



Job Number: NM14569AD
Company: Adventure Exploration Partners II
Lease/Well: Bevo 11 Federal 4H
Location: Lea Co
Rig Name: Latshaw #4
State/County: New Mexico/ Lea CO.
Country: USA
API Number: 30-025-

Elev. GL: 3531.00 ft RKB: 22.00 ft
System: US State Plane 1983
Group: New Mexico Eastern Zone
Datum: GRS80
Mag. Decl.: 7.16° (C:\HawkEye\IGRF2005.mif)
Grid Conv.: 0.42644 E
Date: Sunday, December 07, 2014



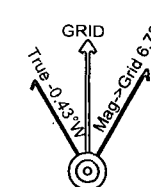
HOBBS OGD
MAR 06 2015
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Performance Drilling Technology, Inc.
Directional Survey Report
Report Prepared by:
Kevin Mc Clard

Calculated by HawkEye Software
Minimum Curvature Method
Vertical Section Plane 2.64°

Northing (US ft): 510514.50 Easting (US ft): 786947.70
Latitude: 32°24'3.4550" N Longitude: -103°32'15.1447" W

Well Location: 708.46 FSL, 898.44 FEL, Section 11, T22S, R33E, New Mexico Principal Meridian, Lea County, NM
Direction Reference: Grid North



Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	EW (Ft)	NS (Ft)	VS (Ft)	DLS °/100 Ft	Easting (US ft)	Northing (US ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	786947.70	510514.50
100.00	0.41	204.40	100.00	-0.15	-0.33	-0.33	0.41	786947.55	510514.17
200.00	0.41	237.58	200.00	-0.60	-0.84	-0.87	0.23	786947.10	510513.66
300.00	0.50	194.54	299.99	-1.01	-1.46	-1.50	0.34	786946.69	510513.04
400.00	0.24	153.96	399.99	-1.03	-2.07	-2.11	0.35	786946.67	510512.43
500.00	0.17	209.35	499.99	-1.01	-2.39	-2.43	0.20	786946.69	510512.11
600.00	0.18	241.31	599.99	-1.22	-2.59	-2.64	0.10	786946.48	510511.91
700.00	0.40	325.35	699.99	-1.55	-2.38	-2.45	0.42	786946.15	510512.12
800.00	0.59	316.24	799.99	-2.11	-1.72	-1.81	0.21	786945.59	510512.78
900.00	0.22	343.08	899.98	-2.52	-1.16	-1.28	0.41	786945.18	510513.34
1000.00	0.16	320.01	999.98	-2.67	-0.87	-1.00	0.10	786945.03	510513.63
1100.00	0.20	221.48	1099.98	-2.87	-0.90	-1.03	0.27	786944.83	510513.60
1200.00	0.38	117.11	1199.98	-2.69	-1.18	-1.30	0.47	786945.01	510513.32
1300.00	0.24	218.06	1299.98	-2.53	-1.50	-1.61	0.49	786945.17	510513.00
1400.00	0.12	69.12	1399.98	-2.56	-1.62	-1.74	0.35	786945.14	510512.88
1500.00	0.38	236.92	1499.98	-2.74	-1.77	-1.89	0.50	786944.96	510512.73
1600.00	0.25	203.02	1599.98	-3.10	-2.15	-2.29	0.22	786944.60	510512.35
1700.00	0.30	276.77	1699.98	-3.45	-2.32	-2.47	0.33	786944.25	510512.18
1800.00	0.70	283.79	1799.97	-4.30	-2.14	-2.34	0.40	786943.40	510512.36
1900.00	0.45	268.23	1899.97	-5.28	-2.01	-2.25	0.29	786942.42	510512.49
2000.00	0.78	278.47	1999.96	-6.35	-1.92	-2.21	0.35	786941.35	510512.58
2100.00	0.54	265.30	2099.96	-7.49	-1.86	-2.20	0.28	786940.21	510512.64
2200.00	0.56	200.85	2199.95	-8.14	-2.35	-2.73	0.59	786939.56	510512.15
2300.00	0.90	123.57	2299.95	-7.66	-3.24	-3.59	0.95	786940.04	510511.26

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Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	EW (Ft)	NS (Ft)	VS (Ft)	DLS %/100 Ft	Easting (US ft)	Northing (US ft)
2400.00	1.18	118.59	2399.93	-6.10	-4.17	-4.45	0.29	786941.60	510510.33
2500.00	1.25	114.26	2499.91	-4.20	-5.11	-5.30	0.12	786943.50	510509.39
2600.00	1.34	110.60	2599.88	-2.11	-5.97	-6.06	0.12	786945.59	510508.53
2700.00	1.30	109.91	2699.85	0.05	-6.77	-6.76	0.04	786947.75	510507.73
2800.00	1.13	92.61	2799.83	2.10	-7.20	-7.10	0.40	786949.80	510507.30
2900.00	1.05	71.10	2899.82	3.95	-6.95	-6.76	0.41	786951.65	510507.55
3000.00	0.93	58.47	2999.80	5.51	-6.23	-5.97	0.25	786953.21	510508.27
3100.00	1.06	53.12	3099.79	6.94	-5.25	-4.92	0.16	786954.64	510509.25
3200.00	1.25	39.93	3199.77	8.38	-3.86	-3.47	0.33	786956.08	510510.64
3300.00	0.93	26.17	3299.75	9.44	-2.29	-1.85	0.41	786957.14	510512.21
3400.00	0.45	33.26	3399.74	10.02	-1.24	-0.77	0.49	786957.72	510513.26
3500.00	0.46	88.28	3499.74	10.63	-0.90	-0.40	0.42	786958.33	510513.60
3600.00	0.64	98.13	3599.73	11.59	-0.96	-0.43	0.20	786959.29	510513.54
3700.00	0.57	93.00	3699.73	12.64	-1.07	-0.48	0.09	786960.34	510513.43
3800.00	0.71	88.92	3799.72	13.75	-1.08	-0.45	0.15	786961.45	510513.42
3900.00	0.69	82.10	3899.71	14.97	-0.99	-0.30	0.09	786962.67	510513.51
4000.00	0.63	87.79	3999.71	16.11	-0.88	-0.14	0.09	786963.81	510513.62
4100.00	0.79	82.91	4099.70	17.35	-0.78	0.02	0.17	786965.05	510513.72
4200.00	0.47	70.43	4199.69	18.42	-0.55	0.29	0.35	786966.12	510513.95
4300.00	0.45	119.45	4299.69	19.15	-0.61	0.27	0.38	786966.85	510513.89
4400.00	0.59	87.74	4399.69	20.00	-0.78	0.14	0.31	786967.70	510513.72
4500.00	0.74	88.91	4499.68	21.16	-0.75	0.23	0.15	786968.86	510513.75
4600.00	0.71	82.45	4599.67	22.42	-0.66	0.38	0.09	786970.12	510513.84
4700.00	0.35	85.32	4699.67	23.34	-0.55	0.53	0.36	786971.04	510513.95
4800.00	0.21	60.03	4799.67	23.80	-0.43	0.66	0.18	786971.50	510514.07
4900.00	0.61	82.42	4899.66	24.49	-0.27	0.86	0.42	786972.19	510514.23
5000.00	0.36	73.16	4999.66	25.32	-0.11	1.06	0.26	786973.02	510514.39
5100.00	0.32	89.94	5099.66	25.90	-0.02	1.17	0.11	786973.60	510514.48
5225.00	0.17	81.20	5224.66	26.43	0.01	1.23	0.12	786974.13	510514.51
5330.00	0.30	302.00	5329.66	26.35	0.18	1.39	0.42	786974.05	510514.68
5425.00	0.30	257.10	5424.65	25.90	0.26	1.45	0.24	786973.60	510514.76
5519.00	1.50	213.70	5518.64	24.98	-0.82	0.33	1.38	786972.68	510513.68
5614.00	3.40	196.00	5613.55	23.51	-4.57	-3.48	2.13	786971.21	510509.93
5710.00	5.30	197.20	5709.27	21.41	-11.54	-10.54	1.98	786969.11	510502.96
5805.00	5.50	196.30	5803.85	18.84	-20.10	-19.21	0.23	786966.54	510494.40
5900.00	5.10	198.20	5898.44	16.24	-28.48	-27.70	0.46	786963.94	510486.02
5995.00	4.90	192.10	5993.08	14.07	-36.46	-35.77	0.60	786961.77	510478.04
6090.00	4.90	190.00	6087.73	12.52	-44.42	-43.80	0.19	786960.22	510470.08
6185.00	4.90	190.90	6182.39	11.05	-52.40	-51.84	0.08	786958.75	510462.10
6280.00	4.90	177.40	6277.04	10.46	-60.44	-59.89	1.21	786958.16	510454.06
6375.00	4.90	177.60	6371.70	10.82	-68.55	-67.98	0.02	786958.52	510445.95

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	EW (Ft)	NS (Ft)	VS (Ft)	DLS %/100 Ft	Easting (US ft)	Northing (US ft)
6470.00	4.90	179.20	6466.35	11.04	-76.66	-76.07	0.14	786958.74	510437.84
6565.00	5.20	181.10	6560.98	11.02	-85.02	-84.42	0.36	786958.72	510429.48
6659.00	4.20	180.40	6654.66	10.91	-92.72	-92.12	1.07	786958.61	510421.78
6754.00	4.40	195.10	6749.40	9.94	-99.72	-99.15	1.18	786957.64	510414.78
6850.00	4.10	193.30	6845.13	8.19	-106.61	-106.12	0.34	786955.89	510407.89
6945.00	4.30	194.70	6939.88	6.50	-113.36	-112.94	0.24	786954.20	510401.14
7039.00	4.60	185.10	7033.60	5.27	-120.52	-120.15	0.85	786952.97	510393.98
7134.00	4.70	188.50	7128.28	4.36	-128.17	-127.83	0.31	786952.06	510386.33
7229.00	4.60	184.60	7222.97	3.48	-135.82	-135.51	0.35	786951.18	510378.68
7324.00	4.30	189.80	7317.69	2.57	-143.12	-142.85	0.53	786950.27	510371.38
7419.00	4.20	186.70	7412.43	1.56	-150.09	-149.86	0.26	786949.26	510364.41
7514.00	4.40	179.90	7507.16	1.16	-157.19	-156.97	0.58	786948.86	510357.31
7609.00	4.30	180.60	7601.88	1.13	-164.39	-164.16	0.12	786948.83	510350.11
7703.00	4.50	178.10	7695.61	1.21	-171.60	-171.36	0.29	786948.91	510342.90
7798.00	3.70	178.90	7790.36	1.39	-178.39	-178.14	0.84	786949.09	510336.11
7893.00	3.90	185.90	7885.16	1.12	-184.67	-184.42	0.53	786948.82	510329.83
7989.00	4.70	187.40	7980.88	0.28	-191.82	-191.60	0.84	786947.98	510322.68
8084.00	4.40	190.20	8075.58	-0.87	-199.26	-199.09	0.39	786946.83	510315.24
8179.00	5.10	188.20	8170.26	-2.12	-207.03	-206.91	0.76	786945.58	510307.47
8274.00	4.70	188.30	8264.91	-3.28	-215.06	-214.98	0.42	786944.42	510299.44
8369.00	4.60	194.80	8359.60	-4.82	-222.59	-222.58	0.56	786942.88	510291.91
8464.00	4.30	194.40	8454.31	-6.67	-229.73	-229.79	0.32	786941.03	510284.77
8559.00	4.70	192.00	8549.02	-8.37	-236.98	-237.12	0.47	786939.33	510277.52
8654.00	4.60	191.80	8643.71	-9.96	-244.52	-244.72	0.11	786937.74	510269.98
8749.00	4.50	181.80	8738.41	-10.85	-251.97	-252.21	0.84	786936.85	510262.53
8845.00	4.20	186.20	8834.13	-11.35	-259.23	-259.48	0.47	786936.35	510255.27
8940.00	4.70	179.40	8928.85	-11.69	-266.58	-266.84	0.76	786936.01	510247.92
9035.00	4.80	185.40	9023.52	-12.02	-274.43	-274.69	0.53	786935.68	510240.07
9130.00	4.50	187.60	9118.21	-12.89	-282.08	-282.38	0.37	786934.81	510232.42
9225.00	4.90	183.10	9212.89	-13.60	-289.83	-290.15	0.57	786934.10	510224.67
9320.00	4.80	180.70	9307.55	-13.87	-297.85	-298.18	0.24	786933.83	510216.65
9415.00	4.70	184.10	9402.22	-14.19	-305.71	-306.04	0.31	786933.51	510208.79
9510.00	4.70	180.70	9496.90	-14.52	-313.48	-313.82	0.29	786933.18	510201.02
9605.00	4.40	184.00	9591.60	-14.82	-321.01	-321.35	0.42	786932.88	510193.49
9700.00	5.30	174.40	9686.26	-14.65	-329.01	-329.34	1.27	786933.05	510185.49
9753.00	4.00	128.50	9739.11	-12.96	-332.60	-332.85	7.20	786934.74	510181.90
9784.00	5.30	105.00	9770.01	-10.73	-333.65	-333.79	7.36	786936.97	510180.85
9816.00	4.60	101.20	9801.89	-8.05	-334.28	-334.29	2.41	786939.65	510180.22
9847.00	2.90	109.40	9832.82	-6.09	-334.78	-334.70	5.74	786941.61	510179.72
9879.00	2.00	109.20	9864.79	-4.80	-335.23	-335.10	2.81	786942.90	510179.27
9910.00	1.10	108.40	9895.78	-4.00	-335.50	-335.33	2.90	786943.70	510179.00

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	EW (Ft)	NS (Ft)	VS (Ft)	DLS %/100 Ft	Easting (US ft)	Northing (US ft)
9942.00	1.00	92.90	9927.77	-3.43	-335.61	-335.42	0.94	786944.27	510178.89
9973.00	0.70	62.70	9958.77	-2.99	-335.54	-335.32	1.71	786944.71	510178.96
10005.00	0.70	67.80	9990.77	-2.64	-335.38	-335.14	0.19	786945.06	510179.12
10036.00	0.30	44.90	10021.77	-2.41	-335.25	-335.00	1.42	786945.29	510179.25
10068.00	0.90	295.80	10053.76	-2.57	-335.08	-334.84	3.24	786945.13	510179.42
10099.00	1.00	295.30	10084.76	-3.04	-334.86	-334.64	0.32	786944.66	510179.64
10130.00	0.80	296.60	10115.76	-3.48	-334.65	-334.45	0.65	786944.22	510179.85
10162.00	0.30	0.60	10147.75	-3.67	-334.46	-334.28	2.25	786944.03	510180.04
10194.00	0.30	318.20	10179.75	-3.73	-334.32	-334.13	0.68	786943.97	510180.18
10225.00	0.40	285.70	10210.75	-3.89	-334.23	-334.05	0.70	786943.81	510180.27
10257.00	0.70	288.80	10242.75	-4.18	-334.13	-333.97	0.94	786943.52	510180.37
10288.00	0.70	285.70	10273.75	-4.54	-334.02	-333.88	0.12	786943.16	510180.48
10320.00	0.90	290.50	10305.75	-4.97	-333.88	-333.75	0.66	786942.73	510180.62
10351.00	1.10	299.50	10336.74	-5.45	-333.65	-333.55	0.82	786942.25	510180.85
10414.00	4.30	331.50	10399.67	-7.11	-331.27	-331.25	5.42	786940.59	510183.23
10445.00	5.70	338.50	10430.55	-8.22	-328.82	-328.85	4.92	786939.48	510185.68
10477.00	9.30	346.90	10462.27	-9.39	-324.82	-324.91	11.73	786938.31	510189.68
10508.00	15.10	348.30	10492.56	-10.78	-318.42	-318.58	18.73	786936.92	510196.08
10540.00	22.20	350.10	10522.86	-12.67	-308.37	-308.63	22.26	786935.03	510206.13
10571.00	26.90	350.40	10551.05	-14.85	-295.68	-296.05	15.17	786932.85	510218.82
10603.00	30.40	351.00	10579.12	-17.32	-280.54	-281.04	10.97	786930.38	510233.96
10634.00	32.50	353.10	10605.57	-19.55	-264.53	-265.15	7.64	786928.15	510249.97
10666.00	33.90	356.80	10632.35	-21.08	-247.08	-247.79	7.69	786926.62	510267.42
10697.00	36.30	0.60	10657.71	-21.47	-229.27	-230.01	10.47	786926.23	510285.23
10729.00	39.00	3.90	10683.05	-20.68	-209.74	-210.47	10.53	786927.02	510304.76
10760.00	41.70	6.50	10706.67	-18.85	-189.76	-190.43	10.26	786928.85	510324.74
10792.00	43.70	7.80	10730.19	-16.15	-168.23	-168.80	6.83	786931.55	510346.27
10823.00	46.30	8.10	10752.11	-13.11	-146.52	-146.97	8.41	786934.59	510367.98
10855.00	49.20	8.10	10773.62	-9.78	-123.08	-123.40	9.06	786937.92	510391.42
10886.00	51.90	7.90	10793.32	-6.45	-99.37	-99.57	8.72	786941.25	510415.13
10918.00	54.00	7.60	10812.60	-3.00	-74.07	-74.13	6.61	786944.70	510440.43
10949.00	56.50	6.50	10830.27	0.12	-48.79	-48.74	8.58	786947.82	510465.71
10981.00	59.40	5.50	10847.25	2.95	-21.82	-21.66	9.44	786950.65	510492.68
11012.00	62.70	4.40	10862.25	5.29	5.20	5.44	11.09	786952.99	510519.70
11044.00	66.90	2.70	10875.87	7.07	34.09	34.38	13.98	786954.77	510548.59
11075.00	71.80	0.10	10886.80	7.77	63.08	63.37	17.65	786955.47	510577.58
11107.00	74.20	359.60	10896.16	7.69	93.68	93.93	7.65	786955.39	510608.18
11126.00	74.10	359.50	10901.35	7.55	111.96	112.18	0.73	786955.25	510626.46
11158.00	75.30	359.10	10909.79	7.17	142.82	143.00	3.94	786954.87	510657.32
11189.00	77.40	359.00	10917.11	6.67	172.94	173.06	6.78	786954.37	510687.44
11220.00	80.30	0.20	10923.10	6.46	203.35	203.43	10.10	786954.16	510717.85

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	EW (Ft)	NS (Ft)	VS (Ft)	DLS %/100 Ft	Easting (US ft)	Northing (US ft)
11251.00	83.90	1.00	10927.36	6.78	234.05	234.11	11.89	786954.48	510748.55
11283.00	87.80	2.30	10929.68	7.70	265.94	266.01	12.84	786955.40	510780.44
11314.00	92.20	3.20	10929.68	9.19	296.90	297.01	14.49	786956.89	510811.40
11346.00	94.00	3.50	10927.95	11.05	328.80	328.96	5.70	786958.75	510843.30
11377.00	94.80	3.20	10925.57	12.86	359.65	359.86	2.76	786960.56	510874.15
11473.00	94.30	3.80	10917.95	18.70	455.17	455.55	0.81	786966.40	510969.67
11567.00	88.60	3.20	10915.57	24.44	548.92	549.47	6.10	786972.14	511063.42
11661.00	89.30	2.10	10917.30	28.78	642.81	643.45	1.39	786976.48	511157.31
11756.00	91.00	1.00	10917.05	31.35	737.77	738.43	2.13	786979.05	511252.27
11850.00	90.00	1.70	10916.23	33.57	831.74	832.40	1.30	786981.27	511346.24
11945.00	91.40	1.20	10915.07	35.97	926.69	927.37	1.56	786983.67	511441.19
12039.00	91.10	2.90	10913.02	39.33	1020.61	1021.34	1.84	786987.03	511535.11
12134.00	86.80	4.60	10914.76	45.54	1115.36	1116.28	4.87	786993.24	511629.86
12228.00	86.60	4.70	10920.17	53.15	1208.90	1210.06	0.24	787000.85	511723.40
12323.00	87.80	4.40	10924.81	60.68	1303.48	1304.90	1.30	787008.38	511817.98
12417.00	89.60	3.70	10926.94	67.31	1397.22	1398.84	2.05	787015.01	511911.72
12512.00	91.30	3.30	10926.20	73.11	1492.04	1493.82	1.84	787020.81	512006.54
12606.00	89.80	3.80	10925.29	78.93	1585.85	1587.80	1.68	787026.63	512100.35
12701.00	90.70	2.70	10924.88	84.32	1680.69	1682.79	1.50	787032.02	512195.19
12795.00	92.90	2.20	10921.93	88.33	1774.56	1776.74	2.40	787036.03	512289.06
12890.00	90.90	2.40	10918.78	92.14	1869.42	1871.68	2.12	787039.84	512383.92
12984.00	89.80	1.40	10918.20	95.26	1963.37	1965.67	1.58	787042.96	512477.87
13079.00	91.50	0.30	10917.12	96.67	2058.34	2060.61	2.13	787044.37	512572.84
13173.00	89.90	1.20	10915.98	97.90	2152.33	2154.55	1.95	787045.60	512666.83
13268.00	91.00	0.40	10915.23	99.23	2247.31	2249.50	1.43	787046.93	512761.81
13362.00	87.90	2.40	10916.13	101.52	2341.26	2343.45	3.92	787049.22	512855.76
13457.00	88.70	2.00	10918.95	105.17	2436.15	2438.41	0.94	787052.87	512950.65
13551.00	89.30	2.50	10920.59	108.86	2530.06	2532.39	0.83	787056.56	513044.56
13645.00	89.30	2.90	10921.74	113.28	2623.95	2626.38	0.43	787060.98	513138.45
13740.00	88.20	3.90	10923.81	118.92	2718.76	2721.35	1.56	787066.62	513233.26
13838.00	89.20	2.40	10926.04	124.30	2816.58	2819.32	1.84	787072.00	513331.08
13932.00	89.70	1.70	10926.94	127.66	2910.52	2913.31	0.92	787075.36	513425.02
14027.00	90.50	1.20	10926.77	130.07	3005.48	3008.28	0.99	787077.77	513519.98
14121.00	91.10	0.50	10925.46	131.46	3099.46	3102.23	0.98	787079.16	513613.96
14216.00	90.40	1.20	10924.22	132.87	3194.44	3197.17	1.04	787080.57	513708.94
14310.00	90.20	1.60	10923.72	135.17	3288.41	3291.15	0.48	787082.87	513802.91
14405.00	88.80	3.00	10924.55	138.98	3383.33	3386.14	2.08	787086.68	513897.83
14500.00	88.10	4.70	10927.12	145.35	3478.08	3481.08	1.93	787093.05	513992.58
14594.00	88.10	4.50	10930.24	152.89	3571.72	3574.97	0.21	787100.59	514086.22
14689.00	88.70	3.90	10932.89	159.84	3666.43	3669.90	0.89	787107.54	514180.93
14783.00	89.90	3.30	10934.04	165.75	3760.23	3763.88	1.43	787113.45	514274.73

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	EW (Ft)	NS (Ft)	VS (Ft)	DLS %/100 Ft	Easting (US ft)	Northing (US ft)
14878.00	90.80	2.50	10933.46	170.55	3855.11	3858.87	1.27	787118.25	514369.61
14972.00	91.70	2.30	10931.41	174.49	3949.00	3952.85	0.98	787122.19	514463.50
15067.00	92.90	1.50	10927.60	177.63	4043.87	4047.76	1.52	787125.33	514558.37
15161.00	94.20	0.50	10921.78	179.27	4137.67	4141.54	1.74	787126.97	514652.17
15216.00	94.70	0.30	10917.51	179.65	4192.51	4196.33	0.98	787127.35	514707.01
Projection to bit									
15260.00	94.70	0.30	10913.90	179.88	4236.36	4240.15	0.00	787127.58	514750.86