



# End of Well Report

Prepared for



## Valley Farms I01

November 07, 2011

ARK Directional Services Inc  
191 University Blvd, # 601  
Denver, CO 80206

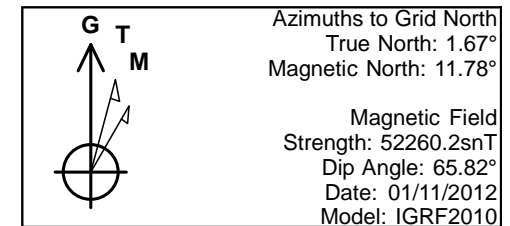
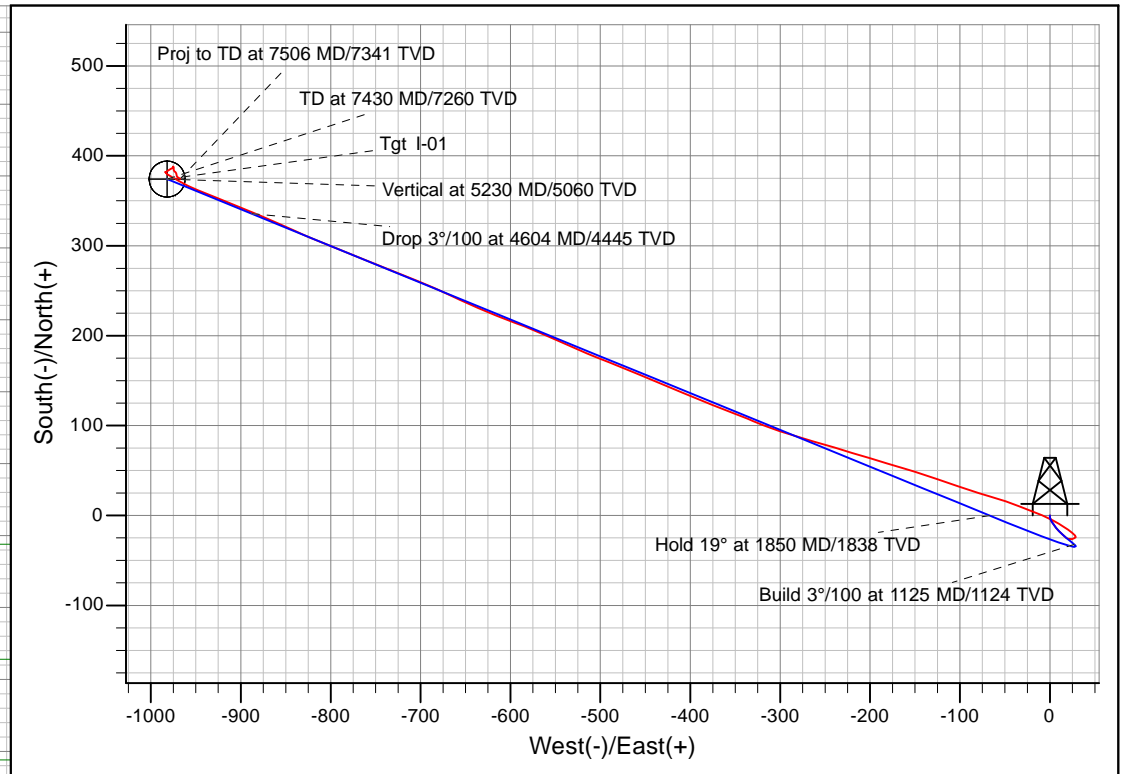
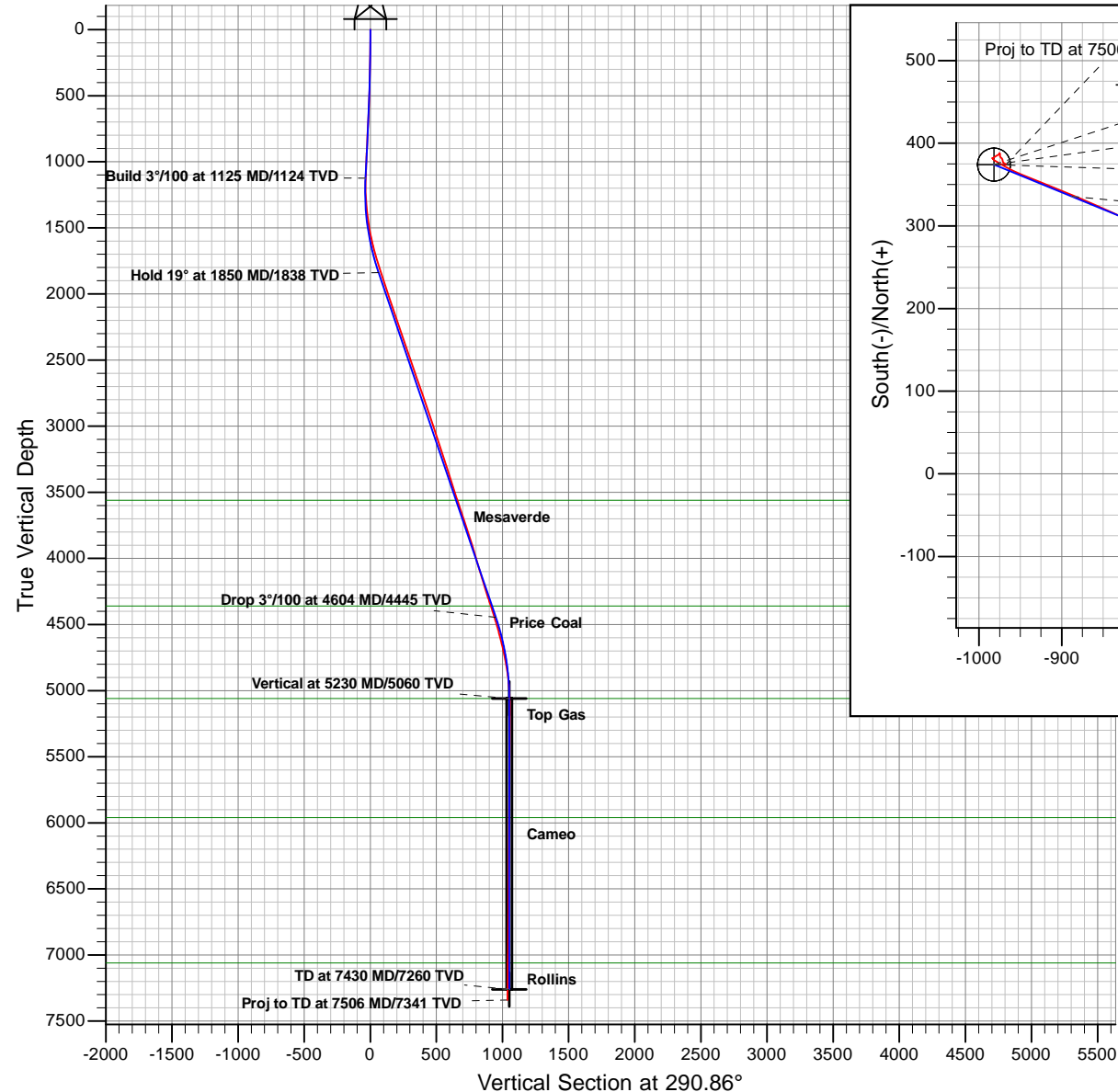


# Antero Resources

## Valley Farms I

Antero Valley Farms I01 (111108)

Planned  
Vs. Actual



PROJECT DETAILS: Valley Farms	
Geodetic System:	Universal Transverse Mercator
Datum:	North American Datum 1983
Ellipsoid:	GRS 1980
Zone:	Zone 13N (108 W to 102 W)
System Datum:	Mean Sea Level

REFERENCE INFORMATION	
Co-ordinate (N/E) Reference:	Well Antero Valley Farms I01 (111108) - Slot I-1, Grid North
Vertical (TVD) Reference:	RKB @ 5674.00ft (RKB)
Section (VS) Reference:	Slot - I-1(0.00N, 0.00E)
Measured Depth Reference:	RKB @ 5674.00ft (RKB)
Calculation Method:	Minimum Curvature

Plan: Valley Farms I01 P06  
Created By: ARK Directional Services Inc.  
Date: 14:12, November 07 2011

# **Antero Resources**

**Valley Farms**

**Valley Farms I**

**Antero Valley Farms I01 (111108) - Slot I-1**

**Valley Farms I01**

**Survey: Valley Farms I01 MWD**

## **Survey Report - Geographic**

**31 October, 2011**

## Survey Report - Geographic

<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Antero Valley Farms I01 (111108) - Slot I-1
<b>Project:</b>	Valley Farms	<b>TVD Reference:</b>	RKB @ 5674.00ft (RKB)
<b>Site:</b>	Valley Farms I	<b>MD Reference:</b>	RKB @ 5674.00ft (RKB)
<b>Well:</b>	Antero Valley Farms I01 (111108)	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Valley Farms I01	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Valley Farms I01	<b>Database:</b>	EDM5000

<b>Project</b>	Valley Farms		
<b>Map System:</b>	Universal Transverse Mercator	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Zone 13N (108 W to 102 W)		

Site	Valley Farms I				
Site Position:		Northing:	14,365,113.22 usft	Latitude:	39.526635439°N
From:	Lat/Long	Easting:	901,976.81 usft	Longitude:	107.618637050°W
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in	Grid Convergence:	-1.67 °

Well	Antero Valley Farms I01 (111108) - Slot I-1					
Well Position	+N/-S	0.00 ft	Northing:	14,365,126.75 usft	Latitude:	39.526668778°N
	+E/-W	0.00 ft	Easting:	901,929.46 usft	Longitude:	107.618806221°W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,650.00 ft

<b>Wellbore</b>	Valley Farms I01				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	01/11/12	10.11	65.82	52,260

<b>Design</b>	Valley Farms I01				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	290.86	

<b>Survey Program</b>	<b>Date</b>	10/31/11			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
100.00	920.00	Valley Farms I01 GYRO (Valley Farms I01)	NS-GYRO-MS	North sensing gyrocompassing m/s	
1,063.00	7,506.00	Valley Farms I01 MWD (Valley Farms I01)	MWD	MWD - Standard	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Map Northing (usft)</b>	<b>Map Easting (usft)</b>	<b>Latitude</b>	<b>Longitude</b>	
920.00	3.09	129.89	919.32	-25.07	18.64	14,365,101.67	901,948.10	39.526601483°N	107.618737583°W	
1,063.00	2.68	65.90	1,062.18	-26.18	24.66	14,365,100.57	901,954.11	39.526598926°N	107.618716176°W	
1,126.00	2.42	73.10	1,125.11	-25.19	27.27	14,365,101.56	901,956.73	39.526601846°N	107.618707006°W	
1,189.00	1.19	15.80	1,188.08	-24.17	28.72	14,365,102.57	901,958.18	39.526604750°N	107.618701971°W	
1,253.00	2.59	320.52	1,252.05	-22.42	27.98	14,365,104.33	901,957.44	39.526609508°N	107.618704768°W	
1,315.00	4.79	312.52	1,313.92	-19.59	25.19	14,365,107.16	901,954.64	39.526617051°N	107.618714976°W	
1,378.00	6.90	303.82	1,376.59	-15.70	20.10	14,365,111.04	901,949.56	39.526627303°N	107.618733385°W	
1,441.00	7.78	302.59	1,439.07	-11.30	13.37	14,365,115.45	901,942.82	39.526638845°N	107.618757706°W	
1,504.00	9.71	298.89	1,501.34	-6.44	5.12	14,365,120.31	901,934.58	39.526651531°N	107.618787418°W	
1,567.00	11.60	292.70	1,563.25	-1.42	-5.38	14,365,125.32	901,924.08	39.526664443°N	107.618825120°W	
1,630.00	13.71	292.00	1,624.72	3.82	-18.14	14,365,130.56	901,911.31	39.526677804°N	107.618870889°W	

# Survey Report - Geographic

<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Antero Valley Farms I01 (111108) - Slot I-1
<b>Project:</b>	Valley Farms	<b>TVD Reference:</b>	RKB @ 5674.00ft (RKB)
<b>Site:</b>	Valley Farms I	<b>MD Reference:</b>	RKB @ 5674.00ft (RKB)
<b>Well:</b>	Antero Valley Farms I01 (111108)	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Valley Farms I01	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Valley Farms I01	<b>Database:</b>	EDM5000

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,693.00	15.29	291.29	1,685.71	9.63	-32.81	14,365,136.38	901,896.65	39.526692581°N	107.618923435°W
1,756.00	16.70	288.79	1,746.27	15.56	-49.12	14,365,142.31	901,880.34	39.526707553°N	107.618981829°W
1,819.00	17.71	286.59	1,806.45	21.21	-66.87	14,365,147.96	901,862.59	39.526721641°N	107.619045307°W
1,882.00	18.81	288.39	1,866.28	27.16	-85.69	14,365,153.90	901,843.76	39.526736436°N	107.619112600°W
1,945.00	18.72	288.92	1,925.93	33.64	-104.89	14,365,160.38	901,824.56	39.526752686°N	107.619181294°W
2,008.00	18.50	288.30	1,985.64	40.05	-123.95	14,365,166.80	901,805.51	39.526768768°N	107.619249455°W
2,070.00	18.50	287.82	2,044.43	46.15	-142.65	14,365,172.90	901,786.81	39.526784006°N	107.619316345°W
2,133.00	18.81	286.41	2,104.12	52.08	-161.91	14,365,178.83	901,767.55	39.526798732°N	107.619385184°W
2,196.00	18.50	286.82	2,163.81	57.84	-181.22	14,365,184.59	901,748.24	39.526812997°N	107.619454189°W
2,259.00	18.50	287.21	2,223.56	63.69	-200.33	14,365,190.44	901,729.12	39.526827518°N	107.619522512°W
2,323.00	18.59	286.11	2,284.23	69.53	-219.83	14,365,196.27	901,709.62	39.526841969°N	107.619592196°W
2,386.00	19.12	287.21	2,343.85	75.37	-239.34	14,365,202.11	901,690.12	39.526856431°N	107.619661894°W
2,448.00	19.20	286.50	2,402.42	81.27	-258.81	14,365,208.01	901,670.65	39.526871061°N	107.619731495°W
2,511.00	19.29	285.89	2,461.90	87.06	-278.75	14,365,213.80	901,650.70	39.526885357°N	107.619802738°W
2,574.00	18.81	288.39	2,521.45	93.11	-298.40	14,365,219.86	901,631.06	39.526900395°N	107.619872965°W
2,637.00	18.90	291.51	2,581.07	100.06	-317.53	14,365,226.80	901,611.93	39.526917922°N	107.619941457°W
2,700.00	18.98	291.82	2,640.66	107.61	-336.53	14,365,234.35	901,592.92	39.526937115°N	107.620009561°W
2,763.00	19.29	291.69	2,700.18	115.26	-355.71	14,365,242.01	901,573.74	39.526956581°N	107.620078301°W
2,826.00	19.29	290.98	2,759.64	122.83	-375.10	14,365,249.58	901,554.36	39.526975806°N	107.620147759°W
2,889.00	18.90	293.09	2,819.17	130.56	-394.20	14,365,257.30	901,535.25	39.526995480°N	107.620216231°W
2,952.00	19.12	292.48	2,878.74	138.51	-413.12	14,365,265.25	901,516.33	39.527015770°N	107.620284078°W
3,015.00	18.50	292.92	2,938.37	146.34	-431.86	14,365,273.09	901,497.59	39.527035775°N	107.620351277°W
3,078.00	18.41	292.48	2,998.13	154.04	-450.26	14,365,280.79	901,479.20	39.527055420°N	107.620417251°W
3,141.00	18.50	292.70	3,057.89	161.70	-468.67	14,365,288.45	901,460.78	39.527074967°N	107.620483273°W
3,204.00	18.50	291.12	3,117.64	169.16	-487.22	14,365,295.90	901,442.24	39.527093948°N	107.620549741°W
3,267.00	18.28	291.69	3,177.42	176.41	-505.72	14,365,303.16	901,423.73	39.527112368°N	107.620616046°W
3,330.00	17.31	294.07	3,237.41	183.89	-523.46	14,365,310.63	901,406.00	39.527131457°N	107.620679662°W
3,390.00	17.40	294.59	3,294.68	191.26	-539.77	14,365,318.01	901,389.69	39.527150384°N	107.620738196°W
3,453.00	17.89	292.92	3,354.71	198.95	-557.25	14,365,325.69	901,372.21	39.527170080°N	107.620800910°W
3,516.00	18.50	293.01	3,414.56	206.62	-575.36	14,365,333.37	901,354.10	39.527189690°N	107.620865870°W
3,579.00	17.89	290.11	3,474.41	213.86	-593.65	14,365,340.60	901,335.81	39.527208076°N	107.620931402°W
3,642.00	17.89	290.81	3,534.37	220.62	-611.78	14,365,347.37	901,317.68	39.527225186°N	107.620996336°W
3,705.00	18.50	293.88	3,594.22	228.11	-629.96	14,365,354.85	901,299.49	39.527244266°N	107.621061534°W
3,768.00	18.72	294.41	3,653.92	236.33	-648.31	14,365,363.08	901,281.15	39.527265363°N	107.621127376°W
3,831.00	18.02	294.81	3,713.71	244.60	-666.36	14,365,371.34	901,263.10	39.527286601°N	107.621192181°W
3,894.00	18.28	293.49	3,773.58	252.63	-684.27	14,365,379.37	901,245.19	39.527307192°N	107.621256448°W
3,957.00	18.19	292.70	3,833.41	260.36	-702.40	14,365,387.10	901,227.06	39.527326958°N	107.621321487°W
4,020.00	17.49	292.00	3,893.39	267.70	-720.25	14,365,394.45	901,209.21	39.527345672°N	107.621385480°W
4,083.00	16.48	292.08	3,953.64	274.61	-737.31	14,365,401.35	901,192.15	39.527363254°N	107.621446627°W
4,146.00	16.39	291.38	4,014.06	281.21	-753.87	14,365,407.95	901,175.59	39.527380036°N	107.621505967°W
4,209.00	16.22	291.38	4,074.53	287.65	-770.34	14,365,414.40	901,159.12	39.527396409°N	107.621564982°W
4,272.00	16.79	292.39	4,134.93	294.33	-786.94	14,365,421.07	901,142.51	39.527413391°N	107.621624504°W
4,335.00	17.40	292.08	4,195.15	301.33	-804.09	14,365,428.08	901,125.37	39.527431244°N	107.621685958°W
4,398.00	17.40	292.70	4,255.27	308.51	-821.51	14,365,435.26	901,107.95	39.527449539°N	107.621748410°W
4,461.00	18.59	294.81	4,315.18	316.36	-839.31	14,365,443.10	901,090.15	39.527469650°N	107.621812302°W
4,524.00	17.58	293.50	4,375.07	324.37	-857.15	14,365,451.11	901,072.31	39.527490193°N	107.621876334°W
4,587.00	17.40	292.93	4,435.16	331.83	-874.55	14,365,458.58	901,054.91	39.527509279°N	107.621938750°W
4,650.00	16.70	292.62	4,495.39	338.98	-891.58	14,365,465.73	901,037.87	39.527527537°N	107.621999825°W
4,713.00	14.81	292.31	4,556.02	345.52	-907.39	14,365,472.27	901,022.07	39.527544213°N	107.622056497°W
4,775.00	14.41	292.09	4,616.01	351.43	-921.87	14,365,478.18	901,007.59	39.527559267°N	107.622108404°W
4,839.00	12.70	291.21	4,678.23	356.97	-935.81	14,365,483.72	900,993.65	39.527573353°N	107.622158356°W
4,901.00	11.82	292.31	4,738.82	361.85	-948.04	14,365,488.59	900,981.42	39.527585753°N	107.622202182°W
4,964.00	10.11	297.32	4,800.66	366.83	-958.92	14,365,493.58	900,970.54	39.527598567°N	107.622241253°W
5,059.00	7.21	299.30	4,894.57	373.58	-971.53	14,365,500.33	900,957.93	39.527616066°N	107.622286622°W
5,153.00	3.78	301.10	4,988.13	378.07	-979.33	14,365,504.81	900,950.13	39.527627757°N	107.622314718°W

# Survey Report - Geographic

<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Antero Valley Farms I01 (111108) - Slot I-1
<b>Project:</b>	Valley Farms	<b>TVD Reference:</b>	RKB @ 5674.00ft (RKB)
<b>Site:</b>	Valley Farms I	<b>MD Reference:</b>	RKB @ 5674.00ft (RKB)
<b>Well:</b>	Antero Valley Farms I01 (111108)	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Valley Farms I01	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Valley Farms I01	<b>Database:</b>	EDM5000

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
5,224.77	2.42	312.89	5,059.79	380.32	-982.46	14,365,507.07	900,946.99	39.527633687°N	107.622326060°W	
<b>Tgt I-01</b>										
5,248.00	2.02	320.00	5,083.00	380.97	-983.09	14,365,507.71	900,946.37	39.527635413°N	107.622328331°W	
5,342.00	0.31	132.00	5,176.99	382.07	-983.96	14,365,508.81	900,945.50	39.527638359°N	107.622331548°W	
5,436.00	0.22	133.32	5,270.98	381.77	-983.64	14,365,508.52	900,945.82	39.527637578°N	107.622330383°W	
5,531.00	1.01	48.50	5,365.98	382.20	-982.88	14,365,508.95	900,946.58	39.527638817°N	107.622327735°W	
5,625.00	1.41	52.81	5,459.96	383.45	-981.34	14,365,510.20	900,948.12	39.527642365°N	107.622322402°W	
5,720.00	1.19	65.42	5,554.93	384.57	-979.51	14,365,511.31	900,949.95	39.527645575°N	107.622316041°W	
5,814.00	1.19	59.80	5,648.91	385.47	-977.78	14,365,512.21	900,951.68	39.527648174°N	107.622310000°W	
5,909.00	1.19	62.22	5,743.89	386.42	-976.06	14,365,513.17	900,953.40	39.527650935°N	107.622303986°W	
6,003.00	0.48	348.69	5,837.88	387.26	-975.27	14,365,514.01	900,954.19	39.527653305°N	107.622301287°W	
6,098.00	0.48	350.89	5,932.88	388.05	-975.41	14,365,514.79	900,954.05	39.527655443°N	107.622301867°W	
6,192.00	0.48	129.32	6,026.88	388.19	-975.17	14,365,514.93	900,954.29	39.527655844°N	107.622301023°W	
6,287.00	0.88	168.83	6,121.87	387.22	-974.72	14,365,513.96	900,954.74	39.527653225°N	107.622299332°W	
6,381.00	0.79	190.40	6,215.86	385.87	-974.70	14,365,512.62	900,954.76	39.527649535°N	107.622299112°W	
6,475.00	1.10	162.63	6,309.85	384.37	-974.54	14,365,511.12	900,954.91	39.527645436°N	107.622298418°W	
6,570.00	1.01	145.32	6,404.83	382.81	-973.80	14,365,509.56	900,955.66	39.527641219°N	107.622295604°W	
6,664.00	0.70	118.90	6,498.82	381.86	-972.82	14,365,508.60	900,956.64	39.527638667°N	107.622292055°W	
6,758.00	1.32	161.09	6,592.81	380.55	-971.97	14,365,507.30	900,957.49	39.527635163°N	107.622288896°W	
6,853.00	1.01	162.32	6,687.79	378.72	-971.36	14,365,505.47	900,958.10	39.527630183°N	107.622286550°W	
6,947.00	0.62	170.80	6,781.78	377.43	-971.03	14,365,504.18	900,958.43	39.527626667°N	107.622285237°W	
7,041.00	0.22	123.30	6,875.78	376.83	-970.79	14,365,503.57	900,958.66	39.527625036°N	107.622284352°W	
7,136.00	0.22	210.40	6,970.78	376.57	-970.73	14,365,503.32	900,958.72	39.527624335°N	107.622284113°W	
7,230.00	0.40	104.93	7,064.78	376.33	-970.51	14,365,503.08	900,958.95	39.527623694°N	107.622283288°W	
7,325.00	0.62	118.51	7,159.77	376.00	-969.74	14,365,502.75	900,959.72	39.527622848°N	107.622280519°W	
7,419.00	1.01	127.83	7,253.76	375.25	-968.63	14,365,501.99	900,960.82	39.527620876°N	107.622276540°W	
7,425.06	0.99	126.51	7,259.82	375.19	-968.55	14,365,501.93	900,960.91	39.527620708°N	107.622276235°W	
<b>BH I-01</b>										
7,461.00	0.88	117.50	7,295.76	374.87	-968.06	14,365,501.62	900,961.40	39.527619891°N	107.622274452°W	
7,506.00	0.88	117.50	7,340.75	374.55	-967.44	14,365,501.30	900,962.02	39.527619065°N	107.622272247°W	
<b>Proj to TD at 7506 MD/7341 TVD</b>										

Survey Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
7,506.00	7,340.75	374.55	-967.44	Proj to TD at 7506 MD/7341 TVD	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_