

OPERATOR
WELL/LEASE
COUNTY

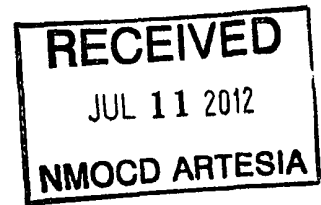
MEWBOURNE OIL COMPANY
THOMPSON 8 FEDERAL # 2H
EDDY

041-0097

STATE OF NEW MEXICO
DEVIATION REPORT

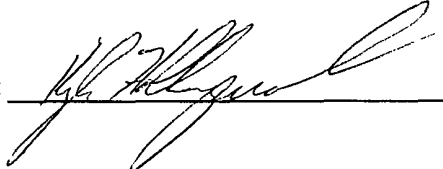
30-015-39295

334	1.00
679	0.42
986	1.25
1,177	2.00
1,364	0.60
1,714	0.75
2,175	0.85
2,573	1.00
2,936	1.25
3,529	0.61
3,845	0.44
4,350	0.60
4,845	1.47
5,296	0.90
5,737	0.80
6,178	0.85
6,654	2.55
7,078	1.29



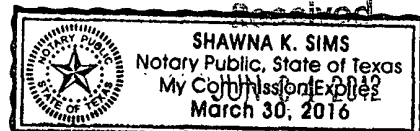
STATE OF TEXAS

COUNTY OF MIDLAND

BY: 

The foregoing instrument was acknowledged before me on 5/29/12, by
Kyle Hollingsworth on behalf of Patterson-UTI Drilling Company LLC.

Shawna K. Sims
Notary Public for Midland County, Texas
My Commission Expires:



Mewbourne Oil Company
Hobbs



Company: Mewbourne Oil Corporation
Lease/Well: Thompson 8 Federal/2H

Rig Name: Patterson 41
State/County: New Mexico/Eddy

Latitude: 32.59
GRID North is 0.13 Degrees East of True North
VS-Azi: 0.00 Degrees



Depth Reference : RKB=16 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: thompson 8 fed 2h.ut
Minimum Curvature Method
Report Date/Time: 5/21/2012 / 09:55

Vaughn Energy Services
Fort Worth, Texas
817-741-3610
Surveyor: Mark Havens
Thompson 8 Federal 2H / API 30-015-39295

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
200.00	0.51	28.86	200.00	0.78	0.43	0.78	0.90	28.86	0.26
400.00	0.46	226.70	399.99	1.02	0.29	1.02	1.06	15.61	0.48
600.00	0.63	207.70	599.99	-0.50	-0.81	-0.50	0.95	238.18	0.13
800.00	2.38	103.26	799.93	-2.43	2.73	-2.43	3.66	131.71	1.31
1000.00	1.73	89.33	999.80	-3.35	9.79	-3.35	10.35	108.90	0.41
1200.00	0.68	81.33	1199.75	-3.14	13.97	-3.14	14.32	102.67	0.53
1400.00	1.07	84.62	1399.73	-2.79	17.00	-2.79	17.22	99.31	0.20
1600.00	0.93	88.32	1599.70	-2.56	20.48	-2.56	20.64	97.14	0.08
1800.00	3.53	84.02	1799.53	-1.88	28.22	-1.88	28.28	93.80	1.30
2000.00	3.02	85.44	1999.20	-0.82	39.60	-0.82	39.60	91.18	0.25
2200.00	2.76	60.64	2198.96	1.97	49.05	1.97	49.09	87.70	0.63
2400.00	3.57	34.80	2398.66	9.44	56.81	9.44	57.58	80.56	0.81
2600.00	1.79	28.14	2598.43	17.31	61.83	17.31	64.21	74.36	0.90
2800.00	1.89	334.75	2798.34	23.04	61.90	23.04	66.05	69.58	0.83
3000.00	1.06	329.70	2998.28	27.63	59.55	27.63	65.65	65.11	0.42
3200.00	0.87	322.46	3198.25	30.44	57.69	30.44	65.23	62.18	0.11
3400.00	0.76	6.56	3398.23	32.97	56.91	32.97	65.77	59.91	0.31
3600.00	0.52	358.38	3598.22	35.20	57.04	35.20	67.02	58.32	0.13
3800.00	0.50	305.81	3798.21	36.62	56.30	36.62	67.16	56.96	0.23
4000.00	0.60	312.26	3998.20	37.84	54.81	37.84	66.61	55.38	0.06

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
4200.00	0.52	314.52	4198.19	39.19	53.38	39.19	66.22	53.72	0.04
4400.00	0.66	315.89	4398.18	40.66	51.92	40.66	65.95	51.93	0.07
4600.00	0.98	316.66	4598.16	42.74	49.94	42.74	65.73	49.44	0.16
4800.00	1.19	324.43	4798.12	45.69	47.55	45.69	65.94	46.14	0.13
5000.00	1.43	332.76	4998.07	49.60	45.19	49.60	67.10	42.33	0.15
5200.00	1.35	331.95	5198.01	53.91	42.93	53.91	68.92	38.53	0.04
5400.00	0.91	324.63	5397.97	57.29	40.91	57.29	70.39	35.53	0.23
5600.00	0.78	316.80	5597.95	59.58	39.05	59.58	71.24	33.24	0.09
5800.00	0.56	282.05	5797.94	60.78	37.16	60.78	71.24	31.44	0.23
6000.00	0.67	300.58	5997.93	61.57	35.20	61.57	70.93	29.76	0.11
6200.00	0.91	277.77	6197.91	62.38	32.62	62.38	70.40	27.61	0.20
6400.00	1.71	264.94	6397.85	62.33	28.08	62.33	68.37	24.25	0.42
6600.00	2.05	238.29	6597.75	60.19	22.07	60.19	64.11	20.14	0.46
6800.00	2.13	232.63	6797.62	56.05	16.07	56.05	58.31	16.00	0.11
7000.00	1.38	226.83	6997.52	52.15	11.36	52.15	53.37	12.29	0.39
7200.00	0.74	239.75	7197.49	49.85	8.49	49.85	50.57	9.66	0.34
7250.00	0.70	242.34	7247.48	49.55	7.94	49.55	50.18	9.10	0.11

Mewbourne Oil Co

Eddy County, New Mexico

Sec 8-20S-29E

Thompson 8 Federal Com #2H

Wellbore #1

Survey: MWD

DDC Survey Report

23 May, 2012



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Thompson 8 Federal Com #2H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3303.0usft (Patterson 41)
Site:	Sec 8-20S-29E	MD Reference:	WELL @ 3303.0usft (Patterson 41)
Well:	Thompson 8 Federal Com #2H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000 1 Single User Db

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

Site:		Sec 8-20S-29E			
Site Position:		Northing:	579,433.40 usft	Latitude:	32° 35' 33.830 N
From:	Map	Easting:	575,217.33 usft	Longitude:	104° 5' 20.792 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.13 °

Well:	Thompson 8 Federal Com #2H
Well Position	+N-S 0.0 usft Northing: 579,433.40 usft Latitude: 32° 35' 33.830 N
	+E-W 0.0 usft Easting: 575,217.33 usft Longitude: 104° 5' 20.792 W
Position Uncertainty	0.0 usft Wellhead Elevation: usft Ground Level: 3,285.0 usft

Wellbore		Wellbore #1			
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/20/2012	7 75	60 42	48,697

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

Vertical Section:	Depth From (TVD)	+N-S	+E-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	276.09

Survey Program		Date: 5/23/2012		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
200.0	7,250.0	Gyro (Wellbore #1)	Good_gyro	Good Gyro
7,420.0	12,378.0	MWD (Wellbore #1)	MWD default	MWD - Standard

Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N-S	+E-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
TIE IN @ 7250' MD / 7248' TVD									
7,250.0	0.70	242.34	7,247.5	49.4	8.0	-2.7	0.00	0.00	0.00
7,420.0	3.20	218.70	7,417.4	45.3	4.1	0.7	1.51	1.47	-13.91
7,452.0	3.20	225.90	7,449.3	43.9	2.9	1.8	1.26	0.00	22.50
7,483.0	5.90	233.40	7,480.2	42.4	1.0	3.5	8.90	8.71	24.19
7,515.0	10.00	244.10	7,511.9	40.2	-2.8	7.1	13.57	12.81	33.44
7,546.0	14.10	252.80	7,542.2	37.9	-8.8	12.8	14.43	13.23	28.06
Crossed Hard Line @ 7578' Md / 7573' TVD									
7,578.0	17.60	260.40	7,573.0	35.9	-17.3	21.1	12.69	10.94	23.75

DDC Survey Report



Company: Mewbourne Oil Co
Project: Eddy County, New Mexico
Site: Sec 8-20S-29E
Well: Thompson:8 Federal Com #2H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Thompson 8 Federal Com #2H
TVD Reference: WELL @ 3303.0usft (Patterson 41)
MD Reference: WELL @ 3303.0usft (Patterson 41)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,609.0	20.80	269.60	7,602.3	35.1	-27.5	31.0	14.18	10.32	29.68
7,641.0	24.00	276.10	7,631.9	35.8	-39.6	43.2	12.63	10.00	20.31
7,672.0	27.30	278.50	7,659.8	37.5	-52.9	56.6	11.16	10.65	7.74
7,704.0	30.30	279.60	7,687.9	39.9	-68.1	72.0	9.52	9.38	3.44
7,735.0	34.10	279.80	7,714.1	42.7	-84.4	88.5	12.26	12.26	0.65
7,767.0	37.80	279.00	7,740.0	45.8	-103.0	107.2	11.66	11.56	-2.50
7,798.0	41.30	278.00	7,763.9	48.7	-122.5	127.0	11.48	11.29	-3.23
7,830.0	44.40	278.90	7,787.3	51.9	-144.0	148.7	9.87	9.69	2.81
7,861.0	47.60	278.80	7,808.9	55.3	-166.0	171.0	10.33	10.32	-0.32
7,893.0	50.50	277.60	7,829.8	58.8	-190.0	195.1	9.49	9.06	-3.75
7,925.0	53.50	277.20	7,849.5	62.0	-215.0	220.3	9.43	9.38	-1.25
7,956.0	56.40	277.90	7,867.3	65.3	-240.1	245.7	9.54	9.35	2.26
7,988.0	59.90	277.90	7,884.2	69.1	-267.0	272.9	10.94	10.94	0.00
8,019.0	64.70	277.40	7,898.6	72.7	-294.2	300.3	15.55	15.48	-1.61
8,051.0	68.20	277.00	7,911.4	76.4	-323.3	329.6	11.00	10.94	-1.25
8,082.0	71.30	277.20	7,922.1	80.0	-352.2	358.7	10.02	10.00	0.65
8,114.0	75.50	276.50	7,931.3	83.7	-382.6	389.3	13.29	13.13	-2.19
8,145.0	80.00	275.60	7,937.9	86.8	-412.7	419.6	14.79	14.52	-2.90
8,177.0	84.50	274.60	7,942.2	89.7	-444.3	451.3	14.40	14.06	-3.13
8,261.0	90.20	276.80	7,946.1	98.0	-527.8	535.2	7.27	6.79	2.62
8,293.0	90.40	277.40	7,945.9	101.9	-559.5	567.2	1.98	0.63	1.88
8,325.0	90.70	277.80	7,945.6	106.2	-591.2	599.2	1.56	0.94	1.25
8,357.0	91.00	276.40	7,945.1	110.1	-623.0	631.2	4.47	0.94	-4.38
8,389.0	91.10	275.90	7,944.5	113.6	-654.8	663.2	1.59	0.31	-1.56
8,420.0	90.60	275.30	7,944.1	116.6	-685.6	694.1	2.52	-1.61	-1.94
8,452.0	90.70	275.50	7,943.7	119.6	-717.5	726.1	0.70	0.31	0.63
8,484.0	90.70	275.10	7,943.3	122.6	-749.4	758.1	1.25	0.00	-1.25
8,547.0	91.60	275.80	7,942.0	128.5	-812.1	821.1	1.81	1.43	1.11
8,611.0	90.90	276.50	7,940.6	135.4	-875.7	885.1	1.55	-1.09	1.09
8,675.0	90.50	275.70	7,939.9	142.2	-939.3	949.1	1.40	-0.63	-1.25
8,738.0	90.60	275.10	7,939.3	148.1	-1,002.0	1,012.1	0.97	0.16	-0.95
8,802.0	91.40	274.50	7,938.1	153.5	-1,065.8	1,076.1	1.56	1.25	-0.94
8,865.0	90.60	273.50	7,937.0	157.9	-1,128.6	1,139.0	2.03	-1.27	-1.59
8,928.0	90.60	273.20	7,936.4	161.5	-1,191.5	1,201.9	0.48	0.00	-0.48
8,992.0	90.50	271.80	7,935.8	164.3	-1,255.5	1,265.8	2.19	-0.16	-2.19
9,055.0	91.20	273.40	7,934.8	167.2	-1,318.4	1,328.7	2.77	1.11	2.54
9,119.0	91.00	275.40	7,933.6	172.1	-1,382.2	1,392.6	3.14	-0.31	3.13
9,183.0	91.60	276.30	7,932.2	178.6	-1,445.8	1,456.6	1.69	0.94	1.41
9,246.0	90.80	275.80	7,930.8	185.3	-1,508.5	1,519.6	1.50	-1.27	-0.79
9,310.0	90.80	274.90	7,929.9	191.2	-1,572.2	1,583.6	1.41	0.00	-1.41
9,373.0	91.00	274.50	7,928.9	196.4	-1,635.0	1,646.6	0.71	0.32	-0.63
9,436.0	90.20	274.50	7,928.3	201.3	-1,697.8	1,709.5	1.27	-1.27	0.00
9,500.0	90.60	274.70	7,927.8	206.5	-1,761.6	1,773.5	0.70	0.63	0.31

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Thompson 8 Federal Com #2H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3303.0usft (Patterson 41)
Site:	Sec 8-20S-29E	MD Reference:	WELL @ 3303.0usft (Patterson 41)
Well:	Thompson 8 Federal Com #2H	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)
9,564.0	91.30	274.10	7,926.8	211.4	-1,825.4	1,837.5	1.44	1.09	-0.94
9,627.0	90.60	274.80	7,925.7	216.3	-1,888.2	1,900.4	1.57	-1.11	1.11
9,691.0	90.80	274.40	7,925.0	221.4	-1,951.9	1,964.4	0.70	0.31	-0.63
9,754.0	91.10	273.20	7,923.9	225.6	-2,014.8	2,027.4	1.96	0.48	-1.90
9,818.0	90.70	274.50	7,922.9	229.9	-2,078.6	2,091.3	2.12	-0.63	2.03
9,882.0	90.90	276.50	7,922.0	236.0	-2,142.3	2,155.3	3.14	0.31	3.13
9,945.0	90.20	277.30	7,921.4	243.6	-2,204.9	2,218.3	1.69	-1.11	1.27
10,009.0	90.80	277.30	7,920.8	251.7	-2,268.4	2,282.3	0.94	0.94	0.00
10,072.0	91.40	277.70	7,919.6	259.9	-2,330.8	2,345.2	1.14	0.95	0.63
10,136.0	91.10	278.60	7,918.2	269.0	-2,394.1	2,409.2	1.48	-0.47	1.41
10,199.0	89.50	278.00	7,917.9	278.1	-2,456.5	2,472.1	2.71	-2.54	-0.95
10,263.0	89.50	277.80	7,918.5	286.9	-2,519.9	2,536.1	0.31	0.00	-0.31
10,326.0	89.90	277.40	7,918.8	295.2	-2,582.3	2,599.1	0.90	0.63	-0.63
10,390.0	90.30	276.90	7,918.7	303.2	-2,645.8	2,663.0	1.00	0.63	-0.78
10,453.0	91.10	276.70	7,917.9	310.6	-2,708.4	2,726.0	1.31	1.27	-0.32
10,517.0	91.30	276.00	7,916.6	317.7	-2,772.0	2,790.0	1.14	0.31	-1.09
10,580.0	90.40	276.20	7,915.6	324.4	-2,834.6	2,853.0	1.46	-1.43	0.32
10,644.0	90.40	275.00	7,915.2	330.7	-2,898.3	2,917.0	1.87	0.00	-1.88
10,707.0	90.90	275.10	7,914.5	336.2	-2,961.0	2,980.0	0.81	0.79	0.16
10,771.0	91.90	274.60	7,912.9	341.6	-3,024.8	3,044.0	1.75	1.56	-0.78
10,834.0	91.10	274.80	7,911.3	346.8	-3,087.6	3,106.9	1.31	-1.27	0.32
10,897.0	90.00	274.70	7,910.7	352.0	-3,150.3	3,169.9	1.75	-1.75	-0.16
10,961.0	90.50	275.30	7,910.4	357.6	-3,214.1	3,233.9	1.22	0.78	0.94
11,024.0	91.50	275.60	7,909.3	363.5	-3,276.8	3,296.9	1.66	1.59	0.48
11,087.0	91.30	275.10	7,907.7	369.4	-3,339.5	3,359.8	0.85	-0.32	-0.79
11,151.0	89.70	275.30	7,907.2	375.2	-3,403.2	3,423.8	2.52	-2.50	0.31
11,215.0	89.70	275.20	7,907.5	381.1	-3,467.0	3,487.8	0.16	0.00	-0.16
11,279.0	90.70	275.20	7,907.3	386.9	-3,530.7	3,551.8	1.56	1.56	0.00
11,343.0	91.10	275.00	7,906.3	392.6	-3,594.4	3,615.8	0.70	0.63	-0.31
11,407.0	91.60	274.50	7,904.8	397.9	-3,658.2	3,679.8	1.10	0.78	-0.78
11,470.0	90.70	274.30	7,903.5	402.7	-3,721.0	3,742.7	1.46	-1.43	-0.32
11,533.0	90.60	274.00	7,902.8	407.3	-3,783.8	3,805.7	0.50	-0.16	-0.48
11,596.0	91.30	273.60	7,901.8	411.4	-3,846.7	3,868.6	1.28	1.11	-0.63
11,660.0	89.60	273.70	7,901.3	415.5	-3,910.6	3,932.6	2.66	-2.66	0.16
11,724.0	89.10	273.40	7,902.0	419.5	-3,974.4	3,996.5	0.91	-0.78	-0.47
11,756.0	89.10	273.50	7,902.5	421.4	-4,006.4	4,028.5	0.31	0.00	0.31
11,788.0	89.10	273.30	7,903.0	423.3	-4,038.3	4,060.4	0.62	0.00	-0.63
11,820.0	90.30	273.00	7,903.2	425.0	-4,070.3	4,092.4	3.87	3.75	-0.94
11,883.0	92.10	272.30	7,901.8	428.0	-4,133.2	4,155.2	3.07	2.86	-1.11
11,947.0	93.10	271.70	7,898.9	430.2	-4,197.1	4,219.0	1.82	1.56	-0.94
12,011.0	92.80	272.20	7,895.6	432.4	-4,260.9	4,282.8	0.91	-0.47	0.78
12,075.0	92.00	272.60	7,893.0	435.0	-4,324.8	4,346.6	1.40	-1.25	0.63
12,137.0	91.20	272.10	7,891.2	437.6	-4,386.8	4,408.4	1.52	-1.29	-0.81
12,200.0	90.70	272.30	7,890.2	440.0	-4,449.7	4,471.3	0.85	-0.79	0.32

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Thompson 8 Federal Com #2H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3303.0usft (Patterson 41)
Site:	Sec 8-20S-29E	MD Reference:	WELL @ 3303.0usft (Patterson 41)
Well:	Thompson 8 Federal Com #2H	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)
12,264.0	92.00	272.30	7,888.7	442.6	-4,513.6	4,535.1	2.03	2.03	0.00
12,328.0	93.20	272.60	7,885.8	445.3	-4,577.5	4,598.9	1.93	1.88	0.47
TD @ 12378' MD / 7883' TVD									
12,378.0	93.20	272.60	7,883.0	447.6	-4,627.4	4,648.7	0.00	0.00	0.00

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,250.0	7,247.5	49.4	8.0	TIE IN @ 7250' MD / 7248' TVD
7,578.0	7,573.0	35.9	-17.3	Crossed Hard Line @ 7578' MD / 7573' TVD
12,378.0	7,883.0	447.6	-4,627.4	TD @ 12378' MD / 7883' TVD

Checked By: _____	Approved By: _____	Date: _____
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Company Name Mewbourne Oil Co
Thompson 8 Federal Com #2H
Eddy County, New Mexico
Rig Patterson 41
Created By Dina Chance
Date 5/23/2012

Thompson 8 Federal Com #2H
Eddy County, New Mexico
Q110188 & WT-12283

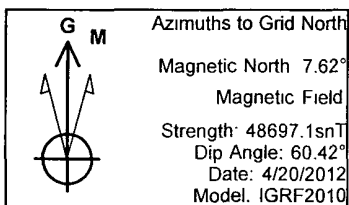
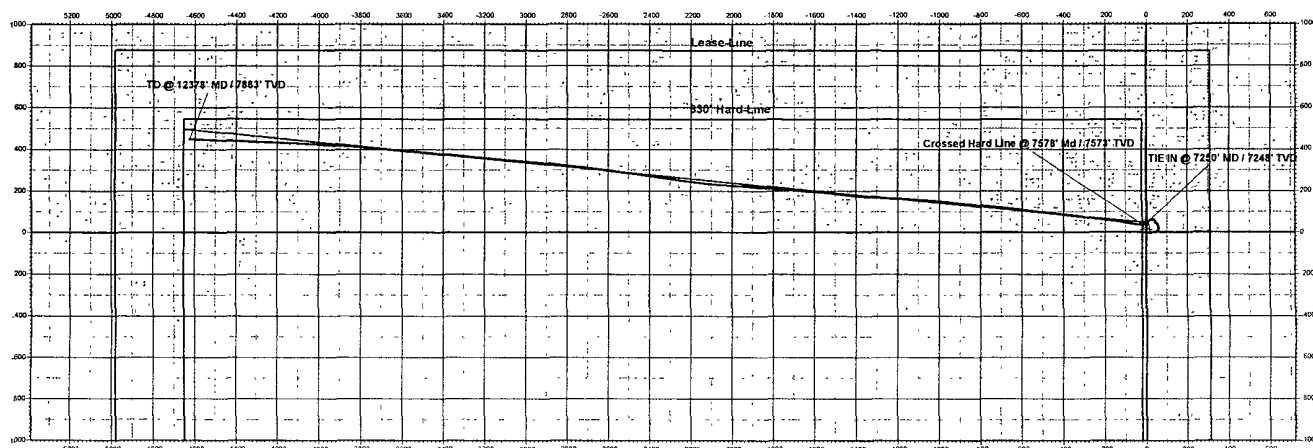
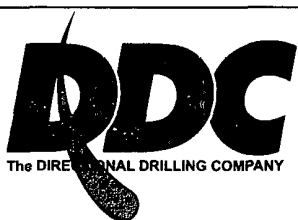
WELL DETAILS Thompson 8 Federal Com #2H

Ground Level	3285.0	Latitude	Longitude
+N/-S	+E/-W	North	East
0.0	0.0	579433.40	575217.33
		32° 35' 33.830 N	104° 6' 20.792 W

PROJECT DETAILS Eddy County, New Mexico

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

Mewbourne Oil Company

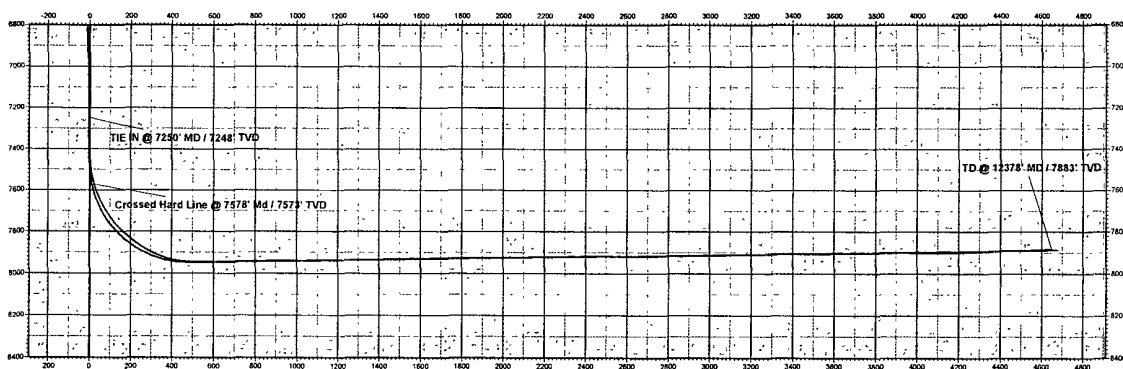


DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	North	East	Latitude	Longitude
PBHL Thompson 8 Fed Com #2PB88.0	496.5	-4653.4	579929.90	570563.90	32° 35' 38.846 N	104° 6' 15.172 W	
- plan hits target center							

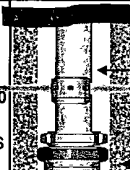
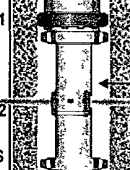
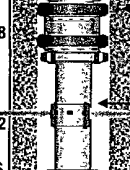
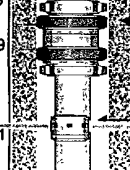
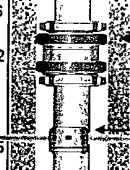
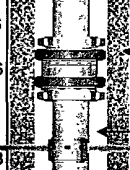
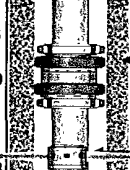
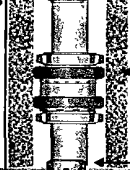
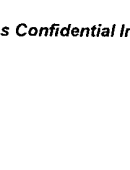
ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
7250.0	0.70	242.34	7247.5	49.4	8.0	-2.7	164.2	TIE IN @ 7250' MD / 7248' TVD
7578.0	17.60	260.40	7573.0	35.9	17.3	21.1	193.8	Crossed Hard Line @ 7578' Md / 7573' TVD
12378.0	93.20	272.60	7883.0	447.6	-4627.4	4648.7	4924.6	TD @ 12378' MD / 7883' TVD



Vertical Section at 276.09° (200 usf/in)

		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 4-Jun-12								
Well Name Thompson 8 Federal 2H		Type of Installation 19-Stage 4-1/2" StackFRAC® HD		Location Eddy County, NM								
Depth	Drawing	Description	OD(in)	ID(in)	Length							
							Page 1 of 3					
KOP 7420'	***Drillable FracPORT's to be shipped without handling pups*** 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 7" Shoe 8230 4-1/2" 13.50# P-110 LTC Casing 4-1/2" 13.50# P-110 LTC LINER JOINTS: 8 Stage 19 SNU0010703 8322.82' 311.45BBLs Packers Plus 4-1/2" Drillable FracPORT™ with 3.500" Seat for 3.625" High Pressure Ball PN: 121332-000023 (5 shear pins at 314 psi each: 1,570 psi opening pressure) 4-1/2" 13.50# P-110 LTC LINER JOINTS: 2 6' x 4-1/2" 13 50# P-110 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure) 3' x 4-1/2" 13 50# P-110 LTC Pup Joint 4-1/2" 13.50# P-110 LTC LINER JOINTS: 2 Stage 18 SNU0010582 8493.02' 314.00BBLs Packers Plus 4-1/2" Drillable FracPORT™ with 3.375" Seat for 3.500" High Pressure Ball PN: 121332-000022 (5 shear pins at 314 psi each: 1,570 psi opening pressure) 4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 6' x 4-1/2" 13 50# P-110 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure) 3' x 4-1/2" 13 50# P-110 LTC Pup Joint 4-1/2" 13.50# P-110 LTC LINER JOINTS: 2 Stage 17 SNU0010577 8701.01' 317.12BBLs Packers Plus 4-1/2" Drillable FracPORT™ with 3.250" Seat for 3.375" High Pressure Ball PN: 121332-000021 (5 shear pins at 314 psi each: 1,570 psi opening pressure) 4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 6' x 4-1/2" 13 50# P-110 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure) 3' x 4-1/2" 13 50# P-110 LTC Pup Joint 4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 Stage 16 SNU0010556 8945.08' 320.78BBLs Packers Plus 4-1/2" Drillable FracPORT™ with 3.125" Seat for 3.250" High Pressure Ball PN: 121332-000020 (5 shear pins at 314 psi each: 1,570 psi opening pressure) 4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 6' x 4-1/2" 13 50# P-110 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure) 3' x 4-1/2" 13 50# P-110 LTC Pup Joint 4-1/2" 13.50# P-110 LTC LINER JOINTS: 2 SNU0009766 9067.95'						5.875"	4.750				
									5.850"	3.850	9 47	
									4 500"	3 92"	304 52	
									5 630"	3.500	2 65	
									4 500"	3.840		
									4 500"	3 92"	76 50	
									4 500"	3 92"	6 10	
									5 750"	3.875	5 25	
									4 500"	3 92"	3 10	
									4 500"	3 92"	76 60	
			5 630"	3.375	2.65							
			4 500"	3 92"	114 55							
			4 500"	3 92"	6 11							
			5 750"	3.875	5 25							
			4 500"	3 92"	3 12							
			4 500"	3 92"	76 31							
			5 630"	3.250	2 65							
			4 500"	3.840								
			4 500"	3 92"	113 42							
			4 500"	3 92"	6 12							
			5 750"	3.875	5 25							
			4 500"	3 92"	3 11							
			4 500"	3 92"	113 52							
			5 630"	3.125	2 65							
			4 500"	3.840								
			4 500"	3 92"	114.11							
			4 500"	3 92"	6 11							
			5 750"	3.875	5 25							
			4 500"	3 92"	3 10							
			4 500"	3 92"	76 06							
Service Center Midland, TX		Telephone 432-563-8024		Contact Scott Mabry		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 Completion	
Prepared for Mr. Mickey Young		Company Mewbourne Oil Company		Date 4-Jun-12			
Well Name Thompson 8 Federal 2H		Type of Installation 19-Stage 4-1/2" StackFRAC® HD		Location Eddy County, NM			
Depth	Drawing	Description	OD(in)	ID(in)	Length		
Page 2 of 3							
Stage 15 SNU0010550 9152.36' 323.89BBLs		Packers Plus 4-1/2" Drillable FracPORT™ with 3.000" Seat for 3.125" High Pressure Ball PN: 121332-000019 (5 shear pins at 314 psi each: 1,570 psi opening pressure) 4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 6' x 4-1/2" 13 50# P-110 LTC Pup Joint	5 630"	3.000	2 65		
			4 500"	3 92"	114 13		
			4 500"	3 92"	6 10		
			5 750"	3.875	5 25		
Stage 14 SNU0009381 9275.24'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure) 3' x 4-1/2" 13 50# P-110 LTC Pup Joint 4-1/2" 13.50# P-110 LTC LINER JOINTS: 3	4 500"	3 92"	3 11		
			4 500"	3 92"	113 90		
			5 630"	2.875	2 65		
Stage 13 SNU0010542 9397.50' 327.57BBLs		Packers Plus 4-1/2" Drillable FracPORT™ with 2.875" Seat for 3.000" High Pressure Ball PN: 121332-000018 (5 shear pins at 314 psi each: 1,570 psi opening pressure) 4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 6' x 4-1/2" 13 50# P-110 LTC Pup Joint	4 500"	3 92"	113 33		
			4 500"	3 92"	6 11		
			5 750"	3.875	5 25		
Stage 12 SNU0010058 9519.59'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure) 3' x 4-1/2" 13 50# P-110 LTC Pup Joint 4-1/2" 13.50# P-110 LTC LINER JOINTS: 2	4 500"	3 92"	3 10		
			4 500"	3 92"	75 04		
			5 630"	2.750	2 65		
Stage 11 SNU0010472 9602.98' 330.65BBLs		Packers Plus 4-1/2" Drillable FracPORT™ with 2.750" Seat for 2.875" High Pressure Ball PN: 121332-000017 (5 shear pins at 314 psi each: 1,570 psi opening pressure) 4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 6' x 4-1/2" 13 50# P-110 LTC Pup Joint	4 500"	3 92"	114 02		
			4 500"	3 92"	6 01		
			5 750"	3.875	5 25		
Stage 10 SNU0009229 9725.66'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure) 3' x 4-1/2" 13 50# P-110 LTC Pup Joint 4-1/2" 13.50# P-110 LTC LINER JOINTS: 3	4 500"	3 92"	3 11		
			4 500"	3 92"	113 53		
			5 630"	2.625	2 65		
Stage 9 SNU0010461 9847 55' 334.32BBLs		Packers Plus 4-1/2" Drillable FracPORT™ with 2.625" Seat for 2.750" High Pressure Ball PN: 121332-000016 (5 shear pins at 314 psi each: 1,570 psi opening pressure) 4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 6' x 4-1/2" 13 50# P-110 LTC Pup Joint	4 500"	3 92"	113 39		
			4 500"	3 92"	6 08		
			5 750"	3.875	5 25		
Stage 8 SNU0010072 9969.67'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure) 3' x 4-1/2" 13 50# P-110 LTC Pup Joint 4-1/2" 13.50# P-110 LTC LINER JOINTS: 3	4 500"	3 92"	3 10		
			4 500"	3 92"	114 83		
			5 630"	2.500	2 65		
Stage 7 SNU0010425 10092.85' 338.00BBLs		Packers Plus 4-1/2" Drillable FracPORT™ with 2.500" Seat for 2.625" High Pressure Ball PN: 121332-000015 (5 shear pins at 314 psi each: 1,570 psi opening pressure) 4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 6' x 4-1/2" 13 50# P-110 LTC Pup Joint	4 500"	3 92"	114 91		
			4 500"	3 92"	6 11		
			5 750"	3.875	5 25		
Stage 6 SNU0010266 10216.52'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure) 3' x 4-1/2" 13 50# P-110 LTC Pup Joint 4-1/2" 13.50# P-110 LTC LINER JOINTS: 3	4 500"	3 92"	3 11		
			4 500"	3 92"	114 21		
			5 630"	2.375	2 65		
Stage 5 SNU0010423 10339.09' 341.69BBLs		Packers Plus 4-1/2" Drillable FracPORT™ with 2.375" Seat for 2.500" High Pressure Ball PN: 121332-000014 (5 shear pins at 314 psi each: 1,570 psi opening pressure) 4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 6' x 4-1/2" 13 50# P-110 LTC Pup Joint	4 500"	3 92"	114 26		
			4 500"	3 92"	6 12		
			5 750"	3.875	5 25		
Stage 4 SNU0010270 10462.12'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure) 3' x 4-1/2" 13 50# P-110 LTC Pup Joint 4-1/2" 13.50# P-110 LTC LINER JOINTS: 3	4 500"	3 92"	3 13		
			4 500"	3 92"	114 26		
			5 630"	2.250	2 65		
Stage 3 SNU0010418 10584.76' 345.38BBLs		Packers Plus 4-1/2" Drillable FracPORT™ with 2.250" Seat for 2.375" High Pressure Ball PN: 121332-000013 (5 shear pins at 314 psi each: 1,570 psi opening pressure) 4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 6' x 4-1/2" 13 50# P-110 LTC Pup Joint	4 500"	3 92"	114 22		
			4 500"	3 92"	6 11		
			5 750"	3.875	5 25		
Stage 2 SNU0010261 10707.74'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure) 3' x 4-1/2" 13 50# P-110 LTC Pup Joint 4-1/2" 13.50# P-110 LTC LINER JOINTS: 2	4 500"	3 92"	3 11		
			4 500"	3 92"	75 48		
			5 630"	2.125	2 65		
Stage 1 SNU0010690 10791.58' 348.48BBLs		Packers Plus 4-1/2" Drillable FracPORT™ with 2.125" Seat for 2.250" High Pressure Ball PN: 121332-000012 (5 shear pins at 314 psi each: 1,570 psi opening pressure) 4-1/2" 13.50# P-110 LTC LINER JOINTS: 3	4 500"	3 92"	114 72		

Service Center Midland, TX	Telephone 432-563-8024	Contact Scott Mabry	Telephone Chad Williams 405-255-3223
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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 4-Jun-12			
Well Name Thompson 8 Federal 2H		Type of Installation 19-Stage 4-1/2" StackFRAC® HD	Location Eddy County, NM			
Depth	Drawing	Description	OD(in)	ID(in)	Length	
			Page 3 of 3			
SNU0009760 10915.07'		6' x 4-1/2" 13 50# P-110 LTC Pup Joint	4 500"	3 92"	6 12	
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)	5 750"	3.875	5 25	
3' x 4 1/2" 13.60# P-110 LTC Pup Joint		4 500"	3 92"	3 11		
4-1/2" 13.50# P-110 LTC LINER		JOINTS: 3	4 500"	3.92"	114.90	
Stage 7		Packers Plus 4-1/2" Drillable FracPORT™ with 2.000" Seat for 2.125" High Pressure Ball PN: 121332-000011 (5 shear pins at 314 psi each: 1,570 psi opening pressure)	5 630"	2.000	2 65	
SNU0010185 11038.33' 352.18BBLS		4-1/2" 13.50# P-110 LTC LINER	JOINTS: 3	4 500"	3 92"	114 80
6' x 4-1/2" 13 50# P-110 LTC Pup Joint		4 500"	3.92"	6.12		
SNU0010309 11161.90'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)	5 750"	3.875	5 25	
3' x 4-1/2" 13 50# P-110 LTC Pup Joint		4 500"	3 92"	3 11		
Stage 6		4-1/2" 13.50# P-110 LTC LINER	JOINTS: 2	4 500"	3.92"	76 55
SNU0010178 11246.81' 355.31BBLS		Packers Plus 4-1/2" Drillable FracPORT™ with 1.875" Seat for 2.000" High Pressure Ball PN: 121332-000010 (5 shear pins at 314 psi each: 1,570 psi opening pressure)	5 630"	1.875	2 65	
4-1/2" 13.50# P-110 LTC LINER		JOINTS: 3	4.500"	3 92"	115 49	
6' x 4-1/2" 13 50# P-110 LTC Pup Joint		4 500"	3.92"	6 11		
SNU0010308 11371.06'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)	5 750"	3.875	5 25	
3' x 4-1/2" 13 50# P-110 LTC Pup Joint		4 500"	3 92"	3 11		
Stage 5		4-1/2" 13.50# P-110 LTC LINER	JOINTS: 2	4 500"	3.92"	76 50
SNU0010176 11455.92' 358.45BBLS		Packers Plus 4-1/2" Drillable FracPORT™ with 1.750" Seat for 1.875" High Pressure Ball PN: 121332-000009 (5 shear pins at 314 psi each: 1,570 psi opening pressure)	5 630"	1.750	2 65	
4-1/2" 13.50# P-110 LTC LINER		JOINTS: 3	4 500"	3 92"	114.82	
6' x 4-1/2" 13 50# P-110 LTC Pup Joint		4 500"	3.92"	6 13		
SNU0010322 11579.52'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)	5 750"	3.875	5 25	
3' x 4-1/2" 13 50# P-110 LTC Pup Joint		4 500"	3 92"	3 11		
Stage 4		4-1/2" 13.50# P-110 LTC LINER	JOINTS: 2	4 500"	3.92"	76 59
SNU0010101 11664.47' 361.57BBLS		Packers Plus 4-1/2" Drillable FracPORT™ with 1.625" Seat for 1.750" High Pressure Ball PN: 121332-000008 (5 shear pins at 314 psi each: 1,570 psi opening pressure)	5 630"	1.625	2 65	
4-1/2" 13.50# P-110 LTC LINER		JOINTS: 3	4 500"	3 92"	114 55	
6' x 4-1/2" 13.50# P-110 LTC Pup Joint		4 500"	3 92"	6 05		
SNU0010262 11787.72'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)	5.750"	3.875	5 25	
3' x 4-1/2" 13 50# P-110 LTC Pup Joint		4 500"	3 92"	3 11		
Stage 3		4-1/2" 13.50# P-110 LTC LINER	JOINTS: 2	4 500"	3.92"	76 58
SNU0010099 11872.66' 364.70BBLS		Packers Plus 4-1/2" Drillable FracPORT™ with 1.500" Seat for 1.625" High Pressure Ball PN: 121332-000007 (5 shear pins at 314 psi each: 1,570 psi opening pressure)	5 630"	1.500	2 65	
4-1/2" 13.50# P-110 LTC LINER		JOINTS: 3	4 500"	3 92"	114 84	
6' x 4-1/2" 13 50# P-110 LTC Pup Joint		4.500"	3.92"	6 07		
SNU0010259 11996.22'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)	5 750"	3.875	5.25	
3' x 4-1/2" 13 50# P-110 LTC Pup Joint		4 500"	3 92"	3 10		
Stage 2		4-1/2" 13.50# P-110 LTC LINER	JOINTS: 3	4 500"	3.92"	114 28
SNU0009359 12118.85' 368.93BBLS		Packers Plus 4-1/2" Drillable FracPORT™ with 1.375" Seat for 1.500" High Pressure Ball PN: 121332-000006 (5 shear pins at 314 psi each: 1,570 psi opening pressure)	5 630"	1.375	2 65	
4-1/2" 13.50# P-110 LTC LINER		JOINTS: 3	4 500"	3 92"	114 82	
6' x 4-1/2" 13 50# P-110 LTC Pup Joint		4 500"	3.92"	6 01		
SNU0010263 12242.33'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)	5 750"	3.875	5 25	
3' x 4-1/2" 13 50# P-110 LTC Pup Joint		4.500"	3.92"	3.13		
4-1/2" 13.50# P-110 LTC LINER		JOINTS: 2	4 500"	3 92"	76.54	
Stage 1 12330.00' 371.56BBLS		Customer 4-1/2" Pump Off Sub (Pinned above 4000 PSI)	2 75			
TMD 12378'						
Service Center Midland, TX		Telephone 432-563-8024	Contact Scott Mabry			
				Telephone Chad Williams 405-255-3223		

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