



Job Number: 0811175051486/0811175051490
 Company: OXY U.S.A., Inc.
 Lease/Well: Bravo Dome Carbon Dioxide Gas Unit 2333-22
 Location: Union County, New Mexico
 Rig Name: Capstar #25
 RKB:
 G.L. or M.S.L.:

State/Country: New Mexico/USA
 Declination: 7.58°
 Grid: East To Grid
 File name: F:\SURVEY\2008SU-11OXYUSA-11BRAVO22.SVY
 Date/Time: 24-Nov-09 / 09:04
 Curve Name: Surface - 2555' M.D. (COMPOSITE)

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 2,555' MD is, to the best of
 our knowledge a true and accurate account of
 the well bore.
 MS Energy Services
 Date 11/24/09

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
200.00	1.00	.00	.00	.00	.00	.00	.00	.00	.00
200.00	1.00	5.77	199.99	1.74	.18	1.74	1.75	5.77	.50
400.00	.75	343.95	399.97	4.73	-.01	4.73	4.73	359.87	.21
600.00	1.00	297.00	599.95	6.78	-1.93	6.78	7.05	344.13	.37
800.00	1.25	313.03	799.91	9.06	-5.08	9.06	10.39	330.74	.20
1000.00	1.50	320.06	999.85	12.56	-8.35	12.56	15.08	326.37	.15
1200.00	2.25	325.09	1199.74	17.78	-12.28	17.78	21.61	325.37	.38
1400.00	4.00	329.10	1399.44	26.99	-18.11	26.99	32.50	326.14	.88
1600.00	5.75	326.09	1598.71	41.29	-27.28	41.29	49.49	326.55	.88
1800.00	8.00	329.08	1797.26	61.55	-40.02	61.55	73.42	326.96	1.14

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
2000.00	10.75	332.08	1994.57	89.97	-55.91	89.97	105.93	328.14	1.40
2167.00	10.75	334.17	2158.64	117.76	-69.99	117.76	136.99	329.27	.23
Tied Multi-Shot Single Shots Into Multi-Shot Gyroscopic Surveys									
2255.00	11.00	336.88	2245.06	132.86	-76.86	132.86	153.50	329.95	.65
Multi-Shot Single Shot									
2355.00	13.00	342.20	2342.87	152.35	-84.05	152.35	174.00	331.12	2.28
Multi-Shot Single Shot									
2455.00	13.00	332.66	2440.32	173.05	-92.65	173.05	196.30	331.83	2.14
Multi-Shot Single Shot									
2555.00	13.50	336.24	2537.66	193.73	-102.52	193.73	219.18	332.11	.96



December 1, 2009

Occidental Permian LTD.
Well: Bravo Dome Unit 2333 022G
County: Union Co., NM

Leam MWD from 840' – 2,633' MD
Projection: 2,690' MD

This Borehole Survey taken between 7/17/2008 and 7/20/2008 has been conducted and calculated according to the highest professional standards and complies with all known State and Federal requirements.

Reviewed and Approved:

Date: December 1, 2009

Signature:



Nora Tucker
Well Planner

LEAM Drilling Systems, Inc.

Survey Report

Company: OCCIDENTAL PERMIAN LTD.		Date: 12/1/2009		Time: 13:43:11		Page: 1	
Field: Union Co., NM		Co-ordinate(NE) Reference:		Site: Bravo Dome Unit, Grid North			
Site: Bravo Dome Unit		Vertical (TVD) Reference:		SITE 0.0			
Well: 2333 022G		Section (VS) Reference:		Well (0.00N,0.00E,353.41Azi)			
Wellpath: OH		Survey Calculation Method:		Minimum Curvature		Db: Sybase	

Field: Union Co., NM	
Map System: US State Plane Coordinate System 1927	Map Zone: New Mexico, Eastern Zone
Geo Datum: NAD27 (Clarke 1866)	Coordinate System: Site Centre
Sys Datum: Mean Sea Level	Geomagnetic Model: igrf200510

Site: Bravo Dome Unit	
Site Position:	Northing: 1913399.01 ft
From: Map	Easting: 778785.19 ft
Position Uncertainty: 0.00 ft	Latitude: 36 15 17.912 N
Ground Level: 0.00 ft	Longitude: 103 23 16.043 W
	North Reference: Grid
	Grid Convergence: 0.56 deg

Well: 2333 022G		Slot Name:	
Well Position:	+N/-S 0.00 ft	Northing: 1913399.01 ft	Latitude: 36 15 17.912 N
	+E/-W 0.00 ft	Easting: 778785.19 ft	Longitude: 103 23 16.043 W
Position Uncertainty: 0.00 ft			

Wellpath: OH		Drilled From: Surface	
Current Datum: SITE	Height 0.00 ft	Tie-on Depth:	0.00 ft
Magnetic Data: 12/1/2009		Above System Datum:	Mean Sea Level
Field Strength: 0 nT		Declination:	0.00 deg
Vertical Section:	Depth From (TVD)	Mag Dip Angle:	0.00 deg
	ft	+E/-W	Direction
	ft	ft	deg
0.00	0.00	0.00	353.41

Survey Program for Definitive Wellpath				
Date: 12/1/2009		Validated: No		Version: 0
Actual From	To	Survey	Toolcode	Tool Name
ft	ft			
200.00	800.00	Survey #1 (200.00-2555.00)	Gyroscope	Gyroscope
840.00	2633.00	Survey #2 (840.00-2633.00)	MWD	Std MWD
2690.00	2690.00	Survey #3 (2690.00-2690.00)	Project	Projection

Survey										
MD	Incl	Azim	TVD	+N/-S	+E/-W	VS	DLS	Build	Turn	Tool/Comment
ft	deg	deg	ft	ft	ft	ft	deg/100ft	deg/100ft	deg/100ft	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	TIE LINE
200.00	1.00	5.77	199.99	1.74	0.18	1.70	0.50	0.50	0.00	Gyroscope
400.00	0.75	343.95	399.97	4.73	-0.01	4.70	0.21	-0.12	-10.91	Gyroscope
600.00	1.00	297.00	599.95	6.78	-1.93	6.96	0.37	0.12	-23.47	Gyroscope
800.00	1.25	313.03	799.91	9.06	-5.08	9.58	0.20	0.12	8.01	Gyroscope
840.00	1.30	322.40	839.90	9.72	-5.67	10.31	0.54	0.12	23.42	MWD
872.00	1.30	323.70	871.89	10.30	-6.11	10.93	0.09	0.00	4.06	MWD
904.00	1.40	324.20	903.88	10.91	-6.55	11.59	0.31	0.31	1.56	MWD
935.00	1.40	325.20	934.87	11.53	-6.99	12.25	0.08	0.00	3.23	MWD
967.00	1.70	324.90	966.86	12.24	-7.49	13.01	0.94	0.94	-0.94	MWD
999.00	1.80	327.70	998.84	13.05	-8.03	13.88	0.41	0.31	8.75	MWD
1031.00	1.90	327.70	1030.83	13.92	-8.58	14.82	0.31	0.31	0.00	MWD
1063.00	1.80	328.60	1062.81	14.80	-9.13	15.75	0.33	-0.31	2.81	MWD
1094.00	1.40	324.00	1093.80	15.52	-9.60	16.52	1.35	-1.29	-14.84	MWD
1126.00	1.50	328.60	1125.79	16.20	-10.05	17.24	0.48	0.31	14.37	MWD
1158.00	1.70	334.40	1157.78	16.98	-10.47	18.07	0.80	0.62	18.12	MWD
1189.00	1.90	337.50	1188.76	17.87	-10.87	19.00	0.72	0.65	10.00	MWD
1221.00	1.80	338.40	1220.74	18.83	-11.26	20.00	0.33	-0.31	2.81	MWD
1253.00	1.80	339.50	1252.73	19.77	-11.62	20.97	0.11	0.00	3.44	MWD
1284.00	1.70	341.80	1283.71	20.66	-11.93	21.89	0.39	-0.32	7.42	MWD
1316.00	1.50	345.50	1315.70	21.52	-12.19	22.77	0.70	-0.62	11.56	MWD

LEAM Drilling Systems, Inc.

Survey Report

Company: OCCIDENTAL PERMIAN LTD.
Field: Union Co., NM
Site: Bravo Dome Unit
Well: 2333 022G
Wellpath: OH

Date: 12/1/2009 **Time:** 13:43:11 **Page:** 2
Co-ordinate(NE) Reference: Site: Bravo Dome Unit, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,353.41Azi)
Survey Calculation Method: Minimum Curvature **Db:** Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
1346.00	1.50	349.10	1345.69	22.28	-12.36	23.55	0.31	0.00	12.00	MWD
1378.00	1.50	353.40	1377.68	23.11	-12.48	24.39	0.35	0.00	13.44	MWD
1409.00	1.50	358.80	1408.67	23.92	-12.54	25.20	0.46	0.00	17.42	MWD
1441.00	1.30	6.90	1440.66	24.70	-12.51	25.97	0.88	-0.62	25.31	MWD
1473.00	1.40	9.60	1472.65	25.44	-12.40	26.70	0.37	0.31	8.44	MWD
1504.00	1.60	11.10	1503.64	26.24	-12.25	27.47	0.66	0.65	4.84	MWD
1536.00	1.40	15.30	1535.63	27.06	-12.06	28.26	0.71	-0.62	13.12	MWD
1568.00	1.60	14.10	1567.62	27.87	-11.85	29.04	0.63	0.62	-3.75	MWD
1600.00	1.50	18.50	1599.61	28.70	-11.61	29.84	0.49	-0.31	13.75	MWD
1631.00	1.50	19.40	1630.60	29.46	-11.34	30.57	0.08	0.00	2.90	MWD
1663.00	1.50	14.10	1662.59	30.27	-11.10	31.34	0.43	0.00	-16.56	MWD
1695.00	1.40	10.20	1694.58	31.06	-10.93	32.11	0.44	-0.31	-12.19	MWD
1726.00	1.30	5.80	1725.57	31.78	-10.83	32.81	0.46	-0.32	-14.19	MWD
1758.00	1.30	2.90	1757.56	32.50	-10.77	33.52	0.21	0.00	-9.06	MWD
1789.00	1.30	8.00	1788.55	33.20	-10.71	34.21	0.37	0.00	16.45	MWD
1853.00	1.30	11.50	1852.53	34.63	-10.46	35.60	0.12	0.00	5.47	MWD
1916.00	1.40	15.50	1915.52	36.07	-10.11	37.00	0.22	0.16	6.35	MWD
1979.00	1.40	16.20	1978.50	37.55	-9.69	38.42	0.03	0.00	1.11	MWD
2042.00	1.40	15.00	2041.48	39.04	-9.28	39.84	0.05	0.00	-1.90	MWD
2105.00	1.50	15.50	2104.46	40.58	-8.86	41.32	0.16	0.16	0.79	MWD
2168.00	1.50	10.60	2167.44	42.18	-8.49	42.88	0.20	0.00	-7.78	MWD
2230.00	1.30	10.90	2229.42	43.67	-8.20	44.32	0.32	-0.32	0.48	MWD
2294.00	1.40	14.80	2293.40	45.14	-7.87	45.74	0.21	0.16	6.09	MWD
2357.00	1.40	13.00	2356.38	46.63	-7.50	47.18	0.07	0.00	-2.86	MWD
2449.00	1.30	12.50	2448.36	48.75	-7.02	49.23	0.11	-0.11	-0.54	MWD
2541.00	1.20	5.10	2540.33	50.72	-6.71	51.16	0.21	-0.11	-8.04	MWD
2633.00	1.30	9.50	2632.31	52.71	-6.45	53.10	0.15	0.11	4.78	MWD
2690.00	1.30	9.50	2689.30	53.99	-6.24	54.35	0.00	0.00	0.00	Project

LEAM Drilling Systems, Inc.

Survey Report - Geographic

Company: OCCIDENTAL PERMIAN LTD.				Date: 12/1/2009		Time: 13:45:04		Page: 1	
Field: Union Co., NM				Co-ordinate(NE) Reference:		Site: Bravo Dome Unit, Grid North			
Site: Bravo Dome Unit				Vertical (TVD) Reference:		SITE 0.0			
Well: 2333 022G				Section (VS) Reference:		Well (0.00N,0.00E,353.41Azi)			
Wellpath: OH				Survey Calculation Method:		Minimum Curvature		Db: Sybase	

Field: Union Co., NM			
Map System: US State Plane Coordinate System 1927		Map Zone: New Mexico, Eastern Zone	
Geo Datum: NAD27 (Clarke 1866)		Coordinate System: Site Centre	
Sys Datum: Mean Sea Level		Geomagnetic Model: igrf200510	

Site: Bravo Dome Unit					
Site Position:		Northing: 1913399.01 ft		Latitude: 36 15 17.912 N	
From: Map		Easting: 778785.19 ft		Longitude: 103 23 16.043 W	
Position Uncertainty: 0.00 ft				North Reference: Grid	
Ground Level: 0.00 ft				Grid Convergence: 0.56 deg	

Well: 2333 022G				Slot Name:			
Well Position: +N/-S 0.00 ft		Northing: 1913399.01 ft		Latitude: 36 15 17.912 N			
+E/-W 0.00 ft		Easting: 778785.19 ft		Longitude: 103 23 16.043 W			
Position Uncertainty: 0.00 ft							

Wellpath: OH				Drilled From: Surface			
Current Datum: SITE		Height 0.00 ft		Tie-on Depth: 0.00 ft			
Magnetic Data: 12/1/2009				Above System Datum: Mean Sea Level			
Field Strength: 0 nT				Declination: 0.00 deg			
Vertical Section: Depth From (TVD)		+N/-S		Mag Dip Angle: 0.00 deg			
ft		ft		+E/-W		Direction	
				ft		deg	
0.00		0.00		0.00		353.41	

Survey Program for Definitive Wellpath					
Date: 12/1/2009		Validated: No		Version: 0	
Actual From		To		Toolcode	
ft		ft		Tool Name	
200.00	800.00	Survey #1 (200.00-2555.00)		Gyroscope	Gyroscope
840.00	2633.00	Survey #2 (840.00-2633.00)		MWD	Std MWD
2690.00	2690.00	Survey #3 (2690.00-2690.00)		Project	Projection

Survey													
MD	Incl	Azim	TVD	+N/-S	+E/-W	Map	Map	<--- Latitude --->			<--- Longitude --->		
ft	deg	deg	ft	ft	ft	Northing	Easting	Deg	Min	Sec	Deg	Min	Sec
0.00	0.00	0.00	0.00	0.00	0.00	1913399.01	778785.19	36	15	17.912 N	103	23	16.043 W
200.00	1.00	5.77	199.99	1.74	0.18	1913400.75	778785.37	36	15	17.929 N	103	23	16.041 W
400.00	0.75	343.95	399.97	4.73	-0.01	1913403.74	778785.18	36	15	17.958 N	103	23	16.043 W
600.00	1.00	297.00	599.95	6.78	-1.93	1913405.79	778783.26	36	15	17.979 N	103	23	16.066 W
800.00	1.25	313.03	799.91	9.06	-5.08	1913408.07	778780.11	36	15	18.002 N	103	23	16.104 W
840.00	1.30	322.40	839.90	9.72	-5.67	1913408.73	778779.52	36	15	18.008 N	103	23	16.111 W
872.00	1.30	323.70	871.89	10.30	-6.11	1913409.31	778779.08	36	15	18.014 N	103	23	16.116 W
904.00	1.40	324.20	903.88	10.91	-6.55	1913409.92	778778.64	36	15	18.020 N	103	23	16.122 W
935.00	1.40	325.20	934.87	11.53	-6.99	1913410.54	778778.20	36	15	18.026 N	103	23	16.127 W
967.00	1.70	324.90	966.86	12.24	-7.49	1913411.25	778777.70	36	15	18.033 N	103	23	16.133 W
999.00	1.80	327.70	998.84	13.05	-8.03	1913412.06	778777.16	36	15	18.041 N	103	23	16.139 W
1031.00	1.90	327.70	1030.83	13.92	-8.58	1913412.93	778776.61	36	15	18.050 N	103	23	16.146 W
1063.00	1.80	328.60	1062.81	14.80	-9.13	1913413.81	778776.06	36	15	18.059 N	103	23	16.153 W
1094.00	1.40	324.00	1093.80	15.52	-9.60	1913414.53	778775.59	36	15	18.066 N	103	23	16.158 W
1126.00	1.50	328.60	1125.79	16.20	-10.05	1913415.21	778775.14	36	15	18.073 N	103	23	16.164 W
1158.00	1.70	334.40	1157.78	16.98	-10.47	1913415.99	778774.72	36	15	18.080 N	103	23	16.169 W
1189.00	1.90	337.50	1188.76	17.87	-10.87	1913416.88	778774.32	36	15	18.089 N	103	23	16.174 W
1221.00	1.80	338.40	1220.74	18.83	-11.26	1913417.84	778773.93	36	15	18.099 N	103	23	16.178 W
1253.00	1.80	339.50	1252.73	19.77	-11.62	1913418.78	778773.57	36	15	18.108 N	103	23	16.182 W
1284.00	1.70	341.80	1283.71	20.66	-11.93	1913419.67	778773.26	36	15	18.117 N	103	23	16.186 W

LEAM Drilling Systems, Inc.

Survey Report - Geographic

Company: OCCIDENTAL PERMIAN LTD.
Field: Union Co., NM
Site: Bravo Dome Unit
Well: 2333 022G
Wellpath: OH

Date: 12/1/2009 **Time:** 13:45:04 **Page:** 2
Co-ordinate(NE) Reference: Site: Bravo Dome Unit, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,353.41Azi)
Survey Calculation Method: Minimum Curvature **Db:** Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude ---> Deg Min Sec			<--- Longitude ---> Deg Min Sec		
1316.00	1.50	345.50	1315.70	21.52	-12.19	1913420.53	778773.00	36	15	18.125 N	103	23	16.189 W
1346.00	1.50	349.10	1345.69	22.28	-12.36	1913421.29	778772.83	36	15	18.133 N	103	23	16.191 W
1378.00	1.50	353.40	1377.68	23.11	-12.48	1913422.12	778772.71	36	15	18.141 N	103	23	16.193 W
1409.00	1.50	358.80	1408.67	23.92	-12.54	1913422.93	778772.65	36	15	18.149 N	103	23	16.193 W
1441.00	1.30	6.90	1440.66	24.70	-12.51	1913423.71	778772.68	36	15	18.157 N	103	23	16.193 W
1473.00	1.40	9.60	1472.65	25.44	-12.40	1913424.45	778772.79	36	15	18.164 N	103	23	16.191 W
1504.00	1.60	11.10	1503.64	26.24	-12.25	1913425.25	778772.94	36	15	18.172 N	103	23	16.189 W
1536.00	1.40	15.30	1535.63	27.06	-12.06	1913426.07	778773.13	36	15	18.180 N	103	23	16.187 W
1568.00	1.60	14.10	1567.62	27.87	-11.85	1913426.88	778773.34	36	15	18.188 N	103	23	16.184 W
1600.00	1.50	18.50	1599.61	28.70	-11.61	1913427.71	778773.58	36	15	18.196 N	103	23	16.181 W
1631.00	1.50	19.40	1630.60	29.46	-11.34	1913428.47	778773.85	36	15	18.204 N	103	23	16.178 W
1663.00	1.50	14.10	1662.59	30.27	-11.10	1913429.28	778774.09	36	15	18.212 N	103	23	16.175 W
1695.00	1.40	10.20	1694.58	31.06	-10.93	1913430.07	778774.26	36	15	18.220 N	103	23	16.173 W
1726.00	1.30	5.80	1725.57	31.78	-10.83	1913430.79	778774.36	36	15	18.227 N	103	23	16.171 W
1758.00	1.30	2.90	1757.56	32.50	-10.77	1913431.51	778774.42	36	15	18.234 N	103	23	16.171 W
1789.00	1.30	8.00	1788.55	33.20	-10.71	1913432.21	778774.48	36	15	18.241 N	103	23	16.170 W
1853.00	1.30	11.50	1852.53	34.63	-10.46	1913433.64	778774.73	36	15	18.255 N	103	23	16.167 W
1916.00	1.40	15.50	1915.52	36.07	-10.11	1913435.08	778775.08	36	15	18.269 N	103	23	16.162 W
1979.00	1.40	16.20	1978.50	37.55	-9.69	1913436.56	778775.50	36	15	18.284 N	103	23	16.157 W
2042.00	1.40	15.00	2041.48	39.04	-9.28	1913438.05	778775.91	36	15	18.298 N	103	23	16.152 W
2105.00	1.50	15.50	2104.46	40.58	-8.86	1913439.59	778776.33	36	15	18.314 N	103	23	16.146 W
2168.00	1.50	10.60	2167.44	42.18	-8.49	1913441.19	778776.70	36	15	18.329 N	103	23	16.142 W
2230.00	1.30	10.90	2229.42	43.67	-8.20	1913442.68	778776.99	36	15	18.344 N	103	23	16.138 W
2294.00	1.40	14.80	2293.40	45.14	-7.87	1913444.15	778777.32	36	15	18.359 N	103	23	16.134 W
2357.00	1.40	13.00	2356.38	46.63	-7.50	1913445.64	778777.69	36	15	18.373 N	103	23	16.129 W
2449.00	1.30	12.50	2448.36	48.75	-7.02	1913447.76	778778.17	36	15	18.394 N	103	23	16.123 W
2541.00	1.20	5.10	2540.33	50.72	-6.71	1913449.73	778778.48	36	15	18.414 N	103	23	16.119 W
2633.00	1.30	9.50	2632.31	52.71	-6.45	1913451.72	778778.74	36	15	18.433 N	103	23	16.115 W
2690.00	1.30	9.50	2689.30	53.99	-6.24	1913453.00	778778.95	36	15	18.446 N	103	23	16.113 W