



End of Well Report

Prepared for



Fenno Ranch A1

August 26, 2010

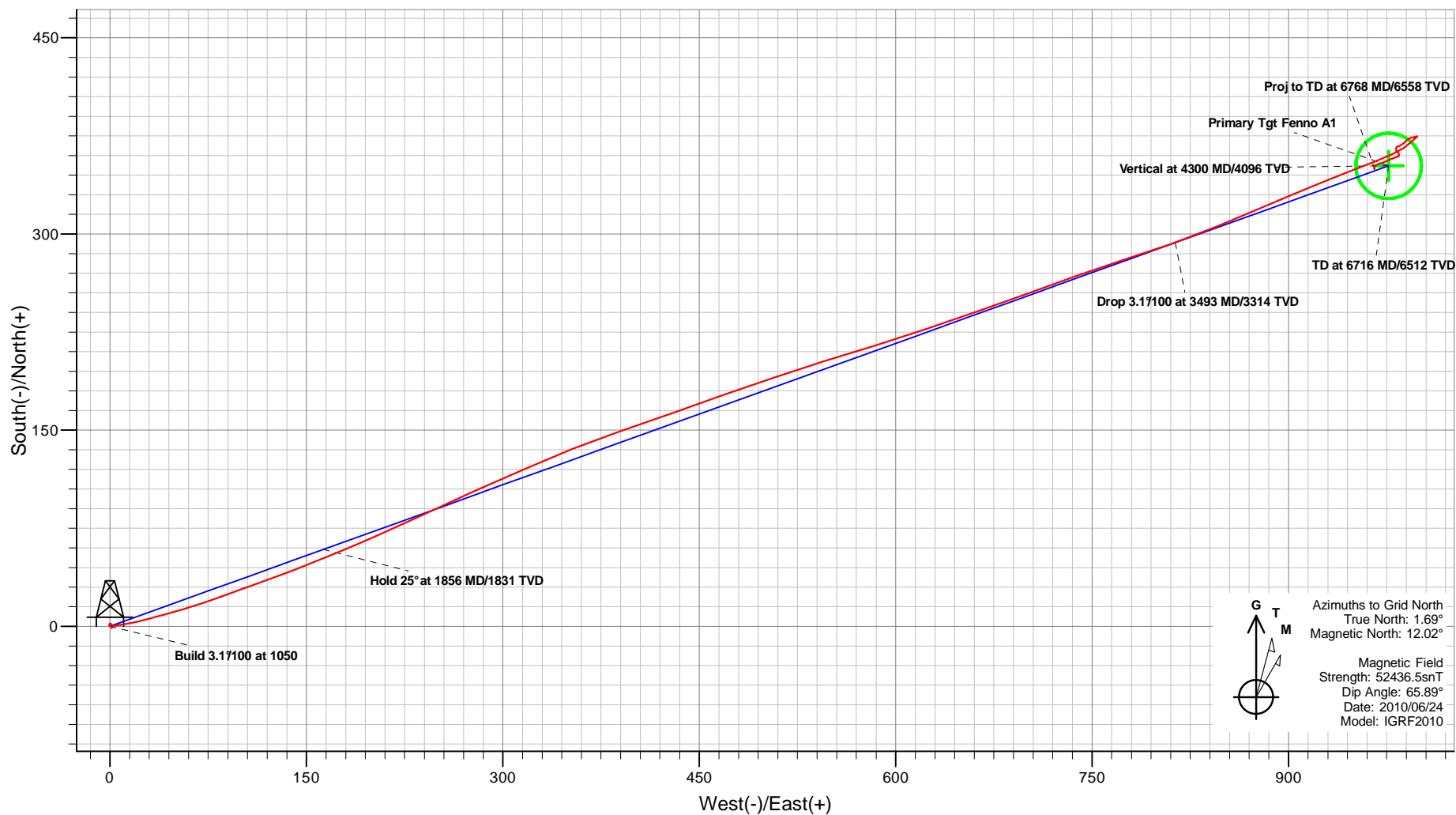
ARK Directional Services Inc
191 University Blvd, # 601
Denver, CO 80206



PLAN VIEW

Antero Resources

Project: Fenno Ranch
Site: Frontier 12
Well: Fenno Ranch A1 (111174)
Wellbore: Fenno Ranch A1
Design: Fenno Ranch A1



Fenno Ranch A1
Created By: ARK Directional Services
Date: 7:50, August 25 2010

PROJECT DETAILS: Fenno Ranch
Geodetic System: Universal Transverse Mercator
Datum: NAD83 Colorado - HARN
Ellipsoid: GRS 1980
Zone: Zone 13N (108 W to 102 W)
System Datum: Mean Sea Level

REFERENCE INFORMATION

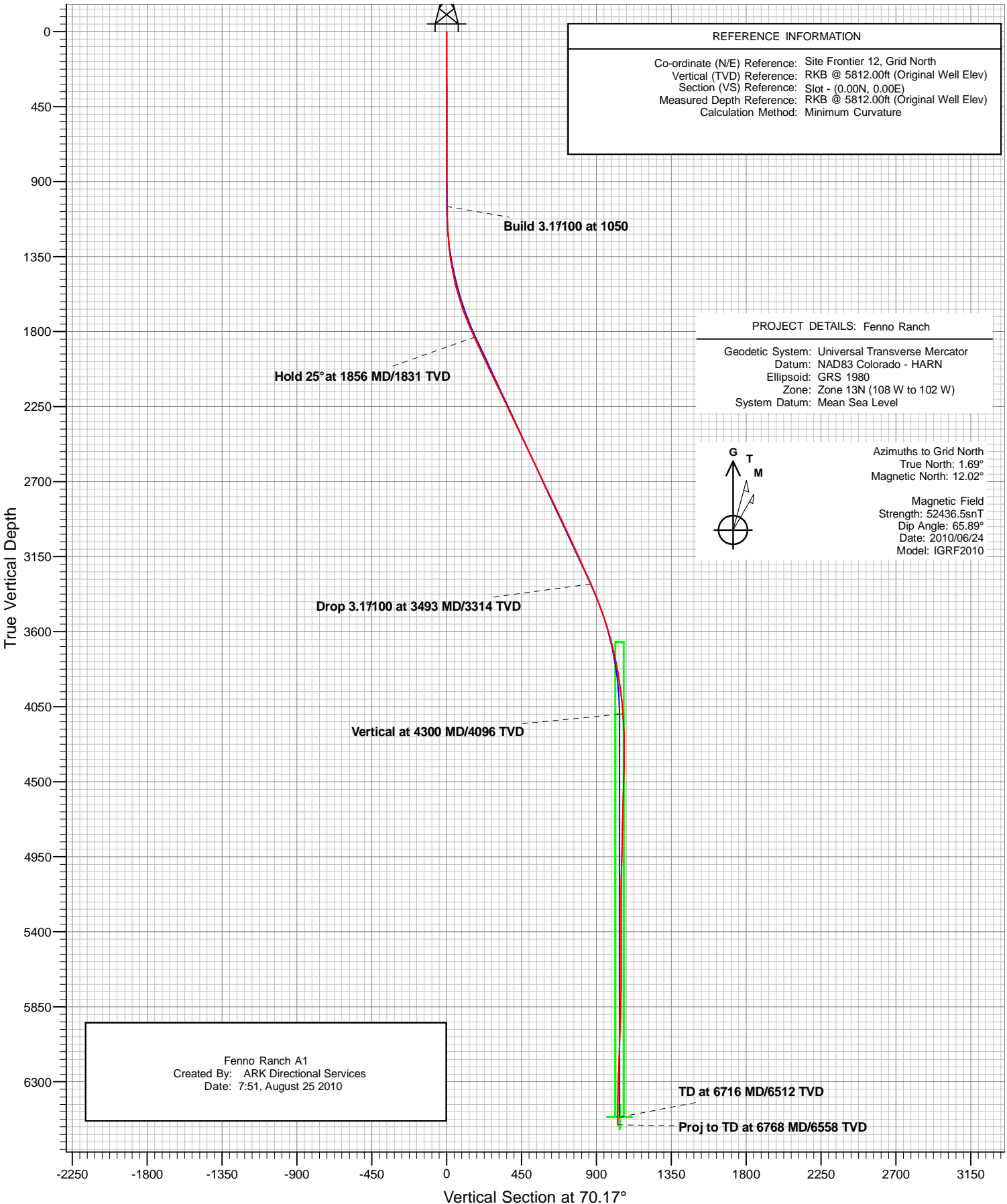
Co-ordinate (N/E) Reference: Site Frontier 12, Grid North
Vertical (TVD) Reference: RKB @ 5812.00ft (Original Well Elev)
Section (VS) Reference: Slot - (0.00N, 0.00E)
Measured Depth Reference: RKB @ 5812.00ft (Original Well Elev)
Calculation Method: Minimum Curvature



Antero Resources

Fenno Ranch A1

PLANNED VS ACTUAL



Antero Resources

Fenno Ranch

Frontier 12

Fenno Ranch A1 (111174)

Fenno Ranch A1

Survey: Fenno Ranch A1

Survey Report - Geographic

26 August, 2010

ARK Directional Services

Survey Report - Geographic

Company:	Antero Resources	Local Co-ordinate Reference:	Site Frontier 12
Project:	Fenno Ranch	TVD Reference:	RKB @ 5812.00ft (Original Well Elev)
Site:	Frontier 12	MD Reference:	RKB @ 5812.00ft (Original Well Elev)
Well:	Fenno Ranch A1 (111174)	North Reference:	Grid
Wellbore:	Fenno Ranch A1	Survey Calculation Method:	Minimum Curvature
Design:	Fenno Ranch A1	Database:	EDM SERVER DB

Project	Fenno Ranch		
Map System:	Universal Transverse Mercator	System Datum:	Mean Sea Level
Geo Datum:	NAD83 Colorado - HARN		
Map Zone:	Zone 13N (108 W to 102 W)		

Site	Frontier 12		
Site Position:		Northing:	14,381,383.763 usft
From:	Map	Easting:	894,017.706 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in
		Latitude:	39.570634161°N
		Longitude:	107.648531073°W
		Grid Convergence:	-1.69 °

Well	Fenno Ranch A1 (111174)		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft
		Latitude:	39.570634161°N
		Longitude:	107.648531073°W
		Ground Level:	5,788.00 ft

Wellbore	Fenno Ranch A1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	2010/06/24	10.33
			(°)
			65.89
			52,436

Design	Fenno Ranch A1		
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
			70.17

Survey Program	Date	2010/08/25		
From	To	Survey (Wellbore)	Tool Name	Description
(ft)	(ft)			
162.00	6,768.00	Fenno Ranch A1 (Fenno Ranch A1)	MWD	MWD - Standard

Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Map	Map	Latitude	Longitude
Depth	(°)	(°)	Depth	(ft)	(ft)	Northing	Easting		
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
0.00	0.00	0.00	0.00	0.00	0.00	14,381,383.763	894,017.706	39.570634161°N	107.648531073°W
162.00	0.44	307.68	162.00	0.38	-0.49	14,381,384.143	894,017.213	39.570635164°N	107.648532858°W
256.00	0.79	13.16	255.99	1.23	-0.63	14,381,384.995	894,017.075	39.570637489°N	107.648533436°W
349.00	0.88	48.23	348.98	2.33	0.05	14,381,386.095	894,017.754	39.570640562°N	107.648531146°W
441.00	1.76	154.31	440.97	1.53	1.19	14,381,385.292	894,018.893	39.570638452°N	107.648527022°W
534.00	0.88	180.59	533.94	-0.47	1.80	14,381,383.291	894,019.505	39.570633012°N	107.648524645°W
627.00	0.62	242.38	626.94	-1.42	1.35	14,381,382.344	894,019.052	39.570630376°N	107.648526152°W
720.00	0.44	45.95	719.94	-1.40	1.16	14,381,382.359	894,018.863	39.570630402°N	107.648526824°W
813.00	0.44	23.45	812.93	-0.83	1.56	14,381,382.934	894,019.261	39.570632014°N	107.648525471°W
907.00	0.53	35.05	906.93	-0.14	1.95	14,381,383.622	894,019.655	39.570633931°N	107.648524149°W
950.00	0.53	32.41	949.93	0.19	2.17	14,381,383.952	894,019.875	39.570634856°N	107.648523400°W
1,059.00	0.26	90.59	1,058.93	0.61	2.69	14,381,384.375	894,020.393	39.570636058°N	107.648521610°W

ARK Directional Services

Survey Report - Geographic

Company:	Antero Resources	Local Co-ordinate Reference:	Site Frontier 12
Project:	Fenno Ranch	TVD Reference:	RKB @ 5812.00ft (Original Well Elev)
Site:	Frontier 12	MD Reference:	RKB @ 5812.00ft (Original Well Elev)
Well:	Fenno Ranch A1 (111174)	North Reference:	Grid
Wellbore:	Fenno Ranch A1	Survey Calculation Method:	Minimum Curvature
Design:	Fenno Ranch A1	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	
1,091.00	0.88	95.96	1,090.92	0.59	3.00	14,381,384.349	894,020.710	39.570636012°N	107.648520484°W	
1,122.00	1.49	90.15	1,121.92	0.56	3.64	14,381,384.323	894,021.350	39.570635993°N	107.648518213°W	
1,154.00	2.37	82.16	1,153.90	0.65	4.72	14,381,384.412	894,022.421	39.570636324°N	107.648514424°W	
1,185.00	3.16	80.84	1,184.86	0.87	6.19	14,381,384.636	894,023.900	39.570637057°N	107.648509206°W	
1,217.00	4.13	81.81	1,216.80	1.18	8.21	14,381,384.940	894,025.911	39.570638055°N	107.648502108°W	
1,248.00	4.83	81.81	1,247.70	1.52	10.60	14,381,385.285	894,028.308	39.570639195°N	107.648493648°W	
1,280.00	5.63	79.43	1,279.57	2.00	13.48	14,381,385.765	894,031.184	39.570640744°N	107.648483501°W	
1,311.00	6.59	77.59	1,310.39	2.66	16.71	14,381,386.426	894,034.417	39.570642819°N	107.648472113°W	
1,343.00	7.82	76.88	1,342.14	3.55	20.62	14,381,387.315	894,038.330	39.570645574°N	107.648458332°W	
1,374.00	8.61	75.65	1,372.82	4.61	24.93	14,381,388.369	894,042.632	39.570648813°N	107.648443192°W	
1,406.00	9.67	76.53	1,404.41	5.83	29.86	14,381,389.589	894,047.567	39.570652558°N	107.648425828°W	
1,437.00	10.72	74.42	1,434.92	7.21	35.17	14,381,390.970	894,052.876	39.570656776°N	107.648407152°W	
1,469.00	11.78	74.51	1,466.31	8.88	41.19	14,381,392.642	894,058.891	39.570661848°N	107.648386005°W	
1,501.00	13.10	73.90	1,497.56	10.76	47.82	14,381,394.520	894,065.523	39.570667537°N	107.648362690°W	
1,532.00	14.33	73.54	1,527.67	12.82	54.87	14,381,396.581	894,072.578	39.570673763°N	107.648337898°W	
1,564.00	15.38	72.75	1,558.60	15.20	62.72	14,381,398.961	894,080.428	39.570680928°N	107.648310317°W	
1,595.00	16.61	71.61	1,588.40	17.82	70.85	14,381,401.578	894,088.559	39.570688765°N	107.648281768°W	
1,627.00	17.58	70.12	1,618.99	20.90	79.74	14,381,404.665	894,097.444	39.570697950°N	107.648250594°W	
1,658.00	18.72	70.12	1,648.44	24.19	88.82	14,381,407.948	894,106.525	39.570707693°N	107.648218747°W	
1,690.00	19.69	70.12	1,678.66	27.77	98.72	14,381,411.528	894,116.424	39.570718313°N	107.648184031°W	
1,721.00	20.57	70.12	1,707.77	31.39	108.75	14,381,415.156	894,126.457	39.570729077°N	107.648148845°W	
1,753.00	21.80	70.20	1,737.61	35.32	119.63	14,381,419.080	894,137.335	39.570740723°N	107.648110695°W	
1,784.00	23.03	70.12	1,766.26	39.33	130.75	14,381,423.092	894,148.453	39.570752629°N	107.648071700°W	
1,816.00	24.17	68.36	1,795.59	43.87	142.72	14,381,427.637	894,160.430	39.570766065°N	107.648029720°W	
1,847.00	24.87	67.74	1,823.79	48.68	154.66	14,381,432.447	894,172.362	39.570780225°N	107.647987925°W	
1,879.00	24.96	67.83	1,852.81	53.78	167.14	14,381,437.544	894,184.842	39.570795216°N	107.647944217°W	
1,910.00	24.87	66.86	1,880.93	58.81	179.19	14,381,442.573	894,196.893	39.570809990°N	107.647902021°W	
1,942.00	24.96	67.22	1,909.95	64.07	191.60	14,381,447.832	894,209.306	39.570825420°N	107.647858569°W	
1,973.00	25.22	66.16	1,938.03	69.27	203.67	14,381,453.034	894,221.378	39.570840667°N	107.647816320°W	
2,067.00	25.84	65.02	2,022.85	86.02	240.56	14,381,469.780	894,258.265	39.570889589°N	107.647687308°W	
2,162.00	25.58	65.72	2,108.44	103.19	278.02	14,381,486.956	894,295.727	39.570939739°N	107.647556305°W	
2,256.00	25.84	66.34	2,193.14	119.76	315.28	14,381,503.522	894,332.988	39.570988197°N	107.647425946°W	
2,350.00	25.49	67.83	2,277.86	135.61	352.78	14,381,519.375	894,370.484	39.571034721°N	107.647294686°W	
2,445.00	25.49	71.70	2,363.62	149.75	391.12	14,381,533.509	894,408.825	39.571076594°N	107.647160247°W	
2,539.00	25.66	70.12	2,448.41	163.02	429.46	14,381,546.781	894,447.168	39.571116103°N	107.647025709°W	
2,633.00	25.93	70.64	2,533.05	176.75	467.99	14,381,560.515	894,485.698	39.571156895°N	107.646890561°W	
2,728.00	25.40	71.08	2,618.67	190.24	506.86	14,381,574.006	894,524.567	39.571197050°N	107.646754181°W	
2,822.00	25.31	72.75	2,703.62	202.74	545.12	14,381,586.502	894,562.828	39.571234421°N	107.646619856°W	
2,917.00	25.84	73.10	2,789.31	214.78	584.33	14,381,598.542	894,602.031	39.571270621°N	107.646482142°W	
3,011.00	25.40	71.26	2,874.07	227.21	623.02	14,381,610.975	894,640.724	39.571307854°N	107.646346278°W	
3,106.00	25.58	70.82	2,959.82	240.50	661.68	14,381,624.258	894,679.389	39.571347421°N	107.646210602°W	
3,200.00	24.79	70.03	3,044.89	253.89	699.37	14,381,637.656	894,717.078	39.571387221°N	107.646078395°W	
3,295.00	24.61	69.94	3,131.20	267.48	736.67	14,381,651.243	894,754.378	39.571427509°N	107.645947590°W	
3,389.00	24.43	72.23	3,216.72	280.13	773.57	14,381,663.889	894,791.276	39.571465184°N	107.645818113°W	
3,484.00	24.17	70.82	3,303.30	292.51	810.65	14,381,676.275	894,828.353	39.571502157°N	107.645687970°W	
3,579.00	22.06	67.22	3,390.68	305.81	845.47	14,381,689.574	894,863.176	39.571541455°N	107.645565914°W	
3,673.00	20.04	66.86	3,478.40	318.98	876.56	14,381,702.739	894,894.264	39.571580084°N	107.645457082°W	
3,768.00	17.23	67.30	3,568.41	330.81	904.51	14,381,714.568	894,922.217	39.571614793°N	107.645359224°W	
3,862.00	14.59	67.83	3,658.80	340.65	928.32	14,381,724.410	894,946.029	39.571643716°N	107.645275841°W	
3,957.00	12.30	69.85	3,751.19	348.65	948.91	14,381,732.412	894,966.612	39.571667332°N	107.645203711°W	
4,051.00	9.93	66.95	3,843.42	355.27	965.77	14,381,739.035	894,983.472	39.571686864°N	107.645144635°W	
4,146.00	7.38	66.69	3,937.33	360.90	978.91	14,381,744.657	894,996.615	39.571703350°N	107.645098632°W	
4,240.00	5.36	54.38	4,030.75	365.84	988.02	14,381,749.604	895,005.729	39.571717657°N	107.645066837°W	
4,334.00	4.13	46.03	4,124.43	370.75	994.03	14,381,754.511	895,011.735	39.571731605°N	107.645046061°W	
4,429.00	1.67	52.98	4,219.30	373.96	997.60	14,381,757.721	895,015.303	39.571740697°N	107.645033748°W	

ARK Directional Services

Survey Report - Geographic

Company:	Antero Resources	Local Co-ordinate Reference:	Site Frontier 12
Project:	Fenno Ranch	TVD Reference:	RKB @ 5812.00ft (Original Well Elev)
Site:	Frontier 12	MD Reference:	RKB @ 5812.00ft (Original Well Elev)
Well:	Fenno Ranch A1 (111174)	North Reference:	Grid
Wellbore:	Fenno Ranch A1	Survey Calculation Method:	Minimum Curvature
Design:	Fenno Ranch A1	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
4,523.00	0.18	269.01	4,313.29	374.78	998.54	14,381,758.543	895,016.249	39.571743029°N	107.645030480°W
4,618.00	1.41	253.90	4,408.28	374.45	997.27	14,381,758.216	895,014.976	39.571742030°N	107.645034955°W
4,709.00	1.32	260.05	4,499.25	373.96	995.16	14,381,757.724	895,012.868	39.571740511°N	107.645042377°W
4,807.00	1.49	255.21	4,597.22	373.44	992.82	14,381,757.204	895,010.525	39.571738894°N	107.645050631°W
4,901.00	2.20	223.66	4,691.18	371.82	990.39	14,381,755.587	895,008.097	39.571734261°N	107.645059067°W
4,996.00	0.79	231.92	4,786.14	370.10	988.62	14,381,753.864	895,006.323	39.571729391°N	107.645065177°W
5,090.00	1.67	234.38	4,880.12	368.90	986.99	14,381,752.666	895,004.699	39.571725974°N	107.645070808°W
5,185.00	1.32	242.73	4,975.09	367.60	984.90	14,381,751.359	895,002.601	39.571722218°N	107.645078108°W
5,279.00	0.70	256.36	5,069.07	366.97	983.38	14,381,750.727	895,001.081	39.571720363°N	107.645083432°W
5,374.00	0.44	227.18	5,164.07	366.58	982.55	14,381,750.342	895,000.250	39.571719240°N	107.645086340°W
5,468.00	1.23	195.01	5,258.06	365.36	982.02	14,381,749.123	894,999.724	39.571715851°N	107.645088077°W
5,563.00	1.32	146.49	5,353.04	363.46	982.36	14,381,747.225	895,000.064	39.571710673°N	107.645086674°W
5,657.00	1.41	118.02	5,447.01	362.02	983.98	14,381,745.779	895,001.682	39.571706837°N	107.645080785°W
5,752.00	1.49	213.11	5,541.99	360.43	984.33	14,381,744.195	895,002.039	39.571702520°N	107.645079353°W
5,846.00	0.26	93.41	5,635.98	359.40	983.88	14,381,743.159	895,001.585	39.571699640°N	107.645080857°W
5,940.00	0.18	77.50	5,729.98	359.42	984.24	14,381,743.178	895,001.942	39.571699722°N	107.645079593°W
6,035.00	1.49	253.19	5,824.97	359.09	983.20	14,381,742.853	895,000.905	39.571698747°N	107.645083235°W
6,129.00	2.37	245.72	5,918.92	357.94	980.26	14,381,741.701	894,997.963	39.571695347°N	107.645093542°W
6,224.00	1.49	250.38	6,013.86	356.72	977.31	14,381,740.478	894,995.010	39.571691755°N	107.645103886°W
6,318.00	1.93	242.21	6,107.82	355.57	974.75	14,381,739.330	894,992.458	39.571688398°N	107.645112811°W
6,412.00	1.93	257.41	6,201.77	354.48	971.81	14,381,738.247	894,989.513	39.571685189°N	107.645123138°W
6,507.00	1.93	253.46	6,296.71	353.68	968.71	14,381,737.443	894,986.418	39.571682733°N	107.645134025°W
6,601.00	1.76	221.11	6,390.67	352.14	966.25	14,381,735.904	894,983.952	39.571678314°N	107.645142609°W
6,696.00	0.97	178.84	6,485.64	350.24	965.30	14,381,734.001	894,983.009	39.571673016°N	107.645145753°W
6,722.38	0.79	140.91	6,512.02	349.87	965.42	14,381,733.637	894,983.128	39.571672027°N	107.645145293°W
Primary Tgt Fenno A1									
6,722.43	0.79	140.91	6,512.07	349.87	965.42	14,381,733.636	894,983.128	39.571672025°N	107.645145291°W
A1 Prim Tgt									
6,723.00	0.79	139.90	6,512.64	349.87	965.43	14,381,733.630	894,983.133	39.571672009°N	107.645145273°W
6,768.00	0.79	139.90	6,557.63	349.39	965.83	14,381,733.156	894,983.533	39.571670739°N	107.645143807°W
Proj to TD at 6768 MD/6558 TVD									

Survey Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
6,768.00	6,557.63	349.39	965.83	Proj to TD at 6768 MD/6558 TVD

Checked By: _____ Approved By: _____ Date: _____