

Results of Directional Survey

API number:	30-025-41093		
OGRID:		Operator:	MURCHISON OIL & GAS INC
		Property:	JACKSON UNIT # 24H

surface	ULSTR:	O	22	T 24S	R 33E
				200 FSL	2435 FEL

BH Loc	ULSTR:	B	22	T 24S	R 33E
16000	MD	11101.8	TVD	347 FNL	2282 FEL
				4933 FSL	

Top Perf/OH	ULSTR:	O	22	T 24S	R 33E
11781	MD	11200.3	TVD	719 FSL	2180 FEL

Bot Perf/OH	ULSTR:	B	22	T 24S	R 33E
15904	MD	11099.8	TVD	443 FNL	2282 FEL
				4837 FSL	

	MD	N/S	E/W	VD
	11746	483.70	259.70	11201.4
TOP PERFS/OH	11781	518.55	255.00	11200.29
	11841	578.30	263.80	11198.40
	15836	4568.70	153.20	11098.60
BOT PERFS/OH	15904	4636.70	153.27	11099.80
	15932	4664.70	153.30	11100.30

NEXT TO LAST	15990	4722.70	153.10	11101.50
LAST READING	16000	4732.70	153.10	11101.80
TD	16000	4732.70	153.10	11101.80

Surface Location	200 FS	2435 FE
Projected BHL	4933 FS	2282 FE
Location of		
Top Perfs/OH	719 FS	2180 FE
Bottom Perfs/OH	4837 FS	2282 FE

SUMMARY of Subsurface Locations

Surface Location	O-22-24S-33E	200 FS	2435 FE	Vert. Depth
Top Perfs/OH	O-22-24S-33E	719 FS	2180 FE	11200.29
Bottom Perfs/OH	B-22-24S-33E	4837 FS	2282 FE	11099.80
Projected TD	B-22-24S-33E	4933 FS	2282 FE	11101.80

AUG 26 2013

HOBBS OCD

JUL 18 2013

RECEIVED

Murchison Oil and Gas

Jackson Unit Section 22

Jackson Unit 24H

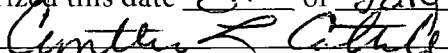
Survey: Jackson Unit 24

MOJO Standard Survey

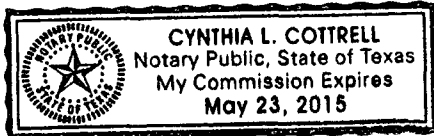
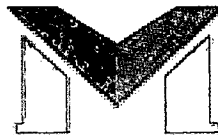
08 July, 2013

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

data.  (Signature)

Notarized this date 8th of July,
2013.  Notary

Signature County of Collin State of Texas



Company: Murchison Oil and Gas Project: Jackson Unit Section 22 Site: Jackson Unit 24H Well: Jackson Unit 24H Wellbore: Jackson Unit 24H Design: Jackson Unit 24H	Local Co-ordinate Reference: Well Jackson Unit 24H TVD Reference: WELL @ 3561.0usft (Original Well Elev) MD Reference: WELL @ 3561.0usft (Original Well Elev) North Reference: Grid Survey Calculation Method: Minimum Curvature Database: EDM 5000.1 Single User Db
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Project	Jackson Unit Section 22		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Jackson Unit 24H				
Site Position:	Northing:	436,048.50 usft	Latitude:	32° 11' 47.065 N	
From: Lat/Long	Easting:	780,703.06 usft	Longitude:	103° 33' 34.246 W	
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.41 °

Well	Jackson Unit 24H					
Well Position	+N/-S	0.0 usft	Northing:	436,048.50 usft	Latitude:	32° 11' 47.065 N
	+E/-W	0.0 usft	Easting:	780,703.06 usft	Longitude:	103° 33' 34.246 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,539.0 usft

Wellbore	Jackson Unit 24H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	08/04/2013	7.36	60.12	48,419

Design	Jackson Unit 24H			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	
		Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	1.30

Survey Program	Date 08/07/2013			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	16,000.0	Jackson Unit 24 (Jackson Unit 24H)	MWD	MWD - Standard

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well Jackson Unit 24H
Project:	Jackson Unit Section 22	TVD Reference:	WELL @ 3561.0usft (Original Well Elev)
Site:	Jackson Unit 24H	MD Reference:	WELL @ 3561.0usft (Original Well Elev)
Well:	Jackson Unit 24H	North Reference:	Grid
Wellbore:	Jackson Unit 24H	Survey Calculation Method:	Minimum Curvature
Design:	Jackson Unit 24H	Database:	EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
0.0	0.00	0.00	0.0	-3,561.0	0.0	0.0	0.0	0.00	436,048.50	780,703.06	
100.0	0.85	258.49	100.0	-3,461.0	-0.1	-0.7	-0.2	0.85	436,048.36	780,702.33	
200.0	0.94	245.94	200.0	-3,361.0	-0.6	-2.2	-0.7	0.22	436,047.87	780,700.86	
300.0	0.95	245.54	300.0	-3,261.0	-1.3	-3.7	-1.4	0.01	436,047.20	780,699.35	
400.0	0.76	237.69	400.0	-3,161.0	-2.0	-5.0	-2.1	0.22	436,046.50	780,698.04	
500.0	0.65	251.89	500.0	-3,061.0	-2.5	-6.1	-2.7	0.21	436,045.97	780,696.94	
600.0	0.59	247.80	599.9	-2,961.1	-2.9	-7.1	-3.1	0.07	436,045.60	780,695.92	
700.0	0.45	286.98	699.9	-2,861.1	-3.0	-8.0	-3.2	0.37	436,045.52	780,695.07	
800.0	0.33	317.65	799.9	-2,761.1	-2.7	-8.6	-2.9	0.24	436,045.84	780,694.50	
900.0	0.34	347.91	899.9	-2,661.1	-2.2	-8.8	-2.4	0.18	436,046.35	780,694.24	
1,000.0	0.46	3.95	999.9	-2,561.1	-1.5	-8.8	-1.7	0.16	436,047.04	780,694.21	
1,100.0	0.65	4.95	1,099.9	-2,461.1	-0.5	-8.8	-0.7	0.19	436,048.00	780,694.29	
1,200.0	0.51	14.80	1,199.9	-2,361.1	0.5	-8.6	0.3	0.17	436,049.00	780,694.45	
1,221.0	0.52	8.83	1,220.9	-2,340.1	0.7	-8.6	0.5	0.26	436,049.18	780,694.49	
Rustler											
1,259.0	0.54	358.67	1,258.9	-2,302.1	1.0	-8.5	0.8	0.26	436,049.53	780,694.51	
13 3/8"											
1,300.0	0.59	349.06	1,299.9	-2,261.1	1.4	-8.6	1.2	0.26	436,049.93	780,694.47	
1,400.0	0.84	356.11	1,399.9	-2,161.1	2.7	-8.7	2.5	0.26	436,051.17	780,694.32	
1,500.0	0.76	9.51	1,499.9	-2,061.1	4.1	-8.7	3.9	0.20	436,052.56	780,694.38	
1,600.0	0.26	336.12	1,599.9	-1,961.1	4.9	-8.7	4.7	0.56	436,053.42	780,694.40	
1,700.0	0.33	284.00	1,699.9	-1,861.1	5.2	-9.0	5.0	0.27	436,053.69	780,694.02	
1,800.0	0.79	255.38	1,799.9	-1,761.1	5.1	-10.0	4.9	0.52	436,053.59	780,693.08	
1,900.0	0.76	260.50	1,899.9	-1,661.1	4.8	-11.3	4.5	0.08	436,053.31	780,691.76	
2,000.0	0.79	272.41	1,999.9	-1,561.1	4.7	-12.6	4.4	0.16	436,053.23	780,690.41	
2,100.0	0.83	302.16	2,099.9	-1,461.1	5.1	-13.9	4.8	0.42	436,053.64	780,689.11	
2,200.0	0.78	315.85	2,199.9	-1,361.1	6.0	-15.0	5.7	0.20	436,054.51	780,688.02	

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well Jackson Unit 24H
Project:	Jackson Unit Section 22	TVD Reference:	WELL @ 3561.0usft (Original Well Elev)
Site:	Jackson Unit 24H	MD Reference:	WELL @ 3561.0usft (Original Well Elev)
Well:	Jackson Unit 24H	North Reference:	Grid
Wellbore:	Jackson Unit 24H	Survey Calculation Method:	Minimum Curvature
Design:	Jackson Unit 24H	Database:	EDM 5000.1 Single User Db

Survey												
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)		
2,300.0	0.87	315.07	2,299.8	-1,261.2	7.0	-16.0	6.7	0.09	436,055.54	780,687.01		
2,400.0	0.66	313.43	2,399.8	-1,161.2	8.0	-17.0	7.6	0.21	436,056.47	780,686.06		
2,500.0	0.54	314.51	2,499.8	-1,061.2	8.7	-17.8	8.3	0.12	436,057.20	780,685.31		
2,600.0	0.46	320.57	2,599.8	-961.2	9.3	-18.3	8.9	0.10	436,057.84	780,684.71		
2,700.0	0.57	313.08	2,699.8	-861.2	10.0	-19.0	9.6	0.13	436,058.49	780,684.10		
2,800.0	0.92	346.44	2,799.8	-761.2	11.1	-19.5	10.7	0.54	436,059.61	780,683.54		
2,900.0	1.00	359.22	2,899.8	-661.2	12.8	-19.7	12.3	0.23	436,061.26	780,683.34		
3,000.0	1.33	6.91	2,999.8	-561.2	14.8	-19.6	14.3	0.36	436,063.29	780,683.47		
3,100.0	1.34	7.01	3,099.8	-461.2	17.1	-19.3	16.7	0.01	436,065.60	780,683.75		
3,200.0	1.56	358.84	3,199.7	-361.3	19.6	-19.2	19.2	0.30	436,068.12	780,683.87		
3,300.0	1.90	341.98	3,299.7	-261.3	22.6	-19.7	22.1	0.61	436,071.06	780,683.33		
3,400.0	2.46	334.41	3,399.6	-161.4	26.1	-21.2	25.6	0.63	436,074.57	780,681.89		
3,500.0	2.52	335.12	3,499.5	-61.5	30.0	-23.0	29.5	0.07	436,078.50	780,680.04		
3,600.0	2.27	334.97	3,599.4	38.4	33.8	-24.8	33.2	0.25	436,082.29	780,678.27		
3,700.0	1.58	330.05	3,699.4	138.4	36.8	-26.3	36.2	0.71	436,085.28	780,676.75		
3,800.0	1.48	306.53	3,799.3	238.3	38.7	-28.0	38.1	0.63	436,087.24	780,675.02		
3,900.0	1.35	295.08	3,899.3	338.3	40.0	-30.1	39.3	0.31	436,088.51	780,672.92		
4,000.0	0.70	299.69	3,999.3	438.3	40.8	-31.7	40.1	0.65	436,089.31	780,671.32		
4,100.0	0.61	301.33	4,099.3	538.3	41.4	-32.7	40.6	0.09	436,089.89	780,670.33		
4,200.0	0.94	287.13	4,199.3	638.3	41.9	-34.0	41.1	0.38	436,090.41	780,669.10		
4,300.0	1.23	293.89	4,299.3	738.3	42.6	-35.7	41.8	0.32	436,091.09	780,667.33		
4,400.0	0.96	298.29	4,399.2	838.2	43.4	-37.4	42.6	0.28	436,091.92	780,665.61		
4,500.0	0.65	84.54	4,499.2	938.2	43.9	-37.6	43.0	1.54	436,092.37	780,665.44		
4,600.0	1.44	102.96	4,599.2	1,038.2	43.6	-35.8	42.8	0.85	436,092.14	780,667.23		
4,700.0	2.09	102.83	4,699.2	1,138.2	43.0	-32.8	42.2	0.65	436,091.45	780,670.23		
4,800.0	3.22	117.16	4,799.1	1,238.1	41.3	-28.6	40.6	1.30	436,089.77	780,674.51		
4,900.0	4.49	117.45	4,898.8	1,337.8	38.2	-22.6	37.7	1.27	436,086.68	780,680.48		

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5,000.0	3.71	113.63	4,998.6	1,437.6	35.1	-16.1	34.7	0.83	436,083.58	780,686.92		
5,100.0	2.69	118.63	5,098.4	1,537.4	32.7	-11.1	32.4	1.06	436,081.16	780,691.94		
5,115.0	2.40	118.40	5,113.4	1,552.4	32.3	-10.5	32.1	1.93	436,080.84	780,692.53		
5,216.0	2.16	119.11	5,214.3	1,653.3	30.4	-7.0	30.2	0.24	436,078.91	780,696.05		
Delaware												
5,248.0	2.09	119.37	5,246.3	1,685.3	29.8	-6.0	29.7	0.24	436,078.33	780,697.09		
9 5/8"												
5,328.0	1.90	120.10	5,326.2	1,765.2	28.4	-3.6	28.4	0.24	436,076.95	780,699.51		
5,423.0	2.20	123.30	5,421.2	1,860.2	26.7	-0.7	26.6	0.34	436,075.16	780,702.39		
5,518.0	2.00	117.40	5,516.1	1,955.1	24.9	2.3	24.9	0.31	436,073.39	780,705.39		
5,614.0	2.10	118.30	5,612.1	2,051.1	23.3	5.4	23.4	0.11	436,071.79	780,708.42		
5,708.0	1.90	120.20	5,706.0	2,145.0	21.7	8.2	21.9	0.22	436,070.19	780,711.29		
5,803.0	1.90	111.00	5,801.0	2,240.0	20.3	11.1	20.6	0.32	436,068.83	780,714.12		
5,897.0	2.10	113.50	5,894.9	2,333.9	19.1	14.1	19.4	0.23	436,067.59	780,717.15		
5,992.0	1.90	109.70	5,989.8	2,428.8	17.9	17.2	18.2	0.25	436,066.36	780,720.23		
6,085.0	1.80	115.90	6,082.8	2,521.8	16.7	19.9	17.1	0.24	436,065.20	780,723.00		
6,180.0	1.90	126.80	6,177.7	2,616.7	15.1	22.5	15.6	0.38	436,063.61	780,725.60		
6,213.0	1.79	125.16	6,210.7	2,649.7	14.5	23.4	15.0	0.36	436,062.98	780,726.46		
Cherry Canyon												
6,275.0	1.60	121.50	6,272.7	2,711.7	13.5	24.9	14.0	0.36	436,061.97	780,727.99		
6,369.0	1.80	122.70	6,366.7	2,805.7	12.0	27.3	12.6	0.22	436,060.49	780,730.35		
6,464.0	1.80	110.60	6,461.6	2,900.6	10.7	29.9	11.3	0.40	436,059.16	780,733.00		
6,558.0	1.70	123.40	6,555.6	2,994.6	9.4	32.5	10.1	0.43	436,057.87	780,735.55		
6,653.0	1.70	111.00	6,650.5	3,089.5	8.1	35.0	8.9	0.39	436,056.59	780,738.04		
6,747.0	2.10	112.90	6,744.5	3,183.5	6.9	37.9	7.8	0.43	436,055.42	780,740.93		
6,842.0	1.60	114.60	6,839.4	3,278.4	5.7	40.7	6.6	0.53	436,054.19	780,743.74		
6,936.0	1.90	106.70	6,933.4	3,372.4	4.7	43.4	5.7	0.41	436,053.20	780,746.43		

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7,031.0	2.50	152.50	7,028.3	3,467.3	2.4	45.8	3.4	1.89	436,050.91	780,748.89		
7,125.0	2.90	158.50	7,122.2	3,561.2	-1.6	47.7	-0.5	0.52	436,046.88	780,750.71		
7,221.0	3.10	188.10	7,218.1	3,657.1	-6.5	48.2	-5.4	1.61	436,042.05	780,751.23		
7,315.0	3.10	193.00	7,311.9	3,750.9	-11.4	47.2	-10.4	0.28	436,037.05	780,750.30		
7,410.0	2.90	193.70	7,406.8	3,845.8	-16.3	46.1	-15.2	0.21	436,032.22	780,749.16		
7,505.0	2.60	193.50	7,501.7	3,940.7	-20.7	45.0	-19.7	0.32	436,027.79	780,748.08		
7,601.0	3.50	188.40	7,597.6	4,036.6	-25.7	44.1	-24.7	0.98	436,022.77	780,747.15		
7,644.0	4.19	180.86	7,640.5	4,079.5	-28.6	43.9	-27.6	1.99	436,019.90	780,746.93		
Brushy Canyon												
7,696.0	5.10	174.60	7,692.3	4,131.3	-32.8	44.1	-31.8	1.99	436,015.70	780,747.12		
7,791.0	4.60	169.30	7,787.0	4,226.0	-40.8	45.2	-39.7	0.71	436,007.75	780,748.23		
7,886.0	4.30	171.00	7,881.7	4,320.7	-48.0	46.4	-46.9	0.34	436,000.49	780,749.49		
7,981.0	4.40	168.90	7,976.4	4,415.4	-55.1	47.7	-54.0	0.20	435,993.40	780,750.75		
8,075.0	3.80	166.60	8,070.2	4,509.2	-61.7	49.1	-60.5	0.66	435,986.83	780,752.17		
8,170.0	3.70	166.80	8,165.0	4,604.0	-67.7	50.5	-66.6	0.11	435,980.78	780,753.60		
8,265.0	3.70	170.60	8,259.8	4,698.8	-73.7	51.7	-72.5	0.26	435,974.77	780,754.80		
8,360.0	4.10	161.40	8,354.5	4,793.5	-80.0	53.3	-78.7	0.78	435,968.53	780,756.38		
8,455.0	4.60	156.40	8,449.3	4,888.3	-86.7	55.9	-85.4	0.66	435,961.82	780,758.99		
8,550.0	4.40	163.40	8,544.0	4,983.0	-93.7	58.5	-92.3	0.61	435,954.84	780,761.55		
8,643.0	4.80	164.40	8,636.7	5,075.7	-100.8	60.6	-99.4	0.44	435,947.67	780,763.62		
8,737.0	4.40	161.80	8,730.4	5,169.4	-108.0	62.7	-106.6	0.48	435,940.46	780,765.80		
8,831.0	5.00	157.10	8,824.1	5,263.1	-115.2	65.5	-113.7	0.76	435,933.26	780,768.52		
8,926.0	6.80	156.60	8,918.5	5,357.5	-124.2	69.3	-122.6	1.90	435,924.28	780,772.37		
9,020.0	6.40	158.00	9,011.9	5,450.9	-134.2	73.5	-132.5	0.46	435,914.32	780,776.54		
9,115.0	5.40	157.90	9,106.4	5,545.4	-143.2	77.1	-141.5	1.05	435,905.26	780,780.21		
9,140.0	5.16	157.95	9,131.3	5,570.3	-145.4	78.0	-143.6	0.96	435,903.13	780,781.07		
Bone Spring												

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well Jackson Unit 24H
Project:	Jackson Unit Section 22	TVD Reference:	WELL @ 3561.0usft (Original Well Elev)
Site:	Jackson Unit 24H	MD Reference:	WELL @ 3561.0usft (Original Well Elev)
Well:	Jackson Unit 24H	North Reference:	Grid
Wellbore:	Jackson Unit 24H	Survey Calculation Method:	Minimum Curvature
Design:	Jackson Unit 24H	Database:	EDM 5000.1 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
9,209.0	4.50	158.10	9,200.1	5,639.1	-150.8	80.2	-148.9	0.96	435,897.75	780,783.25
9,244.0	4.00	163.18	9,235.0	5,674.0	-153.2	81.1	-151.3	1.79	435,895.30	780,784.11
Avalon Shale										
9,299.0	3.30	174.10	9,289.9	5,728.9	-156.6	81.8	-154.7	1.79	435,891.89	780,784.83
9,394.0	2.70	179.10	9,384.7	5,823.7	-161.6	82.1	-159.7	0.69	435,886.94	780,785.15
9,488.0	2.30	184.90	9,478.6	5,917.6	-165.7	82.0	-163.8	0.50	435,882.84	780,785.02
9,583.0	1.90	193.70	9,573.6	6,012.6	-169.1	81.4	-167.2	0.54	435,879.41	780,784.48
9,677.0	1.70	208.60	9,667.5	6,106.5	-171.8	80.4	-170.0	0.54	435,876.67	780,783.45
9,772.0	2.00	239.80	9,762.5	6,201.5	-173.9	78.3	-172.1	1.09	435,874.60	780,781.34
9,867.0	1.00	237.10	9,857.5	6,296.5	-175.2	76.2	-173.4	1.05	435,873.32	780,779.21
9,962.0	0.50	183.40	9,952.4	6,391.4	-176.0	75.4	-174.3	0.85	435,872.46	780,778.49
10,057.0	1.50	192.10	10,047.4	6,486.4	-177.7	75.1	-175.9	1.06	435,870.83	780,778.21
10,152.0	2.50	220.50	10,142.4	6,581.4	-180.5	73.5	-178.8	1.45	435,868.03	780,776.60
10,180.0	2.41	224.09	10,170.3	6,609.3	-181.4	72.7	-179.7	0.64	435,867.15	780,775.79
1st Bone Spring Sand										
10,264.0	2.20	236.40	10,254.3	6,693.3	-183.5	70.2	-181.9	0.64	435,864.99	780,773.22
10,359.0	2.30	241.40	10,349.2	6,788.2	-185.4	67.0	-183.9	0.23	435,863.07	780,770.03
10,454.0	2.20	243.40	10,444.1	6,883.1	-187.2	63.7	-185.7	0.13	435,861.34	780,766.73
10,549.0	2.30	248.70	10,539.1	6,978.1	-188.7	60.3	-187.3	0.24	435,859.83	780,763.32
10,642.0	1.70	283.10	10,632.0	7,071.0	-189.0	57.2	-187.7	1.41	435,859.46	780,760.24
10,738.0	4.10	345.70	10,727.9	7,166.9	-185.4	54.9	-184.1	3.80	435,863.11	780,758.00
10,785.0	5.31	351.80	10,774.7	7,213.7	-181.6	54.2	-180.3	2.77	435,866.89	780,757.28
7"										
10,800.0	5.70	353.20	10,789.7	7,228.7	-180.2	54.0	-178.9	2.77	435,868.32	780,757.09
10,832.0	8.90	352.00	10,821.4	7,260.4	-176.2	53.5	-174.9	10.01	435,872.35	780,756.56
10,862.0	10.60	352.90	10,851.0	7,290.0	-171.1	52.8	-169.9	5.69	435,877.38	780,755.89
10,894.0	10.60	355.70	10,882.4	7,321.4	-165.3	52.2	-164.0	1.61	435,883.24	780,755.31
2nd Bone Spring Sand										

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well Jackson Unit 24H
Project:	Jackson Unit Section 22	TVD Reference:	WELL @ 3561.0usft (Original Well Elev)
Site:	Jackson Unit 24H	MD Reference:	WELL @ 3561.0usft (Original Well Elev)
Well:	Jackson Unit 24H	North Reference:	Grid
Wellbore:	Jackson Unit 24H	Survey Calculation Method:	Minimum Curvature
Design:	Jackson Unit 24H	Database:	EDM 5000.1 Single User Db

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
10,927.0	11.00	356.70	10,914.8	7,353.8	-159.1	51.8	-157.9	1.34	435,889.41	780,754.90
10,959.0	14.10	8.90	10,946.1	7,385.1	-152.2	52.3	-151.0	12.70	435,896.31	780,755.33
10,990.0	19.50	19.80	10,975.7	7,414.7	-143.6	54.6	-142.3	20.10	435,904.92	780,757.67
11,022.0	25.70	25.50	11,005.3	7,444.3	-132.3	59.4	-130.9	20.53	435,916.22	780,762.47
11,054.0	32.70	27.70	11,033.2	7,472.2	-118.4	66.4	-116.8	22.13	435,930.15	780,769.48
11,086.0	37.70	30.30	11,059.3	7,498.3	-102.2	75.4	-100.5	16.31	435,946.26	780,778.44
11,117.0	43.00	30.20	11,083.0	7,522.0	-84.9	85.5	-82.9	17.10	435,963.60	780,788.55
11,149.0	49.30	28.50	11,105.1	7,544.1	-64.8	96.8	-62.6	20.06	435,983.71	780,799.84
11,180.0	54.40	24.60	11,124.3	7,563.3	-43.0	107.6	-40.5	19.19	436,005.51	780,810.70
11,212.0	61.20	21.50	11,141.3	7,580.3	-18.1	118.2	-15.4	22.77	436,030.42	780,821.27
11,243.0	65.90	20.10	11,155.1	7,594.1	7.9	128.1	10.8	15.69	436,056.36	780,831.12
11,274.0	69.70	20.60	11,166.8	7,605.8	34.8	138.0	37.9	12.35	436,083.27	780,841.10
11,306.0	71.50	20.60	11,177.4	7,616.4	63.0	148.7	66.4	5.62	436,111.52	780,851.72
11,337.0	72.00	20.70	11,187.2	7,626.2	90.6	159.0	94.2	1.64	436,139.07	780,862.10
11,369.0	74.50	19.40	11,196.4	7,635.4	119.3	169.5	123.2	8.73	436,167.85	780,872.60
11,400.0	78.30	17.90	11,203.7	7,642.7	147.9	179.2	151.9	13.13	436,196.40	780,882.23
11,431.0	81.60	16.90	11,209.1	7,648.1	177.0	188.3	181.2	11.11	436,225.52	780,891.36
11,463.0	84.80	16.10	11,212.9	7,651.9	207.5	197.3	211.9	10.30	436,255.98	780,900.38
11,495.0	89.40	15.70	11,214.5	7,653.5	238.2	206.1	242.8	14.43	436,286.71	780,909.13
11,526.0	92.90	14.50	11,213.9	7,652.9	268.1	214.1	272.9	11.94	436,316.63	780,917.21
11,558.0	94.40	13.90	11,211.8	7,650.8	299.1	222.0	304.0	5.05	436,347.59	780,925.04
11,652.0	93.00	9.60	11,205.8	7,644.8	390.9	241.1	396.3	4.80	436,439.40	780,944.13
11,746.0	92.30	7.50	11,201.4	7,640.4	483.7	255.0	489.4	2.35	436,532.25	780,958.09
11,841.0	91.30	3.10	11,198.4	7,637.4	578.3	263.8	584.1	4.75	436,626.77	780,966.86
11,936.0	90.80	0.80	11,196.7	7,635.7	673.2	267.0	679.1	2.48	436,721.70	780,970.09
12,030.0	91.70	359.40	11,194.6	7,633.6	767.2	267.2	773.0	1.77	436,815.67	780,970.26
12,125.0	91.70	359.90	11,191.8	7,630.8	862.1	266.6	868.0	0.53	436,910.63	780,969.68

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well Jackson Unit 24H
Project:	Jackson Unit Section 22	TVD Reference:	WELL @ 3561.0usft (Original Well Elev)
Site:	Jackson Unit 24H	MD Reference:	WELL @ 3561.0usft (Original Well Elev)
Well:	Jackson Unit 24H	North Reference:	Grid
Wellbore:	Jackson Unit 24H	Survey Calculation Method:	Minimum Curvature
Design:	Jackson Unit 24H	Database:	EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
12,220.0	93.50	359.00	11,187.5	7,626.5	957.0	265.7	962.8	2.12	437,005.52	780,968.77	
12,316.0	92.40	358.30	11,182.6	7,621.6	1,052.9	263.4	1,058.6	1.36	437,101.36	780,966.51	
12,411.0	90.90	358.30	11,179.8	7,618.8	1,147.8	260.6	1,153.4	1.58	437,196.28	780,963.69	
12,506.0	92.60	356.60	11,176.9	7,615.9	1,242.6	256.4	1,248.1	2.53	437,291.13	780,959.47	
12,602.0	93.00	356.20	11,172.2	7,611.2	1,338.3	250.4	1,343.7	0.59	437,386.83	780,953.45	
12,697.0	93.00	355.80	11,167.3	7,606.3	1,433.0	243.8	1,438.1	0.42	437,481.47	780,946.83	
12,792.0	91.30	356.50	11,163.7	7,602.7	1,527.7	237.4	1,532.7	1.94	437,576.18	780,940.45	
12,887.0	88.90	355.50	11,163.5	7,602.5	1,622.4	230.8	1,627.3	2.74	437,670.94	780,933.83	
12,983.0	91.10	356.00	11,163.5	7,602.5	1,718.2	223.7	1,722.8	2.35	437,766.67	780,926.71	
13,077.0	90.10	356.00	11,162.6	7,601.6	1,811.9	217.1	1,816.4	1.06	437,860.44	780,920.16	
13,173.0	89.80	356.20	11,162.6	7,601.6	1,907.7	210.6	1,912.0	0.38	437,956.22	780,913.63	
13,268.0	90.60	357.30	11,162.3	7,601.3	2,002.6	205.2	2,006.7	1.43	438,051.06	780,908.24	
13,364.0	90.50	357.50	11,161.4	7,600.4	2,098.5	200.8	2,102.5	0.23	438,146.96	780,903.89	
13,460.0	91.90	358.90	11,159.4	7,598.4	2,194.4	197.8	2,198.3	2.06	438,242.88	780,900.87	
13,554.0	91.70	359.30	11,156.4	7,595.4	2,288.3	196.3	2,292.2	0.48	438,336.83	780,899.40	
13,649.0	91.20	359.00	11,154.0	7,593.0	2,383.3	194.9	2,387.1	0.61	438,431.78	780,897.99	
13,745.0	91.30	359.00	11,151.9	7,590.9	2,479.2	193.3	2,483.0	0.10	438,527.75	780,896.31	
13,840.0	91.00	359.00	11,150.0	7,589.0	2,574.2	191.6	2,577.9	0.32	438,622.71	780,894.65	
13,934.0	91.30	358.80	11,148.1	7,587.1	2,668.2	189.8	2,671.8	0.38	438,716.68	780,892.85	
14,029.0	91.30	358.80	11,146.0	7,585.0	2,763.1	187.8	2,766.7	0.00	438,811.63	780,890.86	
14,124.0	91.10	358.20	11,144.0	7,583.0	2,858.1	185.3	2,861.5	0.67	438,906.58	780,888.38	
14,218.0	90.60	357.50	11,142.6	7,581.6	2,952.0	181.8	2,955.4	0.92	439,000.50	780,884.85	
14,313.0	90.40	358.10	11,141.8	7,580.8	3,046.9	178.1	3,050.2	0.67	439,095.43	780,881.20	
14,408.0	90.10	357.90	11,141.3	7,580.3	3,141.9	174.8	3,145.0	0.38	439,190.37	780,877.89	
14,503.0	91.70	359.10	11,139.9	7,578.9	3,236.8	172.3	3,239.9	2.11	439,285.32	780,875.40	
14,598.0	91.90	359.20	11,136.9	7,575.9	3,331.8	170.9	3,334.8	0.24	439,380.26	780,873.99	
14,693.0	91.80	358.90	11,133.8	7,572.8	3,426.7	169.4	3,429.7	0.33	439,475.20	780,872.42	

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well Jackson Unit 24H
Project:	Jackson Unit Section 22	TVD Reference:	WELL @ 3561.0usft (Original Well Elev)
Site:	Jackson Unit 24H	MD Reference:	WELL @ 3561.0usft (Original Well Elev)
Well:	Jackson Unit 24H	North Reference:	Grid
Wellbore:	Jackson Unit 24H	Survey Calculation Method:	Minimum Curvature
Design:	Jackson Unit 24H	Database:	EDM 5000.1 Single User Db

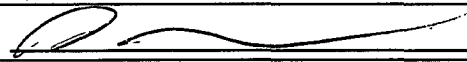
Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
14,787.0	92.50	358.90	11,130.3	7,569.3	3,520.6	167.6	3,523.5	0.74	439,569.11	780,870.61	
14,882.0	92.00	358.40	11,126.5	7,565.5	3,615.5	165.3	3,618.3	0.74	439,664.01	780,868.38	
14,977.0	91.70	357.80	11,123.5	7,562.5	3,710.4	162.2	3,713.1	0.71	439,758.91	780,865.23	
15,072.0	93.40	358.30	11,119.3	7,558.3	3,805.3	158.9	3,807.9	1.87	439,853.76	780,862.00	
15,167.0	93.20	358.10	11,113.8	7,552.8	3,900.1	156.0	3,902.6	0.30	439,948.55	780,859.02	
15,262.0	92.30	0.10	11,109.2	7,548.2	3,994.9	154.5	3,997.4	2.31	440,043.43	780,857.53	
15,356.0	92.10	359.80	11,105.6	7,544.6	4,088.9	154.4	4,091.3	0.38	440,137.36	780,857.45	
15,452.0	91.70	359.50	11,102.4	7,541.4	4,184.8	153.8	4,187.2	0.52	440,233.30	780,856.86	
15,549.0	90.70	359.20	11,100.4	7,539.4	4,281.8	152.7	4,284.1	1.08	440,330.27	780,855.76	
15,644.0	90.80	0.20	11,099.2	7,538.2	4,376.8	152.2	4,379.1	1.06	440,425.26	780,855.27	
15,740.0	90.40	0.40	11,098.2	7,537.2	4,472.8	152.7	4,475.1	0.47	440,521.26	780,855.77	
15,836.0	89.10	0.20	11,098.6	7,537.6	4,568.7	153.2	4,571.0	1.37	440,617.25	780,856.27	
15,932.0	88.80	359.90	11,100.3	7,539.3	4,664.7	153.3	4,667.0	0.44	440,713.24	780,856.35	
15,952.0	88.80	359.80	11,100.8	7,539.8	4,684.7	153.2	4,687.0	0.50	440,733.23	780,856.30	
15,990.0	88.80	359.80	11,101.5	7,540.5	4,722.7	153.1	4,725.0	0.00	440,771.22	780,856.17	
4 1/2"											
16,000.0	88.80	359.80	11,101.8	7,540.8	4,732.7	153.1	4,735.0	0.00	440,781.22	780,856.13	
Projection to Bit											

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
15,990.0	11,101.5	4 1/2"	4-1/2	6-1/8	
1,259.0	1,258.9	13 3/8"	13-3/8	16	
5,248.0	5,246.3	9 5/8"	9-5/8	12-1/4	
10,785.0	10,774.7	7"	7	8-1/2	

Company: Murchison Oil and Gas Project: Jackson Unit Section 22 Site: Jackson Unit 24H Well: Jackson Unit 24H Wellbore: Jackson Unit 24H Design: Jackson Unit 24H	Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database:	Well Jackson Unit 24H WELL @ 3561.0usft (Original Well Elev) WELL @ 3561.0usft (Original Well Elev) Grid Minimum Curvature EDM 5000.1 Single User Db
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Formations				
Measured Depth (usft)	Vertical Depth (usft)	Name		
9,140.0	9,131.3	Bone Spring	Dip	(°)
9,244.0	9,235.0	Avalon Shale	0.00	
7,644.0	7,640.5	Brushy Canyon	0.00	
5,216.0	5,214.3	Delaware	0.00	
10,180.0	10,170.3	1st Bone Spring Sand	0.00	
1,221.0	1,220.9	Rustler	0.00	
10,894.0	10,882.4	2nd Bone Spring Sand	0.00	
6,213.0	6,210.7	Cherry Canyon	0.00	

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		
		+N/-S (usft)	+E/-W (usft)	Comment
16,000.0	11,101.8	4,732.7	153.1	Projection to Bit

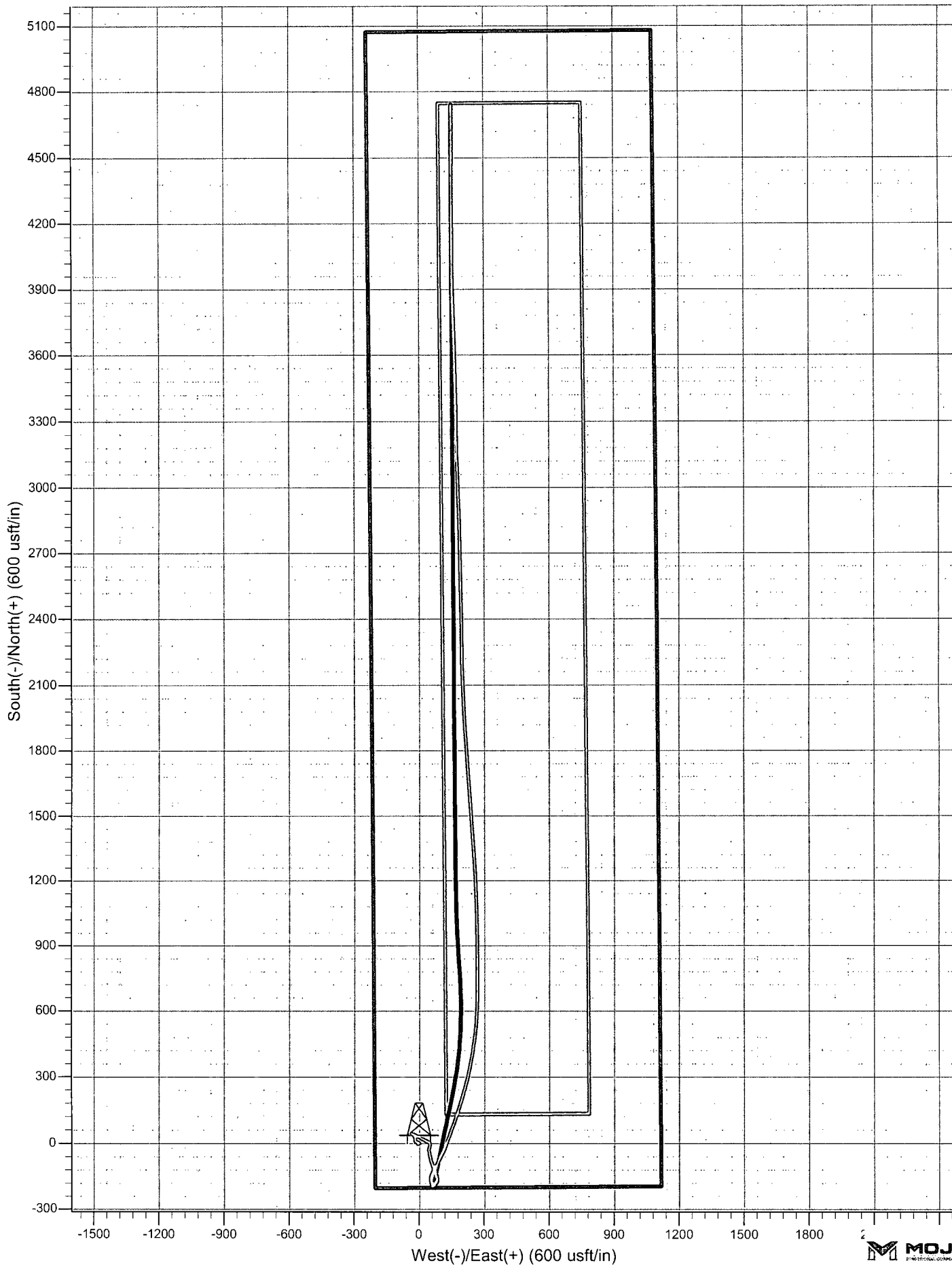
Checked By: _____ Approved By:  Date: 07/08/2013

Site: Jackson Unit 24H
Well: Jackson Unit 24H
Wellbore: Jackson Unit 24H
Design: Jackson Unit 24H

 MURCHISON OIL & GAS, INC.



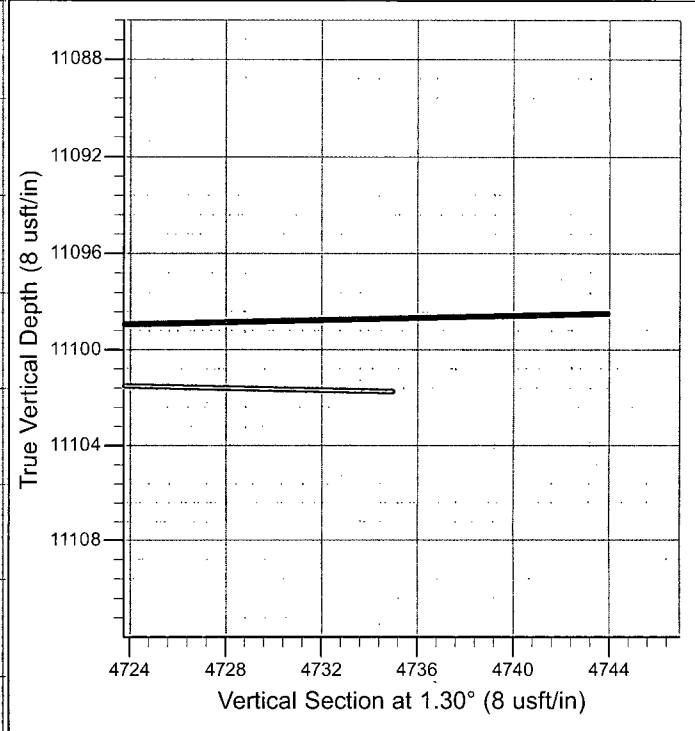
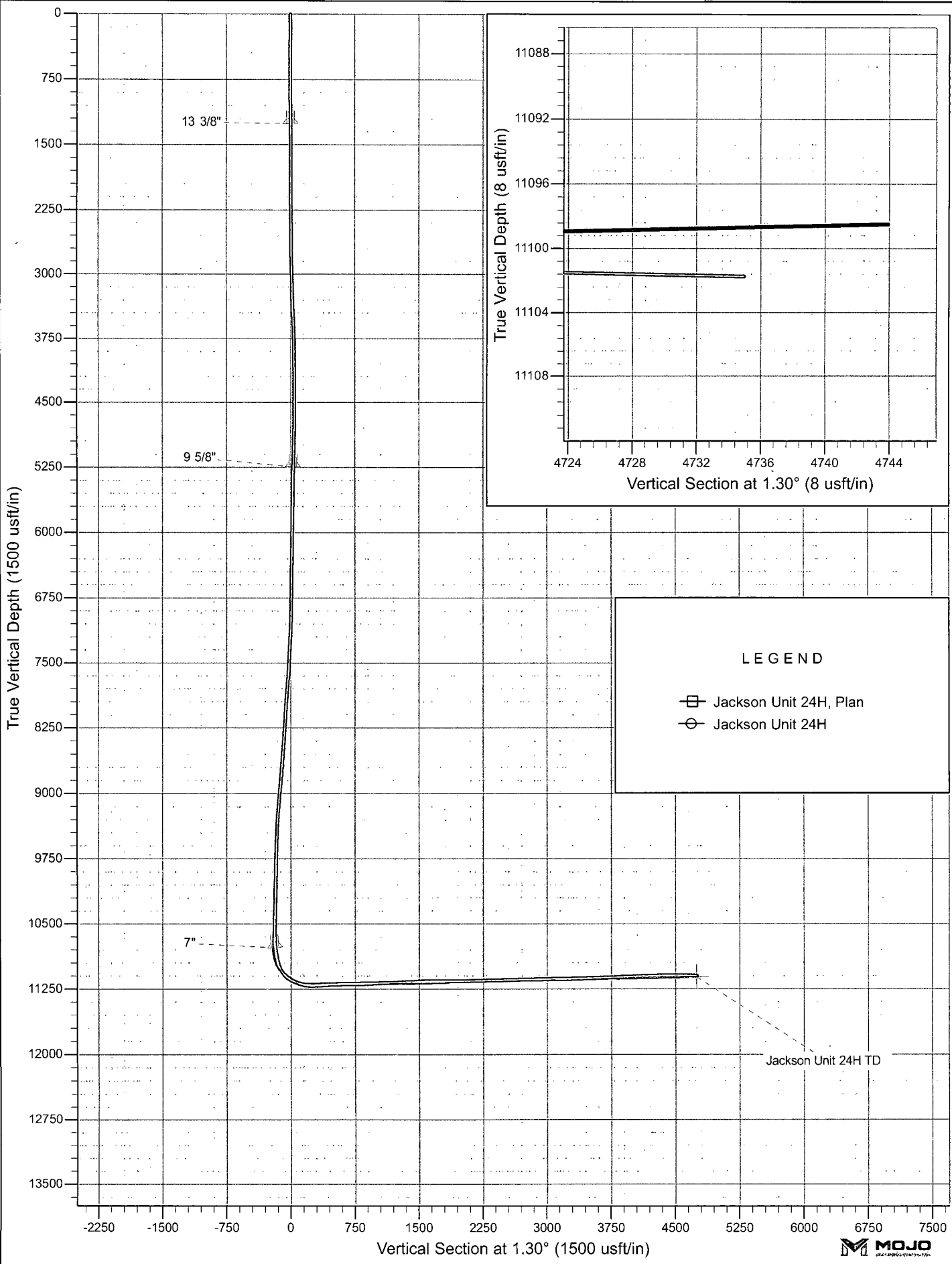
True North: -0.41°
Magnetic North: 6.94°
Magnetic Field
Strength: 48418.7snT
Dip Angle: 60.12°
Date: 08/04/2013
Model: IGRF2010





Site: Jackson Unit 24H
 Well: Jackson Unit 24H
 Wellbore: Jackson Unit 24H
 Design: Jackson Unit 24H



True North: -0.41°
 Magnetic North: 6.94°
 Magnetic Field
 Strength: 48418.7snT
 Dip Angle: 60.12°
 Date: 08/04/2013
 Model: IGRF2010



LEGEND

-  Jackson Unit 24H, Plan
-  Jackson Unit 24H