

Results of Directional Survey

API number:	30-025-40975		
OGRID:		Operator:	MURCHISON OIL & GAS INC
		Property:	MOGI 9 STATE COM # 1H

surface	ULSTR:	M	09	T 24S	R 33E
				200 FSL	350 FWL

BH Loc	ULSTR:	D	09	T 24S	R 33E
15637	MD	11162.6	TVD	333 FNL	328 FWL
				4947 FSL	

Top Perf/OH	ULSTR:	M	09	T 24S	R 33E
11220	MD	11084.0	TVD	555 FSL	352 FWL

Bot Perf/OH	ULSTR:	D	09	T 24S	R 33E
15622	MD	11161.7	TVD	348 FNL	328 FWL
				4932 FSL	

	MD	N/S	E/W	VD
	11201	338.80	1.10	11073.9
TOP PERFS/OH	11220	354.86	1.96	11083.98
	11234	366.70	2.60	11091.40
	15553	4663.60	-19.30	11157.60
BOT PERFS/OH	15622	4732.42	-21.60	11161.67
	15592	4702.50	-20.60	11159.90

NEXT TO LAST	15553	4663.60	-19.30	11157.60
LAST READING	15592	4702.50	-20.60	11159.90
TD	15637	4747.38	-22.10	11162.55

Surface Location	200	FS	350	FW
Projected BHL	4947	FS	328	FW
Location of				
Top Perfs/OH	555	FS	352	FW
Bottom Perfs/OH	4932	FS	328	FW

SUMMARY of Subsurface Locations

Surface Location	M-09-24S-33E	200	FS	350	FW	Vert. Depth
Top Perfs/OH	M-09-24S-33E	555	FS	352	FW	11083.98
Bottom Perfs/OH	D-09-24S-33E	4932	FS	328	FW	11161.67
Projected TD	D-09-24S-33E	4947	FS	328	FW	11162.55

NOV 14 2013

 MURCHISON OIL & GAS, INC.

Murchison Oil and Gas

Jackson Unit Section 9

MOGI 9 State Com 1H

MOGI 9 State Com 1H

MOGI 9 State Com 1H

HOBBS OCD

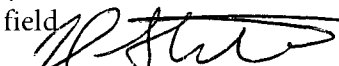
MAY 06 2013

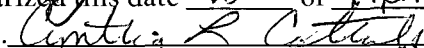
RECEIVED

Survey: MOGI 9 State Com 1H

MOJO Standard Survey

09 April, 2013

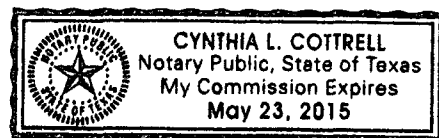
This survey is correct to the best of my knowledge and is supported
by actual field data.  (Signature)

Notarized this date 12th of April,
2013.  Notary

Signature County of Collin State of Texas



MOJO
DIRECTIONAL CORPORATION



Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well MOGI 9 State Com 1H
Project:	Jackson Unit Section 9	TVD Reference:	WELL @ 3628.1usft (Original Well Elev)
Site:	MOGI 9 State Com 1H	MD Reference:	WELL @ 3628.1usft (Original Well Elev)
Well:	MOGI 9 State Com 1H	North Reference:	Grid
Wellbore:	MOGI 9 State Com 1H	Survey Calculation Method:	Minimum Curvature
Design:	MOGI 9 State Com 1H	Database:	EDM 5000.1 Single User Db

Project	Jackson Unit Section 9		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	MOGI 9 State Com 1H		
Site Position:		Northing:	446,564.37 usft
From:	Lat/Long	Easting:	772,851.05 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 13' 31.672 N
		Longitude:	103° 35' 4.769 W
		Grid Convergence:	0.40 °

Well	MOGI 9 State Com 1H					
Well Position	+N/-S	0.0 usft	Northing:	446,564.37 usft	Latitude:	32° 13' 31.672 N
	+E/-W	0.0 usft	Easting:	772,851.05 usft	Longitude:	103° 35' 4.769 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	3,606.1 usft

Wellbore	MOGI 9 State Com 1H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	28/01/2013	7.39	60.15	48,452

Design	MOGI 9 State Com 1H				
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	359.56	

Survey Program	Date 09/04/2013			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	15,592.0	MOGI 9 State Com 1H (MOGI 9 State Com	MWD	MWD - Standard

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Local Co-ordinate Reference: Well MOGI 9 State Com 1H
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MD Reference: WELL @ 3628.1usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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	0.00	0.0	-3,628.1	0.0	0.0	0.0	0.00	446,564.37	772,851.05
100.0	0.06	138.25		100.0	-3,528.1	0.0	0.0	0.0	0.06	446,564.33	772,851.09
200.0	0.25	185.00		200.0	-3,428.1	-0.3	0.1	-0.3	0.21	446,564.08	772,851.10
300.0	0.26	197.74		300.0	-3,328.1	-0.7	0.0	-0.7	0.06	446,563.64	772,851.02
400.0	0.39	176.85		400.0	-3,228.1	-1.3	-0.1	-1.3	0.17	446,563.09	772,850.97
500.0	0.15	208.27		500.0	-3,128.1	-1.7	-0.1	-1.7	0.27	446,562.63	772,850.92
600.0	0.19	191.79		600.0	-3,028.1	-2.0	-0.2	-2.0	0.06	446,562.35	772,850.83
700.0	0.34	209.61		700.0	-2,928.1	-2.4	-0.4	-2.4	0.17	446,561.93	772,850.65
800.0	0.41	218.19		800.0	-2,828.1	-3.0	-0.8	-3.0	0.09	446,561.39	772,850.28
900.0	0.21	226.02		900.0	-2,728.1	-3.4	-1.1	-3.4	0.20	446,560.99	772,849.93
1,000.0	0.08	256.24		1,000.0	-2,628.1	-3.5	-1.3	-3.5	0.15	446,560.84	772,849.73
1,100.0	0.09	311.80		1,100.0	-2,528.1	-3.5	-1.5	-3.5	0.08	446,560.88	772,849.60
1,200.0	0.18	23.48		1,200.0	-2,428.1	-3.3	-1.5	-3.3	0.17	446,561.07	772,849.60
1,300.0	0.29	20.05		1,300.0	-2,328.1	-2.9	-1.3	-2.9	0.11	446,561.46	772,849.75
1,303.0	0.30	19.91		1,303.0	-2,325.1	-2.9	-1.3	-2.9	0.27	446,561.47	772,849.76
13 3/8"											
1,400.0	0.56	17.64		1,400.0	-2,228.1	-2.2	-1.1	-2.2	0.27	446,562.16	772,849.99
1,500.0	1.31	357.50		1,500.0	-2,128.1	-0.6	-1.0	-0.6	0.81	446,563.77	772,850.09
1,600.0	0.99	342.94		1,599.9	-2,028.2	1.4	-1.3	1.4	0.43	446,565.73	772,849.78
1,700.0	0.89	339.53		1,699.9	-1,928.2	2.9	-1.8	2.9	0.11	446,567.29	772,849.26
1,800.0	0.89	339.53		1,799.9	-1,828.2	4.4	-2.3	4.4	0.00	446,568.74	772,848.71
1,900.0	1.09	356.56		1,899.9	-1,728.2	6.0	-2.7	6.1	0.35	446,570.42	772,848.39
2,000.0	1.09	356.58		1,999.9	-1,628.2	7.9	-2.8	8.0	0.00	446,572.32	772,848.27
2,100.0	1.07	350.47		2,099.9	-1,528.2	9.8	-3.0	9.8	0.12	446,574.19	772,848.06
2,200.0	0.82	350.98		2,199.9	-1,428.2	11.4	-3.3	11.5	0.25	446,575.82	772,847.79
2,300.0	1.07	7.38		2,299.8	-1,328.3	13.1	-3.3	13.1	0.37	446,577.45	772,847.80
2,400.0	0.85	348.02		2,399.8	-1,228.3	14.7	-3.3	14.8	0.39	446,579.10	772,847.77

Company: Murchison Oil and Gas
Project: Jackson Unit Section 9
Site: MOGI 9 State Com 1H
Well: MOGI 9 State Com 1H
Wellbore: MOGI 9 State Com 1H
Design: MOGI 9 State Com 1H

Local Co-ordinate Reference: Well MOGI 9 State Com 1H
TVD Reference: WELL @ 3628.1usft (Original Well Elev)
MD Reference: WELL @ 3628.1usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)	
2,500.0	0.90	343.66	2,499.8	-1,128.3	16.2	-3.7	16.2	0.08	446,580.58	772,847.39	
2,600.0	0.97	6.61	2,599.8	-1,028.3	17.8	-3.8	17.8	0.38	446,582.17	772,847.27	
2,700.0	0.80	347.46	2,699.8	-928.3	19.3	-3.8	19.4	0.34	446,583.70	772,847.21	
2,800.0	1.10	15.47	2,799.8	-828.3	20.9	-3.7	21.0	0.54	446,585.30	772,847.32	
2,900.0	0.97	5.39	2,899.8	-728.3	22.7	-3.4	22.7	0.22	446,587.07	772,847.65	
3,000.0	1.13	30.06	2,999.7	-628.4	24.4	-2.8	24.4	0.48	446,588.77	772,848.23	
3,100.0	1.01	9.78	3,099.7	-528.4	26.1	-2.2	26.1	0.39	446,590.49	772,848.87	
3,200.0	1.21	33.45	3,199.7	-428.4	27.9	-1.5	27.9	0.50	446,592.24	772,849.60	
3,300.0	0.87	28.48	3,299.7	-328.4	29.4	-0.5	29.4	0.35	446,593.79	772,850.55	
3,400.0	1.13	30.03	3,399.7	-228.4	30.9	0.3	30.9	0.26	446,595.31	772,851.40	
3,500.0	1.39	41.37	3,499.7	-128.4	32.7	1.6	32.7	0.36	446,597.07	772,852.70	
3,600.0	1.33	45.84	3,599.6	-28.5	34.4	3.3	34.4	0.12	446,598.79	772,854.33	
3,700.0	1.18	38.21	3,699.6	71.5	36.0	4.7	36.0	0.22	446,600.41	772,855.80	
3,800.0	0.74	34.39	3,799.6	171.5	37.4	5.7	37.3	0.44	446,601.75	772,856.80	
3,900.0	0.45	53.46	3,899.6	271.5	38.1	6.4	38.1	0.35	446,602.52	772,857.48	
4,000.0	0.19	63.33	3,999.6	371.5	38.5	6.9	38.4	0.26	446,602.83	772,857.95	
4,100.0	0.26	102.76	4,099.6	471.5	38.5	7.3	38.4	0.17	446,602.85	772,858.32	
4,200.0	0.13	157.61	4,199.6	571.5	38.3	7.5	38.3	0.21	446,602.69	772,858.58	
4,300.0	0.49	137.60	4,299.6	671.5	37.9	7.9	37.8	0.37	446,602.27	772,858.91	
4,400.0	1.70	115.72	4,399.6	771.5	36.9	9.5	36.9	1.26	446,601.31	772,860.54	
4,500.0	3.20	116.07	4,499.5	871.4	35.1	13.3	35.0	1.50	446,599.44	772,864.38	
4,600.0	2.62	120.40	4,599.3	971.2	32.7	17.8	32.6	0.62	446,597.06	772,868.86	
4,700.0	4.00	119.76	4,699.2	1,071.1	29.8	22.8	29.6	1.38	446,594.17	772,873.86	
4,800.0	5.29	122.63	4,798.8	1,170.7	25.6	29.7	25.4	1.31	446,589.96	772,880.77	
4,900.0	5.49	123.33	4,898.4	1,270.3	20.5	37.6	20.2	0.21	446,584.84	772,888.65	
5,000.0	4.18	124.27	4,998.0	1,369.9	15.8	44.6	15.4	1.31	446,580.16	772,895.66	

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5,171.0	3.11	126.49	5,168.7	1,540.6	9.5	53.5	9.1	0.63	446,573.89	772,904.54	
9 5/8"											
5,253.0	2.60	128.20	5,250.6	1,622.5	7.0	56.7	6.6	0.63	446,571.42	772,907.79	
5,349.0	2.60	124.80	5,346.5	1,718.4	4.5	60.2	4.0	0.16	446,568.83	772,911.29	
5,445.0	2.40	123.20	5,442.4	1,814.3	2.1	63.7	1.6	0.22	446,566.49	772,914.76	
5,539.0	2.20	119.70	5,536.3	1,908.2	0.1	66.9	-0.4	0.26	446,564.52	772,917.97	
5,637.0	2.20	118.80	5,634.2	2,006.1	-1.7	70.2	-2.2	0.04	446,562.68	772,921.25	
5,732.0	1.90	117.70	5,729.2	2,101.1	-3.3	73.2	-3.9	0.32	446,561.07	772,924.25	
5,829.0	2.00	115.30	5,826.1	2,198.0	-4.8	76.1	-5.4	0.13	446,559.60	772,927.20	
5,925.0	2.20	118.00	5,922.1	2,294.0	-6.4	79.3	-7.0	0.23	446,558.02	772,930.34	
6,021.0	2.10	116.80	6,018.0	2,389.9	-8.0	82.5	-8.6	0.11	446,556.36	772,933.54	
6,117.0	2.00	113.90	6,113.9	2,485.8	-9.5	85.6	-10.1	0.15	446,554.89	772,936.64	
6,214.0	2.00	109.70	6,210.9	2,582.8	-10.7	88.7	-11.4	0.15	446,553.63	772,939.78	
6,310.0	1.90	106.90	6,306.8	2,678.7	-11.8	91.8	-12.5	0.14	446,552.60	772,942.88	
6,407.0	1.70	112.30	6,403.8	2,775.7	-12.8	94.7	-13.5	0.27	446,551.59	772,945.75	
6,502.0	1.70	108.30	6,498.7	2,870.6	-13.8	97.3	-14.5	0.12	446,550.61	772,948.39	
6,598.0	1.60	108.20	6,594.7	2,966.6	-14.6	100.0	-15.4	0.10	446,549.75	772,951.02	
6,694.0	1.50	107.00	6,690.7	3,062.6	-15.4	102.4	-16.2	0.11	446,548.96	772,953.49	
6,790.0	1.40	103.10	6,786.6	3,158.5	-16.0	104.8	-16.8	0.15	446,548.33	772,955.84	
6,887.0	1.50	103.10	6,883.6	3,255.5	-16.6	107.2	-17.4	0.10	446,547.77	772,958.23	
6,982.0	1.40	99.40	6,978.6	3,350.5	-17.1	109.5	-17.9	0.14	446,547.30	772,960.58	
7,079.0	1.20	92.40	7,075.5	3,447.4	-17.3	111.7	-18.2	0.26	446,547.06	772,962.77	
7,175.0	1.30	86.40	7,171.5	3,543.4	-17.3	113.8	-18.2	0.17	446,547.09	772,964.86	
7,272.0	1.20	87.90	7,268.5	3,640.4	-17.2	115.9	-18.1	0.11	446,547.19	772,966.97	
7,368.0	1.20	98.00	7,364.5	3,736.4	-17.3	117.9	-18.2	0.22	446,547.09	772,968.97	
7,464.0	1.30	102.10	7,460.5	3,832.4	-17.6	120.0	-18.6	0.14	446,546.72	772,971.03	
7,560.0	1.40	104.40	7,556.4	3,928.3	-18.2	122.2	-19.1	0.12	446,546.20	772,973.23	

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7,656.0	1.10	101.10	7,652.4	4,024.3	-18.6	124.2	-19.6	0.32	446,545.73	772,975.27	
7,751.0	1.10	94.60	7,747.4	4,119.3	-18.9	126.0	-19.9	0.13	446,545.49	772,977.08	
7,846.0	1.50	122.50	7,842.4	4,214.3	-19.6	128.0	-20.6	0.78	446,544.74	772,979.03	
7,942.0	1.00	150.80	7,938.3	4,310.2	-21.0	129.4	-22.0	0.81	446,543.34	772,980.50	
8,038.0	0.80	231.60	8,034.3	4,406.2	-22.2	129.3	-23.2	1.23	446,542.19	772,980.38	
8,134.0	1.00	244.30	8,130.3	4,502.2	-23.0	128.1	-23.9	0.29	446,541.41	772,979.10	
8,230.0	1.60	228.40	8,226.3	4,598.2	-24.2	126.3	-25.2	0.72	446,540.16	772,977.35	
8,326.0	1.50	228.30	8,322.3	4,694.2	-25.9	124.4	-26.9	0.10	446,538.43	772,975.41	
8,422.0	1.60	231.50	8,418.2	4,790.1	-27.6	122.4	-28.5	0.14	446,536.76	772,973.42	
8,518.0	1.70	237.30	8,514.2	4,886.1	-29.2	120.1	-30.1	0.20	446,535.16	772,971.17	
8,614.0	1.60	236.00	8,610.1	4,982.0	-30.7	117.8	-31.6	0.11	446,533.64	772,968.86	
8,711.0	2.10	247.20	8,707.1	5,079.0	-32.2	115.0	-33.1	0.63	446,532.19	772,966.10	
8,807.0	2.20	239.60	8,803.0	5,174.9	-33.8	111.8	-34.6	0.31	446,530.58	772,962.89	
8,902.0	2.50	257.90	8,898.0	5,269.9	-35.1	108.2	-36.0	0.85	446,529.22	772,959.29	
8,998.0	2.30	249.80	8,993.9	5,365.8	-36.3	104.4	-37.1	0.41	446,528.12	772,955.44	
9,094.0	2.40	248.90	9,089.8	5,461.7	-37.6	100.7	-38.4	0.11	446,526.73	772,951.76	
9,191.0	2.50	245.90	9,186.7	5,558.6	-39.2	96.9	-40.0	0.17	446,525.14	772,947.93	
9,287.0	2.30	236.60	9,282.6	5,654.5	-41.2	93.4	-41.9	0.46	446,523.22	772,944.41	
9,344.0	2.50	216.70	9,339.6	5,711.5	-42.8	91.7	-43.5	1.50	446,521.59	772,942.71	
9,440.0	3.00	219.80	9,435.5	5,807.4	-46.4	88.8	-47.1	0.54	446,517.98	772,939.85	
9,537.0	2.50	223.60	9,532.3	5,904.2	-49.9	85.7	-50.5	0.55	446,514.50	772,936.77	
9,633.0	2.20	204.70	9,628.3	6,000.2	-53.1	83.5	-53.7	0.86	446,511.31	772,934.55	
9,729.0	2.40	206.20	9,724.2	6,096.1	-56.5	81.8	-57.2	0.22	446,507.83	772,932.90	
9,825.0	3.00	229.80	9,820.1	6,192.0	-60.0	79.0	-60.6	1.30	446,504.41	772,930.09	
9,921.0	2.60	214.30	9,916.0	6,287.9	-63.4	75.9	-64.0	0.89	446,500.99	772,926.95	
10,017.0	1.90	202.60	10,011.9	6,383.8	-66.6	74.1	-67.2	0.87	446,497.72	772,925.11	
10,082.0	1.50	267.80	10,076.9	6,448.8	-67.7	72.8	-68.2	2.87	446,496.69	772,923.84	

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well MOGI 9 State Com 1H
Project:	Jackson Unit Section 9	TVD Reference:	WELL @ 3628.1usft (Original Well Elev)
Site:	MOGI 9 State Com 1H	MD Reference:	WELL @ 3628.1usft (Original Well Elev)
Well:	MOGI 9 State Com 1H	North Reference:	Grid
Wellbore:	MOGI 9 State Com 1H	Survey Calculation Method:	Minimum Curvature
Design:	MOGI 9 State Com 1H	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)	
10,114.0	2.10	310.60	10,108.9	6,480.8	-67.3	71.9	-67.9	4.46	446,497.06	772,922.98	
10,145.0	2.20	298.40	10,139.8	6,511.7	-66.7	71.0	-67.2	1.51	446,497.71	772,922.02	
10,177.0	3.10	294.00	10,171.8	6,543.7	-66.0	69.6	-66.5	2.88	446,498.36	772,920.69	
10,216.0	3.10	307.20	10,210.7	6,582.6	-64.9	67.8	-65.5	1.83	446,499.42	772,918.89	
10,248.0	3.40	324.50	10,242.7	6,614.6	-63.7	66.6	-64.2	3.19	446,500.72	772,917.65	
10,280.0	5.90	332.90	10,274.6	6,646.5	-61.4	65.3	-61.9	8.08	446,502.95	772,916.35	
10,312.0	7.80	338.10	10,306.3	6,678.2	-57.9	63.7	-58.4	6.24	446,506.43	772,914.79	
10,346.0	8.20	346.30	10,340.0	6,711.9	-53.4	62.3	-53.9	3.55	446,510.93	772,913.36	
10,378.0	9.80	348.00	10,371.6	6,743.5	-48.6	61.2	-49.0	5.07	446,515.81	772,912.25	
10,410.0	11.20	348.50	10,403.1	6,775.0	-42.9	60.0	-43.3	4.38	446,521.52	772,911.06	
10,442.0	13.70	348.20	10,434.3	6,806.2	-36.1	58.6	-36.5	7.82	446,528.28	772,909.67	
10,475.0	16.10	351.00	10,466.2	6,838.1	-27.7	57.1	-28.2	7.59	446,536.63	772,908.15	
10,507.0	17.00	353.20	10,496.9	6,868.8	-18.7	55.9	-19.1	3.43	446,545.66	772,906.90	
10,539.0	18.10	350.10	10,527.4	6,899.3	-9.2	54.4	-9.6	4.51	446,555.20	772,905.50	
10,571.0	20.30	346.30	10,557.6	6,929.5	1.1	52.3	0.7	7.90	446,565.49	772,903.33	
10,603.0	22.20	345.00	10,587.5	6,959.4	12.4	49.4	12.0	6.12	446,576.72	772,900.45	
10,635.0	24.50	346.70	10,616.8	6,988.7	24.7	46.3	24.3	7.49	446,589.02	772,897.35	
10,667.0	26.90	344.90	10,645.7	7,017.6	38.1	42.9	37.8	7.89	446,602.47	772,893.94	
10,699.0	29.30	344.40	10,673.9	7,045.8	52.6	38.9	52.3	7.54	446,617.00	772,889.95	
10,731.0	29.20	345.00	10,701.8	7,073.7	67.7	34.8	67.4	0.97	446,632.08	772,885.82	
10,763.0	28.50	345.90	10,729.8	7,101.7	82.7	30.9	82.4	2.57	446,647.03	772,881.94	
10,795.0	27.90	345.00	10,758.0	7,129.9	97.3	27.1	97.1	2.30	446,661.66	772,878.15	
10,826.0	28.60	345.40	10,785.3	7,157.2	111.5	23.3	111.3	2.34	446,675.85	772,874.40	
10,859.0	28.70	346.10	10,814.3	7,186.2	126.8	19.5	126.7	1.06	446,691.19	772,870.50	
10,891.0	27.50	345.80	10,842.5	7,214.4	141.4	15.8	141.3	3.78	446,705.81	772,866.85	
10,928.0	27.64	345.25	10,875.3	7,247.2	158.0	11.5	157.9	0.78	446,722.39	772,862.57	

7"

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well MOGI 9 State Com 1H
Project:	Jackson Unit Section 9	TVD Reference:	WELL @ 3628.1usft (Original Well Elev)
Site:	MOGI 9 State Com 1H	MD Reference:	WELL @ 3628.1usft (Original Well Elev)
Well:	MOGI 9 State Com 1H	North Reference:	Grid
Wellbore:	MOGI 9 State Com 1H	Survey Calculation Method:	Minimum Curvature
Design:	MOGI 9 State Com 1H	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)
10,945.0	27.70	345.00	10,890.4	7,262.3	165.6	9.5	165.6	0.78	446,730.02	772,860.54
10,977.0	32.00	348.40	10,918.1	7,290.0	181.1	5.9	181.1	14.44	446,745.51	772,856.91
11,009.0	36.30	350.40	10,944.6	7,316.5	198.8	2.6	198.8	13.89	446,763.17	772,853.62
11,041.0	39.70	353.20	10,969.8	7,341.7	218.3	-0.2	218.3	11.91	446,782.66	772,850.83
11,073.0	43.60	357.40	10,993.7	7,365.6	239.5	-1.9	239.5	14.98	446,803.85	772,849.12
11,105.0	47.80	0.10	11,016.1	7,388.0	262.4	-2.4	262.4	14.45	446,826.74	772,848.64
11,137.0	51.70	2.20	11,036.8	7,408.7	286.8	-1.9	286.8	13.18	446,851.15	772,849.14
11,169.0	54.90	3.70	11,055.9	7,427.8	312.4	-0.6	312.4	10.68	446,876.76	772,850.47
11,201.0	56.50	3.40	11,073.9	7,445.8	338.8	1.1	338.8	5.06	446,903.15	772,852.10
11,234.0	59.50	3.00	11,091.4	7,463.3	366.7	2.6	366.7	9.15	446,931.09	772,853.67
11,265.0	62.40	3.90	11,106.5	7,478.4	393.8	4.2	393.7	9.69	446,958.13	772,855.30
11,298.0	65.20	3.10	11,121.0	7,492.9	423.3	6.0	423.3	8.76	446,987.68	772,857.10
11,330.0	67.70	2.00	11,133.8	7,505.7	452.6	7.4	452.5	8.42	447,016.99	772,858.41
11,362.0	69.80	1.50	11,145.4	7,517.3	482.4	8.3	482.3	6.72	447,046.80	772,859.32
11,394.0	71.70	1.50	11,156.0	7,527.9	512.6	9.1	512.5	5.94	447,077.00	772,860.11
11,426.0	74.20	1.80	11,165.3	7,537.2	543.2	9.9	543.1	7.86	447,107.57	772,860.99
11,458.0	77.90	3.00	11,173.1	7,545.0	574.2	11.2	574.1	12.12	447,138.60	772,862.29
11,490.0	79.00	1.80	11,179.5	7,551.4	605.5	12.5	605.4	5.03	447,169.92	772,863.60
11,522.0	80.00	1.10	11,185.3	7,557.2	637.0	13.3	636.9	3.79	447,201.37	772,864.40
11,554.0	81.40	0.80	11,190.5	7,562.4	668.6	13.9	668.5	4.47	447,232.95	772,864.92
11,586.0	83.90	1.10	11,194.6	7,566.5	700.3	14.4	700.2	7.87	447,264.68	772,865.45
11,619.0	86.00	1.10	11,197.5	7,569.4	733.2	15.0	733.0	6.36	447,297.54	772,866.08
11,651.0	88.00	0.30	11,199.1	7,571.0	765.1	15.4	765.0	6.73	447,329.49	772,866.47
11,682.0	89.30	359.60	11,199.9	7,571.8	796.1	15.4	796.0	4.76	447,360.48	772,866.44
11,715.0	89.50	359.50	11,200.2	7,572.1	829.1	15.1	829.0	0.68	447,393.48	772,866.18
11,747.0	89.50	358.60	11,200.5	7,572.4	861.1	14.6	861.0	2.81	447,425.48	772,865.65
11,844.0	90.20	359.40	11,200.7	7,572.6	958.1	12.9	958.0	1.10	447,522.46	772,863.96

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well MOGI 9 State Com 1H
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Site:	MOGI 9 State Com 1H	MD Reference:	WELL @ 3628.1usft (Original Well Elev)
Well:	MOGI 9 State Com 1H	North Reference:	Grid
Wellbore:	MOGI 9 State Com 1H	Survey Calculation Method:	Minimum Curvature
Design:	MOGI 9 State Com 1H	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)
11,940.0	90.50	359.90	11,200.2	7,572.1	1,054.1	12.3	1,054.0	0.61	447,618.46	772,863.37
12,035.0	90.80	0.10	11,199.1	7,571.0	1,149.1	12.3	1,148.9	0.38	447,713.45	772,863.37
12,129.0	89.10	358.80	11,199.2	7,571.1	1,243.1	11.4	1,242.9	2.28	447,807.44	772,862.47
12,225.0	90.90	359.70	11,199.2	7,571.1	1,339.1	10.2	1,338.9	2.10	447,903.43	772,861.22
12,321.0	89.00	0.10	11,199.2	7,571.1	1,435.1	10.0	1,434.9	2.02	447,999.42	772,861.05
12,417.0	91.60	1.50	11,198.7	7,570.6	1,531.0	11.3	1,530.9	3.08	448,095.40	772,862.39
12,512.0	89.70	359.60	11,197.7	7,569.6	1,626.0	12.2	1,625.9	2.83	448,190.38	772,863.30
12,609.0	88.70	358.50	11,199.0	7,570.9	1,723.0	10.6	1,722.9	1.53	448,287.36	772,861.69
12,705.0	88.80	359.40	11,201.1	7,573.0	1,818.9	8.9	1,818.8	0.94	448,383.32	772,859.93
12,801.0	90.20	359.70	11,202.0	7,573.9	1,914.9	8.1	1,914.8	1.49	448,479.31	772,859.18
12,896.0	90.40	359.60	11,201.5	7,573.4	2,009.9	7.5	2,009.8	0.24	448,574.30	772,858.60
12,993.0	91.50	359.80	11,199.8	7,571.7	2,106.9	7.0	2,106.8	1.15	448,671.29	772,858.09
13,089.0	90.30	359.20	11,198.3	7,570.2	2,202.9	6.2	2,202.8	1.40	448,767.27	772,857.25
13,185.0	88.90	358.20	11,199.0	7,570.9	2,298.9	4.0	2,298.8	1.79	448,863.24	772,855.07
13,281.0	93.50	359.60	11,197.0	7,568.9	2,394.8	2.2	2,394.7	5.01	448,959.17	772,853.23
13,377.0	92.50	357.40	11,192.0	7,563.9	2,490.6	-0.3	2,490.6	2.51	449,055.00	772,850.72
13,473.0	92.30	357.90	11,188.0	7,559.9	2,586.5	-4.3	2,586.4	0.56	449,150.83	772,846.79
13,569.0	91.70	358.10	11,184.6	7,556.5	2,682.3	-7.6	2,682.3	0.66	449,246.72	772,843.44
13,665.0	90.90	359.00	11,182.4	7,554.3	2,778.3	-10.0	2,778.3	1.25	449,342.66	772,841.01
13,761.0	90.20	0.10	11,181.5	7,553.4	2,874.3	-10.8	2,874.3	1.36	449,438.65	772,840.26
13,858.0	87.90	358.50	11,183.1	7,555.0	2,971.2	-12.0	2,971.3	2.89	449,535.62	772,839.07
13,954.0	87.30	0.10	11,187.1	7,559.0	3,067.2	-13.2	3,067.2	1.78	449,631.53	772,837.90
14,049.0	87.10	0.10	11,191.8	7,563.7	3,162.0	-13.0	3,162.0	0.21	449,726.41	772,838.07
14,114.0	89.00	0.00	11,194.0	7,565.9	3,227.0	-12.9	3,227.0	2.93	449,791.37	772,838.12
14,209.0	93.20	1.80	11,192.2	7,564.1	3,321.9	-11.4	3,321.9	4.81	449,886.32	772,839.61
14,305.0	93.70	1.80	11,186.4	7,558.3	3,417.7	-8.4	3,417.7	0.52	449,982.10	772,842.62
14,399.0	94.70	1.40	11,179.5	7,551.4	3,511.4	-5.8	3,511.4	1.15	450,075.80	772,845.24

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well MOGI 9 State Com 1H
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Site:	MOGI 9 State Com 1H	MD Reference:	WELL @ 3628.1usft (Original Well Elev)
Well:	MOGI 9 State Com 1H	North Reference:	Grid
Wellbore:	MOGI 9 State Com 1H	Survey Calculation Method:	Minimum Curvature
Design:	MOGI 9 State Com 1H	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)
14,494.0	95.10	1.50	11,171.4	7,543.3	3,606.1	-3.4	3,606.0	0.43	450,170.43	772,847.64
14,591.0	94.40	1.20	11,163.4	7,535.3	3,702.7	-1.1	3,702.6	0.78	450,267.07	772,849.91
14,687.0	93.20	0.80	11,157.0	7,528.9	3,798.5	0.5	3,798.4	1.32	450,362.84	772,851.59
14,784.0	91.90	359.90	11,152.7	7,524.6	3,895.4	1.1	3,895.2	1.63	450,459.74	772,852.18
14,880.0	90.90	0.60	11,150.3	7,522.2	3,991.3	1.5	3,991.2	1.27	450,555.71	772,852.60
14,977.0	92.30	359.10	11,147.6	7,519.5	4,088.3	1.3	4,088.2	2.11	450,652.66	772,852.34
15,072.0	89.40	358.30	11,146.2	7,518.1	4,183.2	-0.9	4,183.1	3.17	450,747.62	772,850.19
15,169.0	91.70	357.50	11,145.3	7,517.2	4,280.2	-4.4	4,280.1	2.51	450,844.54	772,846.63
15,265.0	88.20	357.30	11,145.4	7,517.3	4,376.1	-8.8	4,376.0	3.65	450,940.43	772,842.28
15,361.0	87.70	357.70	11,148.8	7,520.7	4,471.9	-13.0	4,471.9	0.67	451,036.27	772,838.10
15,457.0	87.50	358.30	11,152.8	7,524.7	4,567.8	-16.3	4,567.8	0.66	451,132.13	772,834.75
15,553.0	86.80	358.10	11,157.6	7,529.5	4,663.6	-19.3	4,663.6	0.76	451,227.96	772,831.74
15,592.0	86.50	358.20	11,159.9	7,531.8	4,702.5	-20.6	4,702.5	0.81	451,266.88	772,830.48

Casing Points		
Measured Depth (usft)	Vertical Depth (usft)	Name
1,303.0	1,303.0	13 3/8"
5,171.0	5,168.7	9 5/8"
10,928.0	10,875.3	7"

Checked By: _____ Approved By: _____ Date: _____

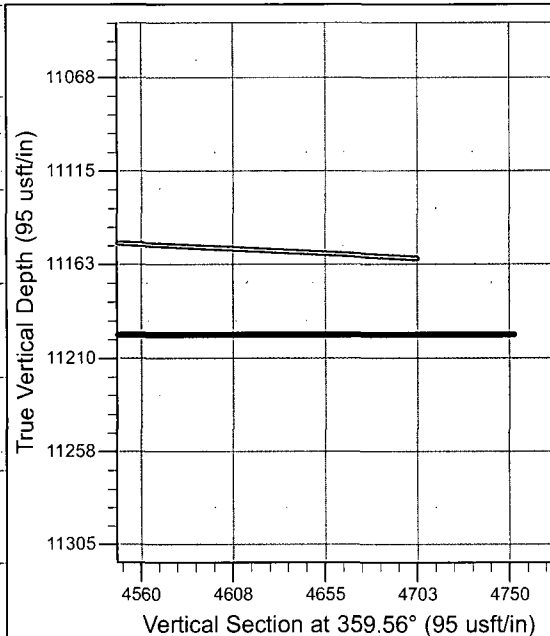
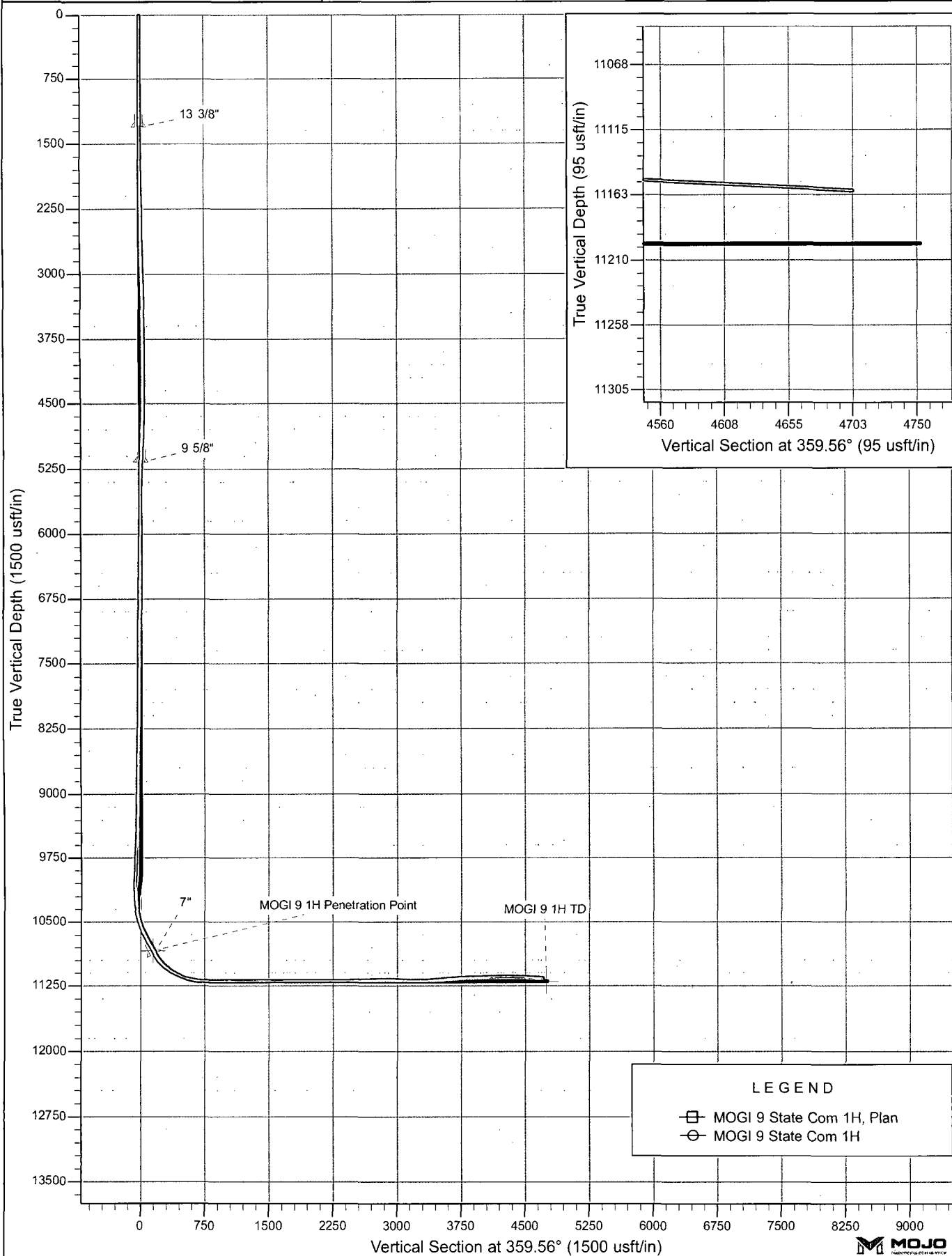
Project: Jackson Unit Section 9
 Site: MOGI 9 State Com 1H
 Well: MOGI 9 State Com 1H
 Wellbore: MOGI 9 State Com 1H
 Design: MOGI 9 State Com 1H

 **MURCHISON OIL & GAS, INC.**



Azimuths to Grid North
 True North: -0.40°
 Magnetic North: 6.99°

Magnetic Field
 Strength: 48452.2nT
 Dip Angle: 60.15°
 Date: 28/01/2013
 Model: IGRF2010



LEGEND

- MOGI 9 State Com 1H, Plan
- MOGI 9 State Com 1H

Project: Jackson Unit Section 9
Site: MOGI 9 State Com 1H
Well: MOGI 9 State Com 1H
Wellbore: MOGI 9 State Com 1H
Design: MOGI 9 State Com 1H

 **MURCHISON OIL & GAS, INC.**



Azimuths to Grid North
True North: -0.40°
Magnetic North: 6.99°

Magnetic Field
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