

Results of Directional Survey

API number:	30-025-41973		
OGRID:		Operator:	MURCHISON OIL & GAS INC
		Property:	MOGI 9 STATE COM # 10H

surface	ULSTR:	O	09	T 24S	R 33E
				50 FSL	1455 FEL

BH Loc	ULSTR:	B	09	T 24S	R 33E
15943	MD	11037.9	TVD	233 FNL	1742 FEL
				5047 FSL	

Top Perf/OH	ULSTR:	O	09	T 24S	R 33E
11225	MD	10993.0	TVD	345 FSL	1677 FEL

Bot Perf/OH	ULSTR:	B	09	T 24S	R 33E
15820	MD	11035.6	TVD	356 FNL	1741 FEL
				4924 FSL	

	MD	N/S	E/W	VD
	11216.00	287.30	-217.70	10990.90
TOP PERFS/OH	11225.00	294.99	-221.94	10992.96
	11247.00	313.80	-232.30	10998.00
	15813.00	4866.70	-286.00	11035.50
BOT PERFS/OH	15820.00	4873.70	-286.07	11035.64
	15844.00	4897.70	-286.30	11036.10

NEXT TO LAST	15933.00	4986.70	-287.20	11037.70
LAST READING	15943.00	4996.70	-287.30	11037.90
TD	15943.00	4996.70	-287.30	11037.90

Surface Location	50 FS	1455 FE
Projected BHL	5047 FS	1742 FE
Location of		
Top Perfs/OH	345 FS	1677 FE
Bottom Perfs/OH	4924 FS	1741 FE

SUMMARY of Subsurface Locations

Surface Location	O-09-24S-33E	50 FS	1455 FE	Vert. Depth
Top Perfs/OH	O-09-24S-33E	345 FS	1677 FE	10992.96
Bottom Perfs/OH	B-09-24S-33E	4924 FS	1741 FE	11035.64
Projected TD	B-09-24S-33E	5047 FS	1742 FE	11037.90

DEC 09 2014

Murchison Oil and Gas

Jackson Unit Section 9

MOGI 9 state Com 10H

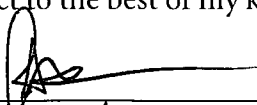
Survey: MOGI 9 State Com 10H

MOJO Standard Survey

20 October, 2014

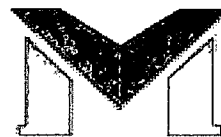
HOBS OCD
OCT 29 2014
RECEIVED

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

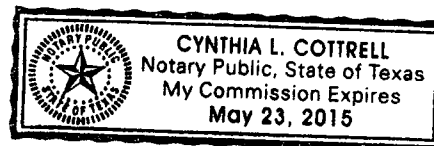
 (Signature)

Notarized this date 23rd of October, 2014

Cynthia L. Cottrell
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 10H
Project:	Jackson Unit Section 9	TVD Reference:	WELL @ 3641.9usft (Original Well Elev)
Site:	MOGI 9 state Com 10H	MD Reference:	WELL @ 3641.9usft (Original Well Elev)
Well:	MOGI 9 State Com 10H	North Reference:	Grid
Wellbore:	MOGI 9 State Com 10H	Survey Calculation Method:	Minimum Curvature
Design:	MOGI 9 State Com 10H	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 10H			
Site Position:	Northing:	446,429.72 usft	Latitude:	32° 13' 30.098 N
From:	Easting:	776,328.28 usft	Longitude:	103° 34' 24.302 W
Position Uncertainty:	Slot Radius:	13-3/16 "	Grid Convergence:	0.41 °

Well	MOGI 9 State Com 10H			
Well Position	+N/-S	0.0 usft	Northing:	446,429.72 usft
	+E/-W	0.0 usft	Easting:	776,328.28 usft
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft
			Latitude:	32° 13' 30.098 N
			Longitude:	103° 34' 24.302 W
			Ground Level:	3,619.9 usft

Wellbore	MOGI 9 State Com 10H				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	04/09/2014	7.19	60.11	48,293

Design	MOGI 9 State Com 10H				
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	356.84	

Survey Program	Date 20/10/2014			
From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
100.0	15,943.0	MOGI 9 State Com 10H (MOGI 9 State Co	MWD	MWD - Standard

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Well:	MOGI 9 State Com 10H	North Reference:	Grid
Wellbore:	MOGI 9 State Com 10H	Survey Calculation Method:	Minimum Curvature
Design:	MOGI 9 State Com 10H	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	-3,641.9	0.0	0.0	0.0	0.00	446,429.72	776,328.28
100.0	0.77	67.32	100.0	-3,541.9	0.3	0.6	0.2	0.77	446,429.98	776,328.90
200.0	1.03	64.05	200.0	-3,441.9	0.9	2.0	0.8	0.26	446,430.63	776,330.33
300.0	1.56	66.35	300.0	-3,341.9	1.9	4.1	1.6	0.53	446,431.57	776,332.38
400.0	1.92	63.66	399.9	-3,242.0	3.1	6.9	2.8	0.37	446,432.86	776,335.13
500.0	1.93	57.22	499.9	-3,142.0	4.8	9.8	4.2	0.22	446,434.51	776,338.05
600.0	1.83	63.26	599.8	-3,042.1	6.4	12.6	5.7	0.22	446,436.14	776,340.89
700.0	1.99	70.09	699.7	-2,942.2	7.7	15.7	6.9	0.28	446,437.45	776,343.95
800.0	2.48	63.19	799.7	-2,842.2	9.3	19.2	8.2	0.56	446,439.02	776,347.51
900.0	3.05	65.43	899.6	-2,742.3	11.4	23.6	10.1	0.58	446,441.10	776,351.86
1,000.0	3.61	67.86	999.4	-2,642.5	13.7	28.9	12.1	0.58	446,443.39	776,357.20
1,100.0	4.59	70.87	1,099.1	-2,542.8	16.2	35.6	14.2	1.00	446,445.89	776,363.89
1,200.0	5.81	74.00	1,198.7	-2,443.2	18.9	44.3	16.4	1.25	446,448.60	776,372.54
1,286.7	6.06	72.18	1,284.9	-2,357.0	21.5	52.8	18.5	0.36	446,451.21	776,381.11
Rustler										
1,300.0	6.10	71.91	1,298.2	-2,343.7	21.9	54.2	18.9	0.36	446,451.64	776,382.46
1,303.0	6.07	71.87	1,301.2	-2,340.7	22.0	54.5	19.0	1.17	446,451.74	776,382.76
13 3/8"										
1,400.0	4.94	70.13	1,397.7	-2,244.2	25.0	63.3	21.5	1.17	446,454.76	776,391.56
1,500.0	4.33	64.31	1,497.4	-2,144.5	28.1	70.7	24.2	0.77	446,457.86	776,399.01
1,600.0	3.64	62.58	1,597.1	-2,044.8	31.2	76.9	26.9	0.70	446,460.95	776,405.23
1,700.0	2.85	62.78	1,697.0	-1,944.9	33.8	82.0	29.3	0.79	446,463.55	776,410.26
1,800.0	2.70	62.28	1,796.9	-1,845.0	36.1	86.3	31.3	0.15	446,465.79	776,414.55
1,900.0	2.17	60.39	1,896.8	-1,745.1	38.1	90.0	33.1	0.54	446,467.82	776,418.28
2,000.0	1.76	57.83	1,996.7	-1,645.2	39.9	92.9	34.7	0.42	446,469.57	776,421.23
2,100.0	1.46	54.87	2,096.7	-1,545.2	41.4	95.3	36.1	0.31	446,471.12	776,423.57
2,200.0	1.02	53.06	2,196.6	-1,445.3	42.7	97.0	37.3	0.44	446,472.39	776,425.32

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well MOGI 9 State Com 10H
Project:	Jackson Unit Section 9	TVD Reference:	WELL @ 3641.9usft (Original Well Elev)
Site:	MOGI 9 state Com 10H	MD Reference:	WELL @ 3641.9usft (Original Well Elev)
Well:	MOGI 9 State Com 10H	North Reference:	Grid
Wellbore:	MOGI 9 State Com 10H	Survey Calculation Method:	Minimum Curvature
Design:	MOGI 9 State Com 10H	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	0.79	52.73	2,296.6	-1,345.3	43.6	98.3	38.1	0.23	446,473.34	776,426.58
2,400.0	0.69	46.82	2,396.6	-1,245.3	44.5	99.3	38.9	0.13	446,474.17	776,427.57
2,500.0	0.65	26.26	2,496.6	-1,145.3	45.4	100.0	39.8	0.24	446,475.09	776,428.26
2,600.0	0.67	19.17	2,596.6	-1,045.3	46.4	100.4	40.8	0.08	446,476.15	776,428.71
2,700.0	0.74	8.44	2,696.6	-945.3	47.6	100.7	42.0	0.15	446,477.34	776,428.99
2,800.0	0.69	9.78	2,796.6	-845.3	48.9	100.9	43.2	0.05	446,478.57	776,429.19
2,900.0	0.60	15.37	2,896.6	-745.3	50.0	101.1	44.3	0.11	446,479.67	776,429.43
3,000.0	0.67	9.54	2,996.6	-645.3	51.0	101.4	45.4	0.10	446,480.75	776,429.67
3,100.0	0.45	347.05	3,096.6	-545.3	52.0	101.4	46.3	0.31	446,481.71	776,429.67
3,200.0	0.64	333.65	3,196.6	-445.3	52.9	101.1	47.2	0.23	446,482.60	776,429.34
3,300.0	0.80	352.65	3,296.6	-345.3	54.1	100.7	48.4	0.29	446,483.79	776,429.00
3,400.0	0.85	17.63	3,396.6	-245.3	55.5	100.9	49.8	0.36	446,485.19	776,429.14
3,500.0	0.80	36.13	3,496.5	-145.4	56.7	101.5	51.1	0.27	446,486.46	776,429.77
3,600.0	0.81	40.92	3,596.5	-45.4	57.8	102.4	52.1	0.07	446,487.56	776,430.65
3,700.0	0.50	47.46	3,696.5	54.6	58.7	103.2	52.9	0.32	446,488.39	776,431.43
3,800.0	0.23	33.27	3,796.5	154.6	59.1	103.6	53.3	0.28	446,488.85	776,431.86
3,900.0	0.10	297.98	3,896.5	254.6	59.3	103.6	53.5	0.26	446,489.06	776,431.90
4,000.0	0.03	70.47	3,996.5	354.6	59.4	103.6	53.6	0.12	446,489.11	776,431.84
4,100.0	0.24	126.00	4,096.5	454.6	59.3	103.8	53.5	0.22	446,488.99	776,432.04
4,200.0	0.39	167.49	4,196.5	554.6	58.8	104.0	53.0	0.26	446,488.54	776,432.28
4,300.0	0.48	142.46	4,296.5	654.6	58.2	104.3	52.3	0.21	446,487.87	776,432.61
4,400.0	1.36	106.22	4,396.5	754.6	57.5	105.7	51.6	1.01	446,487.21	776,434.01
4,500.0	2.35	107.58	4,496.5	854.6	56.5	108.8	50.5	0.99	446,486.26	776,437.10
4,600.0	2.42	115.08	4,596.4	954.5	55.0	112.7	48.7	0.32	446,484.75	776,440.97
4,700.0	2.69	114.74	4,696.3	1,054.4	53.2	116.7	46.6	0.27	446,482.87	776,445.01
4,800.0	3.54	118.18	4,796.1	1,154.2	50.7	121.6	43.9	0.87	446,480.43	776,449.86
4,900.0	3.58	123.83	4,895.9	1,254.0	47.5	126.9	40.4	0.35	446,477.23	776,455.18

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Design:	MOGI 9 State Com 10H	Database:	EDM 5000.1 Single User Db

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MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
5,000.0	2.99	116.77	4,995.8	1,353.9	44.6	131.8	37.3	0.71	446,474.32	776,460.10
5,100.0	2.23	124.05	5,095.7	1,453.8	42.3	135.8	34.8	0.83	446,472.06	776,464.04
5,176.0	1.55	131.31	5,171.6	1,529.7	40.8	137.8	33.2	0.94	446,470.55	776,466.04
9 5/8"										
5,200.0	1.35	135.09	5,195.6	1,553.7	40.4	138.2	32.7	0.94	446,470.13	776,466.48
5,221.3	1.25	133.01	5,216.9	1,575.0	40.1	138.6	32.4	0.52	446,469.80	776,466.83
Delaware										
5,300.0	0.90	121.37	5,295.6	1,653.7	39.2	139.7	31.4	0.52	446,468.89	776,467.99
5,400.0	1.13	134.05	5,395.6	1,753.7	38.1	141.1	30.2	0.32	446,467.79	776,469.36
5,500.0	0.67	125.70	5,495.6	1,853.7	37.1	142.3	29.2	0.48	446,466.77	776,470.55
5,600.0	1.01	126.02	5,595.6	1,953.7	36.2	143.5	28.2	0.34	446,465.91	776,471.74
5,700.0	0.96	136.48	5,695.5	2,053.6	35.1	144.7	27.0	0.19	446,464.78	776,473.03
5,800.0	0.65	140.88	5,795.5	2,153.6	34.0	145.7	25.9	0.32	446,463.73	776,473.96
5,900.0	0.70	118.46	5,895.5	2,253.6	33.3	146.6	25.2	0.27	446,463.00	776,474.86
6,000.0	0.98	135.02	5,995.5	2,353.6	32.4	147.7	24.2	0.37	446,462.11	776,476.00
6,100.0	0.70	157.83	6,095.5	2,453.6	31.2	148.6	23.0	0.43	446,460.94	776,476.83
6,196.4	0.37	176.55	6,191.9	2,550.0	30.4	148.8	22.1	0.38	446,460.08	776,477.07
Cherry Canyon										
6,200.0	0.36	177.88	6,195.5	2,553.6	30.3	148.8	22.1	0.38	446,460.06	776,477.07
6,300.0	0.29	171.95	6,295.5	2,653.6	29.8	148.8	21.5	0.08	446,459.49	776,477.12
6,400.0	0.34	127.98	6,395.5	2,753.6	29.3	149.1	21.1	0.24	446,459.06	776,477.39
6,500.0	0.36	151.58	6,495.5	2,853.6	28.9	149.5	20.6	0.14	446,458.60	776,477.77
6,600.0	0.44	174.11	6,595.5	2,953.6	28.2	149.7	19.9	0.17	446,457.94	776,477.96
6,700.0	0.51	200.82	6,695.5	3,053.6	27.4	149.6	19.1	0.23	446,457.14	776,477.84
6,800.0	0.34	239.38	6,795.5	3,153.6	26.9	149.2	18.6	0.32	446,456.58	776,477.43
6,900.0	0.20	274.10	6,895.5	3,253.6	26.7	148.7	18.5	0.21	446,456.44	776,477.00
7,000.0	0.10	153.06	6,995.5	3,353.6	26.7	148.6	18.4	0.27	446,456.37	776,476.87

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7,100.0	0.19	173.69	7,095.5	3,453.6	26.4	148.6	18.2	0.10	446,456.13	776,476.92
7,200.0	0.34	180.65	7,195.5	3,553.6	26.0	148.7	17.7	0.15	446,455.67	776,476.94
7,300.0	0.48	223.09	7,295.5	3,653.6	25.4	148.4	17.1	0.32	446,455.07	776,476.65
7,400.0	0.63	225.51	7,395.5	3,753.6	24.7	147.7	16.5	0.15	446,454.38	776,475.97
7,500.0	0.54	245.80	7,495.5	3,853.6	24.1	146.9	15.9	0.22	446,453.80	776,475.15
7,581.4	0.52	246.19	7,576.9	3,935.0	23.8	146.2	15.7	0.02	446,453.49	776,474.46
Brushy Canyon										
7,600.0	0.52	246.28	7,595.5	3,953.6	23.7	146.0	15.6	0.02	446,453.42	776,474.30
7,700.0	0.40	220.07	7,695.5	4,053.6	23.3	145.4	15.2	0.24	446,452.97	776,473.66
7,800.0	0.33	192.95	7,795.5	4,153.6	22.7	145.1	14.7	0.18	446,452.42	776,473.37
7,900.0	0.47	175.61	7,895.5	4,253.6	22.0	145.1	14.0	0.18	446,451.73	776,473.34
8,000.0	0.53	207.93	7,995.5	4,353.6	21.2	144.9	13.2	0.28	446,450.92	776,473.16
8,100.0	0.54	205.13	8,095.5	4,453.6	20.4	144.5	12.4	0.03	446,450.08	776,472.74
8,200.0	0.43	200.34	8,195.4	4,553.5	19.6	144.1	11.6	0.12	446,449.30	776,472.41
8,300.0	0.39	192.01	8,295.4	4,653.5	18.9	143.9	10.9	0.07	446,448.62	776,472.21
8,400.0	0.67	170.44	8,395.4	4,753.5	18.0	144.0	10.0	0.34	446,447.71	776,472.23
8,500.0	0.66	206.84	8,495.4	4,853.5	16.9	143.8	9.0	0.42	446,446.62	776,472.07
8,600.0	0.32	231.05	8,595.4	4,953.5	16.2	143.3	8.3	0.39	446,445.93	776,471.59
8,700.0	0.27	269.19	8,695.4	5,053.5	16.0	142.9	8.1	0.20	446,445.75	776,471.14
8,800.0	0.25	275.23	8,795.4	5,153.5	16.1	142.4	8.2	0.03	446,445.77	776,470.69
8,900.0	0.19	279.15	8,895.4	5,253.5	16.1	142.0	8.2	0.06	446,445.81	776,470.31
9,000.0	0.15	252.08	8,995.4	5,353.5	16.1	141.7	8.2	0.09	446,445.80	776,470.02
9,100.0	0.15	195.51	9,095.4	5,453.5	15.9	141.6	8.1	0.14	446,445.63	776,469.86
9,131.5	0.24	202.64	9,126.9	5,485.0	15.8	141.5	8.0	0.31	446,445.53	776,469.82
Bone Spring										
9,200.0	0.45	207.80	9,195.4	5,553.5	15.4	141.4	7.6	0.31	446,445.16	776,469.64

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well MOGI 9 State Com 10H
Project:	Jackson Unit Section 9	TVD Reference:	WELL @ 3641.9usft (Original Well Elev)
Site:	MOGI 9 state Com 10H	MD Reference:	WELL @ 3641.9usft (Original Well Elev)
Well:	MOGI 9 State Com 10H	North Reference:	Grid
Wellbore:	MOGI 9 State Com 10H	Survey Calculation Method:	Minimum Curvature
Design:	MOGI 9 State Com 10H	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)	
9,261.5	0.55	214.02	9,256.9	5,615.0	15.0	141.1	7.2	0.18	446,444.70	776,469.36	
Avalon Shale											
9,300.0	0.61	216.89	9,295.4	5,653.5	14.7	140.9	6.9	0.18	446,444.39	776,469.14	
9,400.0	1.02	245.84	9,395.4	5,753.5	13.9	139.7	6.2	0.57	446,443.60	776,468.01	
9,500.0	0.75	304.44	9,495.4	5,853.5	13.9	138.4	6.2	0.90	446,443.60	776,466.65	
9,600.0	1.02	318.47	9,595.4	5,953.5	14.9	137.2	7.3	0.34	446,444.64	776,465.53	
9,700.0	1.48	290.36	9,695.4	6,053.5	16.0	135.4	8.5	0.75	446,445.75	776,463.72	
9,800.0	1.51	282.50	9,795.3	6,153.4	16.8	132.9	9.4	0.21	446,446.49	776,461.23	
9,900.0	3.00	275.22	9,895.3	6,253.4	17.3	129.1	10.2	1.51	446,447.01	776,457.33	
10,000.0	4.16	271.50	9,995.1	6,353.2	17.6	122.8	10.8	1.18	446,447.34	776,451.10	
10,100.0	3.71	267.56	10,094.8	6,452.9	17.6	116.0	11.2	0.52	446,447.30	776,444.24	
10,200.0	3.10	269.45	10,194.6	6,552.7	17.4	110.0	11.3	0.62	446,447.14	776,438.31	
10,207.3	2.93	269.01	10,201.9	6,560.0	17.4	109.6	11.3	2.34	446,447.13	776,437.93	
1st Bone Spring Sand											
10,239.0	2.20	266.30	10,233.6	6,591.7	17.4	108.2	11.4	2.34	446,447.08	776,436.51	
10,333.0	2.30	265.20	10,327.5	6,685.6	17.1	104.5	11.3	0.12	446,446.81	776,432.83	
10,428.0	2.40	265.30	10,422.4	6,780.5	16.8	100.7	11.2	0.11	446,446.48	776,428.94	
10,522.0	3.10	254.50	10,516.3	6,874.4	15.9	96.3	10.6	0.92	446,445.64	776,424.53	
10,538.0	3.49	259.24	10,532.3	6,890.4	15.7	95.4	10.4	2.97	446,445.44	776,423.64	
7"											
10,554.0	3.90	263.00	10,548.3	6,906.4	15.6	94.3	10.3	2.97	446,445.28	776,422.62	
10,586.0	5.50	283.70	10,580.2	6,938.3	15.8	91.8	10.7	7.21	446,445.51	776,420.05	
10,617.0	9.10	297.40	10,610.9	6,969.0	17.3	88.1	12.4	12.82	446,446.99	776,416.43	
10,649.0	13.60	298.80	10,642.3	7,000.4	20.3	82.6	15.7	14.09	446,449.97	776,410.88	
10,680.0	17.70	294.50	10,672.1	7,030.2	24.0	75.1	19.8	13.74	446,453.68	776,403.40	
10,712.0	22.10	291.70	10,702.2	7,060.3	28.2	65.1	24.6	14.07	446,457.93	776,393.37	
10,743.0	27.10	290.00	10,730.4	7,088.5	32.8	53.0	29.8	16.29	446,462.50	776,381.31	
10,775.0	31.80	292.30	10,758.2	7,116.3	38.5	38.4	36.3	15.10	446,468.20	776,366.65	

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well MOGI 9 State Com 10H
Project:	Jackson Unit Section 9	TVD Reference:	WELL @ 3641.9usft (Original Well Elev)
Site:	MOGI 9 state Com 10H	MD Reference:	WELL @ 3641.9usft (Original Well Elev)
Well:	MOGI 9 State Com 10H	North Reference:	Grid
Wellbore:	MOGI 9 State Com 10H	Survey Calculation Method:	Minimum Curvature
Design:	MOGI 9 State Com 10H	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)
10,806.0	36.30	295.90	10,783.9	7,142.0	45.6	22.6	44.3	15.90	446,475.31	776,350.83
10,838.0	41.40	301.00	10,808.8	7,166.9	55.2	4.9	54.8	18.80	446,484.90	776,333.22
10,870.0	46.00	305.30	10,832.0	7,190.1	67.3	-13.5	67.9	17.11	446,497.01	776,314.75
10,901.0	48.80	308.40	10,853.0	7,211.1	81.0	-31.8	82.6	11.65	446,510.70	776,296.50
10,933.0	52.30	309.10	10,873.3	7,231.4	96.5	-51.0	99.1	11.07	446,526.17	776,277.24
10,964.0	55.80	309.60	10,891.5	7,249.6	112.4	-70.4	116.1	11.37	446,542.08	776,257.83
10,996.0	58.80	310.60	10,908.8	7,266.9	129.7	-91.0	134.5	9.74	446,559.43	776,237.24
11,027.0	61.60	313.90	10,924.2	7,282.3	147.8	-110.9	153.7	12.92	446,577.52	776,217.34
11,058.0	64.30	317.10	10,938.3	7,296.4	167.5	-130.3	174.4	12.66	446,597.21	776,198.00
11,066.4	64.90	317.85	10,941.9	7,300.0	173.1	-135.4	180.3	10.72	446,602.82	776,192.86
2nd Bone Spring Sand										
11,090.0	66.60	319.90	10,951.6	7,309.7	189.3	-149.6	197.3	10.72	446,619.01	776,178.73
11,121.0	69.70	322.80	10,963.1	7,321.2	211.8	-167.5	220.7	13.24	446,641.48	776,160.77
11,153.0	72.10	325.30	10,973.6	7,331.7	236.2	-185.3	246.1	10.52	446,665.96	776,143.02
11,184.0	74.00	327.50	10,982.6	7,340.7	260.9	-201.7	271.7	9.15	446,690.66	776,126.61
11,207.0	75.44	329.16	10,988.7	7,346.8	279.8	-213.3	291.2	9.34	446,709.54	776,114.97
Cross South Hard Boundary@11207ftMD										
11,216.0	76.00	329.80	10,990.9	7,349.0	287.3	-217.7	298.9	9.34	446,717.05	776,110.54
11,247.0	77.50	332.70	10,998.0	7,356.1	313.8	-232.3	326.1	10.31	446,743.50	776,096.03
11,279.0	79.00	335.70	11,004.5	7,362.6	342.0	-245.9	355.0	10.31	446,771.71	776,082.40
11,310.0	80.80	339.00	11,010.0	7,368.1	370.2	-257.6	383.8	11.98	446,799.87	776,070.65
11,373.0	83.10	346.10	11,018.8	7,376.9	429.6	-276.3	444.2	11.74	446,859.34	776,051.97
11,405.0	84.20	350.30	11,022.4	7,380.5	460.7	-282.8	475.6	13.49	446,890.46	776,045.47
11,436.0	85.10	353.80	11,025.2	7,383.3	491.3	-287.1	506.4	11.61	446,921.02	776,041.20
11,468.0	86.10	356.90	11,027.7	7,385.8	523.1	-289.7	538.3	10.15	446,952.82	776,038.61
11,499.0	88.30	358.60	11,029.2	7,387.3	554.0	-290.9	569.2	8.96	446,983.76	776,037.40
Landing Point @ 11499ftMD 88.3Inc										
11,531.0	88.80	359.20	11,030.0	7,388.1	586.0	-291.5	601.2	2.44	447,015.74	776,036.78

Company: Murchison Oil and Gas
Project: Jackson Unit Section 9
Site: MOGI 9 state Com 10H
Well: MOGI 9 State Com 10H
Wellbore: MOGI 9 State Com 10H
Design: MOGI 9 State Com 10H

Local Co-ordinate Reference: Well MOGI 9 State Com 10H
TVD Reference: WELL @ 3641.9usft (Original Well Elev)
MD Reference: WELL @ 3641.9usft (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)
11,562.0	90.20	359.60	11,030.3	7,388.4	617.0	-291.8	632.2	4.70	447,046.74	776,036.46
11,594.0	90.70	359.70	11,030.0	7,388.1	649.0	-292.0	664.1	1.59	447,078.73	776,036.26
11,657.0	90.10	0.50	11,029.6	7,387.7	712.0	-291.9	727.0	1.59	447,141.73	776,036.37
11,750.0	90.10	0.80	11,029.4	7,387.5	805.0	-290.9	819.8	0.32	447,234.73	776,037.43
11,845.0	90.20	0.50	11,029.2	7,387.3	900.0	-289.8	914.6	0.33	447,329.72	776,038.51
11,940.0	90.50	0.40	11,028.6	7,386.7	995.0	-289.0	1,009.4	0.33	447,424.71	776,039.25
12,034.0	91.00	1.30	11,027.4	7,385.5	1,089.0	-287.6	1,103.2	1.10	447,518.69	776,040.65
12,129.0	88.40	1.50	11,027.9	7,386.0	1,183.9	-285.3	1,197.9	2.74	447,613.66	776,042.97
12,223.0	88.80	1.20	11,030.2	7,388.3	1,277.9	-283.1	1,291.5	0.53	447,707.60	776,045.18
12,318.0	89.30	0.40	11,031.7	7,389.8	1,372.9	-281.8	1,386.3	0.99	447,802.58	776,046.51
12,413.0	89.80	0.40	11,032.5	7,390.6	1,467.9	-281.1	1,481.1	0.53	447,897.57	776,047.17
12,505.0	90.00	0.20	11,032.7	7,390.8	1,559.9	-280.6	1,573.0	0.31	447,989.57	776,047.65
12,599.0	90.00	359.10	11,032.7	7,390.8	1,653.9	-281.2	1,666.8	1.17	448,083.57	776,047.08
12,693.0	90.30	359.00	11,032.4	7,390.5	1,747.8	-282.8	1,760.8	0.34	448,177.56	776,045.52
12,788.0	91.40	357.60	11,031.0	7,389.1	1,842.8	-285.6	1,855.7	1.87	448,272.50	776,042.70
12,883.0	90.80	357.80	11,029.2	7,387.3	1,937.7	-289.4	1,950.7	0.67	448,367.40	776,038.89
12,977.0	89.70	358.30	11,028.8	7,386.9	2,031.6	-292.6	2,044.7	1.29	448,461.35	776,035.69
13,072.0	88.60	359.80	11,030.2	7,388.3	2,126.6	-294.2	2,139.6	1.96	448,556.32	776,034.12
13,167.0	89.30	358.50	11,031.9	7,390.0	2,221.6	-295.6	2,234.5	1.55	448,651.29	776,032.71
13,261.0	89.20	0.70	11,033.1	7,391.2	2,315.6	-296.2	2,328.4	2.34	448,745.27	776,032.05
13,355.0	89.20	359.80	11,034.5	7,392.6	2,409.5	-295.8	2,422.2	0.96	448,839.26	776,032.46
13,450.0	90.20	0.20	11,035.0	7,393.1	2,504.5	-295.8	2,517.0	1.13	448,934.26	776,032.46
13,544.0	90.60	359.00	11,034.3	7,392.4	2,598.5	-296.5	2,610.9	1.35	449,028.25	776,031.81
13,638.0	90.80	0.20	11,033.2	7,391.3	2,692.5	-297.1	2,704.8	1.29	449,122.24	776,031.15
13,731.0	89.10	0.40	11,033.2	7,391.3	2,785.5	-296.6	2,797.6	1.84	449,215.24	776,031.64
13,826.0	89.70	0.20	11,034.2	7,392.3	2,880.5	-296.1	2,892.5	0.67	449,310.23	776,032.13
13,920.0	90.60	359.00	11,034.0	7,392.1	2,974.5	-296.8	2,986.3	1.60	449,404.23	776,031.48

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well MOGI 9 State Com 10H
Project:	Jackson Unit Section 9	TVD Reference:	WELL @ 3641.9usft (Original Well Elev)
Site:	MOGI 9 state Com 10H	MD Reference:	WELL @ 3641.9usft (Original Well Elev)
Well:	MOGI 9 State Com 10H	North Reference:	Grid
Wellbore:	MOGI 9 State Com 10H	Survey Calculation Method:	Minimum Curvature
Design:	MOGI 9 State Com 10H	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)
14,015.0	91.30	358.30	11,032.4	7,390.5	3,069.5	-299.0	3,081.3	1.04	449,499.19	776,029.24
14,109.0	91.40	358.80	11,030.2	7,388.3	3,163.4	-301.4	3,175.2	0.54	449,593.13	776,026.86
14,204.0	91.30	359.30	11,028.0	7,386.1	3,258.4	-303.0	3,270.1	0.54	449,688.09	776,025.29
14,298.0	90.10	1.60	11,026.8	7,384.9	3,352.4	-302.3	3,363.9	2.76	449,782.07	776,026.03
14,392.0	91.70	0.60	11,025.3	7,383.4	3,446.3	-300.5	3,457.6	2.01	449,876.04	776,027.83
14,487.0	90.30	1.70	11,023.7	7,381.8	3,541.3	-298.5	3,552.4	1.87	449,971.00	776,029.74
14,581.0	90.80	1.30	11,022.8	7,380.9	3,635.2	-296.1	3,646.0	0.68	450,064.96	776,032.20
14,676.0	91.90	1.90	11,020.5	7,378.6	3,730.2	-293.4	3,740.7	1.32	450,159.90	776,034.85
14,771.0	89.80	1.90	11,019.1	7,377.2	3,825.1	-290.3	3,835.3	2.21	450,254.83	776,038.00
14,866.0	90.80	0.80	11,018.6	7,376.7	3,920.1	-288.0	3,930.0	1.56	450,349.80	776,040.24
14,961.0	92.00	359.90	11,016.3	7,374.4	4,015.1	-287.5	4,024.8	1.58	450,444.77	776,040.82
15,055.0	88.80	359.80	11,015.6	7,373.7	4,109.0	-287.7	4,118.6	3.41	450,538.75	776,040.57
15,150.0	88.60	0.10	11,017.8	7,375.9	4,204.0	-287.8	4,213.5	0.38	450,633.73	776,040.49
15,245.0	88.30	359.90	11,020.4	7,378.5	4,299.0	-287.8	4,308.3	0.38	450,728.69	776,040.49
15,339.0	88.60	1.30	11,022.9	7,381.0	4,392.9	-286.8	4,402.1	1.52	450,822.65	776,041.47
15,433.0	88.80	1.20	11,025.0	7,383.1	4,486.9	-284.8	4,495.8	0.24	450,916.60	776,043.52
15,528.0	88.30	359.80	11,027.5	7,385.6	4,581.9	-283.9	4,590.5	1.56	451,011.57	776,044.35
15,623.0	88.00	359.30	11,030.5	7,388.6	4,676.8	-284.7	4,685.4	0.61	451,106.52	776,043.60
15,718.0	88.60	359.80	11,033.3	7,391.4	4,771.8	-285.4	4,780.2	0.82	451,201.47	776,042.86
15,813.0	88.80	359.50	11,035.5	7,393.6	4,866.7	-286.0	4,875.1	0.38	451,296.44	776,042.28
15,844.0	88.88	359.46	11,036.1	7,394.2	4,897.7	-286.3	4,906.1	0.28	451,327.44	776,042.00
Cross North Hard Boundary@15844ftMD										
15,892.0	89.00	359.40	11,037.0	7,395.1	4,945.7	-286.8	4,954.0	0.28	451,375.43	776,041.52
15,933.0	89.00	359.40	11,037.7	7,395.8	4,986.7	-287.2	4,994.9	0.00	451,416.42	776,041.09
4 1/2"										
15,943.0	89.00	359.40	11,037.9	7,396.0	4,996.7	-287.3	5,004.9	0.00	451,426.41	776,040.99
TD@15943ftMD 99ft North of Hard Boundary										

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well MOGI 9 State Com 10H
Project:	Jackson Unit Section 9	TVD Reference:	WELL @ 3641.9usft (Original Well Elev)
Site:	MOGI 9 state Com 10H	MD Reference:	WELL @ 3641.9usft (Original Well Elev)
Well:	MOGI 9 State Com 10H	North Reference:	Grid
Wellbore:	MOGI 9 State Com 10H	Survey Calculation Method:	Minimum Curvature
Design:	MOGI 9 State Com 10H	Database:	EDM 5000.1 Single User Db

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,303.0	1,301.2	13 3/8"	13-3/8	16	
5,176.0	5,171.6	9 5/8"	9-5/8	12-1/4	
10,538.0	10,532.3	7"	7	8-1/2	
15,933.0	11,037.7	4 1/2"	4-1/2	8-1/2	

Formations				
Measured Depth (usft)	Vertical Depth (usft)	Name	Dip (°)	
10,207.3	10,201.9	1st Bone Spring Sand	0.00	
6,196.4	6,191.9	Cherry Canyon	0.00	
1,286.7	1,284.9	Rustler	0.00	
5,221.3	5,216.9	Delaware	0.00	
9,131.5	9,126.9	Bone Spring	0.00	
11,066.4	10,941.9	2nd Bone Spring Sand	0.00	
7,581.4	7,576.9	Brushy Canyon	0.00	
9,261.5	9,256.9	Avalon Shale	0.00	

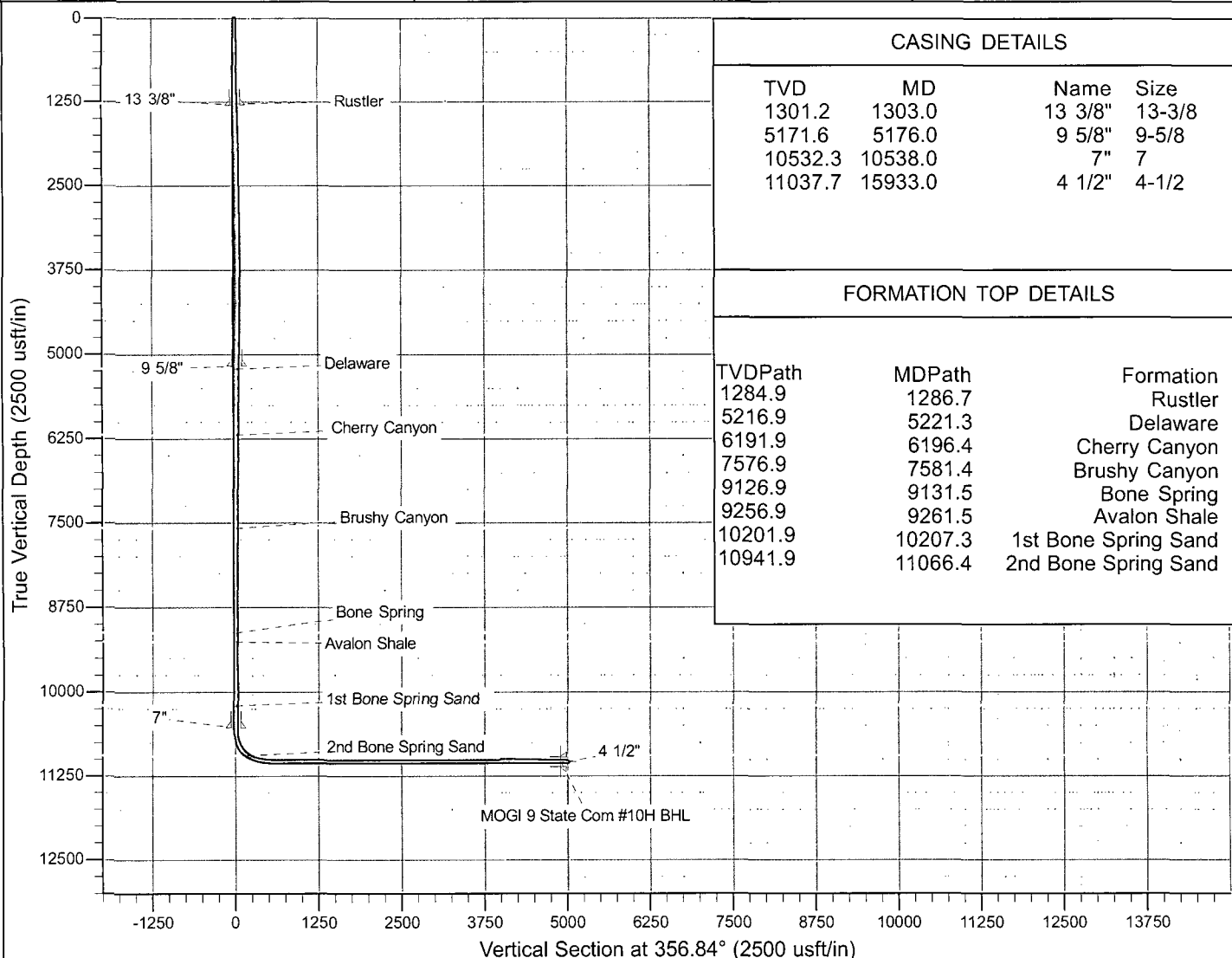
Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
11,207.0	10,988.7	279.8	-213.3	Cross South Hard Boundary@11207ftMD
11,499.0	11,029.2	554.0	-290.9	Landing Point @ 11499ftMD 88.3Inc
15,844.0	11,036.1	4,897.7	-286.3	Cross North Hard Boundary@15844ftMD
15,943.0	11,037.9	4,996.7	-287.3	TD@15943ftMD 99ft North of Hard Boundary

Checked By: _____ Approved By: _____ Date: _____

Site: MOGI 9 state Com 10H
 Well: MOGI 9 State Com 10H
 Wellbore: MOGI 9 State Com 10H
 Design: MOGI 9 State Com 10H

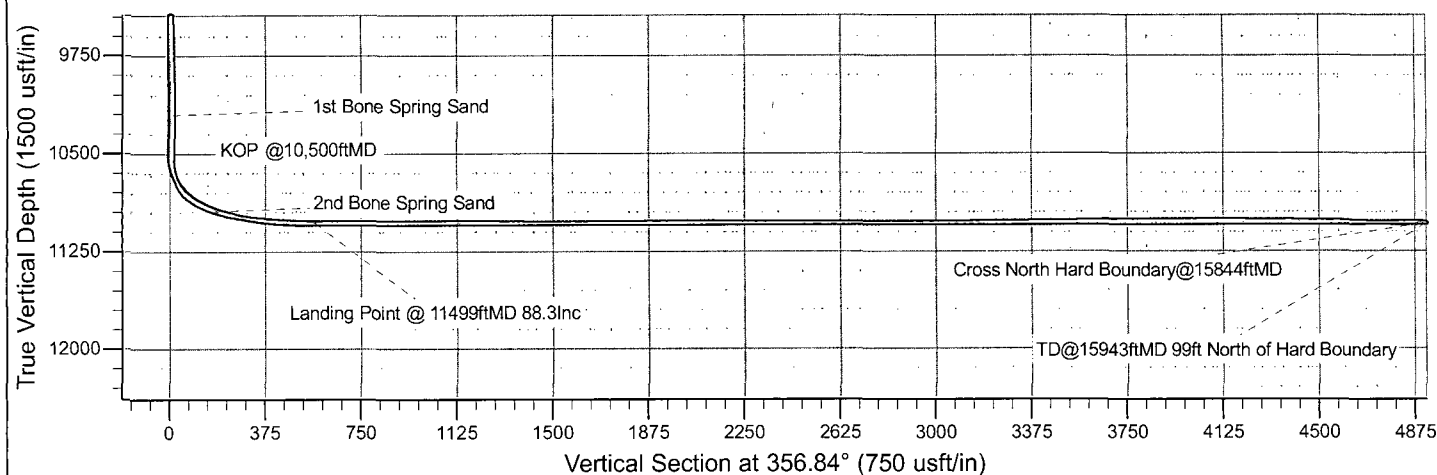


True North: -0.41°
 Magnetic North: 6.79°
 Magnetic Field
 Strength: 48292.8nT
 Dip Angle: 60.11°
 Date: 04/09/2014
 Model: IGRF2010



ANNOTATIONS

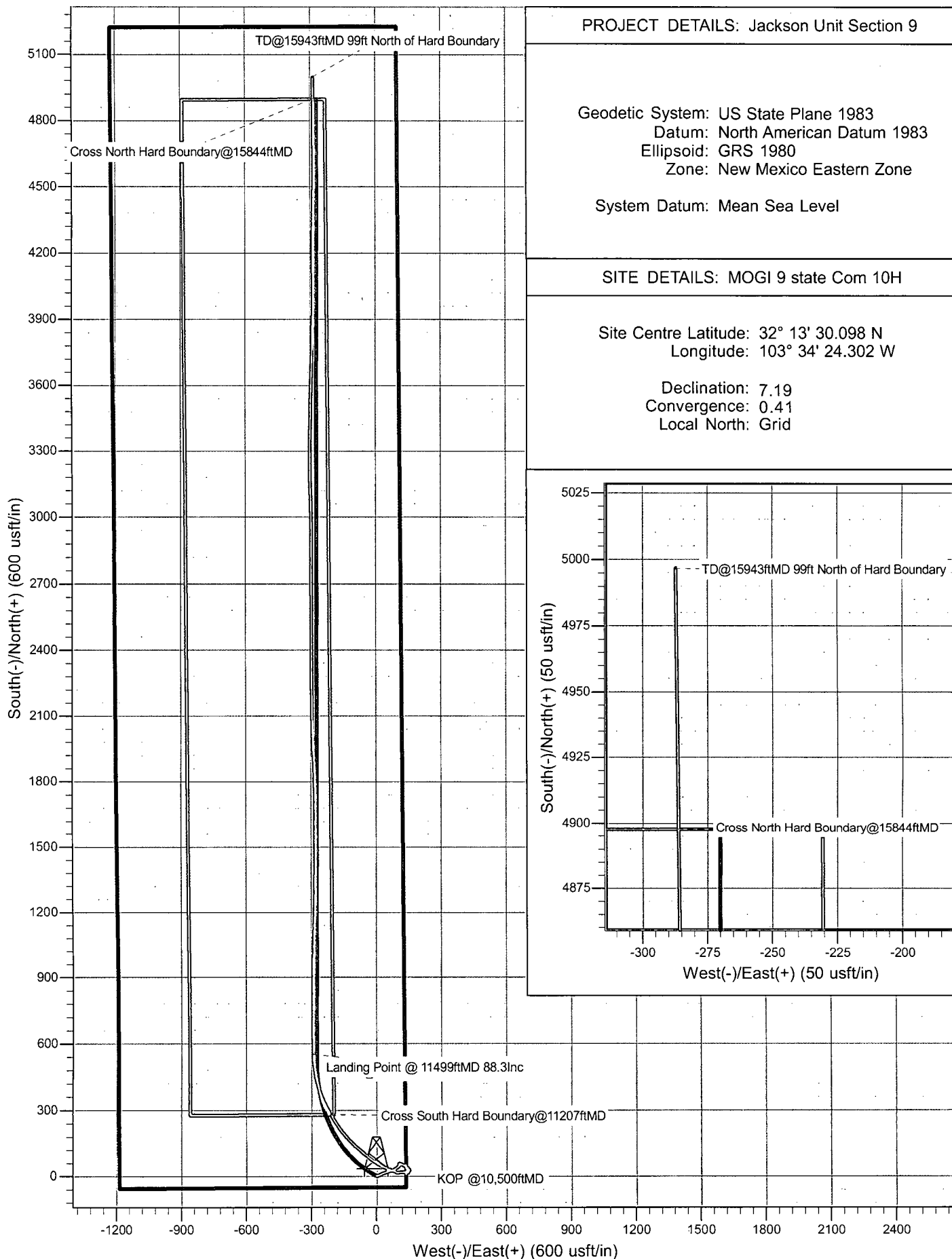
TVD	MD	Inc	Azi	+N/-S	+E/-W	V Sect	Departure	Annotation
10988.7	11207.0	75.44	329.16	279.8	-213.3	291.2	664.3	Cross South Hard Boundary@11207ftMD
11029.2	11499.0	88.30	358.60	554.0	-290.9	569.2	952.9	Landing Point @ 11499ftMD 88.3Inc
11036.1	15844.0	88.88	359.46	4897.7	-286.3	4906.1	5297.2	Cross North Hard Boundary@15844ftMD
11037.9	15943.0	89.00	359.40	4996.7	-287.3	5004.9	5396.2	TD@15943ftMD 99ft North of Boundary



Site: MOGI 9 state Com 10H
Well: MOGI 9 State Com 10H
Wellbore: MOGI 9 State Com 10H
Design: MOGI 9 State Com 10H



True North: -0.41°
Magnetic North: 6.79°
Magnetic Field
Strength: 48292.8nT
Dip Angle: 60.11°
Date: 04/09/2014
Model: IGRF2010

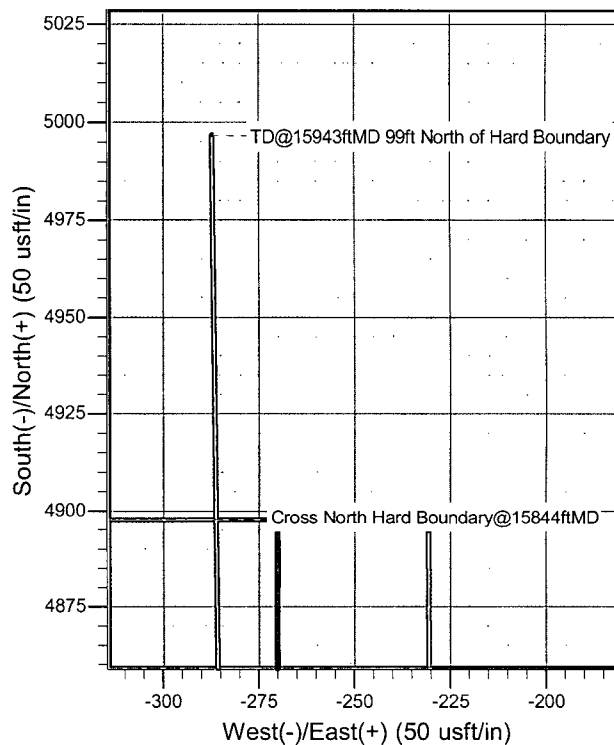


PROJECT DETAILS: Jackson Unit Section 9

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

SITE DETAILS: MOGI 9 state Com 10H

Site Centre Latitude: 32° 13' 30.098 N
Longitude: 103° 34' 24.302 W
Declination: 7.19
Convergence: 0.41
Local North: Grid





Job Number: SVMO-141351
 Company: Murchison Oil & Gas
 Lease/Well: Mogi 9 State Com 10H
 Location: Lea County, NM
 Rig Name: Nabors #M29
 RKB: 22'
 G.L. or M.S.L.: GL

State/Country: New Mexico/USA
 Declination: 6.81°
 Grid: East To Grid North
 File name: S:\2014SU~1\MURCHI~1\MO\MOJI9STC10H.SVY
 Date/Time: 10-Oct-14 / 16:04
 Curve Name: Surface - 10200' M.D. (Rate Gyro)

HOBBS OCD

OCT 29 2014

RECEIVED

MS SURVEY

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane .00
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from
 Surface MD to 10,200 MD is, to the best of
 our knowledge a true and accurate account of the
 well bore.
 Curtis Bingeman 10/10/14
 MS Energy Services Date

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
100.00	.77	67.32	100.00	.26	.62	.26	.67	67.32	.77
200.00	1.03	64.05	199.98	.91	2.05	.91	2.24	66.01	.26
300.00	1.56	66.35	299.96	1.85	4.10	1.85	4.50	65.72	.53
400.00	1.92	63.66	399.91	3.14	6.85	3.14	7.54	65.38	.37
500.00	1.93	57.22	499.86	4.80	9.77	4.80	10.88	63.85	.22
600.00	1.83	63.26	599.80	6.43	12.61	6.43	14.15	63.00	.22
700.00	1.99	70.09	699.75	7.73	15.67	7.73	17.47	63.73	.28
800.00	2.48	63.19	799.67	9.30	19.23	9.30	21.36	64.19	.56
900.00	3.05	65.43	899.55	11.38	23.58	11.38	26.19	64.23	.58

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
1000.00	3.61	67.86	999.38	13.68	28.92	13.68	31.99	64.69	.58
1100.00	4.59	70.87	1099.13	16.17	35.61	16.17	39.12	65.57	1.00
1200.00	5.81	74.00	1198.71	18.88	44.26	18.88	48.12	66.90	1.25
1300.00	6.10	71.91	1298.17	21.93	54.18	21.93	58.45	67.97	.36
1400.00	4.94	70.13	1397.71	25.04	63.28	25.04	68.05	68.41	1.17
1500.00	4.33	64.31	1497.38	28.14	70.73	28.14	76.12	68.30	.77
1600.00	3.64	62.58	1597.14	31.24	76.95	31.24	83.05	67.90	.70
1700.00	2.85	62.78	1696.98	33.84	81.98	33.84	88.69	67.57	.79
1800.00	2.70	62.28	1796.86	36.07	86.27	36.07	93.51	67.31	.15
1900.00	2.17	60.39	1896.77	38.10	90.00	38.10	97.74	67.06	.54
2000.00	1.76	57.83	1996.71	39.85	92.95	39.85	101.13	66.79	.42
2100.00	1.46	54.87	2096.67	41.40	95.29	41.40	103.90	66.51	.31
2200.00	1.02	53.06	2196.65	42.67	97.04	42.67	106.01	66.26	.44
2300.00	.79	52.73	2296.64	43.62	98.30	43.62	107.55	66.07	.23
2400.00	.69	46.82	2396.63	44.45	99.29	44.45	108.79	65.88	.13
2500.00	.65	26.26	2496.62	45.37	99.98	45.37	109.80	65.59	.24
2600.00	.67	19.17	2596.61	46.44	100.43	46.44	110.64	65.18	.08
2700.00	.74	8.44	2696.61	47.63	100.71	47.63	111.41	64.69	.15
2800.00	.69	9.78	2796.60	48.86	100.91	48.86	112.12	64.16	.05
2900.00	.60	15.37	2896.59	49.96	101.15	49.96	112.81	63.72	.11
3000.00	.67	9.54	2996.59	51.04	101.39	51.04	113.51	63.28	.10
3100.00	.45	347.05	3096.58	52.00	101.39	52.00	113.95	62.85	.31
3200.00	.64	333.65	3196.58	52.88	101.06	52.88	114.06	62.38	.23
3300.00	.80	352.65	3296.57	54.07	100.72	54.07	114.32	61.77	.29
3400.00	.85	17.63	3396.56	55.47	100.86	55.47	115.11	61.19	.36
3500.00	.80	36.13	3496.55	56.74	101.49	56.74	116.28	60.79	.27
3600.00	.81	40.92	3596.54	57.84	102.37	57.84	117.58	60.53	.07
3700.00	.50	47.46	3696.53	58.67	103.15	58.67	118.67	60.37	.32
3800.00	.23	33.27	3796.53	59.13	103.58	59.13	119.27	60.28	.28

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
3900.00	.10	297.98	3896.53	59.34	103.62	59.34	119.41	60.20	.26
4000.00	.03	70.47	3996.53	59.39	103.56	59.39	119.39	60.17	.12
4100.00	.24	126.00	4096.53	59.28	103.76	59.28	119.50	60.26	.22
4200.00	.39	167.49	4196.53	58.82	104.00	58.82	119.48	60.51	.26
4300.00	.48	142.46	4296.53	58.16	104.33	58.16	119.45	60.86	.21
4400.00	1.36	106.22	4396.51	57.49	105.73	57.49	120.35	61.46	1.01
4500.00	2.35	107.58	4496.46	56.54	108.82	56.54	122.63	62.54	.99
4600.00	2.42	115.08	4596.37	55.03	112.69	55.03	125.40	63.97	.32
4700.00	2.69	114.74	4696.27	53.15	116.73	53.15	128.26	65.52	.27
4800.00	3.54	118.18	4796.12	50.71	121.58	50.71	131.73	67.36	.87
4900.00	3.58	123.83	4895.93	47.52	126.90	47.52	135.50	69.47	.35
5000.00	2.99	116.77	4995.77	44.60	131.82	44.60	139.16	71.31	.71
5100.00	2.23	124.05	5095.66	42.34	135.76	42.34	142.21	72.68	.83
5200.00	1.35	135.09	5195.61	40.42	138.20	40.42	143.99	73.70	.94
5300.00	.90	121.37	5295.59	39.17	139.71	39.17	145.09	74.34	.52
5400.00	1.13	134.05	5395.58	38.08	141.08	38.08	146.13	74.90	.32
5500.00	.67	125.70	5495.57	37.05	142.27	37.05	147.01	75.40	.48
5600.00	1.01	126.02	5595.56	36.19	143.46	36.19	147.95	75.84	.34
5700.00	.96	136.48	5695.54	35.07	144.75	35.07	148.93	76.38	.19
5800.00	.65	140.88	5795.53	34.02	145.68	34.02	149.60	76.86	.32
5900.00	.70	118.46	5895.52	33.29	146.58	33.29	150.31	77.20	.27
6000.00	.98	135.02	5995.51	32.39	147.72	32.39	151.23	77.63	.37
6100.00	.70	157.83	6095.50	31.22	148.55	31.22	151.80	78.13	.43
6200.00	.36	177.88	6195.50	30.34	148.79	30.34	151.86	78.47	.38
6300.00	.29	171.95	6295.50	29.78	148.84	29.78	151.79	78.69	.08
6400.00	.34	127.98	6395.50	29.34	149.11	29.34	151.97	78.87	.24
6500.00	.36	151.58	6495.49	28.88	149.49	28.88	152.26	79.06	.14
6600.00	.44	174.11	6595.49	28.23	149.68	28.23	152.32	79.32	.17
6700.00	.51	200.82	6695.49	27.43	149.56	27.43	152.06	79.61	.23

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
6800.00	.34	239.38	6795.49	26.86	149.15	26.86	151.55	79.79	.32
6900.00	.20	274.10	6895.48	26.72	148.72	26.72	151.10	79.81	.21
7000.00	.10	153.06	6995.48	26.66	148.59	26.66	150.96	79.83	.27
7100.00	.19	173.69	7095.48	26.41	148.64	26.41	150.97	79.92	.10
7200.00	.34	180.65	7195.48	25.95	148.66	25.95	150.91	80.10	.15
7300.00	.48	223.09	7295.48	25.35	148.37	25.35	150.52	80.30	.32
7400.00	.63	225.51	7395.48	24.66	147.69	24.66	149.74	80.52	.15
7500.00	.54	245.80	7495.47	24.08	146.87	24.08	148.83	80.69	.22
7600.00	.52	246.28	7595.47	23.71	146.02	23.71	147.94	80.78	.02
7700.00	.40	220.07	7695.46	23.26	145.38	23.26	147.23	80.91	.24
7800.00	.33	192.95	7795.46	22.71	145.09	22.71	146.86	81.11	.18
7900.00	.47	175.61	7895.46	22.02	145.06	22.02	146.72	81.37	.18
8000.00	.53	207.93	7995.46	21.20	144.88	21.20	146.42	81.67	.28
8100.00	.54	205.13	8095.45	20.37	144.46	20.37	145.89	81.98	.03
8200.00	.43	200.34	8195.45	19.59	144.13	19.59	145.45	82.26	.12
8300.00	.39	192.01	8295.44	18.90	143.93	18.90	145.16	82.52	.07
8400.00	.67	170.44	8395.44	17.99	143.95	17.99	145.07	82.88	.34
8500.00	.66	206.84	8495.43	16.90	143.79	16.90	144.78	83.30	.42
8600.00	.32	231.05	8595.43	16.21	143.31	16.21	144.23	83.55	.39
8700.00	.27	269.19	8695.43	16.03	142.86	16.03	143.76	83.60	.20
8800.00	.25	275.23	8795.43	16.05	142.41	16.05	143.31	83.57	.03
8900.00	.19	279.15	8895.43	16.10	142.03	16.10	142.94	83.53	.06
9000.00	.15	252.08	8995.43	16.08	141.74	16.08	142.65	83.53	.09
9100.00	.15	195.51	9095.43	15.92	141.58	15.92	142.47	83.59	.14
9200.00	.45	207.80	9195.43	15.44	141.36	15.44	142.20	83.77	.31
9300.00	.61	216.89	9295.42	14.67	140.86	14.67	141.62	84.05	.18
9400.00	1.02	245.84	9395.41	13.88	139.73	13.88	140.41	84.33	.57
9500.00	.75	304.44	9495.40	13.89	138.37	13.89	139.07	84.27	.90
9600.00	1.02	318.47	9595.39	14.92	137.24	14.92	138.05	83.79	.34

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
9700.00	1.48	290.36	9695.37	16.04	135.44	16.04	136.39	83.25	.75
9800.00	1.51	282.50	9795.33	16.77	132.95	16.77	134.00	82.81	.21
9900.00	3.00	275.22	9895.25	17.30	129.05	17.30	130.21	82.37	1.51
10000.00	4.16	271.50	9995.06	17.63	122.82	17.63	124.08	81.83	1.18
10100.00	3.71	267.56	10094.82	17.59	115.96	17.59	117.29	81.38	.52

Last Survey Depth Recorded									
10200.00	3.10	269.45	10194.64	17.42	110.03	17.42	111.40	81.00	.62