



Survey Report

Service Company: Altitude Energy Partners

Location: Jal

Well: Pirate State 101H

Rig: H & P 650

API or UWI: 30-025-43917

Job Number: AEP-1757

State: New Mexico

Operating Company: Centennial Resource Development LLC

County: Lea County

Magnetic Declination: 7.7

Country: United States

Proposed Azimuth: 0.05

Comment:

North Reference: TRUE

Latitude: 32.211181

Longitude: -103.466983

Tie-In Data

MD	Inclination	Azimuth	TVD	NS	EW
0.00	0.00	0.00	0.00	0.00	0.00

Survey Data

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
170.00	0.36	180.78	170.00	-0.53	-0.01	180.78	0.53	-0.53	0.21
325.00	0.51	195.34	324.99	-1.69	-0.20	186.64	1.70	-1.69	0.12
423.00	0.28	198.59	422.99	-2.33	-0.39	189.44	2.37	-2.33	0.24
513.00	0.08	196.74	512.99	-2.60	-0.48	190.37	2.65	-2.60	0.22
607.00	0.11	351.27	606.99	-2.58	-0.51	191.18	2.63	-2.58	0.20
797.00	0.16	7.40	796.99	-2.13	-0.50	193.26	2.19	-2.13	0.03
985.00	0.28	23.02	984.99	-1.45	-0.29	191.27	1.48	-1.45	0.07
1174.00	0.06	193.52	1173.99	-1.12	-0.13	186.69	1.13	-1.12	0.18
1346.00	0.16	26.70	1345.99	-0.99	-0.04	182.57	0.99	-0.99	0.13
1440.00	0.13	138.96	1439.99	-0.96	0.08	174.96	0.96	-0.96	0.26
1629.00	0.29	342.25	1628.99	-0.66	0.08	173.18	0.67	-0.66	0.22
1723.00	0.29	7.94	1722.99	-0.20	0.04	168.85	0.20	-0.20	0.14
1817.00	0.16	282.99	1816.99	0.06	-0.06	319.19	0.08	0.06	0.34
1911.00	0.17	294.01	1910.98	0.15	-0.31	295.83	0.35	0.15	0.04
2006.00	0.17	294.67	2005.98	0.27	-0.57	295.16	0.63	0.27	0.00
2100.00	0.13	203.17	2099.98	0.23	-0.74	287.12	0.77	0.23	0.23
2288.00	0.18	25.19	2287.98	0.30	-0.69	293.22	0.76	0.30	0.16
2382.00	0.28	282.24	2381.98	0.48	-0.86	299.29	0.98	0.48	0.39
2476.00	0.11	258.59	2475.98	0.51	-1.17	293.61	1.28	0.51	0.20
2570.00	0.25	333.19	2569.98	0.68	-1.35	296.61	1.51	0.68	0.26
2664.00	0.28	271.27	2663.98	0.86	-1.67	297.34	1.88	0.86	0.29
2759.00	0.25	308.51	2758.98	1.00	-2.07	295.79	2.29	1.00	0.18

2853.00	0.20	349.99	2852.98	1.29	-2.26	299.73	2.60	1.29	0.18
2947.00	0.28	17.32	2946.98	1.67	-2.22	306.99	2.77	1.67	0.15
3042.00	0.40	3.01	3041.98	2.22	-2.13	316.22	3.08	2.22	0.15
3136.00	0.20	349.84	3135.98	2.71	-2.14	321.70	3.45	2.71	0.22
3230.00	0.30	341.16	3229.97	3.10	-2.25	324.08	3.83	3.10	0.11
3324.00	0.36	331.22	3323.97	3.60	-2.47	325.51	4.36	3.59	0.09
3419.00	0.40	3.35	3418.97	4.19	-2.59	328.23	4.93	4.19	0.23
3513.00	0.43	18.09	3512.97	4.85	-2.47	333.06	5.44	4.85	0.12
3702.00	0.45	29.82	3701.96	6.17	-1.88	343.08	6.45	6.17	0.05
3796.00	0.25	29.07	3795.96	6.67	-1.59	346.56	6.86	6.67	0.21
3890.00	0.35	21.59	3889.96	7.12	-1.39	348.96	7.25	7.11	0.11
3985.00	0.61	39.28	3984.96	7.78	-0.96	352.95	7.84	7.78	0.31
4079.00	0.23	32.97	4078.95	8.32	-0.54	356.27	8.34	8.32	0.41
4173.00	0.28	64.99	4172.95	8.58	-0.23	358.46	8.58	8.58	0.16
4268.00	0.13	29.95	4267.95	8.77	0.03	0.22	8.77	8.77	0.20
4362.00	0.08	83.69	4361.95	8.87	0.15	0.98	8.87	8.87	0.11
4456.00	0.23	98.78	4455.95	8.85	0.40	2.61	8.86	8.85	0.16
4644.00	1.21	103.96	4643.93	8.31	2.70	18.01	8.74	8.31	0.52
4739.00	0.76	120.61	4738.92	7.75	4.22	28.56	8.82	7.75	0.56
4833.00	0.73	152.87	4832.91	6.90	5.03	36.09	8.54	6.90	0.44
4927.00	1.08	128.02	4926.90	5.82	6.00	45.87	8.36	5.82	0.55
5022.00	1.74	116.59	5021.87	4.62	7.99	59.96	9.23	4.63	0.75
5116.00	1.64	118.71	5115.83	3.34	10.45	72.29	10.97	3.35	0.13
5210.00	0.90	117.37	5209.81	2.35	12.29	79.16	12.51	2.36	0.79
5305.00	0.53	111.16	5304.80	1.85	13.36	82.11	13.48	1.86	0.40
5373.00	0.46	118.60	5372.80	1.61	13.89	83.40	13.98	1.62	0.14
5482.00	0.63	96.16	5481.79	1.33	14.87	84.88	14.93	1.35	0.25
5577.00	0.68	106.40	5576.79	1.12	15.93	85.99	15.97	1.13	0.13
5765.00	0.64	103.29	5764.77	0.56	18.02	88.22	18.03	0.58	0.03
5859.00	0.68	119.98	5858.77	0.16	19.02	89.51	19.02	0.18	0.21
5953.00	0.57	119.22	5952.76	-0.35	19.91	90.99	19.91	-0.33	0.12
6142.00	0.73	44.56	6141.75	0.05	21.57	89.86	21.57	0.07	0.42
6236.00	0.13	94.11	6235.75	0.47	22.10	88.78	22.10	0.49	0.69
6330.00	0.32	315.52	6329.75	0.65	22.02	88.30	22.03	0.67	0.45
6519.00	0.40	318.55	6518.75	1.52	21.22	85.89	21.27	1.54	0.04
6662.00	0.38	285.39	6661.74	2.02	20.43	84.34	20.53	2.04	0.16
6707.00	0.41	311.15	6706.74	2.17	20.16	83.86	20.28	2.19	0.40
6802.00	0.34	293.46	6801.74	2.50	19.65	82.74	19.81	2.52	0.14
6896.00	0.45	319.12	6895.74	2.89	19.15	81.40	19.37	2.91	0.22
6990.00	0.52	304.23	6989.73	3.41	18.56	79.58	18.87	3.43	0.15
7085.00	0.55	302.66	7084.73	3.90	17.82	77.65	18.24	3.92	0.04
7179.00	0.48	312.52	7178.73	4.41	17.15	75.57	17.70	4.43	0.12
7273.00	0.66	289.68	7272.72	4.86	16.35	73.44	17.05	4.87	0.30
7367.00	0.60	294.23	7366.72	5.24	15.39	71.18	16.26	5.26	0.08
7462.00	0.50	289.60	7461.71	5.59	14.54	68.98	15.58	5.60	0.12
7556.00	0.38	273.57	7555.71	5.74	13.85	67.47	14.99	5.76	0.18
7650.00	0.23	246.25	7649.71	5.69	13.36	66.94	14.52	5.70	0.22

7745.00	0.20	225.64	7744.71	5.50	13.07	67.19	14.18	5.51	0.09
7839.00	0.64	236.09	7838.70	5.09	12.52	67.88	13.51	5.10	0.47
7933.00	0.79	234.97	7932.70	4.42	11.55	69.05	12.37	4.43	0.16
8028.00	0.80	243.26	8027.69	3.75	10.42	70.22	11.08	3.76	0.12
8122.00	0.90	250.96	8121.68	3.21	9.14	70.63	9.69	3.22	0.16
8216.00	0.99	242.13	8215.66	2.59	7.72	71.44	8.15	2.60	0.18
8311.00	1.43	243.69	8310.64	1.68	5.93	74.16	6.17	1.69	0.46
8405.00	1.65	243.55	8404.61	0.56	3.67	81.32	3.71	0.56	0.23
8499.00	1.55	258.05	8498.57	-0.31	1.22	104.12	1.25	-0.30	0.44
8593.00	1.61	271.50	8592.54	-0.53	-1.35	248.39	1.45	-0.54	0.40
8687.00	1.77	269.32	8686.50	-0.52	-4.12	262.85	4.15	-0.52	0.18
8735.00	1.92	265.49	8734.47	-0.59	-5.66	264.06	5.69	-0.59	0.40
8792.00	1.93	272.15	8791.46	0.10	-6.05	270.93	6.05	0.09	6.12
8831.00	1.56	282.74	8830.42	-0.46	-8.73	266.97	8.74	-0.47	1.17
8862.00	2.13	313.04	8861.41	0.02	-9.56	270.14	9.56	0.02	3.58
8894.00	3.64	335.38	8893.36	1.35	-10.42	277.40	10.51	1.34	5.80
8925.00	5.42	350.19	8924.27	3.69	-11.08	288.42	11.68	3.68	6.83
8956.00	7.39	352.49	8955.07	7.11	-11.59	301.53	13.60	7.10	6.41
8988.00	9.62	350.16	8986.72	11.79	-12.32	313.74	17.05	11.78	7.05
9020.00	11.97	351.48	9018.15	17.70	-13.27	323.15	22.12	17.69	7.38
9051.00	14.67	354.40	9048.31	24.79	-14.12	330.33	28.53	24.78	8.97
9082.00	18.45	356.95	9078.02	33.60	-14.77	336.27	36.70	33.59	12.41
9114.00	22.40	357.68	9108.01	44.75	-15.29	341.14	47.29	44.74	12.37
9145.00	25.32	358.31	9136.35	57.28	-15.72	344.65	59.40	57.27	9.46
9177.00	27.91	0.93	9164.96	71.61	-15.80	347.56	73.34	71.60	8.88
9208.00	31.99	4.65	9191.82	87.06	-15.02	350.21	88.35	87.05	14.46
9239.00	36.41	6.45	9217.45	104.40	-13.32	352.73	105.24	104.38	14.63
9271.00	40.10	7.45	9242.58	124.06	-10.91	354.97	124.54	124.05	11.69
9302.00	44.85	7.50	9265.43	144.81	-8.19	356.76	145.04	144.80	15.32
9334.00	48.94	7.11	9287.30	167.98	-5.22	358.22	168.06	167.97	12.81
9365.00	52.46	6.76	9306.93	191.79	-2.33	359.30	191.80	191.78	11.39
9397.00	57.25	5.41	9325.34	217.80	0.44	0.11	217.80	217.80	15.36
9428.00	61.12	2.67	9341.22	244.35	2.30	0.54	244.36	244.35	14.61
9459.00	64.95	0.35	9355.28	271.96	3.02	0.64	271.98	271.96	14.04
9491.00	70.16	358.80	9367.49	301.52	2.79	0.53	301.54	301.53	16.88
9522.00	75.44	359.00	9376.66	331.12	2.22	0.38	331.13	331.12	17.04
9544.00	79.35	359.49	9381.46	352.59	1.94	0.32	352.59	352.59	17.91
9575.00	83.37	359.80	9386.11	383.23	1.75	0.26	383.23	383.23	13.01
9607.00	84.39	359.91	9389.52	415.04	1.67	0.23	415.05	415.04	3.21
9638.00	86.30	0.29	9392.04	445.94	1.72	0.22	445.94	445.94	6.28
9669.00	87.48	0.20	9393.72	476.89	1.86	0.22	476.90	476.89	3.82
9701.00	88.32	0.36	9394.89	508.87	2.01	0.23	508.87	508.87	2.67
9732.00	89.22	0.31	9395.56	539.86	2.19	0.23	539.87	539.86	2.91
9764.00	88.65	0.23	9396.15	571.86	2.34	0.23	571.86	571.86	1.80
9795.00	88.82	0.15	9396.84	602.85	2.45	0.23	602.85	602.85	0.61
9827.00	87.82	0.10	9397.78	634.83	2.52	0.23	634.84	634.84	3.13
9858.00	87.98	359.86	9398.91	665.81	2.51	0.22	665.82	665.82	0.93

