	382799.25	32°03'02.856"N	103°41'21.042"W	0.24
5700.00	0.590	196.580	5697.77	-86.34	-85.86	55.03	699576.10	382798.25	32°03'02.847"N	103°41'21.045"W	0.10
5800.00	0.580	197.020	5797.76	-87.31	-86.84	54.73	699575.81	382797.27	32°03'02.837"N	103°41'21.048"W	0.01
5900.00	0.530	194.870	5897.76	-88.24	-87.77	54.47	699575.54	382796.34	32°03'02.828"N	103°41'21.051"W	0.05
6000.00	0.550	193.600	5997.75	-89.15	-88.69	54.23	699575.31	382795.43	32°03'02.819"N	103°41'21.054"W	0.02
6100.00	0.540	193.920	6097.75	-90.07	-89.61	54.01	699575.09	382794.50	32°03'02.810"N	103°41'21.057"W	0.01
6200.00	0.560	185.710	6197.74	-91.02	-90.55	53.85	699574.92	382793.56	32°03'02.800"N	103°41'21.059"W	0.08
6300.00	0.590	195.590	6297.74	-92.00	-91.54	53.66	699574.74	382792.58	32°03'02.791"N	103°41'21.061"W	0.10
6400.00	0.690	214.630	6397.73	-92.98	-92.53	53.18	699574.26	382791.59	32°03'02.781"N	103°41'21.066"W	0.23
6500.00	0.710	207.310	6497.73	-94.02	-93.57	52.55	699573.63	382790.54	32°03'02.770"N	103°41'21.074"W	0.09
6600.00	0.760	214.930	6597.72	-95.11	-94.67	51.89	699572.97	382789.45	32°03'02.760"N	103°41'21.082"W	0.11
6700.00	1.020	206.670	6697.71	-96.45	-96.01	51.11	699572.19	382788.11	32°03'02.746"N	103°41'21.091"W	0.29
6800.00	1.150	215.370	6797.69	-98.05	-97.62	50.13	699571.21	382786.49	32°03'02.731"N	103°41'21.102"W	0.21
6900.00	1.100	210.440	6897.67	-99.69	-99.27	49.06	699570.14	382784.85	32°03'02.714"N	103°41'21.115"W	0.11
7000.00	1.200	213.300	6997.65	-101.38	-100.97	48.00	699569.08	382783.15	32°03'02.698"N	103°41'21.127"W	0.12
7100.00	1.260	220.060	7097.63	-103.09	-102.69	46.72	699567.79	382781.43	32°03'02.681"N	103°41'21.142"W	0.16
7200.00	1.260	225.850	7197.60	-104.68	-104.29	45.22	699566.30	382779.82	32°03'02.665"N	103°41'21.160"W	0.13
7300.00	1.290	227.780	7297.58	-106.19	-105.82	43.60	699564.68	382778.30	32°03'02.650"N	103°41'21.179"W	0.05
7400.00	1.530	224.240	7397.55	-107.89	-107.53	41.83	699562.91	382776.59	32°03'02.633"N	103°41'21.199"W	0.26
7500.00	1.530	217.560	7497.51	-109.89	-109.54	40.09	699561.17	382774.57	32°03'02.613"N	103°41'21.220"W	0.18
7600.00	1.600	215.970	7597.47	-112.06	-111.73	38.45	699559.53	382772.38	32°03'02.592"N	103°41'21.239"W	0.08
7700.00	1.660	213.440	7697.43	-114.38	-114.07	36.84	699557.91	382770.05	32°03'02.569"N	103°41'21.258"W	0.09
7800.00	1.560	213.030	7797.39	-116.72	-116.42	35.30	699556.37	382767.70	32°03'02.545"N	103°41'21.276"W	0.10
7900.00	1.700	215.720	7897.35	-119.05	-118.77	33.69	699554.77	382765.35	32°03'02.522"N	103°41'21.295"W	0.16
8000.00	1.720	215.790	7997.31	-121.46	-121.19	31.94	699553.02	382762.93	32°03'02.498"N	103°41'21.315"W	0.02
8100.00	1.650	214.870	8097.26	-123.84	-123.59	30.24	699551.32	382760.53	32°03'02.475"N	103°41'21.335"W	0.08
8200.00	1.520	218.030	8197.23	-126.05	-125.81	28.60	699549.68	382758.30	32°03'02.453"N	103°41'21.354"W	0.16
8300.00	1.510	217.180	8297.19	-128.13	-127.91	26.99	699548.07	382756.21	32°03'02.432"N	103°41'21.373"W	0.02
8320.00	1.600	221.700	8317.18	-128.55	-128.32	26.64	699547.72	382755.79	32°03'02.428"N	103°41'21.377"W	0.76
8352.00	1.300	323.300	8349.18	-128.59	-128.37	26.13	699547.21	382755.75	32°03'02.428"N	103°41'21.383"W	7.05
8383.00	3.600	331.400	8380.15	-127.45	-127.23	25.45	699546.53	382756.89	32°03'02.439"N	103°41'21.391"W	7.48
8415.00	6.700	342.100	8412.02	-124.78	-124.57	24.40	699545.48	382759.54	32°03'02.465"N	103°41'21.403"W	10.10
8446.00	9.700	341.200	8442.69	-120.57	-120.38	23.00	699544.08	382763.74	32°03'02.507"N	103°41'21.419"W	9.69
8478.00	12.400	341.200	8474.10	-114.75	-114.57	21.03	699542.10	382769.54	32°03'02.564"N	103°41'21.442"W	8.44

Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(Red West) Sec 8, T26S, R32E	Wellbore	No. 1H AWB
Facility	Red Hills West 8 Fed Com No. 1H	Sidetrack from	No. 1 AWB at 8300.00 MD

WELLPATH DATA (241 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
8510.00	15.200	341.600	8505.17	-107.49	-107.34	18.59	699539.67	382776.78	32°03'02.636"N	103°41'21.469"W	8.76
8541.00	17.100	343.400	8534.95	-99.25	-99.11	16.01	699537.09	382785.00	32°03'02.718"N	103°41'21.499"W	6.34
8573.00	19.700	344.900	8565.31	-89.51	-89.39	13.26	699534.34	382794.72	32°03'02.814"N	103°41'21.530"W	8.26
8605.00	22.400	344.100	8595.17	-78.41	-78.32	10.18	699531.26	382805.79	32°03'02.924"N	103°41'21.565"W	8.48
8636.00	25.200	343.700	8623.53	-66.36	-66.30	6.71	699527.79	382817.81	32°03'03.043"N	103°41'21.605"W	9.05
8668.00	28.100	343.000	8652.13	-52.58	-52.56	2.60	699523.68	382831.56	32°03'03.179"N	103°41'21.651"W	9.12
8700.00	31.000	342.300	8679.96	-37.48	-37.50	-2.11	699518.97	382846.62	32°03'03.329"N	103°41'21.705"W	9.13
8731.00	34.200	340.800	8706.08	-21.59	-21.66	-7.41	699513.67	382862.45	32°03'03.486"N	103°41'21.765"W	10.65
8763.00	36.700	339.600	8732.14	-4.08	-4.20	-13.70	699507.38	382879.91	32°03'03.659"N	103°41'21.837"W	8.11
8795.00	39.600	339.600	8757.31	14.50	14.33	-20.59	699500.49	382898.44	32°03'03.842"N	103°41'21.916"W	9.06
8825.00	42.900	339.300	8779.86	33.08	32.84	-27.53	699493.55	382916.95	32°03'04.026"N	103°41'21.996"W	11.02
8857.00	46.500	339.600	8802.60	54.22	53.92	-35.43	699485.65	382938.03	32°03'04.235"N	103°41'22.086"W	11.27
8888.00	50.300	340.200	8823.18	76.06	75.68	-43.39	699477.69	382959.79	32°03'04.451"N	103°41'22.177"W	12.34
8920.00	53.600	341.500	8842.90	99.93	99.49	-51.65	699469.43	382983.59	32°03'04.687"N	103°41'22.271"W	10.80
8951.00	56.400	343.400	8860.68	124.21	123.70	-59.30	699461.78	383007.80	32°03'04.927"N	103°41'22.358"W	10.33
8983.00	59.800	345.500	8877.59	150.44	149.87	-66.57	699454.51	383033.97	32°03'05.186"N	103°41'22.441"W	12.00
9015.00	63.300	346.700	8892.83	177.80	177.17	-73.33	699447.76	383061.28	32°03'05.457"N	103°41'22.518"W	11.42
9046.00	65.900	348.400	8906.13	205.19	204.52	-79.36	699441.73	383088.62	32°03'05.728"N	103°41'22.586"W	9.74
9078.00	69.000	350.500	8918.40	234.29	233.57	-84.76	699436.32	383117.66	32°03'06.016"N	103°41'22.647"W	11.43
9110.00	72.600	352.100	8928.92	264.19	263.43	-89.33	699431.76	383147.53	32°03'06.312"N	103°41'22.697"W	12.20
9141.00	76.800	353.300	8937.10	293.88	293.08	-93.12	699427.96	383177.18	32°03'06.605"N	103°41'22.740"W	14.05
9173.00	80.200	355.800	8943.48	325.11	324.29	-96.10	699424.99	383208.39	32°03'06.914"N	103°41'22.772"W	13.10
9205.00	84.400	358.300	8947.77	356.78	355.95	-97.72	699423.36	383240.05	32°03'07.228"N	103°41'22.789"W	15.24
9236.00	86.400	359.600	8950.25	387.68	386.85	-98.29	699422.79	383270.94	32°03'07.533"N	103°41'22.793"W	7.69
9268.00	86.800	359.700	8952.15	419.62	418.79	-98.49	699422.60	383302.88	32°03'07.849"N	103°41'22.793"W	1.29
9300.00	89.200	359.700	8953.27	451.60	450.77	-98.65	699422.43	383334.86	32°03'08.166"N	103°41'22.793"W	7.50
9346.00	90.000	0.500	8953.59	497.60	496.76	-98.57	699422.51	383380.85	32°03'08.621"N	103°41'22.789"W	2.46
9378.00	90.500	0.500	8953.45	529.59	528.76	-98.29	699422.79	383412.85	32°03'08.938"N	103°41'22.783"W	1.56
9409.00	90.700	0.700	8953.12	560.59	559.76	-97.97	699423.12	383443.84	32°03'09.244"N	103°41'22.777"W	0.91
9441.00	90.300	1.100	8952.84	592.57	591.75	-97.47	699423.62	383475.84	32°03'09.561"N	103°41'22.769"W	1.77
9472.00	89.900	1.900	8952.79	623.56	622.74	-96.65	699424.43	383506.82	32°03'09.868"N	103°41'22.758"W	2.89
9504.00	89.500	1.900	8952.96	655.53	654.73	-95.59	699425.49	383538.80	32°03'10.184"N	103°41'22.743"W	1.25
9568.00	89.500	2.200	8953.52	719.46	718.68	-93.30	699427.78	383602.76	32°03'10.817"N	103°41'22.712"W	0.47
9631.00	89.100	2.500	8954.29	782.38	781.62	-90.72	699430.36	383665.70	32°03'11.439"N	103°41'22.678"W	0.79
9693.00	88.200	1.700	8955.75	844.30	843.56	-88.45	699432.63	383727.63	32°03'12.052"N	103°41'22.647"W	1.94
9756.00	89.000	1.800	8957.29	907.23	906.52	-86.53	699434.56	383790.58	32°03'12.675"N	103°41'22.620"W	1.28
9819.00	88.300	2.100	8958.77	970.15	969.46	-84.38	699436.70	383853.53	32°03'13.298"N	103°41'22.591"W	1.21
9882.00	88.200	1.200	8960.69	1033.08	1032.40	-82.57	699438.51	383916.47	32°03'13.921"N	103°41'22.566"W	1.44
9946.00	88.500	0.600	8962.54	1097.03	1096.37	-81.57	699439.52	383980.43	32°03'14.553"N	103°41'22.550"W	1.05
9980.00	89.100	0.000	8963.25	1131.02	1130.36	-81.39	699439.70	384014.42	32°03'14.890"N	103°41'22.545"W	2.50
10011.00	90.200	0.200	8963.44	1162.02	1161.36	-81.33	699439.75	384045.42	32°03'15.197"N	103°41'22.542"W	3.61
10043.00	89.100	0.700	8963.63	1194.01	1193.36	-81.08	699440.00	384077.41	32°03'15.513"N	103°41'22.537"W	3.78
10075.00	88.200	359.700	8964.39	1226.00	1225.35	-80.97	699440.11	384109.40	32°03'15.830"N	103°41'22.534"W	4.20
10106.00	89.300	359.600	8965.06	1256.99	1256.34	-81.16	699439.92	384140.39	32°03'16.136"N	103°41'22.534"W	3.56
10138.00	90.800	359.900	8965.04	1288.99	1288.34	-81.30	699439.78	384172.39	32°03'16.453"N	103°41'22.533"W	4.78

Actual Wellpath Report

No. 1H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(Red West) Sec 8, T26S, R32E	Wellbore	No. 1H AWB
Facility	Red Hills West 8 Fed Com No. 1H	Sidetrack from	No. 1 AWB at 8300.00 MD

WELLPATH DATA (241 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
10170.00	91.100	0.100	8964.51	1320.99	1320.33	-81.30	699439.78	384204.38	32°03'16.770"N	103°41'22.531"W	1.13
10200.00	91.600	359.200	8963.80	1350.98	1350.33	-81.48	699439.60	384234.37	32°03'17.067"N	103°41'22.531"W	3.43
10232.00	91.800	359.100	8962.85	1382.96	1382.31	-81.96	699439.13	384266.35	32°03'17.383"N	103°41'22.534"W	0.70
10263.00	93.100	358.000	8961.52	1413.93	1413.27	-82.74	699438.34	384297.31	32°03'17.689"N	103°41'22.541"W	5.49
10295.00	95.400	357.200	8959.15	1445.82	1445.15	-84.08	699437.01	384329.19	32°03'18.005"N	103°41'22.555"W	7.61
10327.00	96.800	358.100	8955.75	1477.62	1476.94	-85.38	699435.70	384360.98	32°03'18.320"N	103°41'22.568"W	5.19
10359.00	97.300	359.500	8951.82	1509.38	1508.69	-86.05	699435.04	384392.73	32°03'18.634"N	103°41'22.573"W	4.61
10393.00	95.700	359.000	8947.98	1543.16	1542.47	-86.49	699434.59	384426.51	32°03'18.968"N	103°41'22.576"W	4.93
10440.00	94.500	359.800	8943.80	1589.97	1589.28	-86.98	699434.10	384473.31	32°03'19.431"N	103°41'22.578"W	3.06
10455.00	93.600	0.300	8942.74	1604.93	1604.24	-86.97	699434.12	384488.27	32°03'19.579"N	103°41'22.577"W	6.86
10486.00	93.200	0.400	8940.90	1635.87	1635.19	-86.78	699434.31	384519.22	32°03'19.886"N	103°41'22.573"W	1.33
10518.00	93.000	0.400	8939.17	1667.82	1667.14	-86.55	699434.53	384551.17	32°03'20.202"N	103°41'22.568"W	0.62
10550.00	93.200	1.000	8937.44	1699.77	1699.09	-86.16	699434.92	384583.12	32°03'20.518"N	103°41'22.561"W	1.97
10582.00	92.000	3.000	8935.99	1731.70	1731.03	-85.05	699436.04	384615.06	32°03'20.834"N	103°41'22.546"W	7.28
10615.00	88.000	3.500	8935.99	1764.63	1763.97	-83.18	699437.91	384648.00	32°03'21.160"N	103°41'22.522"W	12.22
10646.00	84.700	3.200	8937.96	1795.49	1794.85	-81.37	699439.71	384678.88	32°03'21.465"N	103°41'22.499"W	10.69
10677.00	84.600	2.700	8940.85	1826.30	1825.68	-79.78	699441.30	384709.70	32°03'21.770"N	103°41'22.478"W	1.64
10709.00	84.800	1.700	8943.81	1858.13	1857.52	-78.56	699442.53	384741.54	32°03'22.085"N	103°41'22.462"W	3.17
10740.00	84.700	1.200	8946.64	1888.98	1888.38	-77.78	699443.31	384772.40	32°03'22.391"N	103°41'22.451"W	1.64
10772.00	86.000	0.400	8949.24	1920.86	1920.27	-77.33	699443.75	384804.29	32°03'22.706"N	103°41'22.443"W	4.77
10804.00	88.100	359.700	8950.88	1952.82	1952.22	-77.30	699443.78	384836.24	32°03'23.022"N	103°41'22.441"W	6.92
10835.00	88.500	359.900	8951.80	1983.80	1983.21	-77.41	699443.67	384867.23	32°03'23.329"N	103°41'22.440"W	1.44
10867.00	88.700	0.100	8952.59	2015.79	2015.20	-77.41	699443.67	384899.21	32°03'23.646"N	103°41'22.438"W	0.88
10899.00	88.500	0.100	8953.37	2047.78	2047.19	-77.36	699443.73	384931.20	32°03'23.962"N	103°41'22.435"W	0.62
10931.00	88.600	0.400	8954.18	2079.77	2079.18	-77.22	699443.87	384963.19	32°03'24.279"N	103°41'22.431"W	0.99
10963.00	88.700	0.700	8954.93	2111.76	2111.17	-76.91	699444.17	384995.18	32°03'24.595"N	103°41'22.425"W	0.99
10995.00	89.000	1.000	8955.57	2143.74	2143.16	-76.44	699444.65	385027.17	32°03'24.912"N	103°41'22.417"W	1.33
11026.00	89.100	1.100	8956.09	2174.72	2174.15	-75.87	699445.22	385058.16	32°03'25.218"N	103°41'22.409"W	0.46
11058.00	88.600	1.600	8956.73	2206.70	2206.13	-75.11	699445.97	385090.14	32°03'25.535"N	103°41'22.398"W	2.21
11090.00	88.500	1.500	8957.54	2238.67	2238.11	-74.25	699446.84	385122.12	32°03'25.851"N	103°41'22.385"W	0.44
11122.00	88.700	1.000	8958.32	2270.65	2270.09	-73.55	699447.53	385154.10	32°03'26.168"N	103°41'22.375"W	1.68
11154.00	89.400	0.500	8958.85	2302.63	2302.09	-73.13	699447.95	385186.09	32°03'26.484"N	103°41'22.368"W	2.69
11186.00	88.200	0.100	8959.52	2334.62	2334.08	-72.96	699448.12	385218.08	32°03'26.801"N	103°41'22.364"W	3.95
11217.00	87.900	0.400	8960.58	2365.60	2365.06	-72.83	699448.25	385249.06	32°03'27.107"N	103°41'22.360"W	1.37
11249.00	89.900	0.500	8961.19	2397.59	2397.05	-72.58	699448.51	385281.05	32°03'27.424"N	103°41'22.355"W	6.26
11281.00	89.700	0.500	8961.30	2429.59	2429.05	-72.30	699448.79	385313.05	32°03'27.741"N	103°41'22.350"W	0.62
11313.00	90.000	0.800	8961.39	2461.58	2461.05	-71.94	699449.15	385345.04	32°03'28.057"N	103°41'22.343"W	1.33
11345.00	91.600	0.400	8960.94	2493.57	2493.04	-71.60	699449.48	385377.03	32°03'28.374"N	103°41'22.337"W	5.15
11377.00	91.500	0.500	8960.07	2525.55	2525.03	-71.35	699449.73	385409.02	32°03'28.690"N	103°41'22.332"W	0.44
11408.00	91.800	0.700	8959.18	2556.53	2556.02	-71.02	699450.06	385440.00	32°03'28.997"N	103°41'22.326"W	1.16
11440.00	91.300	0.800	8958.32	2588.51	2588.00	-70.61	699450.48	385471.99	32°03'29.313"N	103°41'22.319"W	1.59
11472.00	90.900	1.200	8957.70	2620.50	2619.99	-70.05	699451.04	385503.98	32°03'29.630"N	103°41'22.310"W	1.77
11503.00	90.700	0.800	8957.27	2651.48	2650.98	-69.51	699451.58	385534.97	32°03'29.937"N	103°41'22.302"W	1.44
11535.00	90.700	1.600	8956.88	2683.47	2682.97	-68.84	699452.25	385566.96	32°03'30.253"N	103°41'22.292"W	2.50
11567.00	91.200	1.700	8956.35	2715.44	2714.95	-67.92	699453.17	385598.94	32°03'30.569"N	103°41'22.279"W	1.59

Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(Red West) Sec 8, T26S, R32E	Wellbore	No. 1H AWB
Facility	Red Hills West 8 Fed Com No. 1H	Sidetrack from	No. 1 AWB at 8300.00 MD

WELLPATH DATA (241 stations)											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
11599.00	91.300	2.400	8955.65	2747.40	2746.93	-66.77	699454.31	385630.91	32°03'30.886"N	103°41'22.263"W	2.21
11630.00	90.300	3.100	8955.22	2778.35	2777.89	-65.28	699455.80	385661.87	32°03'31.192"N	103°41'22.244"W	3.94
11662.00	91.600	3.800	8954.69	2810.27	2809.82	-63.36	699457.72	385693.80	32°03'31.508"N	103°41'22.219"W	4.61
11694.00	91.500	3.400	8953.82	2842.17	2841.75	-61.35	699459.73	385725.72	32°03'31.824"N	103°41'22.194"W	1.29
11726.00	91.200	1.900	8953.07	2874.12	2873.71	-59.87	699461.21	385757.68	32°03'32.140"N	103°41'22.174"W	4.78
11757.00	90.900	1.800	8952.50	2905.08	2904.68	-58.87	699462.21	385788.66	32°03'32.446"N	103°41'22.161"W	1.02
11789.00	91.200	2.800	8951.91	2937.04	2936.65	-57.59	699463.50	385820.62	32°03'32.763"N	103°41'22.143"W	3.26
11820.00	92.700	4.000	8950.86	2967.95	2967.58	-55.75	699465.33	385851.55	32°03'33.069"N	103°41'22.120"W	6.20
11852.00	90.800	4.700	8949.88	2999.82	2999.47	-53.32	699467.76	385883.44	32°03'33.384"N	103°41'22.090"W	6.33
11884.00	91.100	4.100	8949.35	3031.70	3031.37	-50.87	699470.21	385915.34	32°03'33.700"N	103°41'22.059"W	2.10
11915.00	91.500	3.400	8948.65	3062.60	3062.30	-48.84	699472.24	385946.26	32°03'34.005"N	103°41'22.033"W	2.60
11947.00	89.000	4.100	8948.51	3094.51	3094.22	-46.75	699474.33	385978.19	32°03'34.321"N	103°41'22.007"W	8.11
11979.00	88.800	3.900	8949.12	3126.41	3126.14	-44.52	699476.57	386010.10	32°03'34.637"N	103°41'21.978"W	0.88
12011.00	87.300	3.600	8950.21	3158.30	3158.05	-42.42	699478.66	386042.01	32°03'34.953"N	103°41'21.952"W	4.78
12043.00	87.300	3.500	8951.72	3190.19	3189.96	-40.45	699480.64	386073.91	32°03'35.268"N	103°41'21.927"W	0.31
12074.00	87.900	3.600	8953.02	3221.08	3220.87	-38.53	699482.55	386104.83	32°03'35.574"N	103°41'21.902"W	1.96
12106.00	87.900	3.600	8954.19	3252.98	3252.78	-36.52	699484.56	386136.74	32°03'35.890"N	103°41'21.877"W	0.00
12138.00	86.500	2.300	8955.75	3284.88	3284.70	-34.87	699486.21	386168.66	32°03'36.205"N	103°41'21.855"W	5.97
12170.00	85.000	0.700	8958.12	3316.77	3316.60	-34.04	699487.04	386200.55	32°03'36.521"N	103°41'21.844"W	6.84
12201.00	86.000	358.300	8960.56	3347.67	3347.50	-34.31	699486.77	386231.45	32°03'36.827"N	103°41'21.845"W	8.36
12232.00	88.100	357.100	8962.15	3378.61	3378.43	-35.55	699485.53	386262.38	32°03'37.133"N	103°41'21.857"W	7.80
12264.00	89.500	356.400	8962.82	3410.57	3410.37	-37.37	699483.72	386294.32	32°03'37.449"N	103°41'21.876"W	4.89
12296.00	90.500	356.100	8962.82	3442.52	3442.31	-39.46	699481.62	386326.25	32°03'37.765"N	103°41'21.898"W	3.26
12328.00	91.000	356.200	8962.40	3474.46	3474.23	-41.61	699479.47	386358.18	32°03'38.081"N	103°41'21.921"W	1.59
12360.00	92.900	356.200	8961.31	3506.39	3506.14	-43.73	699477.36	386390.08	32°03'38.397"N	103°41'21.943"W	5.94
12391.00	93.500	356.800	8959.58	3537.30	3537.03	-45.62	699475.47	386420.98	32°03'38.703"N	103°41'21.963"W	2.74
12423.00	93.500	356.800	8957.63	3569.20	3568.92	-47.40	699473.68	386452.87	32°03'39.019"N	103°41'21.981"W	0.00
12455.00	93.800	357.500	8955.59	3601.11	3600.82	-48.99	699472.10	386484.76	32°03'39.334"N	103°41'21.998"W	2.38
12487.00	93.800	357.400	8953.47	3633.02	3632.72	-50.41	699470.67	386516.66	32°03'39.650"N	103°41'22.012"W	0.31
12519.00	92.500	357.100	8951.71	3664.94	3664.63	-51.94	699469.14	386548.57	32°03'39.966"N	103°41'22.027"W	4.17
12551.00	90.900	356.400	8950.76	3696.89	3696.56	-53.75	699467.33	386580.50	32°03'40.282"N	103°41'22.046"W	5.46
12582.00	90.500	356.400	8950.38	3727.84	3727.50	-55.70	699465.38	386611.43	32°03'40.588"N	103°41'22.067"W	1.29
12614.00	91.100	355.700	8949.94	3759.78	3759.42	-57.90	699463.18	386643.35	32°03'40.904"N	103°41'22.090"W	2.88
12646.00	91.100	355.600	8949.32	3791.70	3791.32	-60.33	699460.75	386675.25	32°03'41.220"N	103°41'22.116"W	0.31
12678.00	91.400	355.600	8948.63	3823.62	3823.22	-62.79	699458.30	386707.15	32°03'41.536"N	103°41'22.142"W	0.94
12709.00	90.700	355.100	8948.06	3854.53	3854.11	-65.30	699455.78	386738.04	32°03'41.842"N	103°41'22.169"W	2.77
12741.00	91.000	355.000	8947.58	3886.43	3885.99	-68.06	699453.02	386769.92	32°03'42.158"N	103°41'22.199"W	0.99
12773.00	91.800	355.000	8946.80	3918.33	3917.86	-70.85	699450.24	386801.78	32°03'42.473"N	103°41'22.230"W	2.50
12804.00	91.400	354.700	8945.94	3949.21	3948.72	-73.63	699447.45	386832.65	32°03'42.779"N	103°41'22.260"W	1.61
12836.00	90.800	354.600	8945.32	3981.09	3980.58	-76.61	699444.47	386864.50	32°03'43.094"N	103°41'22.292"W	1.90
12868.00	91.500	355.300	8944.68	4012.98	4012.45	-79.43	699441.66	386896.37	32°03'43.410"N	103°41'22.323"W	3.09
12900.00	91.800	355.400	8943.76	4044.89	4044.33	-82.02	699439.06	386928.25	32°03'43.725"N	103°41'22.351"W	0.99
12932.00	91.800	355.300	8942.75	4076.79	4076.21	-84.61	699436.47	386960.12	32°03'44.041"N	103°41'22.379"W	0.31
12964.00	91.500	355.100	8941.83	4108.68	4108.08	-87.29	699433.79	386992.00	32°03'44.356"N	103°41'22.407"W	1.13
12995.00	91.800	352.000	8940.94	4139.50	4138.87	-90.77	699430.31	387022.78	32°03'44.661"N	103°41'22.446"W	10.04

Actual Wellpath Report

No. 1H AWP

Page 7 of 7

INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(Red West) Sec 8, T26S, R32E	Wellbore	No. 1H AWB
Facility	Red Hills West 8 Fed Com No. 1H	Sidetrack from	No. 1 AWB at 8300.00 MD

WELLPATH DATA (241 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
13027.00	91.500	350.900	8940.02	4171.17	4170.50	-95.53	699425.56	387054.41	32°03'44.975"N	103°41'22.499"W	3.56
13059.00	91.700	351.100	8939.12	4202.80	4202.09	-100.53	699420.55	387086.00	32°03'45.287"N	103°41'22.555"W	0.88
13091.00	91.500	351.700	8938.23	4234.47	4233.72	-105.31	699415.77	387117.63	32°03'45.601"N	103°41'22.608"W	1.98
13122.00	91.500	351.600	8937.42	4265.17	4264.38	-109.81	699411.27	387148.29	32°03'45.904"N	103°41'22.658"W	0.32
13154.00	91.500	350.900	8936.58	4296.83	4296.00	-114.68	699406.41	387179.90	32°03'46.218"N	103°41'22.713"W	2.19
13186.00	91.200	351.600	8935.83	4328.49	4327.62	-119.55	699401.54	387211.52	32°03'46.531"N	103°41'22.767"W	2.38
13218.00	91.500	351.300	8935.07	4360.16	4359.25	-124.30	699396.78	387243.16	32°03'46.844"N	103°41'22.820"W	1.33
13249.00	91.500	351.600	8934.26	4390.85	4389.90	-128.91	699392.18	387273.80	32°03'47.148"N	103°41'22.872"W	0.97
13281.00	91.300	351.800	8933.48	4422.54	4421.55	-133.53	699387.56	387305.45	32°03'47.461"N	103°41'22.923"W	0.88
13313.00	92.600	352.000	8932.39	4454.24	4453.21	-138.03	699383.05	387337.11	32°03'47.775"N	103°41'22.973"W	4.11
13344.00	91.500	352.700	8931.28	4484.98	4483.92	-142.16	699378.93	387367.82	32°03'48.079"N	103°41'23.019"W	4.21
13376.00	89.500	353.600	8931.00	4516.78	4515.69	-145.97	699375.11	387399.58	32°03'48.393"N	103°41'23.061"W	6.85
13408.00	88.800	353.300	8931.48	4548.60	4547.47	-149.62	699371.46	387431.37	32°03'48.708"N	103°41'23.101"W	2.38
13440.00	89.500	353.700	8931.95	4580.42	4579.26	-153.25	699367.84	387463.16	32°03'49.023"N	103°41'23.141"W	2.52
13472.00	89.600	353.600	8932.20	4612.25	4611.07	-156.79	699364.30	387494.96	32°03'49.338"N	103°41'23.180"W	0.44
13513.00	89.600	353.600	8932.49	4653.03	4651.81	-161.36	699359.73	387535.70	32°03'49.741"N	103°41'23.230"W	0.00

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
No. 1H PBHL		8955.00	4683.31	-40.48	699480.60	387567.20	32°03'50.046"N	103°41'21.824"W	point

WELLPATH COMPOSITION Ref Wellbore: No. 1H AWB Ref Wellpath: No. 1H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8300.00	Generic gyro - continuous (Standard)	SDI GYRO (100 - 9475)	No. 1 AWB
8300.00	13513.00	NaviTrak (Standard)	MWD	No. 1H AWB



Do it Once
Do it Right

Horizontal Open Hole Multi-Stage
Fracturing and Stimulation
FINAL REPORT

Red Hills West -8- Federal #1H - 4-1/2" 20-Stage StackFRAC® HD

FINAL JOB REPORT

Prepared for Mewbourne Oil Company

RECEIVED

JAN 18 2011
HOBBSOCD

StackFRAC® HD

High Density Multi-Stage
Fracturing System



Do It Once
Do It Right

Packers Plus Energy Services (USA) Inc.

FINAL JOB REPORT

November 28, 2010

Prepared for

Mewbourne Oil Company

Red Hills West -8- Federal #1H

Mr. Mickey Young

Hobbs, NM

**Multi-Stage Open Hole Horizontal
Fracturing and Stimulation System**

SUR @ P-8-26s-32e, 330/S & 380/E
BHL @ A-8-26s-32e, 4982/S & 552/E
API # 30-025-39902



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Final
Drawing

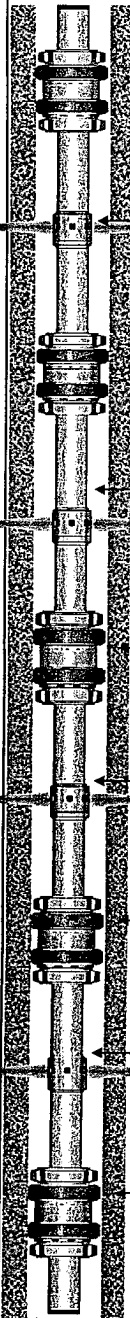
Prepared for Mr. Mickey Young		Company Mewbourne Oil Company		Date 25-Nov-10		
Well Name Red Hill West -8- Fed #1H		Type of Installation 20-Stage 4-1/2" StackFRAC® HD		Location Lea County, NM		
Depth	Drawing	Description		OD(in)	ID(in)	Length
Page 1 of 4						
REV_						
TD						
13,513						
TVD						
8,932						
KOP						
8,350						
TOL						
9,042						
345BBS						
Drillable FracPORT's to be shipped without handling pups						
Latched Seal Assembly						
7" 23-32 ppi x 3.875" Lower Bore x 4.75" Upper Bore SF Liner Hanger Packer						
PN: 108425-000012 (Shear Pins: 2 @ 482 plus 1 @ 241 : 1,205 psi setting pressure)						
SF Bottom Guide S# SNU0001247						
3' x 4-1/2" 11.6# P-110 LTC Pup Joint						
7" 26# P-110 LT&C Casing						
SHOE						
9,343						
Stage 20						
9,409						
351BBS						
RS//						
9,552						
4-1/2" 11.60# P-110 LTC LINER JOINTS: 8						
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)S# EM0040601						
4-1/2" 11.60# P-110 LTC LINER JOINTS: 3						
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: 102188-000003 (6 shear pins at 324 psi each; 1,950 psi setting pressure)S# EA0015994						
3' x 4-1/2" 11.6# P-110 LTC Pup Joint						
4-1/2" 11.60# P-110 LTC LINER JOINTS: 2						
Stage 19						
9,651						
355BBS						
RS//						
9,748						
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)S# EM0038887						
4-1/2" 11.60# P-110 LTC LINER JOINTS: 2						
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: 102188-000003 (6 shear pins at 324 psi each; 1,950 psi setting pressure)S# EA0023875						
3' x 4-1/2" 11.6# P-110 LTC Pup Joint						
4-1/2" 11.60# P-110 LTC LINER JOINTS: 3						
Stage 18						
9,893						
359BBS						
RS//						
9,991						
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)S# EM0041339						
4-1/2" 11.60# P-110 LTC LINER JOINTS: 2						
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: 102188-000003 (6 shear pins at 324 psi each; 1,950 psi setting pressure)S# EA0016010						
3' x 4-1/2" 11.6# P-110 LTC Pup Joint						
4-1/2" 11.60# P-110 LTC LINER JOINTS: 2						
Stage 17						
10,090						
362BBS						
RS//						
10,186						
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)S# EM0041861						
4-1/2" 11.60# P-110 LTC LINER JOINTS: 2						
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: 102188-000003 (6 shear pins at 324 psi each; 1,950 psi setting pressure)S# EA0016084						
3' x 4-1/2" 11.6# P-110 LTC Pup Joint						
4-1/2" 11.60# P-110 LTC LINER JOINTS: 3						
Stage 16						
10,331						
366BBS						
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)S# EM0041237						
Service Center: Midland, TX Telephone: 432-563-8024 Contact: Keith Martin						
Telephone: Chad Williams 405-255-3223						

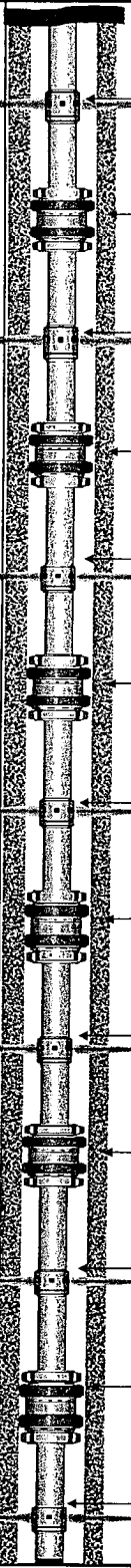


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Final
Drawing

Prepared for Mr. Mickey Young		Company Mewbourne Oil Company		Date 25-Nov-10	
Well Name Red Hill West -8- Fed #1H		Type of Installation 20-Stage 4-1/2" StackFRAC® HD		Location Lea County, NM	
Depth	Drawing	Description	OD(in)	ID(in)	Length
REV_		4-1/2" 11.60# P-110 LTC LINER JOINTS: 1	4.500"	4.000	44.76
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	6.00
RSII		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	5.750"	3.750	5.25
10,385		PN: 102188-000003 (6 shear pins at 324 psi each: 1,950 psi setting pressure)S# EA0016012			
		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: 2	4.500"	4.000	92.71
Stage 15		Packers Plus 4-1/2" Drillable FracPORT™ with 3.000" Seat for 3.125" High Pressure Ball	5.630"	3.000	2.65
10,486		PN: 108482-000057 (5 shear pins at 315 psi each: 1,575 psi opening pressure)S# EM0042635	3.720		
369BBLs		4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500"	4.000	92.62
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	5.99
RSII		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	5.750"	3.750	5.25
10,587		PN: 102188-000003 (6 shear pins at 324 psi each: 1,950 psi setting pressure)S# EA0015288			
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	2.99
		4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500"	4.000	91.51
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
10,687		PN: 108482-000056 (5 shear pins at 315 psi each: 1,575 psi opening pressure)S# EM0040393	3.720		
372BBLs		4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500"	4.000	90.01
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	5.99
RSII		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	5.750"	3.750	5.25
10,785		PN: 102188-000003 (6 shear pins at 324 psi each: 1,950 psi setting pressure)S# EA0015324			
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	3.00
		4-1/2" 11.60# P-110 LTC LINER JOINTS: 3	4.500"	4.000	139.01
Stage 13		Packers Plus 4-1/2" Drillable FracPORT™ with 2.750" Seat for 2.875" High Pressure Ball	5.630"	2.750	2.65
10,933		PN: 108482-000055 (5 shear pins at 315 psi each: 1,575 psi opening pressure)S# EM0041639	3.720		
376BBLs	4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500"	4.000	91.82	
	6' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	5.99	
RSII	Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	5.750"	3.750	5.25	
11,033	PN: 102188-000003 (6 shear pins at 324 psi each: 1,950 psi setting pressure)S# EA0016182				
	3' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	3.00	
	4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500"	4.000	92.58	
Stage 12	Packers Plus 4-1/2" Drillable FracPORT™ with 2.625" Seat for 2.750" High Pressure Ball	5.630"	2.625	2.65	
11,134	PN: 108482-000054 (5 shear pins at 315 psi each: 1,575 psi opening pressure)S# EM0042129	3.720			
379BBLs	4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500"	4.000	89.20	
	6' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	5.98	
RSII	Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	5.750"	3.750	5.25	
11,232	PN: 102188-000003 (6 shear pins at 324 psi each: 1,950 psi setting pressure)S# EA0016076				
	3' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	3.03	
Service Center Midland, TX		Telephone 432-563-8024	Contact Keith Martin	Telephone Chad Williams 405-255-3223	

		<i>Do It Once. Do It Right.</i>		Confidential Information - not to be disclosed outside Mewbourne Oil Company		Final Drawing	
Prepared for Mr. Mickey Young		Company Mewbourne Oil Company		Date 25-Nov-10			
Well Name Red Hill West -8- Fed #1H		Type of Installation 20-Stage 4-1/2" StackFRAC® HD		Location Lea County, NM			
Depth	Drawing	Description	OD(in)	ID(in)	Length		
REV_		4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500"	4.000	91.44		
Stage 11 11,331 382BBLs		Packers Plus 4-1/2" Drillable 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)S# EM0041169	5.630"	2.500 3.720	2.65		
RSII 11,431		4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500"	4.000	90.95		
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	6.02		
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 102188-000003 (6 shear pins at 324 psi each; 1,950 psi setting pressure)S# EA0024181	5.750"	3.750	5.25		
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	3.00		
		4-1/2" 11.60# P-110 LTC LINER JOINTS: 3	4.500"	4.000	131.62		
Stage 10 11,571 386BBLs		Packers Plus 4-1/2" Drillable 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)S# EM0041743	5.630"	2.375 3.720	2.65		
RSII 11,671		4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500"	4.000	91.54		
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	6.07		
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 102188-000003 (6 shear pins at 324 psi each; 1,950 psi setting pressure)S# EA0016020	5.750"	3.750	5.25		
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	3.00		
		4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500"	4.000	88.30		
Stage 9 11,768 389BBLs		Packers Plus 4-1/2" Drillable 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)S# EM0041891	5.630"	2.250 3.720	2.65		
RSII 11,866		4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500"	4.000	89.34		
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	6.03		
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 102188-000003 (6 shear pins at 324 psi each; 1,950 psi setting pressure)S# EA0016006	5.750"	3.750	5.25		
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	3.01		
		4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500"	4.000	85.03		
Stage 8 11,959 392BBLs		Packers Plus 4-1/2" Drillable 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)S# EM0035117	5.630"	2.125 3.720	2.65		
RSII 12,052		4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500"	4.000	84.70		
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	6.00		
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 102188-000003 (6 shear pins at 324 psi each; 1,950 psi setting pressure)S# EA0023899	5.750"	3.750	5.25		
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	3.02		
		4-1/2" 11.60# P-110 LTC LINER JOINTS: 3	4.500"	4.000	134.20		
Stage 7 12,195 394BBLs		Packers Plus 4-1/2" Drillable 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)S# EM0041493	5.630"	2.000 3.720	2.65		
RSII 12,295		4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500"	4.000	91.18		
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	5.95		
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 102188-000003 (6 shear pins at 324 psi each; 1,950 psi setting pressure)S# EA0015310	5.750"	3.750	5.25		
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	3.01		
		4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500"	4.000	82.84		
Stage 6 12,386 397BBLs		Packers Plus 4-1/2" Drillable 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)S# EM0034991	5.630"	1.875 3.720	2.65		
RSII 12,482		4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500"	4.000	87.40		
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	6.00		
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 102188-000003 (6 shear pins at 324 psi each; 1,950 psi setting pressure)S# EA0016080	5.750"	3.750	5.25		
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint	4.500"	4.000	2.99		
		4-1/2" 11.60# P-110 LTC LINER JOINTS: 3	4.500"	4.000	128.15		
Stage 5 12,618 401BBLs		Packers Plus 4-1/2" Drillable 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)S# EM0035075	5.630"	1.750 3.720	2.65		
Service Center Midland, TX		Telephone 432-563-8024		Contact Keith Martin		Telephone Chad Williams 405-255-3223	



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outside Mewbourne Oil Company

Final
Drawing

Prepared for Mr. Mickey Young		Company Mewbourne Oil Company		Date 25-Nov-10	
Well Name Red Hill West -8- Fed #1H		Type of Installation 20-Stage 4-1/2" StackFRAC® HD		Location Lea County, NM	
Depth	Drawing	Description	OD(in)	ID(in)	Length
Page 4 of 4					
REV_					
RSII 12,718		4-1/2" 11.60# P-110 LTC LINER JOINTS: 2 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: 102188-000003 (6 shear pins at 324 psi each: 1,950 psi setting pressure)S# EA0016022 3' x 4-1/2" 11.6# P-110 LTC Pup Joint 4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500" 4.500" 5.750"	4.000 4.000 3.750	91.24 5.98 5.25
Stage 4 12,819 404BBLS		Packers Plus 4-1/2" Drillable FracPORT™ with 1.625" Seat for 1.750" High Pressure Ball PN: 108482-000048 (5 shear pins at 315 psi each: 1,575 psi opening pressure)S# EM0022871	5.630"	1.625 3.720	2.65
RSII 12,913		4-1/2" 11.60# P-110 LTC LINER JOINTS: 2 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: 102188-000003 (6 shear pins at 324 psi each: 1,950 psi setting pressure)S# EA0015986 3' x 4-1/2" 11.6# P-110 LTC Pup Joint 4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500" 4.500" 5.750"	4.000 4.000 3.750	85.61 6.05 5.25
Stage 3 13,014 407BBLS		Packers Plus 4-1/2" Drillable FracPORT™ with 1.500" Seat for 1.625" High Pressure Ball PN: 108482-000047 (5 shear pins at 315 psi each: 1,575 psi opening pressure)S# EM0036513	5.630"	1.500 3.720	2.65
RSII 13,110		4-1/2" 11.60# P-110 LTC LINER JOINTS: 2 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: 102188-000003 (6 shear pins at 324 psi each: 1,950 psi setting pressure)S# EA0016136 3' x 4-1/2" 11.6# P-110 LTC Pup Joint 4-1/2" 11.60# P-110 LTC LINER JOINTS: 3	4.500" 4.500" 5.750"	4.000 4.000 3.750	86.95 5.99 5.25
Stage 2 13,254 411BBLS		Packers Plus 4-1/2" Drillable FracPORT™ with 1.375" Seat for 1.500" High Pressure Ball PN: 108482-000046 (5 shear pins at 315 psi each: 1,575 psi opening pressure)S# EM0037909	5.630"	1.375 3.720	2.65
RSII 13,353		4-1/2" 11.60# P-110 LTC LINER JOINTS: 2 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: 102188-000003 (6 shear pins at 324 psi each: 1,950 psi setting pressure)S# EA0023915 3' x 4-1/2" 11.6# P-110 LTC Pup Joint 4-1/2" 11.60# P-110 LTC LINER JOINTS: 2	4.500" 4.500" 5.750"	4.000 4.000 3.750	90.35 6.00 5.25
Stage 1 13,460 414BBLS		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) 3' x 4-1/2" 11.6# P-110 LTC Pup Joint S# EA0034539	4.500" 4.500" 4.500" 5.630"	4.000 4.000 4.000 3.750	3.01 92.65 6.00 4.34
TOE 13,473		6' x 4-1/2" 11.6# P-110 LTC Pup Joint 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)S# EA0032381	4.500" 5.500"	4.000 NA	6.00 2.73
G.S. 13,486		4-1/2" LTC Single Valve Float Collar PN: 104733 6' x 4-1/2" 11.6# P-110 LTC Pup Joint 4-1/2" LTC Single Valve Float Collar PN: 104733 4-1/2" LTC Guide Shoe PN: 121704-000001	5.000" 4.500" 5.000" 5.500"	NA 4.000 NA 2.250	1.33 5.99 1.33 0.75
Service Center Midland, TX			Telephone 432-563-8024		
Contact Keith Martin			Telephone Chad Williams 405-255-3223		

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Red Hill West -8- Fed #1H					
Item	Description	Length	Landed @	Accumulated	Proposed
			Actual MD		
			13486.00		
	Guide Shoe	0.75	13485.25	0.75	
	Float Collar	1.33	13483.92	2.08	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	5.99	13477.93	8.07	
	Float Collar	1.33	13476.60	9.40	
	Toe Circulating Sub	2.73	13473.87	12.13	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	6.00	13467.87	18.13	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	2.99	13464.88	21.12	
	Dual Hyd.FRAC PORT	4.34	13460.54	25.46	13460.00
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	6.00	13454.54	31.46	
1	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.32	13408.22	77.78	
2	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.33	13361.89	124.11	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	3.01	13358.88	127.12	
	ROCK SEAL II OPENHOLE PACKER	5.25	13353.63	132.37	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	6.00	13347.63	138.37	
3	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.30	13301.33	184.67	
4	One Jt. 4-1/2" 11.6# P-110 LTC Liner	44.05	13257.28	228.72	
	1.375" DRILLABLE FRAC PORT	2.65	13254.63	231.37	13245.00
5	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.34	13208.29	277.71	
6	One Jt. 4-1/2" 11.6# P-110 LTC Liner	43.52	13164.77	321.23	
7	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.30	13118.47	367.53	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	3.02	13115.45	370.55	
	ROCK SEAL II OPENHOLE PACKER	5.25	13110.20	375.80	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	5.99	13104.21	381.79	
8	One Jt. 4-1/2" 11.6# P-110 LTC Liner	40.61	13063.60	422.40	
9	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.34	13017.26	468.74	
	1.50" DRILLABLE FRAC PORT	2.65	13014.61	471.39	13035.00
10	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.30	12968.31	517.69	
11	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.30	12922.01	563.99	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	3.02	12918.99	567.01	
	ROCK SEAL II OPENHOLE PACKER	5.25	12913.74	572.26	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	6.05	12907.69	578.31	
12	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.33	12861.36	624.64	
13	One Jt. 4-1/2" 11.6# P-110 LTC Liner	39.28	12822.08	663.92	
	1.625" DRILLABLE FRAC PORT	2.65	12819.43	666.57	12820.00
14	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.31	12773.12	712.88	
15	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.34	12726.78	759.22	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	3.03	12723.75	762.25	
	ROCK SEAL II OPENHOLE PACKER	5.25	12718.50	767.50	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	5.98	12712.52	773.48	
16	One Jt. 4-1/2" 11.6# P-110 LTC Liner	44.92	12667.60	818.40	
17	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.32	12621.28	864.72	
	1.75" DRILLABLE FRAC PORT	2.65	12618.63	867.37	12600.00
18	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.28	12572.35	913.65	
19	One Jt. 4-1/2" 11.6# P-110 LTC Liner	39.84	12532.51	953.49	

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20	One Jt. 4-1/2" 11.6# P-110 LTC Liner	42.03	12490.48	995.52	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	2.99	12487.49	998.51	
	ROCK SEAL II OPENHOLE PACKER	5.25	12482.24	1003.76	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	6.00	12476.24	1009.76	
21	One Jt. 4-1/2" 11.6# P-110 LTC Liner	42.22	12434.02	1051.98	
22	One Jt. 4-1/2" 11.6# P-110 LTC Liner	45.18	12388.84	1097.16	
	1.875" DRILLABLE FRAC PORT	2.65	12386.19	1099.81	12400.00
23	One Jt. 4-1/2" 11.6# P-110 LTC Liner	36.53	12349.66	1136.34	
24	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.31	12303.35	1182.65	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	3.01	12300.34	1185.66	
	ROCK SEAL II OPENHOLE PACKER	5.25	12295.09	1190.91	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	5.95	12289.14	1196.86	
25	One Jt. 4-1/2" 11.6# P-110 LTC Liner	44.85	12244.29	1241.71	
26	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.33	12197.96	1288.04	
	2.00" DRILLABLE FRAC PORT	2.65	12195.31	1290.69	12190.00
27	One Jt. 4-1/2" 11.6# P-110 LTC Liner	44.62	12150.69	1335.31	
28	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.34	12104.35	1381.65	
29	One Jt. 4-1/2" 11.6# P-110 LTC Liner	43.24	12061.11	1424.89	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	3.02	12058.09	1427.91	
	ROCK SEAL II OPENHOLE PACKER	5.25	12052.84	1433.16	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	6.00	12046.84	1439.16	
30	One Jt. 4-1/2" 11.6# P-110 LTC Liner	41.40	12005.44	1480.56	
31	One Jt. 4-1/2" 11.6# P-110 LTC Liner	43.30	11962.14	1523.86	
	2.125" DRILLABLE FRAC PORT	2.65	11959.49	1526.51	11975.00
32	One Jt. 4-1/2" 11.6# P-110 LTC Liner	39.91	11919.58	1566.42	
33	One Jt. 4-1/2" 11.6# P-110 LTC Liner	45.12	11874.46	1611.54	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	3.01	11871.45	1614.55	
	ROCK SEAL II OPENHOLE PACKER	5.25	11866.20	1619.80	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	6.03	11860.17	1625.83	
34	One Jt. 4-1/2" 11.6# P-110 LTC Liner	44.90	11815.27	1670.73	
35	One Jt. 4-1/2" 11.6# P-110 LTC Liner	44.44	11770.83	1715.17	
	2.25" DRILLABLE FRAC PORT	2.65	11768.18	1717.82	11760.00
36	One Jt. 4-1/2" 11.6# P-110 LTC Liner	45.05	11723.13	1762.87	
37	One Jt. 4-1/2" 11.6# P-110 LTC Liner	43.25	11679.88	1806.12	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	3.00	11676.88	1809.12	
	ROCK SEAL II OPENHOLE PACKER	5.25	11671.63	1814.37	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	6.07	11665.56	1820.44	
38	One Jt. 4-1/2" 11.6# P-110 LTC Liner	45.22	11620.34	1865.66	
39	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.32	11574.02	1911.98	
	2.375" DRILLABLE FRAC PORT	2.65	11571.37	1914.63	11565.00
40	One Jt. 4-1/2" 11.6# P-110 LTC Liner	40.85	11530.52	1955.48	
41	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.30	11484.22	2001.78	
42	One Jt. 4-1/2" 11.6# P-110 LTC Liner	44.47	11439.75	2046.25	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	3.00	11436.75	2049.25	
	ROCK SEAL II OPENHOLE PACKER	5.25	11431.50	2054.50	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	6.02	11425.48	2060.52	
43	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.33	11379.15	2106.85	
44	One Jt. 4-1/2" 11.6# P-110 LTC Liner	44.62	11334.53	2151.47	

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	2.50" DRILLABLE FRAC PORT	2.65	11331.88	2154.12	11350.00
45	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.34	11285.54	2200.46	
46	One Jt. 4-1/2" 11.6# P-110 LTC Liner	45.10	11240.44	2245.56	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	3.03	11237.41	2248.59	
	ROCK SEAL II OPENHOLE PACKER	5.25	11232.16	2253.84	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	5.98	11226.18	2259.82	
47	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.30	11179.88	2306.12	
48	One Jt. 4-1/2" 11.6# P-110 LTC Liner	42.90	11136.98	2349.02	
	2.625" DRILLABLE FRAC PORT	2.65	11134.33	2351.67	11140.00
49	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.29	11088.04	2397.96	
50	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.29	11041.75	2444.25	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	3.00	11038.75	2447.25	
	ROCK SEAL II OPENHOLE PACKER	5.25	11033.50	2452.50	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	5.99	11027.51	2458.49	
51	One Jt. 4-1/2" 11.6# P-110 LTC Liner	45.54	10981.97	2504.03	
52	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.28	10935.69	2550.31	
	2.75" DRILLABLE FRAC PORT	2.65	10933.04	2552.96	10920.00
53	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.31	10886.73	2599.27	
54	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.40	10840.33	2645.67	
55	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.30	10794.03	2691.97	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	3.00	10791.03	2694.97	
	ROCK SEAL II OPENHOLE PACKER	5.25	10785.78	2700.22	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	5.99	10779.79	2706.21	
56	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.35	10733.44	2752.56	
57	One Jt. 4-1/2" 11.6# P-110 LTC Liner	43.66	10689.78	2796.22	
	2.875" DRILLABLE FRAC PORT	2.65	10687.13	2798.87	10700.00
58	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.25	10640.88	2845.12	
59	One Jt. 4-1/2" 11.6# P-110 LTC Liner	45.26	10595.62	2890.38	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	2.99	10592.63	2893.37	
	ROCK SEAL II OPENHOLE PACKER	5.25	10587.38	2898.62	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	5.99	10581.39	2904.61	
60	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.32	10535.07	2950.93	
61	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.30	10488.77	2997.23	
	3.00" DRILLABLE FRAC PORT	2.65	10486.12	2999.88	10500.00
62	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.35	10439.77	3046.23	
63	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.36	10393.41	3092.59	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	2.97	10390.44	3095.56	
	ROCK SEAL II OPENHOLE PACKER	5.25	10385.19	3100.81	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	6.00	10379.19	3106.81	
64	One Jt. 4-1/2" 11.6# P-110 LTC Liner	44.76	10334.43	3151.57	
	3.125" DRILLABLE FRAC PORT	2.65	10331.78	3154.22	10330.00
65	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.26	10285.52	3200.48	
66	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.32	10239.20	3246.80	
67	One Jt. 4-1/2" 11.6# P-110 LTC Liner	44.22	10194.98	3291.02	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	3.00	10191.98	3294.02	
	ROCK SEAL II OPENHOLE PACKER	5.25	10186.73	3299.27	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	6.00	10180.73	3305.27	
68	One Jt. 4-1/2" 11.6# P-110 LTC Liner	45.15	10135.58	3350.42	

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69	One Jt. 4-1/2" 11.6# P-110 LTC Liner	42.20	10093.38	3392.62	
	3.25" DRILLABLE FRAC PORT	2.65	10090.73	3395.27	10100.00
70	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.24	10044.49	3441.51	
71	One Jt. 4-1/2" 11.6# P-110 LTC Liner	44.95	9999.54	3486.46	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	3.00	9996.54	3489.46	
	ROCK SEAL II OPENHOLE PACKER	5.25	9991.29	3494.71	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	5.98	9985.31	3500.69	
72	One Jt. 4-1/2" 11.6# P-110 LTC Liner	42.90	9942.41	3543.59	
73	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.39	9896.02	3589.98	
	3.375" DRILLABLE FRAC PORT	2.65	9893.37	3592.63	9880.00
74	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.27	9847.10	3638.90	
75	One Jt. 4-1/2" 11.6# P-110 LTC Liner	45.20	9801.90	3684.10	
76	One Jt. 4-1/2" 11.6# P-110 LTC Liner	45.20	9756.70	3729.30	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	3.01	9753.69	3732.31	
	ROCK SEAL II OPENHOLE PACKER	5.25	9748.44	3737.56	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	5.99	9742.45	3743.55	
77	One Jt. 4-1/2" 11.6# P-110 LTC Liner	45.17	9697.28	3788.72	
78	One Jt. 4-1/2" 11.6# P-110 LTC Liner	43.29	9653.99	3832.01	
	3.50" DRILLABLE FRAC PORT	2.65	9651.34	3834.66	9660.00
79	One Jt. 4-1/2" 11.6# P-110 LTC Liner	43.94	9607.40	3878.60	
80	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.40	9561.00	3925.00	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	3.00	9558.00	3928.00	
	ROCK SEAL II OPENHOLE PACKER	5.25	9552.75	3933.25	
	4-1/2" 11.6# P-110 LTC 6' Pup Jt	5.99	9546.76	3939.24	
81	One Jt. 4-1/2" 11.6# P-110 LTC Liner	44.92	9501.84	3984.16	
82	One Jt. 4-1/2" 11.6# P-110 LTC Liner	43.56	9458.28	4027.72	
83	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.32	9411.96	4074.04	
	3.625" DRILLABLE FRAC PORT	2.65	9409.31	4076.69	9430.00
84	One Jt. 4-1/2" 11.6# P-110 LTC Liner	42.40	9366.91	4119.09	
85	One Jt. 4-1/2" 11.6# P-110 LTC Liner	44.94	9321.97	4164.03	
86	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.28	9275.69	4210.31	
87	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.28	9229.41	4256.59	
88	One Jt. 4-1/2" 11.6# P-110 LTC Liner	39.65	9189.76	4296.24	
89	One Jt. 4-1/2" 11.6# P-110 LTC Liner	45.02	9144.74	4341.26	
90	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.40	9098.34	4387.66	
91	One Jt. 4-1/2" 11.6# P-110 LTC Liner	46.11	9052.23	4433.77	
	4-1/2" 11.6# P-110 LTC 3' Pup Jt	2.44	9049.79	4436.21	
	Bottom	1.26	9048.53	4437.47	
	SF Hangar	2.51	9046.02	4439.98	
	Top Sleeve	3.31	9042.71	4443.29	
	Setting Tool	5.02	9037.69	4448.31	
	Swivel	1.68	9036.01	4449.99	
	Handling Sub	11.72	9024.29	4461.71	
x	3 1/2 Drill Pipe Joint 13.3#	32.06	8992.23	4493.77	
xx	3 1/2 Drill Pipe Joint 13.3#	31.71	8960.52	4525.48	
1	3 1/2 Drill Pipe Joint 13.3#	31.81	8928.71	4557.29	
x	3 1/2 Drill Pipe Joint 13.3#	31.77	8896.94	4589.06	
xx	3 1/2 Drill Pipe Joint 13.3#	31.81	8865.13	4620.87	

PACKERS PLUS - PACKER PLACEMENT

2	3 1/2 Drill Pipe Joint 13.3#	31.86	8833.27	4652.73	
x	3 1/2 Drill Pipe Joint 13.3#	31.70	8801.57	4684.43	
xx	3 1/2 Drill Pipe Joint 13.3#	30.28	8771.29	4714.71	
3	3 1/2 Drill Pipe Joint 13.3#	31.81	8739.48	4746.52	
x	3 1/2 Drill Pipe Joint 13.3#	31.85	8707.63	4778.37	
xx	3 1/2 Drill Pipe Joint 13.3#	31.50	8676.13	4809.87	
4	3 1/2 Drill Pipe Joint 13.3#	31.74	8644.39	4841.61	
x	3 1/2 Drill Pipe Joint 13.3#	31.97	8612.42	4873.58	
xx	3 1/2 Drill Pipe Joint 13.3#	31.30	8581.12	4904.88	
5	3 1/2 Drill Pipe Joint 13.3#	31.88	8549.24	4936.76	
x	3 1/2 Drill Pipe Joint 13.3#	31.58	8517.66	4968.34	
xx	3 1/2 Drill Pipe Joint 13.3#	31.81	8485.85	5000.15	
6	3 1/2 Drill Pipe Joint 13.3#	31.76	8454.09	5031.91	
x	3 1/2 Drill Pipe Joint 13.3#	31.58	8422.51	5063.49	
xx	3 1/2 Drill Pipe Joint 13.3#	31.31	8391.20	5094.80	
7	3 1/2 Drill Pipe Joint 13.3#	32.01	8359.19	5126.81	
x	3 1/2 Drill Pipe Joint 13.3#	31.73	8327.46	5158.54	
xx	3 1/2 Drill Pipe Joint 13.3#	31.73	8295.73	5190.27	
8	3 1/2 Drill Pipe Joint 13.3#	31.71	8264.02	5221.98	
x	Drill Collars 4 3/4" 46.6#	31.57	8232.45	5253.55	
xx	Drill Collars 4 3/4" 46.6#	30.98	8201.47	5284.53	
9	Drill Collars 4 3/4" 46.6#	30.58	8170.89	5315.11	
x	Drill Collars 4 3/4" 46.6#	31.04	8139.85	5346.15	
xx	Drill Collars 4 3/4" 46.6#	31.77	8108.08	5377.92	
10	Drill Collars 4 3/4" 46.6#	31.06	8077.02	5408.98	
x	Drill Collars 4 3/4" 46.6#	30.45	8046.57	5439.43	
xx	Drill Collars 4 3/4" 46.6#	31.36	8015.21	5470.79	
11	Drill Collars 4 3/4" 46.6#	30.80	7984.41	5501.59	
x	Drill Collars 4 3/4" 46.6#	31.11	7953.30	5532.70	
xx	Drill Collars 4 3/4" 46.6#	31.68	7921.62	5564.38	
12	Drill Collars 4 3/4" 46.6#	30.55	7891.07	5594.93	
x	Drill Collars 4 3/4" 46.6#	31.44	7859.63	5626.37	
xx	Drill Collars 4 3/4" 46.6#	31.37	7828.26	5657.74	
13	Drill Collars 4 3/4" 46.6#	31.16	7797.10	5688.90	
x	Drill Collars 4 3/4" 46.6#	30.65	7766.45	5719.55	
xx	Drill Collars 4 3/4" 46.6#	31.22	7735.23	5750.77	
14	Drill Collars 4 3/4" 46.6#	31.01	7704.22	5781.78	
x	Drill Collars 4 3/4" 46.6#	30.70	7673.52	5812.48	
xx	Drill Collars 4 3/4" 46.6#	31.39	7642.13	5843.87	
15	Drill Collars 4 3/4" 46.6#	31.08	7611.05	5874.95	
x	Drill Collars 4 3/4" 46.6#	30.96	7580.09	5905.91	
xx	Drill Collars 4 3/4" 46.6#	30.88	7549.21	5936.79	
16	Drill Collars 4 3/4" 46.6#	31.73	7517.48	5968.52	
x	Drill Collars 4 3/4" 46.6#	29.68	7487.80	5998.20	
xx	Drill Collars 4 3/4" 46.6#	31.70	7456.10	6029.90	
17	Drill Collars 4 3/4" 46.6#	29.80	7426.30	6059.70	
x	Drill Collars 4 3/4" 46.6#	31.48	7394.82	6091.18	
xx	Drill Collars 4 3/4" 46.6#	30.69	7364.13	6121.87	

PACKERS PLUS - PACKER PLACEMENT

18	Drill Collars 4 3/4" 46.6#	31.02	7333.11	6152.89	
x	Drill Collars 4 3/4" 46.6#	31.25	7301.86	6184.14	
xx	Drill Collars 4 3/4" 46.6#	30.89	7270.97	6215.03	
19	Drill Collars 4 3/4" 46.6#	31.30	7239.67	6246.33	
x	Drill Collars 4 3/4" 46.6#	31.14	7208.53	6277.47	
xx	Drill Collars 4 3/4" 46.6#	31.62	7176.91	6309.09	
20	Drill Collars 4 3/4" 46.6#	30.72	7146.19	6339.81	
x	Drill Collars 4 3/4" 46.6#	29.83	7116.36	6369.64	
xx	Drill Collars 4 3/4" 46.6#	30.85	7085.51	6400.49	
21	Drill Collars 4 3/4" 46.6#	31.03	7054.48	6431.52	
x	Drill Collars 4 3/4" 46.6#	31.58	7022.90	6463.10	
xx	Drill Collars 4 3/4" 46.6#	31.13	6991.77	6494.23	
22	Drill Collars 4 3/4" 46.6#	31.16	6960.61	6525.39	
x	3 1/2 Drill Pipe Joint 13.3#	31.77	6928.84	6557.16	
xx	3 1/2 Drill Pipe Joint 13.3#	31.91	6896.93	6589.07	
23	3 1/2 Drill Pipe Joint 13.3#	31.94	6864.99	6621.01	
x	3 1/2 Drill Pipe Joint 13.3#	31.95	6833.04	6652.96	
xx	3 1/2 Drill Pipe Joint 13.3#	32.03	6801.01	6684.99	
24	3 1/2 Drill Pipe Joint 13.3#	31.82	6769.19	6716.81	
x	3 1/2 Drill Pipe Joint 13.3#	31.71	6737.48	6748.52	
xx	3 1/2 Drill Pipe Joint 13.3#	31.85	6705.63	6780.37	
25	3 1/2 Drill Pipe Joint 13.3#	31.73	6673.90	6812.10	
x	3 1/2 Drill Pipe Joint 13.3#	31.78	6642.12	6843.88	
xx	3 1/2 Drill Pipe Joint 13.3#	31.80	6610.32	6875.68	
26	3 1/2 Drill Pipe Joint 13.3#	31.71	6578.61	6907.39	
x	3 1/2 Drill Pipe Joint 13.3#	31.90	6546.71	6939.29	
xx	3 1/2 Drill Pipe Joint 13.3#	31.78	6514.93	6971.07	
27	3 1/2 Drill Pipe Joint 13.3#	31.93	6483.00	7003.00	
x	3 1/2 Drill Pipe Joint 13.3#	31.93	6451.07	7034.93	
xx	3 1/2 Drill Pipe Joint 13.3#	31.61	6419.46	7066.54	
28	3 1/2 Drill Pipe Joint 13.3#	31.76	6387.70	7098.30	
x	3 1/2 Drill Pipe Joint 13.3#	31.88	6355.82	7130.18	
xx	3 1/2 Drill Pipe Joint 13.3#	31.92	6323.90	7162.10	
29	3 1/2 Drill Pipe Joint 13.3#	31.95	6291.95	7194.05	
x	3 1/2 Drill Pipe Joint 13.3#	31.88	6260.07	7225.93	
xx	3 1/2 Drill Pipe Joint 13.3#	31.82	6228.25	7257.75	
30	3 1/2 Drill Pipe Joint 13.3#	31.53	6196.72	7289.28	
x	3 1/2 Drill Pipe Joint 13.3#	32.02	6164.70	7321.30	
xx	3 1/2 Drill Pipe Joint 13.3#	31.35	6133.35	7352.65	
31	3 1/2 Drill Pipe Joint 13.3#	31.70	6101.65	7384.35	
x	3 1/2 Drill Pipe Joint 13.3#	31.92	6069.73	7416.27	
xx	3 1/2 Drill Pipe Joint 13.3#	31.66	6038.07	7447.93	
32	3 1/2 Drill Pipe Joint 13.3#	31.88	6006.19	7479.81	
x	3 1/2 Drill Pipe Joint 13.3#	31.74	5974.45	7511.55	
xx	3 1/2 Drill Pipe Joint 13.3#	31.98	5942.47	7543.53	
33	3 1/2 Drill Pipe Joint 13.3#	31.72	5910.75	7575.25	
x	3 1/2 Drill Pipe Joint 13.3#	31.38	5879.37	7606.63	
xx	3 1/2 Drill Pipe Joint 13.3#	31.45	5847.92	7638.08	

PACKERS PLUS - PACKER PLACEMENT

34	3 1/2 Drill Pipe Joint 13.3#	31.72	5816.20	7669.80	
x	3 1/2 Drill Pipe Joint 13.3#	31.71	5784.49	7701.51	
xx	3 1/2 Drill Pipe Joint 13.3#	31.88	5752.61	7733.39	
35	3 1/2 Drill Pipe Joint 13.3#	31.97	5720.64	7765.36	
x	3 1/2 Drill Pipe Joint 13.3#	31.63	5689.01	7796.99	
xx	3 1/2 Drill Pipe Joint 13.3#	31.82	5657.19	7828.81	
36	3 1/2 Drill Pipe Joint 13.3#	31.93	5625.26	7860.74	
x	3 1/2 Drill Pipe Joint 13.3#	31.85	5593.41	7892.59	
xx	3 1/2 Drill Pipe Joint 13.3#	31.61	5561.80	7924.20	
37	3 1/2 Drill Pipe Joint 13.3#	31.70	5530.10	7955.90	
x	3 1/2 Drill Pipe Joint 13.3#	31.71	5498.39	7987.61	
xx	3 1/2 Drill Pipe Joint 13.3#	31.76	5466.63	8019.37	
38	3 1/2 Drill Pipe Joint 13.3#	31.65	5434.98	8051.02	
x	3 1/2 Drill Pipe Joint 13.3#	31.95	5403.03	8082.97	
xx	3 1/2 Drill Pipe Joint 13.3#	32.10	5370.93	8115.07	
39	3 1/2 Drill Pipe Joint 13.3#	31.70	5339.23	8146.77	
x	3 1/2 Drill Pipe Joint 13.3#	32.03	5307.20	8178.80	
xx	3 1/2 Drill Pipe Joint 13.3#	31.84	5275.36	8210.64	
40	3 1/2 Drill Pipe Joint 13.3#	32.04	5243.32	8242.68	
x	3 1/2 Drill Pipe Joint 13.3#	31.94	5211.38	8274.62	
xx	3 1/2 Drill Pipe Joint 13.3#	31.70	5179.68	8306.32	
41	3 1/2 Drill Pipe Joint 13.3#	31.70	5147.98	8338.02	
x	3 1/2 Drill Pipe Joint 13.3#	31.74	5116.24	8369.76	
xx	3 1/2 Drill Pipe Joint 13.3#	31.90	5084.34	8401.66	
42	3 1/2 Drill Pipe Joint 13.3#	31.98	5052.36	8433.64	
x	3 1/2 Drill Pipe Joint 13.3#	31.75	5020.61	8465.39	
xx	3 1/2 Drill Pipe Joint 13.3#	31.98	4988.63	8497.37	
43	3 1/2 Drill Pipe Joint 13.3#	31.65	4956.98	8529.02	
x	3 1/2 Drill Pipe Joint 13.3#	31.80	4925.18	8560.82	
xx	3 1/2 Drill Pipe Joint 13.3#	31.95	4893.23	8592.77	
44	3 1/2 Drill Pipe Joint 13.3#	31.84	4861.39	8624.61	
x	3 1/2 Drill Pipe Joint 13.3#	31.95	4829.44	8656.56	
xx	3 1/2 Drill Pipe Joint 13.3#	31.83	4797.61	8688.39	
45	3 1/2 Drill Pipe Joint 13.3#	31.80	4765.81	8720.19	
x	3 1/2 Drill Pipe Joint 13.3#	31.48	4734.33	8751.67	
xx	3 1/2 Drill Pipe Joint 13.3#	31.79	4702.54	8783.46	
46	3 1/2 Drill Pipe Joint 13.3#	31.98	4670.56	8815.44	
x	3 1/2 Drill Pipe Joint 13.3#	31.10	4639.46	8846.54	
xx	3 1/2 Drill Pipe Joint 13.3#	31.98	4607.48	8878.52	
47	3 1/2 Drill Pipe Joint 13.3#	31.86	4575.62	8910.38	
x	3 1/2 Drill Pipe Joint 13.3#	31.94	4543.68	8942.32	
xx	3 1/2 Drill Pipe Joint 13.3#	32.03	4511.65	8974.35	
48	3 1/2 Drill Pipe Joint 13.3#	32.58	4479.07	9006.93	
x	3 1/2 Drill Pipe Joint 13.3#	32.00	4447.07	9038.93	
xx	3 1/2 Drill Pipe Joint 13.3#	31.88	4415.19	9070.81	
49	3 1/2 Drill Pipe Joint 13.3#	31.98	4383.21	9102.79	
x	3 1/2 Drill Pipe Joint 13.3#	31.88	4351.33	9134.67	
xx	3 1/2 Drill Pipe Joint 13.3#	31.88	4319.45	9166.55	

PACKERS PLUS - PACKER PLACEMENT

50	3 1/2 Drill Pipe Joint 13.3#	31.83	4287.62	9198.38	
x	3 1/2 Drill Pipe Joint 13.3#	32.03	4255.59	9230.41	
xx	3 1/2 Drill Pipe Joint 13.3#	32.01	4223.58	9262.42	
51	3 1/2 Drill Pipe Joint 13.3#	31.98	4191.60	9294.40	
x	3 1/2 Drill Pipe Joint 13.3#	31.48	4160.12	9325.88	
xx	3 1/2 Drill Pipe Joint 13.3#	31.52	4128.60	9357.40	
52	3 1/2 Drill Pipe Joint 13.3#	32.01	4096.59	9389.41	
x	3 1/2 Drill Pipe Joint 13.3#	31.64	4064.95	9421.05	
xx	3 1/2 Drill Pipe Joint 13.3#	31.48	4033.47	9452.53	
53	3 1/2 Drill Pipe Joint 13.3#	31.85	4001.62	9484.38	
x	3 1/2 Drill Pipe Joint 13.3#	31.52	3970.10	9515.90	
xx	3 1/2 Drill Pipe Joint 13.3#	31.82	3938.28	9547.72	
54	3 1/2 Drill Pipe Joint 13.3#	31.13	3907.15	9578.85	
x	3 1/2 Drill Pipe Joint 13.3#	31.78	3875.37	9610.63	
xx	3 1/2 Drill Pipe Joint 13.3#	31.98	3843.39	9642.61	
55	3 1/2 Drill Pipe Joint 13.3#	32.05	3811.34	9674.66	
x	3 1/2 Drill Pipe Joint 13.3#	31.94	3779.40	9706.60	
xx	3 1/2 Drill Pipe Joint 13.3#	32.00	3747.40	9738.60	
56	3 1/2 Drill Pipe Joint 13.3#	31.60	3715.80	9770.20	
x	3 1/2 Drill Pipe Joint 13.3#	31.98	3683.82	9802.18	
xx	3 1/2 Drill Pipe Joint 13.3#	31.20	3652.62	9833.38	
57	3 1/2 Drill Pipe Joint 13.3#	31.68	3620.94	9865.06	
x	3 1/2 Drill Pipe Joint 13.3#	31.84	3589.10	9896.90	
xx	3 1/2 Drill Pipe Joint 13.3#	31.63	3557.47	9928.53	
58	3 1/2 Drill Pipe Joint 13.3#	31.68	3525.79	9960.21	
x	3 1/2 Drill Pipe Joint 13.3#	31.88	3493.91	9992.09	
xx	3 1/2 Drill Pipe Joint 13.3#	32.10	3461.81	10024.19	
59	3 1/2 Drill Pipe Joint 13.3#	31.83	3429.98	10056.02	
x	3 1/2 Drill Pipe Joint 13.3#	31.82	3398.16	10087.84	
xx	3 1/2 Drill Pipe Joint 13.3#	31.88	3366.28	10119.72	
60	3 1/2 Drill Pipe Joint 13.3#	31.75	3334.53	10151.47	
x	3 1/2 Drill Pipe Joint 13.3#	31.85	3302.68	10183.32	
xx	3 1/2 Drill Pipe Joint 13.3#	31.98	3270.70	10215.30	
61	3 1/2 Drill Pipe Joint 13.3#	32.12	3238.58	10247.42	
x	3 1/2 Drill Pipe Joint 13.3#	31.88	3206.70	10279.30	
xx	3 1/2 Drill Pipe Joint 13.3#	31.68	3175.02	10310.98	
62	3 1/2 Drill Pipe Joint 13.3#	31.50	3143.52	10342.48	
x	3 1/2 Drill Pipe Joint 13.3#	31.28	3112.24	10373.76	
xx	3 1/2 Drill Pipe Joint 13.3#	32.00	3080.24	10405.76	
63	3 1/2 Drill Pipe Joint 13.3#	31.98	3048.26	10437.74	
x	3 1/2 Drill Pipe Joint 13.3#	31.82	3016.44	10469.56	
xx	3 1/2 Drill Pipe Joint 13.3#	31.63	2984.81	10501.19	
64	3 1/2 Drill Pipe Joint 13.3#	31.98	2952.83	10533.17	
x	3 1/2 Drill Pipe Joint 13.3#	31.62	2921.21	10564.79	
xx	3 1/2 Drill Pipe Joint 13.3#	31.74	2889.47	10596.53	
65	3 1/2 Drill Pipe Joint 13.3#	31.82	2857.65	10628.35	
x	3 1/2 Drill Pipe Joint 13.3#	31.26	2826.39	10659.61	
xx	3 1/2 Drill Pipe Joint 13.3#	31.91	2794.48	10691.52	

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66	3 1/2 Drill Pipe Joint 13.3#	31.99	2762.49	10723.51	
x	3 1/2 Drill Pipe Joint 13.3#	31.60	2730.89	10755.11	
xx	3 1/2 Drill Pipe Joint 13.3#	31.98	2698.91	10787.09	
67	3 1/2 Drill Pipe Joint 13.3#	31.88	2667.03	10818.97	
x	3 1/2 Drill Pipe Joint 13.3#	31.83	2635.20	10850.80	
xx	3 1/2 Drill Pipe Joint 13.3#	31.85	2603.35	10882.65	
68	3 1/2 Drill Pipe Joint 13.3#	31.42	2571.93	10914.07	
x	3 1/2 Drill Pipe Joint 13.3#	32.04	2539.89	10946.11	
xx	3 1/2 Drill Pipe Joint 13.3#	31.70	2508.19	10977.81	
69	3 1/2 Drill Pipe Joint 13.3#	31.60	2476.59	11009.41	
x	3 1/2 Drill Pipe Joint 13.3#	31.94	2444.65	11041.35	
xx	3 1/2 Drill Pipe Joint 13.3#	31.66	2412.99	11073.01	
70	3 1/2 Drill Pipe Joint 13.3#	31.60	2381.39	11104.61	
x	3 1/2 Drill Pipe Joint 13.3#	31.81	2349.58	11136.42	
xx	3 1/2 Drill Pipe Joint 13.3#	31.97	2317.61	11168.39	
71	3 1/2 Drill Pipe Joint 13.3#	31.62	2285.99	11200.01	
x	3 1/2 Drill Pipe Joint 13.3#	31.75	2254.24	11231.76	
xx	3 1/2 Drill Pipe Joint 13.3#	31.67	2222.57	11263.43	
72	3 1/2 Drill Pipe Joint 13.3#	31.93	2190.64	11295.36	
x	3 1/2 Drill Pipe Joint 13.3#	32.00	2158.64	11327.36	
xx	3 1/2 Drill Pipe Joint 13.3#	31.62	2127.02	11358.98	
73	3 1/2 Drill Pipe Joint 13.3#	32.03	2094.99	11391.01	
x	3 1/2 Drill Pipe Joint 13.3#	31.34	2063.65	11422.35	
xx	3 1/2 Drill Pipe Joint 13.3#	31.23	2032.42	11453.58	
74	3 1/2 Drill Pipe Joint 13.3#	31.60	2000.82	11485.18	
x	3 1/2 Drill Pipe Joint 13.3#	31.78	1969.04	11516.96	
xx	3 1/2 Drill Pipe Joint 13.3#	31.78	1937.26	11548.74	
75	3 1/2 Drill Pipe Joint 13.3#	31.58	1905.68	11580.32	
x	3 1/2 Drill Pipe Joint 13.3#	31.82	1873.86	11612.14	
xx	3 1/2 Drill Pipe Joint 13.3#	31.75	1842.11	11643.89	
76	3 1/2 Drill Pipe Joint 13.3#	31.38	1810.73	11675.27	
x	3 1/2 Drill Pipe Joint 13.3#	31.80	1778.93	11707.07	
xx	3 1/2 Drill Pipe Joint 13.3#	31.82	1747.11	11738.89	
77	3 1/2 Drill Pipe Joint 13.3#	31.68	1715.43	11770.57	
x	3 1/2 Drill Pipe Joint 13.3#	31.89	1683.54	11802.46	
xx	3 1/2 Drill Pipe Joint 13.3#	31.90	1651.64	11834.36	
78	3 1/2 Drill Pipe Joint 13.3#	31.95	1619.69	11866.31	
x	3 1/2 Drill Pipe Joint 13.3#	31.52	1588.17	11897.83	
xx	3 1/2 Drill Pipe Joint 13.3#	31.72	1556.45	11929.55	
79	3 1/2 Drill Pipe Joint 13.3#	31.95	1524.50	11961.50	
x	3 1/2 Drill Pipe Joint 13.3#	31.72	1492.78	11993.22	
xx	3 1/2 Drill Pipe Joint 13.3#	31.66	1461.12	12024.88	
80	3 1/2 Drill Pipe Joint 13.3#	31.82	1429.30	12056.70	
x	3 1/2 Drill Pipe Joint 13.3#	31.72	1397.58	12088.42	
xx	3 1/2 Drill Pipe Joint 13.3#	31.18	1366.40	12119.60	
81	3 1/2 Drill Pipe Joint 13.3#	31.90	1334.50	12151.50	
x	3 1/2 Drill Pipe Joint 13.3#	31.89	1302.61	12183.39	
xx	3 1/2 Drill Pipe Joint 13.3#	31.77	1270.84	12215.16	

PACKERS PLUS - PACKER PLACEMENT

82	3 1/2 Drill Pipe Joint 13.3#	31.86	1238.98	12247.02	
x	3 1/2 Drill Pipe Joint 13.3#	32.03	1206.95	12279.05	
xx	3 1/2 Drill Pipe Joint 13.3#	31.75	1175.20	12310.80	
83	3 1/2 Drill Pipe Joint 13.3#	31.80	1143.40	12342.60	
x	3 1/2 Drill Pipe Joint 13.3#	31.91	1111.49	12374.51	
xx	3 1/2 Drill Pipe Joint 13.3#	31.72	1079.77	12406.23	
84	3 1/2 Drill Pipe Joint 13.3#	31.90	1047.87	12438.13	
x	3 1/2 Drill Pipe Joint 13.3#	31.75	1016.12	12469.88	
xx	3 1/2 Drill Pipe Joint 13.3#	31.66	984.46	12501.54	
85	3 1/2 Drill Pipe Joint 13.3#	31.68	952.78	12533.22	
x	3 1/2 Drill Pipe Joint 13.3#	31.58	921.20	12564.80	
xx	3 1/2 Drill Pipe Joint 13.3#	31.77	889.43	12596.57	
86	3 1/2 Drill Pipe Joint 13.3#	31.91	857.52	12628.48	
x	3 1/2 Drill Pipe Joint 13.3#	31.82	825.70	12660.30	
xx	3 1/2 Drill Pipe Joint 13.3#	31.80	793.90	12692.10	
87	3 1/2 Drill Pipe Joint 13.3#	30.28	763.62	12722.38	
x	3 1/2 Drill Pipe Joint 13.3#	31.70	731.92	12754.08	
xx	3 1/2 Drill Pipe Joint 13.3#	31.30	700.62	12785.38	
88	3 1/2 Drill Pipe Joint 13.3#	32.10	668.52	12817.48	
x	3 1/2 Drill Pipe Joint 13.3#	31.80	636.72	12849.28	
xx	3 1/2 Drill Pipe Joint 13.3#	31.81	604.91	12881.09	
89	3 1/2 Drill Pipe Joint 13.3#	31.91	573.00	12913.00	
x	3 1/2 Drill Pipe Joint 13.3#	31.95	541.05	12944.95	
xx	3 1/2 Drill Pipe Joint 13.3#	31.43	509.62	12976.38	
90	3 1/2 Drill Pipe Joint 13.3#	31.60	478.02	13007.98	
x	3 1/2 Drill Pipe Joint 13.3#	32.02	446.00	13040.00	
xx	3 1/2 Drill Pipe Joint 13.3#	31.58	414.42	13071.58	
91	3 1/2 Drill Pipe Joint 13.3#	31.65	382.77	13103.23	
x	3 1/2 Drill Pipe Joint 13.3#	31.92	350.85	13135.15	
xx	3 1/2 Drill Pipe Joint 13.3#	31.98	318.87	13167.13	
92	3 1/2 Drill Pipe Joint 13.3#	31.62	287.25	13198.75	
x	3 1/2 Drill Pipe Joint 13.3#	31.90	255.35	13230.65	
xx	3 1/2 Drill Pipe Joint 13.3#	32.03	223.32	13262.68	
93	3 1/2 Drill Pipe Joint 13.3#	31.78	191.54	13294.46	
x	3 1/2 Drill Pipe Joint 13.3#	31.98	159.56	13326.44	
xx	3 1/2 Drill Pipe Joint 13.3#	31.60	127.96	13358.04	
94	3 1/2 Drill Pipe Joint 13.3#	31.90	96.06	13389.94	
x	3 1/2 Drill Pipe Joint 13.3#	32.06	64.00	13422.00	
xx	3 1/2 Drill Pipe Joint 13.3#	31.85	32.15	13453.85	
95	3 1/2 Drill Pipe Joint 13.3#	31.91	0.24	13485.76	
x	3 1/2 Drill Pipe Joint 13.3#	32.04	-31.80	13517.80	

 Do It Once Do It Right		Job Record	
Operator:	Mewbourne Oil Company	Base Point:	Midland Tx
Company Rep:	Westley Noseff	Packers Plus Rep:	Mario Hernandez
Well Name:	Red Hills West 8Fed #1H	Date Started:	22-Nov
Ticket Number:	SOU001420	Date Completed:	11/25/2010
County/State:	Lea Co. NM	Type of Job:	20Stg StacFRAC HD
Field	West Jal	Formation	Avalon Shale
Legal Description of Location	S.5-T20S-R29E		
DETAIL THE JOB - THIS FORM USED TO REPORT WHAT ACTUALLY TOOK PLACE - FILL OUT COMPLETELY			
General Well Information		Stages	
Well Profile	Open Cased	open	V H D M
Depth TVD	8932	FT	Number of Stages
Depth MD	13513	FT	20
Lateral Length	4170	FT	Distance Between Stages
KOP	8350	FT	Toe to Stage 1
Hole Size	6.125	IN	Stage 1 to Stage 2
BHP	3994	PSI	Stage 2 to Stage 3
BHT		°F	Stage 3 to Stage 4
Reamer run?	yes	Size	Stage 4 to Stage 5
Build Rate	10deg		Stage 5 to Stage 6
Max Dog Leg	12.22		Stage 6 to Stage 7
Angle of Perma Plus	70degs		Stage 7 to Stage 8
			Stage 8 to Stage 9
			Stage 9 to Stage 10
			Stage 10 to Stage 11
			Stage 11 to Stage 12
			Stage 12 to Stage 13
			Stage 13 to Stage 14
			Stage 14 to Stage 15
			Average Stage Length
			Planned Depth Bullet Guide
			Actual Depth Bullet Guide
			Distance Off
WORK STRING INFORMATION			
Casing	Weight	Thread	ID
7"	26#	LTC	6.276
Drill Pipe	Weight	Thread	ID
3 1/2"	13.3#	IF	2.764
Heavy Weight	Weight	Thread	ID
Drill Collar	Weight	Thread	ID
3 1/2"	46.8#	IF	2.25
Liner	Weight	Thread	ID
4 1/2"	11.6#	LTC	4
Well Data	TVD	KOP	Shoe
MD	8,932	8,350	
13,513			
FLUIDS			
Mud Weight	Mud Type	Fill Fluid	Fill Weight
8.6#	Cut Bryn/Polymer	3% kcl	8.4
Fluid Level in Annulus	PUMP	Elevator	LCM?
Start	full	Top Drive	0
Change	Denver PZ-10		45
AS RUN IN HOLE WEIGHTS			
Liner	Push Pipe	H.W.D.P.	D.P.
Air	Air	Air	Air
51,747	51,587	60,980	60,791
Calculated Neutral Weight Including Blocks:	174k	Weight When Released From PermaPlus:	150k
		Pipe Stretch In Inches Before Releasing:	20inch
Setting Tool Part Number	108425-000012	Frac Port Part Number	121332-000024,23, 108482-000060-44
Packer Part Number	102188-000003	Special Part Number	
FTR / NCR	YES	Problem on Job	Could not hold pressure on drill pipe/ backside
Notes:			