

Results of Directional Survey

API number:	30-025-41228		
OGRID:		Operator:	MURCHISON OIL & GAS INC
		Property:	JACKSON UNIT # 22H

surface	ULSTR:	M	22	T 24S	R 33E
				200 FSL	350 FWL

BH Loc	ULSTR:	D	22	T 24S	R 33E
15790	MD	11131.6	TVD	252 FNL	321 FWL
				5028 FSL	

Top Perf/OH	ULSTR:	M	22	T 24S	R 33E
11294	MD	11130.1	TVD	536 FSL	388 FWL

Bot Perf/OH	ULSTR:	D	22	T 24S	R 33E
15710	MD	11130.3	TVD	332 FNL	321 FWL
				4948 FSL	

	MD	N/S	E/W	VD
	11288	330.30	36.90	11128.8
TOP PERFS/OH	11294	336.09	37.69	11130.11
	11320	361.20	41.10	11135.80
	15665	4703.00	-28.20	11129.60
BOT PERFS/OH	15710	4748.00	-28.65	11130.31
	15785	4823.00	-29.40	11131.50

NEXT TO LAST	15785	4823.00	-29.40	11131.50
LAST READING	15790	4828.00	-29.50	11131.60
TD	15790	4828.00	-29.50	11131.60

Surface Location	200	FS	350	FW
Projected BHL	5028	FS	321	FW
Location of				
Top Perfs/OH	536	FS	388	FW
Bottom Perfs/OH	4948	FS	321	FW

SUMMARY of Subsurface Locations

Surface Location	M-22-24S-33E	200	FS	350	FW	Vert. Depth
Top Perfs/OH	M-22-24S-33E	536	FS	388	FW	11130.11
Bottom Perfs/OH	D-22-24S-33E	4948	FS	321	FW	11130.31
Projected TD	D-22-24S-33E	5028	FS	321	FW	11131.60

JUL 16 2014

Murchison Oil and Gas

Jackson Unit Section 22

Jackson Unit 22H

HOBBS OCD

JUN 16 2014

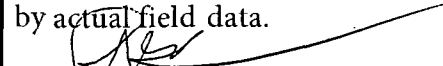
RECEIVED

Survey: Jackson Unit 22H

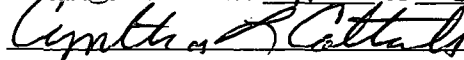
MOJO Standard Survey

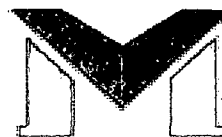
10 June, 2014

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

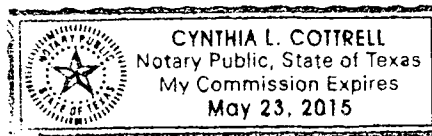
 (Signature)

Notarized this date 11th of June, 2014


Notary Signature County of Collin State of Texas



MOJO
DIRECTIONAL CORPORATION



HOBBS OCD
JUN 16 2014

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well Jackson Unit 22H
Project:	Jackson Unit Section 22	TVD Reference:	WELL @ 3552.5usft (Original Well Elev)
Site:	Jackson Unit 22H	MD Reference:	WELL @ 3552.5usft (Original Well Elev)
Well:	Jackson Unit 22H	North Reference:	Grid
Wellbore:	Jackson Unit 22H	Survey Calculation Method:	Minimum Curvature
Design:	Jackson Unit 22H	Database:	EDM 5000.1 Single User Db

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 22H			
Site Position:	Northing:	436,031.13 usft	Latitude:	32° 11' 47.070 N
From: Lat/Long	Easting:	778,206.19 usft	Longitude:	103° 34' 3.304 W
Position Uncertainty:	Slot Radius:	13-3/16 "	Grid Convergence:	0.41 °

Well	Jackson Unit 22H			
Well Position	+N/-S	0.0 usft	Northing:	436,031.13 usft
	+E/-W	0.0 usft	Easting:	778,206.19 usft
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft
			Latitude:	32° 11' 47.070 N
			Longitude:	103° 34' 3.304 W
			Ground Level:	3,530.5 usft

Wellbore	Jackson Unit 22H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	09/09/2013	7.31	60.11	48,376

Design	Jackson Unit 22H				
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	359.95	

Survey Program	Date	10/06/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	0.0	Jackson Unit 22H (Jackson Unit 22H)	MWD	MWD - Standard

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Wellbore:	Jackson Unit 22H	Survey Calculation Method:	Minimum Curvature
Design:	Jackson Unit 22H	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	11,131.6	7,579.1	4,828.0	-29.5	4,828.0	0.00	440,859.13	778,176.70
100.0	0.43	334.40	100.0	-3,452.5	0.3	-0.2	0.3	0.43	436,031.47	778,206.02
200.0	0.41	333.16	200.0	-3,352.5	1.0	-0.5	1.0	0.02	436,032.13	778,205.70
300.0	0.40	329.56	300.0	-3,252.5	1.6	-0.8	1.6	0.03	436,032.75	778,205.36
400.0	0.34	341.72	400.0	-3,152.5	2.2	-1.1	2.2	0.10	436,033.33	778,205.09
500.0	0.41	356.46	500.0	-3,052.5	2.8	-1.2	2.8	0.12	436,033.97	778,204.98
600.0	0.52	4.42	600.0	-2,952.5	3.6	-1.2	3.6	0.13	436,034.78	778,204.99
700.0	0.57	8.32	700.0	-2,852.5	4.6	-1.1	4.6	0.06	436,035.73	778,205.10
800.0	0.61	10.10	800.0	-2,752.5	5.6	-0.9	5.6	0.04	436,036.74	778,205.26
900.0	0.66	9.84	900.0	-2,652.5	6.7	-0.7	6.7	0.05	436,037.83	778,205.45
1,000.0	0.77	15.22	1,000.0	-2,552.5	7.9	-0.5	7.9	0.13	436,039.05	778,205.73
1,100.0	0.84	11.94	1,100.0	-2,452.5	9.3	-0.1	9.3	0.08	436,040.41	778,206.06
1,200.0	0.80	12.99	1,199.9	-2,352.6	10.7	0.2	10.7	0.04	436,041.81	778,206.36
1,207.6	0.81	12.73	1,207.5	-2,345.0	10.8	0.2	10.8	0.11	436,041.91	778,206.39
Rustler										
1,239.0	0.84	11.71	1,238.9	-2,313.6	11.2	0.3	11.2	0.11	436,042.36	778,206.48
13 3/8"										
1,300.0	0.90	9.92	1,299.9	-2,252.6	12.1	0.5	12.1	0.11	436,043.27	778,206.66
1,400.0	0.92	7.00	1,399.9	-2,152.6	13.7	0.7	13.7	0.05	436,044.84	778,206.89
1,500.0	0.93	358.26	1,499.9	-2,052.6	15.3	0.8	15.3	0.14	436,046.44	778,206.96
1,600.0	0.94	351.14	1,599.9	-1,952.6	16.9	0.6	16.9	0.12	436,048.07	778,206.81
1,700.0	0.96	339.85	1,699.9	-1,852.6	18.5	0.2	18.5	0.19	436,049.66	778,206.40
1,800.0	0.80	336.97	1,799.9	-1,752.6	20.0	-0.3	20.0	0.17	436,051.09	778,205.84
1,900.0	0.80	340.03	1,899.9	-1,652.6	21.3	-0.9	21.3	0.04	436,052.39	778,205.32
2,000.0	0.78	351.59	1,999.8	-1,552.7	22.6	-1.2	22.6	0.16	436,053.72	778,204.99
2,100.0	0.84	357.88	2,099.8	-1,452.7	24.0	-1.3	24.0	0.11	436,055.13	778,204.86
2,200.0	0.87	8.44	2,199.8	-1,352.7	25.5	-1.2	25.5	0.16	436,056.61	778,204.94

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Project:	Jackson Unit Section 22	TVD Reference:	WELL @ 3552.5usft (Original Well Elev)
Site:	Jackson Unit 22H	MD Reference:	WELL @ 3552.5usft (Original Well Elev)
Well:	Jackson Unit 22H	North Reference:	Grid
Wellbore:	Jackson Unit 22H	Survey Calculation Method:	Minimum Curvature
Design:	Jackson Unit 22H	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	1.06	15.79	2,299.8	-1,252.7	27.1	-0.9	27.1	0.23	436,058.25	778,205.31
2,400.0	1.33	17.01	2,399.8	-1,152.7	29.1	-0.3	29.1	0.27	436,060.25	778,205.90
2,500.0	1.50	16.35	2,499.8	-1,052.7	31.5	0.4	31.5	0.17	436,062.62	778,206.61
2,600.0	1.59	18.16	2,599.7	-952.8	34.1	1.2	34.1	0.10	436,065.19	778,207.41
2,700.0	1.77	12.49	2,699.7	-852.8	36.9	2.0	36.9	0.24	436,068.02	778,208.17
2,800.0	1.81	13.41	2,799.6	-752.9	39.9	2.7	39.9	0.05	436,071.06	778,208.87
2,900.0	1.82	12.24	2,899.6	-652.9	43.0	3.4	43.0	0.04	436,074.15	778,209.58
3,000.0	1.81	9.74	2,999.5	-553.0	46.1	4.0	46.1	0.08	436,077.26	778,210.18
3,100.0	1.74	15.33	3,099.5	-453.0	49.1	4.7	49.1	0.19	436,080.28	778,210.85
3,200.0	1.94	23.99	3,199.4	-353.1	52.2	5.8	52.1	0.34	436,083.29	778,211.94
3,300.0	2.13	29.20	3,299.4	-253.1	55.3	7.3	55.3	0.27	436,086.46	778,213.53
3,400.0	2.41	35.71	3,399.3	-153.2	58.7	9.5	58.6	0.38	436,089.79	778,215.67
3,500.0	2.70	36.78	3,499.2	-53.3	62.2	12.1	62.2	0.29	436,093.38	778,218.30
3,600.0	2.94	33.54	3,599.1	46.6	66.3	14.9	66.3	0.29	436,097.40	778,221.13
3,700.0	2.81	29.37	3,698.9	146.4	70.5	17.6	70.5	0.25	436,101.68	778,223.75
3,800.0	2.84	28.45	3,798.8	246.3	74.9	19.9	74.8	0.05	436,105.99	778,226.13
3,900.0	2.69	32.91	3,898.7	346.2	79.0	22.4	79.0	0.26	436,110.14	778,228.59
4,000.0	2.01	32.28	3,998.6	446.1	82.5	24.6	82.4	0.68	436,113.59	778,230.80
4,100.0	1.48	36.93	4,098.6	546.1	85.0	26.3	85.0	0.55	436,116.11	778,232.51
4,200.0	1.03	47.04	4,198.6	646.1	86.6	27.8	86.6	0.50	436,117.75	778,233.95
4,300.0	0.74	75.63	4,298.5	746.0	87.4	29.0	87.4	0.52	436,118.52	778,235.23
4,400.0	0.86	102.55	4,398.5	846.0	87.4	30.4	87.4	0.39	436,118.52	778,236.59
4,500.0	1.45	110.60	4,498.5	946.0	86.8	32.3	86.8	0.61	436,117.91	778,238.50
4,600.0	1.92	113.84	4,598.5	1,046.0	85.7	35.0	85.6	0.48	436,116.79	778,241.22
4,700.0	1.99	115.77	4,698.4	1,145.9	84.2	38.1	84.2	0.10	436,115.36	778,244.32
4,800.0	2.45	116.95	4,798.3	1,245.8	82.5	41.6	82.5	0.46	436,113.64	778,247.79
4,900.0	2.93	121.30	4,898.2	1,345.7	80.2	45.7	80.2	0.52	436,111.34	778,251.87

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5,000.0	3.00	123.04	4,998.1	1,445.6	77.5	50.1	77.4	0.11	436,108.58	778,256.25	
5,045.0	2.70	124.75	5,043.0	1,490.5	76.2	51.9	76.2	0.69	436,107.34	778,258.11	
5,150.0	2.45	128.83	5,147.9	1,595.4	73.4	55.7	73.3	0.30	436,104.52	778,261.89	
9 5/8"											
5,184.6	2.36	130.36	5,182.5	1,630.0	72.5	56.8	72.4	0.30	436,103.60	778,263.01	
Delaware											
5,213.0	2.30	131.70	5,210.9	1,658.4	71.7	57.7	71.7	0.30	436,102.84	778,263.88	
5,308.0	2.20	130.70	5,305.8	1,753.3	69.3	60.5	69.2	0.11	436,100.38	778,266.68	
5,404.0	2.30	128.00	5,401.7	1,849.2	66.9	63.4	66.8	0.15	436,098.00	778,269.60	
5,498.0	2.80	125.50	5,495.6	1,943.1	64.4	66.8	64.3	0.54	436,095.50	778,272.95	
5,593.0	2.50	156.80	5,590.5	2,038.0	61.1	69.5	61.1	1.53	436,092.25	778,275.66	
5,688.0	3.00	169.90	5,685.4	2,132.9	56.8	70.7	56.7	0.84	436,087.90	778,276.91	
5,783.0	2.80	169.10	5,780.3	2,227.8	52.0	71.6	52.0	0.21	436,083.17	778,277.79	
5,877.0	3.00	199.60	5,874.2	2,321.7	47.5	71.2	47.4	1.64	436,078.60	778,277.40	
5,972.0	1.70	185.90	5,969.1	2,416.6	43.7	70.2	43.7	1.48	436,074.86	778,276.42	
6,067.0	1.50	181.70	6,064.1	2,511.6	41.1	70.0	41.0	0.24	436,072.21	778,276.24	
6,163.0	2.40	210.10	6,160.0	2,607.5	38.1	69.0	38.0	1.35	436,069.22	778,275.19	
6,170.5	2.41	210.12	6,167.5	2,615.0	37.8	68.8	37.8	0.11	436,068.94	778,275.03	
Cherry Canyon											
6,257.0	2.50	210.40	6,253.9	2,701.4	34.6	67.0	34.6	0.11	436,065.75	778,273.17	
6,352.0	2.10	214.20	6,348.9	2,796.4	31.4	65.0	31.3	0.45	436,062.52	778,271.14	
6,447.0	1.60	261.70	6,443.8	2,891.3	29.8	62.7	29.7	1.64	436,060.89	778,268.85	
6,542.0	1.70	264.60	6,538.8	2,986.3	29.4	59.9	29.4	0.14	436,060.56	778,266.13	
6,637.0	1.70	268.80	6,633.7	3,081.2	29.3	57.1	29.2	0.13	436,060.40	778,263.32	
6,731.0	1.70	270.40	6,727.7	3,175.2	29.2	54.3	29.2	0.05	436,060.38	778,260.53	
6,826.0	2.20	254.10	6,822.6	3,270.1	28.8	51.2	28.7	0.78	436,059.89	778,257.37	
6,921.0	2.30	266.20	6,917.6	3,365.1	28.1	47.5	28.1	0.51	436,059.27	778,253.71	

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7,015.0	2.20	272.00	7,011.5	3,459.0	28.1	43.8	28.0	0.26	436,059.20	778,250.03
7,110.0	1.60	258.00	7,106.4	3,553.9	27.9	40.7	27.8	0.79	436,058.99	778,246.91
7,205.0	1.40	259.60	7,201.4	3,648.9	27.4	38.3	27.3	0.22	436,058.51	778,244.47
7,300.0	1.40	256.80	7,296.4	3,743.9	26.9	36.0	26.9	0.07	436,058.03	778,242.20
7,395.0	2.00	279.90	7,391.3	3,838.8	26.9	33.3	26.9	0.95	436,058.05	778,239.44
7,490.0	0.40	269.00	7,486.3	3,933.8	27.2	31.3	27.2	1.69	436,058.33	778,237.47
7,584.0	1.00	299.10	7,580.3	4,027.8	27.6	30.2	27.6	0.73	436,058.72	778,236.43
7,619.2	1.09	261.59	7,615.5	4,063.0	27.7	29.6	27.7	1.92	436,058.83	778,235.83
Brushy Canyon										
7,679.0	1.90	228.60	7,675.3	4,122.8	27.0	28.3	26.9	1.92	436,058.09	778,234.52
7,773.0	1.70	250.60	7,769.2	4,216.7	25.5	25.9	25.4	0.76	436,056.59	778,232.04
7,868.0	1.70	254.50	7,864.2	4,311.7	24.6	23.2	24.6	0.12	436,055.75	778,229.35
7,962.0	1.30	238.90	7,958.2	4,405.7	23.7	20.9	23.7	0.60	436,054.82	778,227.09
8,056.0	1.20	243.70	8,052.1	4,499.6	22.7	19.1	22.7	0.15	436,053.84	778,225.30
8,152.0	1.70	218.90	8,148.1	4,595.6	21.2	17.3	21.1	0.82	436,052.28	778,223.50
8,247.0	1.80	244.30	8,243.1	4,690.6	19.4	15.1	19.4	0.82	436,050.54	778,221.27
8,341.0	1.90	226.30	8,337.0	4,784.5	17.7	12.6	17.7	0.62	436,048.82	778,218.82
8,435.0	1.30	226.50	8,431.0	4,878.5	15.9	10.7	15.9	0.64	436,047.01	778,216.92
8,530.0	1.60	217.70	8,525.9	4,973.4	14.1	9.1	14.1	0.39	436,045.22	778,215.32
8,626.0	1.10	221.30	8,621.9	5,069.4	12.3	7.7	12.3	0.53	436,043.47	778,213.90
8,720.0	1.90	230.80	8,715.9	5,163.4	10.7	5.9	10.7	0.89	436,041.81	778,212.09
8,815.0	2.10	237.50	8,810.8	5,258.3	8.7	3.2	8.7	0.32	436,039.88	778,209.40
8,910.0	1.10	264.60	8,905.8	5,353.3	7.7	0.8	7.7	1.29	436,038.85	778,207.03
9,005.0	1.40	292.00	9,000.8	5,448.3	8.1	-1.1	8.1	0.69	436,039.20	778,205.04
9,099.0	0.70	288.90	9,094.8	5,542.3	8.7	-2.7	8.7	0.75	436,039.82	778,203.44
9,120.7	0.68	288.31	9,116.5	5,564.0	8.8	-3.0	8.8	0.11	436,039.90	778,203.19
Bone Spring										

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well Jackson Unit 22H
Project:	Jackson Unit Section 22	TVD Reference:	WELL @ 3552.5usft (Original Well Elev)
Site:	Jackson Unit 22H	MD Reference:	WELL @ 3552.5usft (Original Well Elev)
Well:	Jackson Unit 22H	North Reference:	Grid
Wellbore:	Jackson Unit 22H	Survey Calculation Method:	Minimum Curvature
Design:	Jackson Unit 22H	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)	
9,194.0	0.60	286.00	9,189.7	5,637.2	9.0	-3.8	9.0	0.11	436,040.14	778,202.41	
9,225.8	0.89	277.98	9,221.5	5,669.0	9.1	-4.2	9.1	0.98	436,040.23	778,202.00	
Avalon Shale											
9,289.0	1.50	271.60	9,284.7	5,732.2	9.2	-5.5	9.2	0.98	436,040.32	778,200.69	
9,385.0	0.90	280.10	9,380.7	5,828.2	9.4	-7.5	9.4	0.65	436,040.48	778,198.69	
9,480.0	0.80	278.00	9,475.7	5,923.2	9.6	-8.9	9.6	0.11	436,040.71	778,197.30	
9,575.0	0.80	274.40	9,570.7	6,018.2	9.7	-10.2	9.7	0.05	436,040.85	778,195.98	
9,670.0	1.10	311.40	9,665.7	6,113.2	10.4	-11.6	10.4	0.70	436,041.50	778,194.63	
9,765.0	0.40	316.90	9,760.7	6,208.2	11.2	-12.5	11.2	0.74	436,042.35	778,193.72	
9,859.0	0.30	19.10	9,854.7	6,302.2	11.7	-12.6	11.7	0.40	436,042.82	778,193.58	
9,954.0	0.90	173.10	9,949.7	6,397.2	11.2	-12.4	11.2	1.24	436,042.32	778,193.75	
10,050.0	0.50	139.50	10,045.7	6,493.2	10.1	-12.1	10.1	0.58	436,041.25	778,194.11	
10,140.8	0.47	264.26	10,136.5	6,584.0	9.8	-12.2	9.8	0.95	436,040.91	778,194.00	
1st Bone Spring Sand											
10,144.0	0.50	265.90	10,139.7	6,587.2	9.8	-12.2	9.8	0.95	436,040.91	778,193.97	
10,239.0	1.00	230.30	10,234.6	6,682.1	9.2	-13.3	9.2	0.70	436,040.35	778,192.92	
10,334.0	0.60	235.20	10,329.6	6,777.1	8.4	-14.3	8.4	0.43	436,039.53	778,191.87	
10,429.0	1.00	230.60	10,424.6	6,872.1	7.6	-15.4	7.6	0.43	436,038.72	778,190.82	
10,525.0	1.30	219.60	10,520.6	6,968.1	6.2	-16.7	6.2	0.39	436,037.35	778,189.48	
10,579.0	1.40	218.30	10,574.6	7,022.1	5.2	-17.5	5.2	0.19	436,036.36	778,188.68	
10,615.0	1.58	212.77	10,610.6	7,058.1	4.5	-18.0	4.5	0.65	436,035.60	778,188.14	
7"											
10,655.0	1.80	208.00	10,650.6	7,098.1	3.4	-18.6	3.5	0.65	436,034.58	778,187.55	
10,688.0	1.60	199.90	10,683.6	7,131.1	2.6	-19.0	2.6	0.95	436,033.69	778,187.15	
10,719.0	1.30	206.10	10,714.5	7,162.0	1.8	-19.3	1.9	1.09	436,032.97	778,186.85	
10,751.0	5.50	24.40	10,746.5	7,194.0	2.9	-18.9	2.9	21.25	436,034.04	778,187.32	
10,782.0	10.70	16.70	10,777.2	7,224.7	7.0	-17.4	7.0	17.10	436,038.15	778,188.76	

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well Jackson Unit 22H
Project:	Jackson Unit Section 22	TVD Reference:	WELL @ 3552.5usft (Original Well Elev)
Site:	Jackson Unit 22H	MD Reference:	WELL @ 3552.5usft (Original Well Elev)
Well:	Jackson Unit 22H	North Reference:	Grid
Wellbore:	Jackson Unit 22H	Survey Calculation Method:	Minimum Curvature
Design:	Jackson Unit 22H	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)	
10,814.0	14.70	14.30	10,808.4	7,255.9	13.8	-15.6	13.8	12.61	436,044.94	778,190.62	
10,818.3	15.24	13.96	10,812.5	7,260.0	14.9	-15.3	14.9	12.95	436,046.00	778,190.89	
2nd Bone Spring sand											
10,846.0	18.80	12.20	10,839.0	7,286.5	22.8	-13.5	22.8	12.95	436,053.91	778,192.71	
10,878.0	23.60	11.00	10,868.9	7,316.4	34.1	-11.2	34.1	15.06	436,065.25	778,195.03	
10,910.0	28.00	10.70	10,897.7	7,345.2	47.8	-8.5	47.8	13.76	436,078.92	778,197.64	
10,941.0	32.00	10.90	10,924.5	7,372.0	63.0	-5.6	63.0	12.91	436,094.15	778,200.55	
10,973.0	35.80	10.40	10,951.1	7,398.6	80.5	-2.3	80.6	11.91	436,111.68	778,203.84	
11,005.0	39.30	9.60	10,976.4	7,423.9	99.8	1.0	99.8	11.04	436,130.89	778,207.22	
11,036.0	43.00	9.30	10,999.8	7,447.3	119.9	4.4	119.9	11.95	436,151.01	778,210.57	
11,067.0	47.30	9.80	11,021.6	7,469.1	141.5	8.0	141.5	13.92	436,172.67	778,214.22	
11,099.0	51.00	9.70	11,042.5	7,490.0	165.4	12.1	165.4	11.56	436,196.52	778,218.32	
11,131.0	54.90	8.80	11,061.8	7,509.3	190.6	16.2	190.6	12.39	436,221.73	778,222.42	
11,162.0	59.10	8.60	11,078.7	7,526.2	216.3	20.2	216.3	13.56	436,247.42	778,226.35	
11,194.0	63.00	8.00	11,094.2	7,541.7	244.0	24.2	244.0	12.30	436,275.12	778,230.39	
11,225.0	66.10	8.30	11,107.5	7,555.0	271.7	28.2	271.7	10.04	436,302.83	778,234.36	
11,257.0	70.10	8.50	11,119.4	7,566.9	301.1	32.5	301.0	12.51	436,332.20	778,238.69	
11,288.0	74.70	8.50	11,128.8	7,576.3	330.3	36.9	330.2	14.84	436,361.41	778,243.06	
11,320.0	79.90	8.20	11,135.8	7,583.3	361.2	41.4	361.1	16.28	436,392.29	778,247.59	
11,383.0	88.70	6.60	11,142.1	7,589.6	423.3	49.5	423.2	14.19	436,454.39	778,255.65	
11,477.0	90.70	3.60	11,142.6	7,590.1	516.9	57.8	516.8	3.84	436,548.00	778,264.00	
11,572.0	90.90	359.70	11,141.3	7,588.8	611.8	60.6	611.8	4.11	436,642.94	778,266.74	
11,666.0	90.80	357.30	11,139.9	7,587.4	705.8	58.1	705.7	2.56	436,736.89	778,264.28	
11,761.0	90.60	357.50	11,138.7	7,586.2	800.6	53.8	800.6	0.30	436,831.78	778,259.97	
11,857.0	90.30	357.30	11,138.0	7,585.5	896.5	49.4	896.5	0.38	436,927.68	778,255.61	
11,951.0	89.80	357.30	11,137.9	7,585.4	990.4	45.0	990.4	0.53	437,021.58	778,251.19	
12,046.0	89.80	357.10	11,138.2	7,585.7	1,085.3	40.4	1,085.3	0.21	437,116.46	778,246.55	

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well Jackson Unit 22H
Project:	Jackson Unit Section 22	TVD Reference:	WELL @ 3552.5usft (Original Well Elev)
Site:	Jackson Unit 22H	MD Reference:	WELL @ 3552.5usft (Original Well Elev)
Well:	Jackson Unit 22H	North Reference:	Grid
Wellbore:	Jackson Unit 22H	Survey Calculation Method:	Minimum Curvature
Design:	Jackson Unit 22H	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)
12,141.0	89.80	357.50	11,138.5	7,586.0	1,180.2	35.9	1,180.2	0.42	437,211.36	778,242.07
12,235.0	90.00	357.30	11,138.7	7,586.2	1,274.1	31.6	1,274.1	0.30	437,305.26	778,237.81
12,330.0	90.60	0.00	11,138.2	7,585.7	1,369.1	29.4	1,369.1	2.91	437,400.22	778,235.57
12,423.0	90.20	358.90	11,137.6	7,585.1	1,462.1	28.5	1,462.1	1.26	437,493.21	778,234.68
12,518.0	90.20	358.80	11,137.2	7,584.7	1,557.1	26.6	1,557.0	0.11	437,588.19	778,232.77
12,612.0	89.80	358.50	11,137.2	7,584.7	1,651.0	24.4	1,651.0	0.53	437,682.17	778,230.55
12,707.0	89.30	358.30	11,138.0	7,585.5	1,746.0	21.7	1,746.0	0.57	437,777.13	778,227.90
12,802.0	90.90	359.10	11,137.8	7,585.3	1,841.0	19.6	1,840.9	1.88	437,872.10	778,225.75
12,896.0	90.50	358.80	11,136.7	7,584.2	1,934.9	17.8	1,934.9	0.53	437,966.08	778,224.02
12,991.0	90.20	358.60	11,136.1	7,583.6	2,029.9	15.7	2,029.9	0.38	438,061.05	778,221.87
13,086.0	89.80	358.40	11,136.1	7,583.6	2,124.9	13.2	2,124.9	0.47	438,156.02	778,219.38
13,181.0	90.90	358.90	11,135.5	7,583.0	2,219.9	11.0	2,219.8	1.27	438,250.99	778,217.14
13,276.0	90.30	358.40	11,134.5	7,582.0	2,314.8	8.7	2,314.8	0.82	438,345.95	778,214.91
13,370.0	90.20	358.20	11,134.1	7,581.6	2,408.8	5.9	2,408.8	0.24	438,439.91	778,212.12
13,465.0	90.00	358.00	11,133.9	7,581.4	2,503.7	2.8	2,503.7	0.30	438,534.86	778,208.97
13,559.0	90.60	358.50	11,133.4	7,580.9	2,597.7	-0.1	2,597.7	0.83	438,628.81	778,206.10
13,655.0	90.00	359.40	11,132.9	7,580.4	2,693.7	-1.8	2,693.7	1.13	438,724.79	778,204.34
13,749.0	91.80	359.70	11,131.4	7,578.9	2,787.6	-2.6	2,787.6	1.94	438,818.78	778,203.60
13,844.0	91.70	359.20	11,128.5	7,576.0	2,882.6	-3.5	2,882.6	0.54	438,913.73	778,202.69
13,938.0	91.70	358.90	11,125.8	7,573.3	2,976.5	-5.1	2,976.5	0.32	439,007.67	778,201.13
14,033.0	89.60	358.10	11,124.7	7,572.2	3,071.5	-7.5	3,071.5	2.37	439,102.63	778,198.64
14,127.0	89.30	357.70	11,125.6	7,573.1	3,165.4	-11.0	3,165.4	0.53	439,196.56	778,195.20
14,221.0	88.40	358.50	11,127.5	7,575.0	3,259.4	-14.1	3,259.4	1.28	439,290.49	778,192.08
14,317.0	89.60	359.90	11,129.1	7,576.6	3,355.3	-15.4	3,355.3	1.92	439,386.46	778,190.74
14,412.0	89.70	359.80	11,129.7	7,577.2	3,450.3	-15.7	3,450.3	0.15	439,481.46	778,190.49
14,507.0	89.30	0.00	11,130.6	7,578.1	3,545.3	-15.9	3,545.3	0.47	439,576.45	778,190.33
14,603.0	90.60	359.10	11,130.6	7,578.1	3,641.3	-16.6	3,641.3	1.65	439,672.45	778,189.58

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well Jackson Unit 22H
Project:	Jackson Unit Section 22	TVD Reference:	WELL @ 3552.5usft (Original Well Elev)
Site:	Jackson Unit 22H	MD Reference:	WELL @ 3552.5usft (Original Well Elev)
Well:	Jackson Unit 22H	North Reference:	Grid
Wellbore:	Jackson Unit 22H	Survey Calculation Method:	Minimum Curvature
Design:	Jackson Unit 22H	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)
14,697.0	90.60	359.10	11,129.7	7,577.2	3,735.3	-18.1	3,735.3	0.00	439,766.43	778,188.10
14,793.0	90.80	358.30	11,128.5	7,576.0	3,831.3	-20.3	3,831.3	0.86	439,862.40	778,185.92
14,888.0	90.10	358.30	11,127.7	7,575.2	3,926.2	-23.1	3,926.2	0.74	439,957.35	778,183.10
14,982.0	90.10	357.90	11,127.6	7,575.1	4,020.2	-26.2	4,020.2	0.43	440,051.30	778,179.99
15,077.0	89.40	358.10	11,128.0	7,575.5	4,115.1	-29.5	4,115.1	0.77	440,146.24	778,176.67
15,172.0	89.40	359.60	11,129.0	7,576.5	4,210.1	-31.4	4,210.1	1.58	440,241.21	778,174.76
15,267.0	89.20	0.90	11,130.1	7,577.6	4,305.1	-31.0	4,305.1	1.38	440,336.20	778,175.18
15,361.0	91.50	0.90	11,129.6	7,577.1	4,399.1	-29.5	4,399.1	2.45	440,430.18	778,176.66
15,455.0	90.10	0.60	11,128.3	7,575.8	4,493.0	-28.3	4,493.1	1.52	440,524.16	778,177.89
15,550.0	89.60	359.90	11,128.5	7,576.0	4,588.0	-27.9	4,588.1	0.91	440,619.16	778,178.30
15,645.0	89.40	359.90	11,129.3	7,576.8	4,683.0	-28.1	4,683.0	0.21	440,714.16	778,178.13
15,665.0	89.10	359.40	11,129.6	7,577.1	4,703.0	-28.2	4,703.0	2.92	440,734.16	778,178.01
15,785.0	89.10	359.40	11,131.5	7,579.0	4,823.0	-29.4	4,823.0	0.00	440,854.14	778,176.76
4 1/2"										
15,790.0	89.10	359.40	11,131.6	7,579.1	4,828.0	-29.5	4,828.0	0.00	440,859.13	778,176.70

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Casing Diameter (")	Hole Diameter (")	
1,239.0	13 3/8"	13-3/8	16	
5,150.0	9 5/8"	9-5/8	12-1/4	
10,615.0	7"	7	8-1/2	
15,785.0	4 1/2"	4-1/2	6-1/8	

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well Jackson Unit 22H
Project:	Jackson Unit Section 22	TVD Reference:	WELL @ 3552.5usft (Original Well Elev)
Site:	Jackson Unit 22H	MD Reference:	WELL @ 3552.5usft (Original Well Elev)
Well:	Jackson Unit 22H	North Reference:	Grid
Wellbore:	Jackson Unit 22H	Survey Calculation Method:	Minimum Curvature
Design:	Jackson Unit 22H	Database:	EDM 5000.1 Single User Db

Formations				
Measured Depth (usft)	Vertical Depth (usft)	Name	Dip (°)	
10,818.3	10,812.5	2nd Bone Spring sand	0.00	
9,225.8	9,221.5	Avalon Shale	0.00	
6,170.5	6,167.5	Cherry Canyon	0.00	
7,619.2	7,615.5	Brushy Canyon	0.00	
10,140.8	10,136.5	1st Bone Spring Sand	0.00	
1,207.6	1,207.5	Rustler	0.00	
5,184.6	5,182.5	Delaware	0.00	
9,120.7	9,116.5	Bone Spring	0.00	

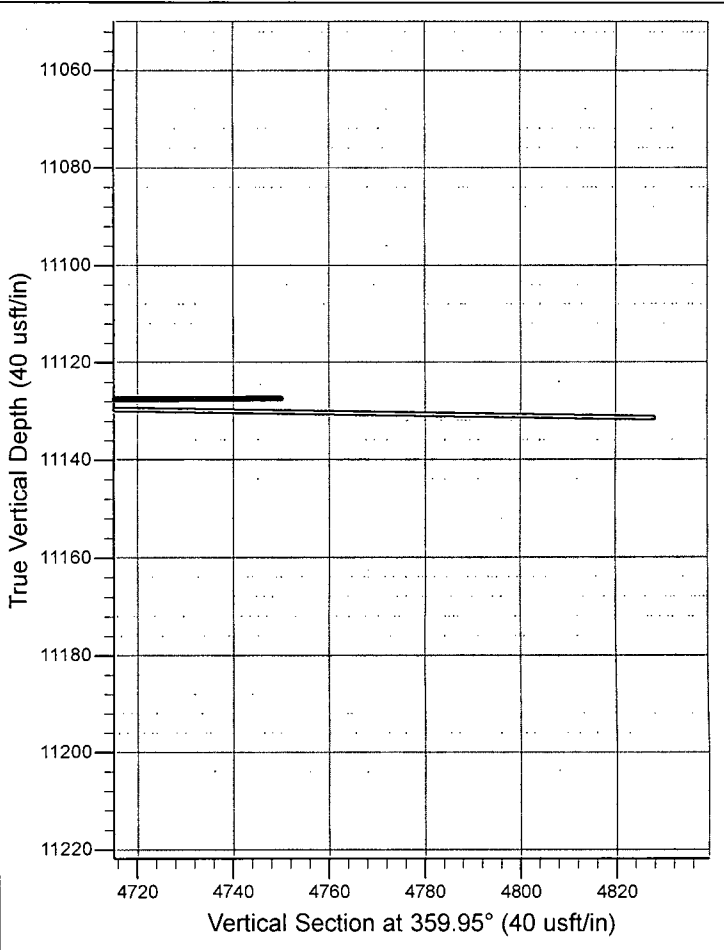
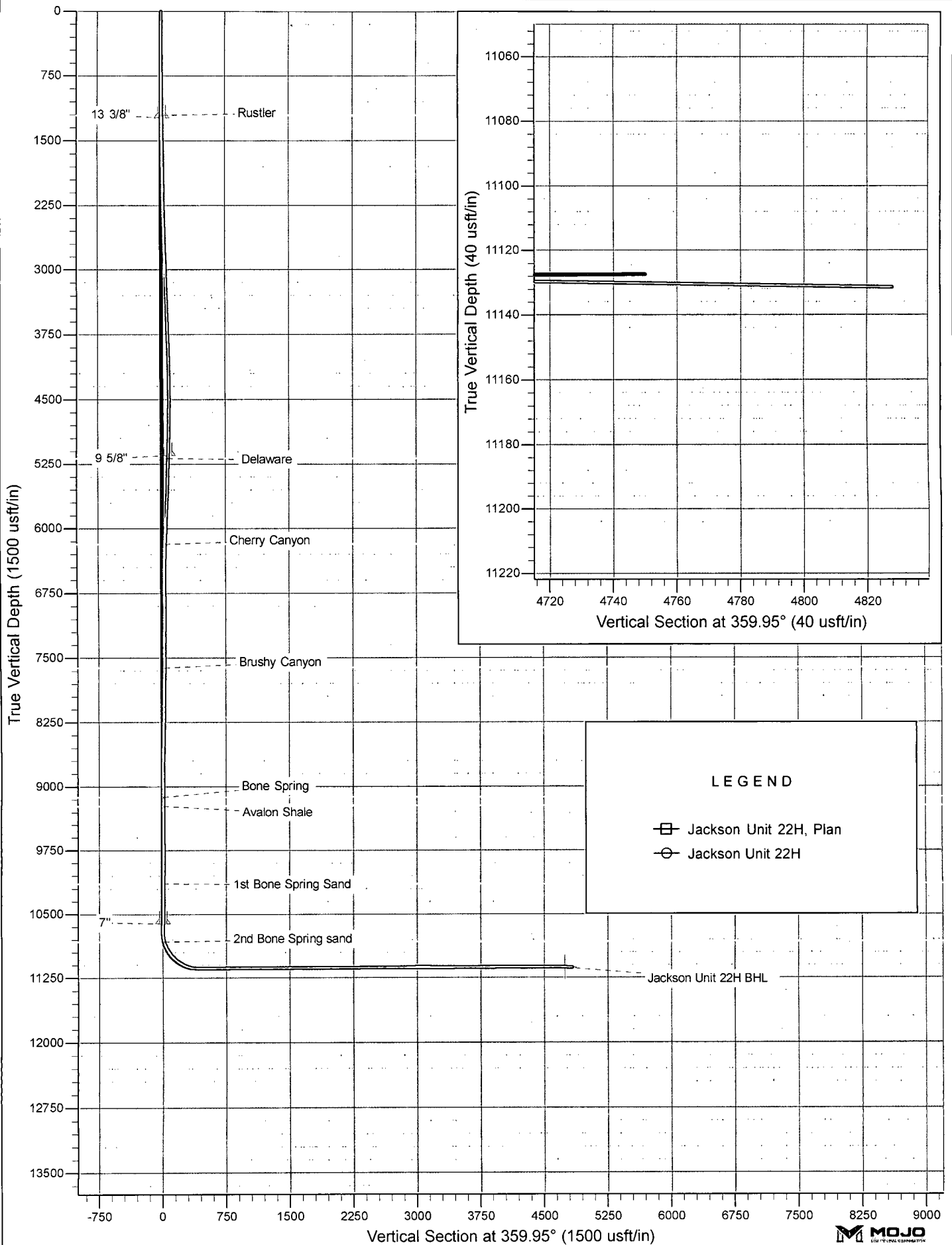
Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
11,051.0	11,010.5	130.2	6.1	Crossed South Hard Boundary at 11051ftMD
15,711.0	11,130.3	4,749.0	-28.7	Crossed North Hard Boundary at 15711ft MD

Checked By: _____	Approved By: _____	Date: _____
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Site: Jackson Unit 22H
Well: Jackson Unit 22H
Wellbore: Jackson Unit 22H
Design: Jackson Unit 22H



True North: -0.41°
Magnetic North: 6.90°
Magnetic Field
Strength: 48375.6snT
Dip Angle: 60.11°
Date: 09/09/2013
Model: IGRF2010



Site: Jackson Unit 22H
 Well: Jackson Unit 22H
 Wellbore: Jackson Unit 22H
 Design: Jackson Unit 22H

 MURCHISON OIL & GAS, INC.



True North: -0.41°
 Magnetic North: 6.90°
 Magnetic Field
 Strength: 48375.6snT
 Dip Angle: 60.11°
 Date: 09/09/2013
 Model: IGRF2010

