

Results of Directional Survey

API number:	30-025-41177		
OGRID:		Operator:	AMTEX ENERGY INC
		Property:	COOP 6 STATE # 1H

surface	ULSTR:	A	06	T 22S	R 33E
				560 FNL	70 FEL

BH Loc	ULSTR:	D	06	T 22S	R 33E
15540 MD		10883.6	TVD	642 FNL	311 FWL
					4969 FEL

Top Perf/OH	ULSTR:	A	06	T 22S	R 33E
11528 MD		10919.4	TVD	537 FNL	964 FEL

Bot Perf/OH	ULSTR:	D	06	T 22S	R 33E
15397 MD		10895.5	TVD	637 FNL	453 FWL
					4827 FEL

	MD	N/S	E/W	VD
	11500	21.42	-865.97	10917.51
TOP PERFS/OH	11528	22.98	-893.86	10919.44
	11597	26.83	-962.59	10924.21
	15392	-76.67	-4751.72	10895.91
BOT PERFS/OH	15397	-76.87	-4756.70	10895.50
	15540	-82.49	-4899.10	10883.63

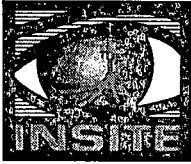
NEXT TO LAST	15392	-76.67	-4751.72	10895.91
LAST READING	15540	-82.49	-4899.10	10883.63
TD	15540	-82.49	-4899.10	10883.63

Surface Location	560 FN	70 FE
Projected BHL	642 FN	4969 FE
Location of		
Top Perfs/OH	537 FN	964 FE
Bottom Perfs/OH	637 FN	4827 FE

SUMMARY of Subsurface Locations

Surface Location	A-06-22S-33E	560 FN	70 FE	Vert. Depth
Top Perfs/OH	A-06-22S-33E	537 FN	964 FE	10919.44
Bottom Perfs/OH	D-06-22S-33E	637 FN	4827 FE	10895.50
Projected TD	D-06-22S-33E	642 FN	4969 FE	10883.63

APR 21 2014



HALLIBURTON

DIRECTIONAL SURVEY REPORT

Amtex Energy
Coop 6 State 1H
Bone Spring
Lea County, New Mexico
USA
HD-XX-0900758170

JBBSOCD
APR 08 2014
RECEIVED

Measured Depth (feet)	Inclination (degrees)	Direction (degrees)	Vertical Depth (feet)	Latitude (feet)	Departure (feet)	Vertical Section (feet)	Dogleg (deg/100ft)
0.00	0.00	0.00	0.00	0.00 N	0.00 E	0.00	TIE-IN
100.00	0.39	250.35	100.00	0.11 S	0.32 W	0.32	0.39
200.00	0.40	249.47	200.00	0.35 S	0.97 W	0.97	0.01
300.00	0.48	237.41	299.99	0.70 S	1.65 W	1.65	0.12
400.00	0.56	231.13	399.99	1.23 S	2.38 W	2.39	0.10
500.00	0.66	223.67	499.98	1.95 S	3.16 W	3.17	0.13
600.00	0.89	209.00	599.98	3.05 S	3.93 W	3.95	0.30
700.00	0.93	205.47	699.96	4.46 S	4.66 W	4.68	0.07
800.00	0.97	205.00	799.95	5.96 S	5.37 W	5.40	0.04
900.00	0.98	202.54	899.93	7.52 S	6.05 W	6.09	0.04
1000.00	0.52	154.71	999.93	8.72 S	6.19 W	6.23	0.74
1100.00	0.34	131.18	1099.92	9.33 S	5.77 W	5.82	0.25
1200.00	0.09	89.00	1199.92	9.52 S	5.47 W	5.52	0.28
1300.00	0.02	11.46	1299.92	9.50 S	5.38 W	5.43	0.09
1400.00	0.04	155.22	1399.92	9.52 S	5.37 W	5.42	0.06
1500.00	0.05	122.80	1499.92	9.57 S	5.31 W	5.36	0.03
1600.00	0.06	138.48	1599.92	9.63 S	5.24 W	5.29	0.02
1700.00	0.06	135.67	1699.92	9.71 S	5.17 W	5.22	0.00
1800.00	0.05	189.18	1799.92	9.79 S	5.14 W	5.19	0.05
1900.00	0.03	173.08	1899.92	9.86 S	5.15 W	5.20	0.02
2000.00	0.07	152.10	1999.92	9.94 S	5.11 W	5.17	0.04
2100.00	0.03	214.63	2099.92	10.02 S	5.10 W	5.15	0.06
2200.00	0.08	260.54	2199.92	10.05 S	5.18 W	5.24	0.06
2300.00	0.12	244.04	2299.92	10.11 S	5.35 W	5.40	0.05
2400.00	0.09	303.99	2399.92	10.11 S	5.51 W	5.56	0.11
2500.00	0.18	348.88	2499.92	9.91 S	5.60 W	5.65	0.13
2600.00	0.30	351.57	2599.92	9.50 S	5.67 W	5.72	0.12
2700.00	0.44	354.72	2699.92	8.86 S	5.74 W	5.79	0.14
2800.00	0.44	359.41	2799.92	8.09 S	5.78 W	5.83	0.04
2900.00	0.46	6.47	2899.91	7.31 S	5.74 W	5.78	0.06
3000.00	0.46	7.29	2999.91	6.51 S	5.65 W	5.68	0.01
3100.00	0.60	350.47	3099.91	5.59 S	5.68 W	5.71	0.21
3200.00	0.98	329.92	3199.90	4.34 S	6.20 W	6.22	0.47
3300.00	0.94	331.17	3299.88	2.88 S	7.02 W	7.04	0.05
3400.00	0.46	328.53	3399.87	1.82 S	7.63 W	7.64	0.48
3500.00	0.14	58.45	3499.87	1.41 S	7.73 W	7.74	0.48
3600.00	0.50	86.10	3599.87	1.32 S	7.19 W	7.20	0.38
3700.00	0.79	82.37	3699.86	1.20 S	6.07 W	6.08	0.29
3800.00	0.46	13.67	3799.86	0.72 S	5.30 W	5.30	0.76
3900.00	0.37	349.69	3899.86	0.01 S	5.26 W	5.26	0.19
4000.00	0.25	328.87	3999.86	0.50 N	5.43 W	5.43	0.16
4100.00	0.12	316.83	4099.85	0.76 N	5.61 W	5.61	0.13
4200.00	0.04	167.17	4199.85	0.80 N	5.68 W	5.67	0.16
4300.00	0.11	121.73	4299.85	0.72 N	5.59 W	5.58	0.09
4400.00	0.09	70.39	4399.85	0.69 N	5.43 W	5.43	0.09
4500.00	0.05	115.54	4499.85	0.70 N	5.32 W	5.32	0.07
4600.00	0.04	231.19	4599.85	0.66 N	5.31 W	5.30	0.08
4700.00	0.04	76.96	4699.85	0.65 N	5.30 W	5.30	0.08
4800.00	0.03	267.11	4799.85	0.65 N	5.29 W	5.29	0.07
4900.00	0.08	202.45	4899.85	0.59 N	5.35 W	5.34	0.07

HALLIBURTON

Coop 6 State 1H

Measured Depth (feet)	Inclination (degrees)	Direction (degrees)	Vertical Depth (feet)	Latitude (feet)	Departure (feet)	Vertical Section (feet)	Dogleg (deg/100ft)
5000.00	0.05	197.13	4999.85	0.48 N	5.39 W	5.38	0.03
5100.00	0.13	158.04	5099.85	0.33 N	5.36 W	5.35	0.10
5200.00	0.06	158.00	5199.85	0.18 N	5.29 W	5.29	0.07
5300.00	0.05	218.88	5299.85	0.10 N	5.30 W	5.30	0.06
5400.00	0.09	191.17	5399.85	0.01 S	5.34 W	5.34	0.05
5500.00	0.06	187.24	5499.85	0.14 S	5.37 W	5.37	0.03
5600.00	0.04	169.44	5599.85	0.23 S	5.37 W	5.37	0.03
5700.00	0.04	209.36	5699.85	0.29 S	5.38 W	5.38	0.03
5800.00	0.05	197.87	5799.85	0.37 S	5.41 W	5.41	0.01
5900.00	0.03	165.45	5899.85	0.43 S	5.41 W	5.42	0.03
6000.00	0.02	356.91	5999.85	0.44 S	5.41 W	5.41	0.05
6100.00	0.09	288.20	6099.85	0.40 S	5.48 W	5.49	0.08
6200.00	0.09	293.13	6199.85	0.34 S	5.63 W	5.63	0.01
6300.00	0.08	269.50	6299.85	0.31 S	5.77 W	5.77	0.04
6400.00	0.09	320.02	6399.85	0.25 S	5.89 W	5.89	0.07
6500.00	0.11	331.11	6499.85	0.11 S	5.99 W	5.99	0.03
6600.00	0.08	296.15	6599.85	0.01 N	6.10 W	6.10	0.06
6700.00	0.04	34.91	6699.85	0.07 N	6.14 W	6.14	0.09
6800.00	0.08	44.61	6799.85	0.14 N	6.07 W	6.07	0.04
6900.00	0.07	23.08	6899.85	0.25 N	6.00 W	6.00	0.03
7000.00	0.22	173.94	6999.85	0.11 N	5.96 W	5.95	0.28
7100.00	0.34	188.47	7099.85	0.37 S	5.98 W	5.98	0.14
7200.00	0.19	200.94	7199.85	0.82 S	6.08 W	6.09	0.16
7300.00	0.10	209.92	7299.85	1.05 S	6.18 W	6.19	0.09
7400.00	0.19	210.85	7399.85	1.27 S	6.31 W	6.32	0.09
7500.00	0.25	184.83	7499.85	1.63 S	6.42 W	6.42	0.12
7600.00	0.21	190.68	7599.85	2.02 S	6.47 W	6.48	0.05
7700.00	0.23	195.14	7699.85	2.40 S	6.56 W	6.57	0.03
7800.00	0.28	215.60	7799.85	2.79 S	6.75 W	6.76	0.10
7900.00	0.29	213.91	7899.85	3.20 S	7.03 W	7.05	0.01
8000.00	0.24	204.92	7999.84	3.60 S	7.26 W	7.28	0.06
8100.00	0.25	213.42	8099.84	3.97 S	7.47 W	7.49	0.04
8200.00	0.30	200.81	8199.84	4.40 S	7.68 W	7.71	0.08
8300.00	0.54	128.85	8299.84	4.94 S	7.41 W	7.44	0.53
8400.00	0.57	135.65	8399.84	5.59 S	6.70 W	6.72	0.07
8500.00	0.68	142.99	8499.83	6.42 S	5.99 W	6.02	0.14
8600.00	0.84	135.12	8599.82	7.41 S	5.12 W	5.15	0.19
8700.00	0.99	129.08	8699.81	8.48 S	3.93 W	3.97	0.18
8800.00	0.80	132.59	8799.80	9.49 S	2.74 W	2.79	0.20
8900.00	0.76	131.95	8899.79	10.41 S	1.74 W	1.79	0.04
9000.00	0.59	110.38	8999.78	11.03 S	0.76 W	0.82	0.30
9100.00	0.22	53.60	9099.78	11.10 S	0.12 W	0.18	0.50
9200.00	0.17	296.92	9199.78	10.92 S	0.10 W	0.16	0.33
9300.00	0.35	248.05	9299.78	10.96 S	0.52 W	0.57	0.27
9400.00	0.82	210.41	9399.77	11.69 S	1.16 W	1.22	0.58
9500.00	1.16	185.91	9499.76	13.32 S	1.63 W	1.70	0.54
9600.00	1.08	160.31	9599.74	15.21 S	1.42 W	1.50	0.50
9700.00	1.46	158.08	9699.71	17.28 S	0.62 W	0.71	0.38
9729.00	1.65	154.88	9728.70	18.00 S	0.31 W	0.40	0.72
9751.00	1.80	162.60	9750.69	18.62 S	0.07 W	0.17	1.26
9847.00	1.80	170.20	9846.65	21.54 S	0.64 E	-0.53	0.25
9940.00	1.20	189.00	9939.61	23.94 S	0.73 E	-0.61	0.83
10036.00	1.50	182.10	10035.59	26.19 S	0.53 E	-0.39	0.35
10132.00	1.40	192.10	10131.56	28.59 S	0.24 E	-0.09	0.28
10228.00	1.60	199.40	10227.52	31.01 S	0.45 W	0.61	0.29

HALLIBURTON

Coop 6 State 1H

Measured Depth (feet)	Inclination (degrees)	Direction (degrees)	Vertical Depth (feet)	Latitude (feet)	Departure (feet)	Vertical Section (feet)	Dogleg (deg/100ft)
10272.00	1.90	201.20	10271.50	32.27 S	0.92 W	1.09	0.69
10348.00	4.97	249.97	10347.37	34.57 S	4.47 W	4.65	5.24
10380.00	8.31	263.39	10379.15	35.31 S	8.07 W	8.26	11.45
10412.00	12.42	267.65	10410.62	35.72 S	13.81 W	14.00	13.06
10444.00	15.28	269.59	10441.69	35.89 S	21.47 W	21.66	9.05
10476.00	17.66	271.93	10472.38	35.76 S	30.54 W	30.73	7.70
10508.00	19.19	272.53	10502.73	35.36 S	40.64 W	40.83	4.84
10540.00	21.26	273.98	10532.76	34.72 S	51.69 W	51.87	6.64
10573.00	24.07	277.40	10563.21	33.44 S	64.33 W	64.51	9.42
10605.00	27.74	277.06	10591.99	31.69 S	78.20 W	78.36	11.46
10637.00	31.95	276.65	10619.74	29.79 S	94.01 W	94.16	13.19
10675.00	37.64	276.72	10650.93	27.27 S	115.54 W	115.68	14.98
10705.00	42.16	275.42	10673.94	25.24 S	134.67 W	134.80	15.31
10738.00	46.97	275.50	10697.44	23.04 S	157.72 W	157.83	14.58
10768.00	50.05	275.23	10717.31	20.94 S	180.09 W	180.19	10.27
10800.00	52.73	275.40	10737.28	18.62 S	204.98 W	205.08	8.39
10832.00	55.73	274.40	10755.99	16.41 S	230.85 W	230.93	9.71
10864.00	56.65	274.40	10773.79	14.37 S	257.36 W	257.43	2.89
10896.00	58.88	272.50	10790.86	12.74 S	284.37 W	284.43	8.59
10924.00	61.00	271.70	10804.88	11.86 S	308.59 W	308.65	7.96
10955.00	63.37	270.56	10819.35	11.32 S	336.00 W	336.05	8.31
10988.00	65.21	270.04	10833.66	11.17 S	365.73 W	365.78	5.76
11019.00	67.16	270.28	10846.18	11.09 S	394.09 W	394.14	6.31
11051.00	69.48	271.23	10858.00	10.69 S	423.82 W	423.87	7.77
11084.00	71.86	272.12	10868.92	9.78 S	454.94 W	454.99	7.65
11116.00	75.14	272.72	10878.01	8.49 S	485.59 W	485.63	10.41
11145.00	78.88	273.60	10884.53	6.93 S	513.80 W	513.83	13.23
11181.00	83.31	274.70	10890.10	4.35 S	549.27 W	549.28	12.67
11213.00	87.59	275.02	10892.64	1.65 S	581.04 W	581.04	13.41
11244.00	86.60	275.32	10894.21	1.14 N	611.88 W	611.86	3.34
11277.00	85.49	275.20	10896.49	4.16 N	644.66 W	644.63	3.38
11308.00	83.62	274.93	10899.43	6.88 N	675.40 W	675.35	6.09
11340.00	83.63	274.72	10902.98	9.56 N	707.09 W	707.03	0.65
11373.00	84.18	274.56	10906.48	12.21 N	739.79 W	739.72	1.74
11405.00	84.74	274.33	10909.57	14.68 N	771.55 W	771.46	1.89
11500.00	85.67	273.83	10917.51	21.42 N	865.97 W	865.85	1.11
11597.00	86.42	272.58	10924.21	26.83 N	962.59 W	962.44	1.50
11694.00	86.79	271.56	10929.95	30.32 N	1059.35 W	1059.18	1.12
11725.00	87.04	271.07	10931.62	31.03 N	1090.30 W	1090.12	1.77
11757.00	87.22	270.94	10933.22	31.59 N	1122.26 W	1122.08	0.69
11788.00	87.47	270.85	10934.66	32.08 N	1153.22 W	1153.04	0.86
11820.00	87.77	270.72	10935.99	32.52 N	1185.19 W	1185.00	1.02
11852.00	88.08	270.42	10937.14	32.83 N	1217.17 W	1216.98	1.35
11884.00	88.39	270.28	10938.13	33.03 N	1249.15 W	1248.96	1.06
11979.00	88.95	270.01	10940.33	33.27 N	1344.12 W	1343.93	0.65
12075.00	86.41	268.53	10944.22	32.05 N	1440.03 W	1439.84	3.06
12168.00	87.53	267.68	10949.14	28.98 N	1532.84 W	1532.67	1.51
12264.00	89.75	267.57	10951.42	25.00 N	1628.73 W	1628.57	2.32
12358.00	89.81	267.14	10951.78	20.66 N	1722.63 W	1722.49	0.46
12454.00	91.05	267.29	10951.06	16.00 N	1818.51 W	1818.40	1.30
12550.00	91.54	266.82	10948.89	11.07 N	1914.36 W	1914.27	0.71
12646.00	91.73	266.32	10946.15	5.33 N	2010.15 W	2010.09	0.56
12742.00	91.98	265.91	10943.04	1.18 S	2105.87 W	2105.85	0.50
12838.00	92.47	265.53	10939.31	8.33 S	2201.53 W	2201.55	0.65
12935.00	92.97	264.99	10934.71	16.34 S	2298.09 W	2298.15	0.76

HALLIBURTON

Coop 6 State 1H

Measured Depth (feet)	Inclination (degrees)	Direction (degrees)	Vertical Depth (feet)	Latitude (feet)	Departure (feet)	Vertical Section (feet)	Dogleg (deg/100ft)
13031.00	93.40	266.02	10929.38	23.85 S	2393.65 W	2393.74	1.16
13128.00	93.33	265.30	10923.68	31.18 S	2490.20 W	2490.33	0.74
13224.00	93.27	265.96	10918.16	38.48 S	2585.76 W	2585.93	0.69
13321.00	92.10	266.51	10913.61	44.85 S	2682.45 W	2682.64	1.33
13416.00	90.31	267.41	10911.61	49.88 S	2777.29 W	2777.51	2.11
13510.00	90.80	267.27	10910.70	54.25 S	2871.18 W	2871.43	0.54
13606.00	88.58	268.99	10911.22	57.38 S	2967.12 W	2967.38	2.93
13700.00	88.52	269.56	10913.60	58.57 S	3061.08 W	3061.35	0.61
13794.00	88.89	269.37	10915.73	59.44 S	3155.05 W	3155.32	0.44
13887.00	89.01	269.68	10917.43	60.22 S	3248.03 W	3248.30	0.36
13981.00	89.38	269.64	10918.75	60.77 S	3342.02 W	3342.29	0.40
14075.00	87.96	270.55	10920.93	60.62 S	3435.99 W	3436.26	1.79
14169.00	87.96	270.48	10924.28	59.77 S	3529.93 W	3530.20	0.07
14263.00	89.13	270.43	10926.67	59.03 S	3623.90 W	3624.15	1.25
14358.00	89.14	270.12	10928.10	58.57 S	3718.88 W	3719.14	0.33
14452.00	89.69	269.96	10929.06	58.51 S	3812.88 W	3813.13	0.61
14546.00	90.00	269.65	10929.31	58.83 S	3906.88 W	3907.13	0.47
14640.00	90.43	269.37	10928.96	59.63 S	4000.87 W	4001.13	0.55
14734.00	91.17	269.54	10927.65	60.52 S	4094.86 W	4095.12	0.81
14828.00	91.11	269.20	10925.78	61.56 S	4188.83 W	4189.10	0.37
14922.00	91.48	268.68	10923.65	63.30 S	4282.79 W	4283.07	0.68
15016.00	92.60	268.74	10920.31	65.41 S	4376.71 W	4376.99	1.19
15110.00	93.34	268.38	10915.44	67.77 S	4470.55 W	4470.85	0.88
15204.00	93.65	268.37	10909.71	70.43 S	4564.34 W	4564.65	0.33
15298.00	94.21	268.13	10903.26	73.29 S	4658.07 W	4658.39	0.65
15392.00	94.76	267.74	10895.91	76.67 S	4751.72 W	4752.06	0.72
15540.00	94.76	267.74	10883.63	82.49 S	4899.10 W	4899.46	0.00

CALCULATION BASED ON MINIMUM CURVATURE METHOD

SURVEY COORDINATES RELATIVE TO WELL SYSTEM REFERENCE POINT
TVD VALUES GIVEN RELATIVE TO DRILLING MEASUREMENT POINT

VERTICAL SECTION RELATIVE TO WELL HEAD
VERTICAL SECTION IS COMPUTED ALONG A DIRECTION OF 269.70 DEGREES (GRID)
A TOTAL CORRECTION OF 7.05 DEG FROM MAGNETIC NORTH TO GRID NORTH HAS BEEN APPLIED

HORIZONTAL DISPLACEMENT IS RELATIVE TO THE WELL HEAD.
HORIZONTAL DISPLACEMENT(CLOSURE) AT 15540.00 FEET
IS 4899.79 FEET ALONG 269.04 DEGREES (GRID)

SURVEYS CALCULATED USING LONG COLLAR METHOD.
WELL ASSUMED VERTICAL AT WELLHEAD.
SURVEYS FROM 100' MD TO 9729' MD PROVIDED BY GYRODATA DIRECTIONAL.
SURVEYS FROM 9751' MD TO 10272' MD PROVIDED BY DIRECTIONAL DRILLING COMPANY.
SURVEYS FROM 10348' MD TO 15392' MD PROVIDED BY SPERRY DRILLING.
SURVEY AT 15392' MD IS PROJECTED TO TD AT 15540' MD.
SPERRY DRILLING ENGINEERS: E. RODRIGUEZ, P. GARCIA, B. GERMAN, P. WHITE, D. MICHALK