

30-015-42668



Job Number: SVMO-141706
 Company: BOPCO, LP
 Lease/Well: Poker Lake Unit CVX JV PC 020H
 Location: Eddy County, NM
 Rig Name: Latshaw #18
 RKB: 29'
 G.L. or M.S.L.: GL

State/Country: New Mexico/USA
 Declination: 7.24°
 Grid: East To Grid North
 File name: S:\2014SU-1\BOPCO\MO\POKERLAKEUN-1\CVX\JVPC020H.SVY
 Date/Time: 18-Dec-14 / 14:12
 Curve Name: Surface - 1144' M.D. (Rate Gyro)

MS SURVEY

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 265.14
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from
 Surface MD to 1144' MD is, to the best of
 our knowledge a true and accurate account of the
 well bore.
 Travis Park 12/18/14
 MS Energy Services
 Date

NM OIL CONSERVATION
 ARTESIA DISTRICT
 OCT 13 2015
 RECEIVED

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	CLOSURE		Dogleg Severity Deg/100
						Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00
84.00	.08	234.39	84.00	-.03	-.05	.06	234.39	.10
176.00	.27	217.62	176.00	-.24	-.23	.34	223.67	.21
267.00	.50	212.33	267.00	-.75	-.58	.94	217.55	.26
359.00	.42	210.09	358.99	-1.38	-.96	1.68	214.81	.09
453.00	.14	122.09	452.99	-1.74	-1.03	2.02	210.76	.47
547.00	.27	69.72	546.99	-1.72	-.73	1.87	202.95	.23
642.00	.26	54.15	641.99	-1.52	-.34	1.56	192.79	.08
736.00	.28	49.02	735.99	-1.24	.00	1.24	179.94	.03
830.00	.33	42.34	829.99	-.89	.36	.96	158.20	.07

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
924.00	.31	37.58	923.99	-.49	.69	-.65	.85	125.27	.04
1019.00	.28	36.77	1018.99	-.10	.99	-.98	1.00	95.86	.03
1113.00	.33	38.85	1112.99	.29	1.30	-1.32	1.33	77.26	.05
Last Survey Depth Recorded									
1144.00	.34	31.77	1143.98	.44	1.40	-1.43	1.47	72.54	.14