



End of Well Report

Prepared for



Burckle A13

May 24, 2011

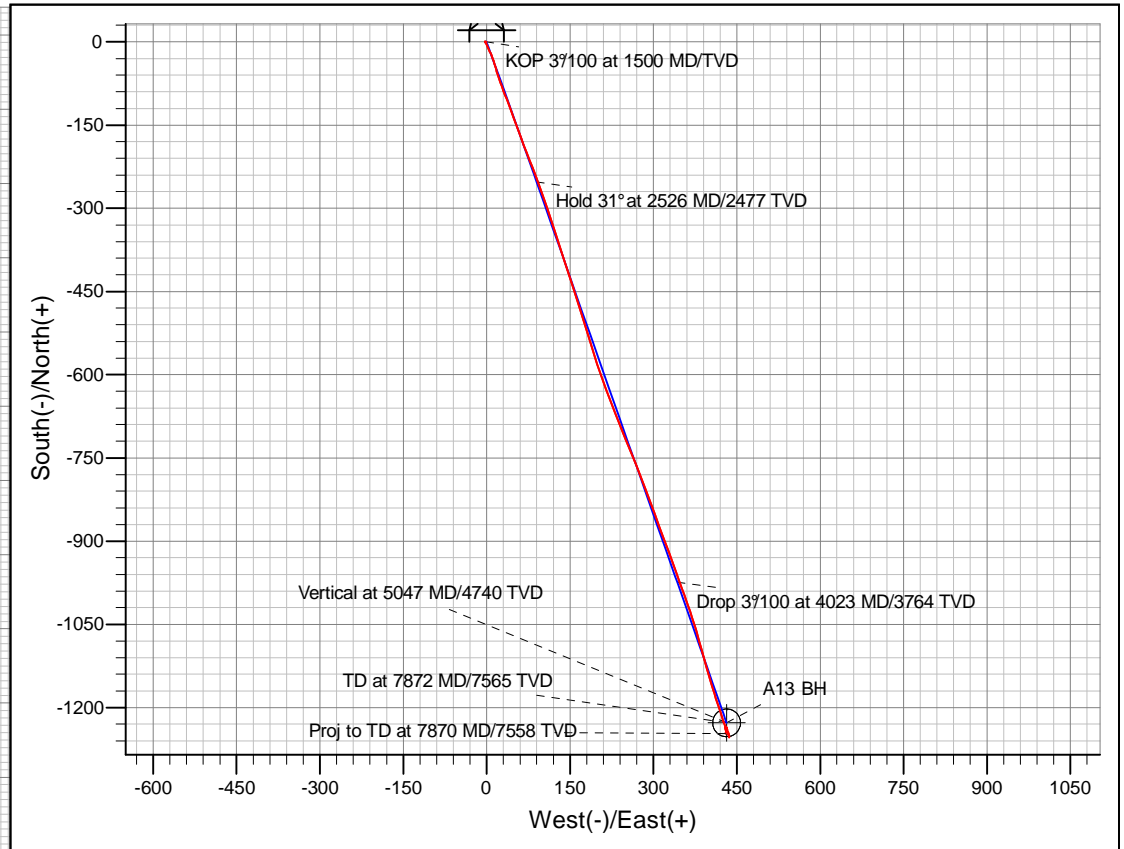
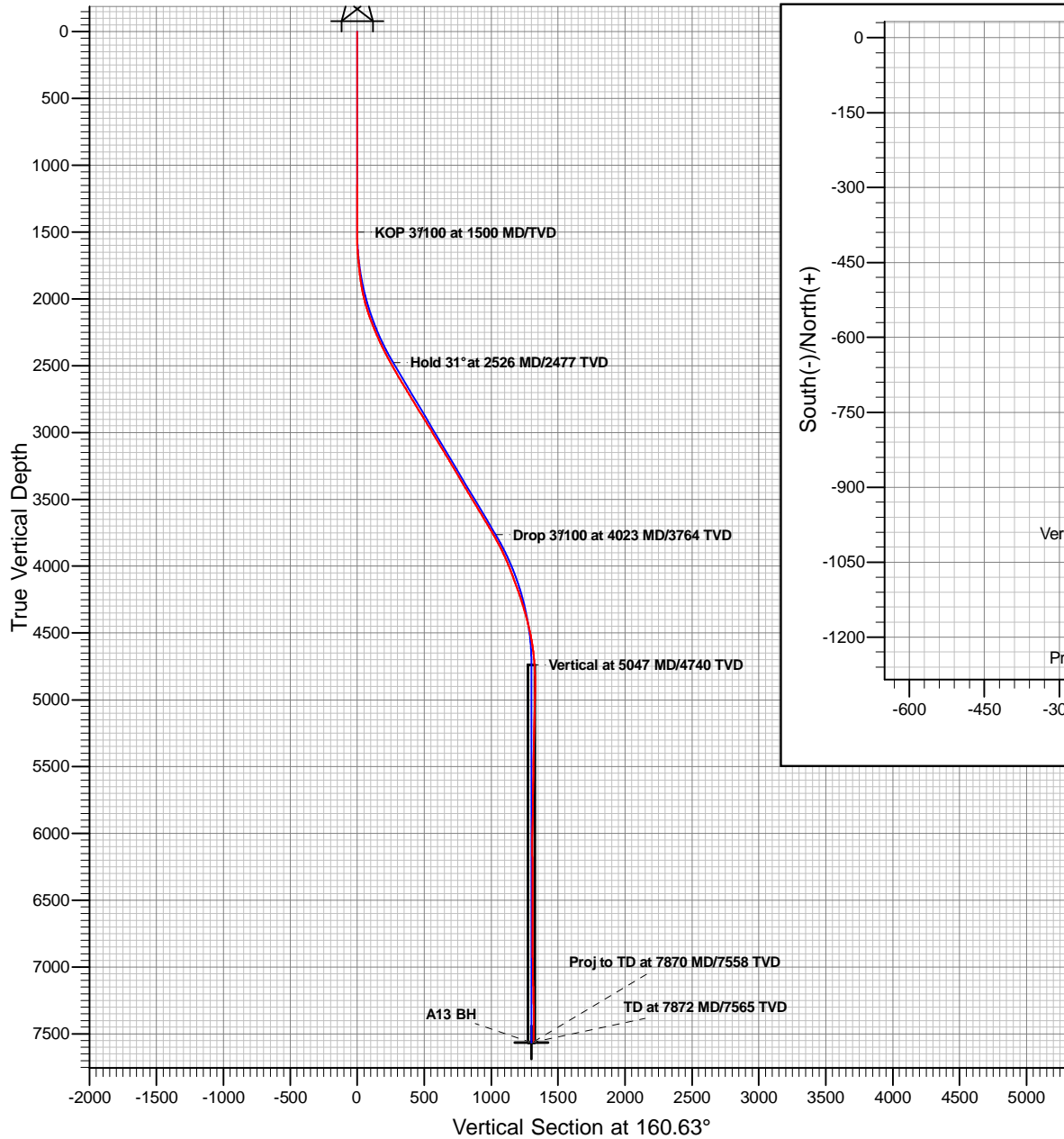
ARK Directional Services Inc
191 University Blvd, # 601
Denver, CO 80206




Antero Resources

Burckle A13 (111334)

Planned Vs. Actual



Magnetic Field Details	
Total Correction to Grid N: +11.93°	
	Model: IGRF2010
	Date: 21-Apr-11
	Grid Conv: -1.70
	Mag. Dec: 10.23°
	Field Strength: 52327
	Dip: 65.83°

PROJECT DETAILS: Burckle
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 Burckle A13 (111334) - Slot A13, Grid North
Vertical (TVD) Reference: KB @ 5583.00ft (Original Well Elev)
Section (VS) Reference: Slot - A13(0.00N, 0.00E)
Measured Depth Reference: KB @ 5583.00ft (Original Well Elev)
Calculation Method: Minimum Curvature

Plan: A13
Created By: ARK Directional Services Inc.
Date: 9:22, May 20 2011

Antero Resources

Burckle

Burckle A Pad

Burckle A13 (111334) - Slot A13

A13

Survey: Burckle A13

Survey Report - Geographic

24 May, 2011

ARK Directional Services

Survey Report - Geographic

Company:	Antero Resources	Local Co-ordinate Reference:	Well Burckle A13 (111334) - Slot A13
Project:	Burckle	TVD Reference:	KB @ 5583.00ft (Original Well Elev)
Site:	Burckle A Pad	MD Reference:	KB @ 5583.00ft (Original Well Elev)
Well:	Burckle A13 (111334)	North Reference:	Grid
Wellbore:	A13	Survey Calculation Method:	Minimum Curvature
Design:	A13	Database:	EDM SERVER DB

Project	Burckle		
Map System:	Universal Transverse Mercator	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Zone 13N (108 W to 102 W)		

Site	Burckle A Pad		
Site Position:		Northing:	14,365,035.78 usft
From:	Map	Easting:	887,434.87 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in
		Latitude:	39.525250278°N
		Longitude:	107.670145154°W
		Grid Convergence:	-1.70 °

Well	Burckle A13 (111334) - Slot A13		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft
		Latitude:	39.525260587°N
		Longitude:	107.670214774°W
		Ground Level:	5,559.00 ft

Wellbore	A13		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	2011/04/21	10.23
			Dip Angle
			(°)
			65.83
			Field Strength
			(nT)
			52,327

Design	A13		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.00	0.00	0.00
			Direction
			(°)
			160.63

Survey Program	Date	2011/05/20		
From	To	Survey (Wellbore)	Tool Name	Description
(ft)	(ft)			
100.00	1,145.00	Burckle A13 Surf (A13)	NS-GYRO-MS	North sensing gyrocompassing m/s
1,249.00	7,870.00	Burckle A13 (A13)	MWD	MWD - Standard

Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Map	Map	Latitude	Longitude
Depth	(°)	(°)	Depth	(ft)	(ft)	Northing	Easting		
(ft)			(ft)			(usft)	(usft)		
1,145.00	0.24	61.86	1,144.99	-0.70	-2.45	14,365,039.41	887,412.90	39.525258470°N	107.670223376°W
1,249.00	0.09	143.33	1,248.99	-0.66	-2.21	14,365,039.45	887,413.14	39.525258591°N	107.670222527°W
1,343.00	0.53	332.20	1,342.99	-0.34	-2.37	14,365,039.78	887,412.98	39.525259471°N	107.670223123°W
1,438.00	0.79	343.45	1,437.98	0.68	-2.76	14,365,040.79	887,412.59	39.525262228°N	107.670224617°W
1,469.00	0.26	327.19	1,468.98	0.94	-2.86	14,365,041.06	887,412.49	39.525262944°N	107.670224995°W
1,501.00	0.26	183.14	1,500.98	0.93	-2.90	14,365,041.04	887,412.45	39.525262909°N	107.670225148°W
1,532.00	0.62	156.42	1,531.98	0.71	-2.84	14,365,040.82	887,412.51	39.525262300°N	107.670224900°W
1,564.00	1.41	152.73	1,563.98	0.20	-2.59	14,365,040.31	887,412.76	39.525260925°N	107.670223962°W
1,595.00	2.29	156.51	1,594.96	-0.71	-2.17	14,365,039.40	887,413.18	39.525258470°N	107.670223737°W
1,627.00	3.16	158.27	1,626.92	-2.11	-1.58	14,365,038.00	887,413.76	39.525254661°N	107.670220166°W
1,658.00	4.31	153.96	1,657.86	-3.95	-0.76	14,365,036.16	887,414.59	39.525249680°N	107.670217040°W

ARK Directional Services

Survey Report - Geographic

Company:	Antero Resources	Local Co-ordinate Reference:	Well Burckle A13 (111334) - Slot A13
Project:	Burckle	TVD Reference:	KB @ 5583.00ft (Original Well Elev)
Site:	Burckle A Pad	MD Reference:	KB @ 5583.00ft (Original Well Elev)
Well:	Burckle A13 (111334)	North Reference:	Grid
Wellbore:	A13	Survey Calculation Method:	Minimum Curvature
Design:	A13	Database:	EDM SERVER DB

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
1,690.00	5.19	155.89	1,689.75	-6.35	0.36	14,365,033.76	887,415.71	39.525243183°N	107.670212823°W	
1,721.00	5.54	154.66	1,720.61	-8.99	1.58	14,365,031.13	887,416.92	39.525236060°N	107.670208249°W	
1,816.00	6.50	153.43	1,815.09	-17.94	5.94	14,365,022.17	887,421.29	39.525211851°N	107.670191834°W	
1,910.00	10.11	160.90	1,908.09	-30.50	11.02	14,365,009.61	887,426.37	39.525177810°N	107.670172513°W	
2,004.00	13.71	164.24	2,000.05	-49.02	16.75	14,364,991.09	887,432.10	39.525127459°N	107.670150277°W	
2,099.00	17.84	160.47	2,091.45	-73.58	24.68	14,364,966.53	887,440.02	39.525060724°N	107.670119617°W	
2,194.00	21.09	158.53	2,181.01	-103.21	35.80	14,364,936.90	887,451.15	39.524980344°N	107.670077096°W	
2,288.00	23.38	159.94	2,268.02	-136.48	48.39	14,364,903.64	887,463.74	39.524890116°N	107.670029002°W	
2,383.00	25.66	160.11	2,354.45	-173.53	61.86	14,364,866.58	887,477.20	39.524789561°N	107.669977407°W	
2,477.00	28.04	157.74	2,438.31	-213.12	77.15	14,364,826.99	887,492.50	39.524682187°N	107.669919058°W	
2,571.00	29.71	160.11	2,520.62	-255.48	93.45	14,364,784.64	887,508.79	39.524567313°N	107.669856878°W	
2,666.00	31.11	161.43	2,602.55	-300.88	109.27	14,364,739.23	887,524.62	39.524444037°N	107.669796042°W	
2,760.00	30.50	161.96	2,683.29	-346.58	124.40	14,364,693.53	887,539.74	39.524319888°N	107.669737672°W	
2,855.00	31.73	162.49	2,764.62	-393.33	139.38	14,364,646.78	887,554.72	39.524192857°N	107.669679683°W	
2,949.00	31.64	161.87	2,844.61	-440.34	154.49	14,364,599.78	887,569.83	39.524065135°N	107.669621220°W	
3,044.00	31.46	162.66	2,925.57	-487.68	169.63	14,364,552.43	887,584.97	39.523936482°N	107.669562603°W	
3,138.00	30.76	163.19	3,006.05	-534.11	183.89	14,364,506.01	887,599.24	39.523810276°N	107.669507198°W	
3,233.00	30.76	161.43	3,087.68	-580.39	198.65	14,364,459.72	887,614.00	39.523684498°N	107.669450038°W	
3,327.00	31.20	160.29	3,168.28	-626.10	214.52	14,364,414.01	887,629.87	39.523560394°N	107.669389028°W	
3,422.00	30.50	158.27	3,249.84	-671.66	231.75	14,364,368.45	887,647.09	39.523436802°N	107.669323221°W	
3,516.00	30.59	157.83	3,330.79	-715.97	249.60	14,364,324.14	887,664.95	39.523316697°N	107.669255307°W	
3,611.00	30.59	157.65	3,412.57	-760.71	267.92	14,364,279.40	887,683.26	39.523195442°N	107.669185732°W	
3,705.00	31.11	159.23	3,493.27	-805.54	285.62	14,364,234.57	887,700.97	39.523073901°N	107.669118296°W	
3,800.00	31.46	160.73	3,574.46	-851.89	302.51	14,364,188.22	887,717.85	39.522948118°N	107.669053612°W	
3,895.00	30.67	158.44	3,655.84	-897.83	319.59	14,364,142.29	887,734.94	39.522823481°N	107.668988260°W	
3,989.00	30.32	161.87	3,736.84	-942.68	335.79	14,364,097.44	887,751.13	39.522701757°N	107.668926181°W	
4,084.00	28.74	158.97	3,819.50	-986.79	351.45	14,364,053.32	887,766.79	39.522582013°N	107.668866073°W	
4,178.00	25.14	161.17	3,903.29	-1,026.80	366.01	14,364,013.32	887,781.35	39.522473442°N	107.668810294°W	
4,261.89	22.58	163.53	3,980.00	-1,059.11	376.33	14,363,981.00	887,791.67	39.522385623°N	107.668770342°W	
4,273.24	22.24	163.89	3,990.50	-1,063.27	377.54	14,363,976.85	887,792.89	39.522374328°N	107.668765606°W	
4,367.00	20.39	164.95	4,077.84	-1,096.09	386.71	14,363,944.03	887,802.05	39.522285026°N	107.668729690°W	
4,461.00	20.13	164.24	4,166.02	-1,127.47	395.35	14,363,912.64	887,810.70	39.522199639°N	107.668695768°W	
4,556.00	17.93	163.37	4,255.83	-1,157.22	403.98	14,363,882.90	887,819.32	39.522118730°N	107.668662086°W	
4,650.00	15.91	162.05	4,345.75	-1,183.34	412.09	14,363,856.77	887,827.44	39.522047722°N	107.668630604°W	
4,745.00	13.62	161.07	4,437.61	-1,206.31	419.73	14,363,833.80	887,835.08	39.521985325°N	107.668601118°W	
4,840.00	10.81	160.99	4,530.45	-1,225.32	426.27	14,363,814.80	887,841.61	39.521933712°N	107.668575983°W	
4,934.00	7.47	163.10	4,623.24	-1,239.50	430.91	14,363,800.61	887,846.26	39.521895176°N	107.668558025°W	
5,028.00	4.39	152.03	4,716.73	-1,248.53	434.38	14,363,791.58	887,849.72	39.521870695°N	107.668544804°W	
5,123.00	1.58	160.47	4,811.60	-1,252.98	436.52	14,363,787.14	887,851.87	39.521858670°N	107.668536744°W	
5,217.00	0.70	290.89	4,905.58	-1,253.99	436.42	14,363,786.12	887,851.76	39.521855873°N	107.668537003°W	
5,312.00	1.14	337.56	5,000.57	-1,252.91	435.52	14,363,787.20	887,850.86	39.521858763°N	107.668540315°W	
5,406.00	2.11	4.11	5,094.54	-1,250.32	435.28	14,363,789.79	887,850.63	39.521865851°N	107.668541412°W	
5,500.00	1.49	355.67	5,188.49	-1,247.38	435.32	14,363,792.74	887,850.66	39.521873932°N	107.668541609°W	
5,595.00	0.62	322.80	5,283.47	-1,245.74	434.91	14,363,794.38	887,850.26	39.521878401°N	107.668543212°W	
5,689.00	1.14	339.85	5,377.46	-1,244.45	434.28	14,363,795.66	887,849.63	39.521881870°N	107.668545577°W	
5,784.00	0.97	319.20	5,472.45	-1,242.96	433.43	14,363,797.16	887,848.78	39.521885904°N	107.668548749°W	
5,878.00	1.32	1.47	5,566.43	-1,241.27	432.94	14,363,798.84	887,848.28	39.521890486°N	107.668550669°W	
5,951.59	0.95	339.43	5,640.00	-1,239.85	432.75	14,363,800.26	887,848.09	39.521894362°N	107.668551501°W	
5,973.00	0.88	330.01	5,661.41	-1,239.55	432.60	14,363,800.57	887,847.95	39.521895197°N	107.668552045°W	
6,067.00	0.62	292.39	5,755.40	-1,238.73	431.77	14,363,801.39	887,847.12	39.521897376°N	107.668555075°W	
6,162.00	1.14	353.03	5,850.39	-1,237.59	431.18	14,363,802.52	887,846.53	39.521900439°N	107.668557284°W	
6,256.00	1.41	355.06	5,944.37	-1,235.51	430.97	14,363,804.60	887,846.31	39.521906129°N	107.668558257°W	
6,351.00	0.79	298.19	6,039.36	-1,234.04	430.29	14,363,806.08	887,845.63	39.521910117°N	107.668560813°W	
6,445.00	0.79	191.14	6,133.35	-1,234.37	429.59	14,363,805.75	887,844.94	39.521909156°N	107.668563246°W	
6,540.00	1.23	172.51	6,228.34	-1,236.02	429.60	14,363,804.09	887,844.94	39.521904620°N	107.668563049°W	

ARK Directional Services

Survey Report - Geographic

Company:	Antero Resources	Local Co-ordinate Reference:	Well Burckle A13 (111334) - Slot A13
Project:	Burckle	TVD Reference:	KB @ 5583.00ft (Original Well Elev)
Site:	Burckle A Pad	MD Reference:	KB @ 5583.00ft (Original Well Elev)
Well:	Burckle A13 (111334)	North Reference:	Grid
Wellbore:	A13	Survey Calculation Method:	Minimum Curvature
Design:	A13	Database:	EDM SERVER DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,635.00	0.44	8.41	6,323.33	-1,236.67	429.79	14,363,803.44	887,845.13	39.521902852°N	107.668562321°W
6,729.00	0.53	20.72	6,417.33	-1,235.91	429.99	14,363,804.21	887,845.34	39.521904964°N	107.668561669°W
6,824.00	0.53	100.44	6,512.32	-1,235.58	430.58	14,363,804.54	887,845.92	39.521905920°N	107.668559623°W
6,918.00	1.14	136.56	6,606.31	-1,236.33	431.65	14,363,803.78	887,847.00	39.521903929°N	107.668555751°W
7,013.00	0.62	309.00	6,701.31	-1,236.70	431.90	14,363,803.42	887,847.25	39.521902954°N	107.668554826°W
7,107.00	0.97	260.40	6,795.30	-1,236.51	430.72	14,363,803.60	887,846.07	39.521903372°N	107.668559025°W
7,202.00	1.23	217.33	6,890.28	-1,237.46	429.31	14,363,802.66	887,844.65	39.521900665°N	107.668563925°W
7,296.00	0.62	124.17	6,984.28	-1,238.54	429.12	14,363,801.57	887,844.46	39.521897665°N	107.668564487°W
7,390.00	1.58	155.19	7,078.26	-1,240.01	430.08	14,363,800.11	887,845.43	39.521893732°N	107.668560916°W
7,485.00	1.41	183.46	7,173.23	-1,242.36	430.56	14,363,797.75	887,845.91	39.521887309°N	107.668558972°W
7,580.00	0.97	199.05	7,268.21	-1,244.29	430.23	14,363,795.83	887,845.57	39.521881996°N	107.668559949°W
7,674.00	0.53	182.35	7,362.20	-1,245.47	429.95	14,363,794.64	887,845.30	39.521878718°N	107.668560808°W
7,768.00	0.53	187.01	7,456.19	-1,246.34	429.88	14,363,793.77	887,845.23	39.521876337°N	107.668560968°W
7,870.00	0.53	187.01	7,558.19	-1,247.28	429.77	14,363,792.84	887,845.11	39.521873759°N	107.668561277°W
Proj to TD at 7870 MD/7558 TVD - A13 BH									

Survey Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
7,870.00	7,558.19	-1,247.28	429.77	Proj to TD at 7870 MD/7558 TVD

Checked By: _____ Approved By: _____ Date: _____