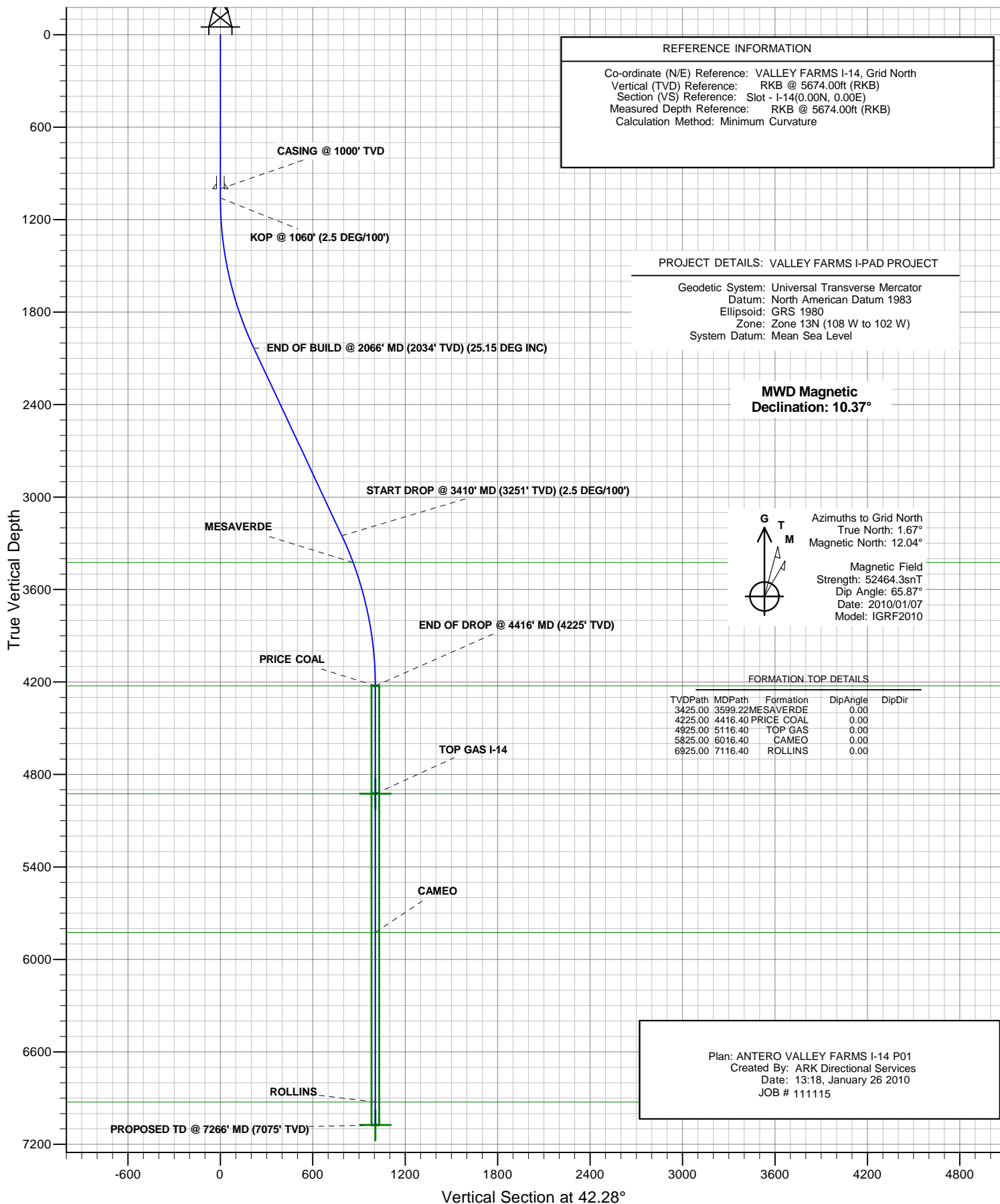




ANTERO RESOURCES

ANTERO VALLEY FARMS I-14

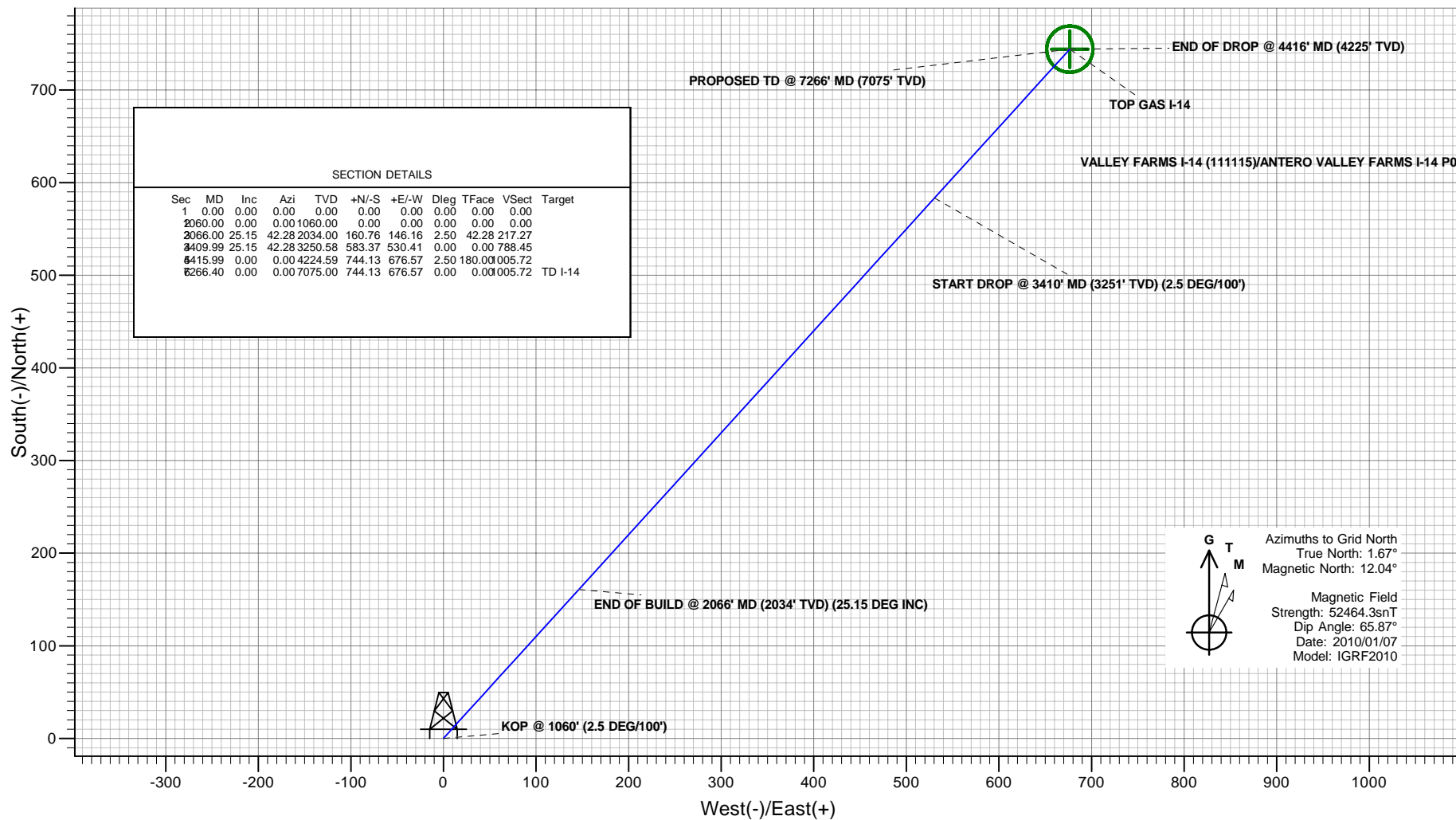




PLAN VIEW

ANTERO RESOURCES

Project: VALLEY FARMS I-PAD PROJECT
Site: FRONTIER 12
Well: VALLEY FARMS I-14 (111115)
Wellbore: ANTERO VALLEY FARMS I-14
Design: ANTERO VALLEY FARMS I-14 P01
JOB # 111115



Plan: ANTERO VALLEY FARMS I-14 P01
Created By: ARK Directional Services
Date: 13:24, January 26 2010

PROJECT DETAILS: VALLEY FARMS I-PAD PROJECT

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

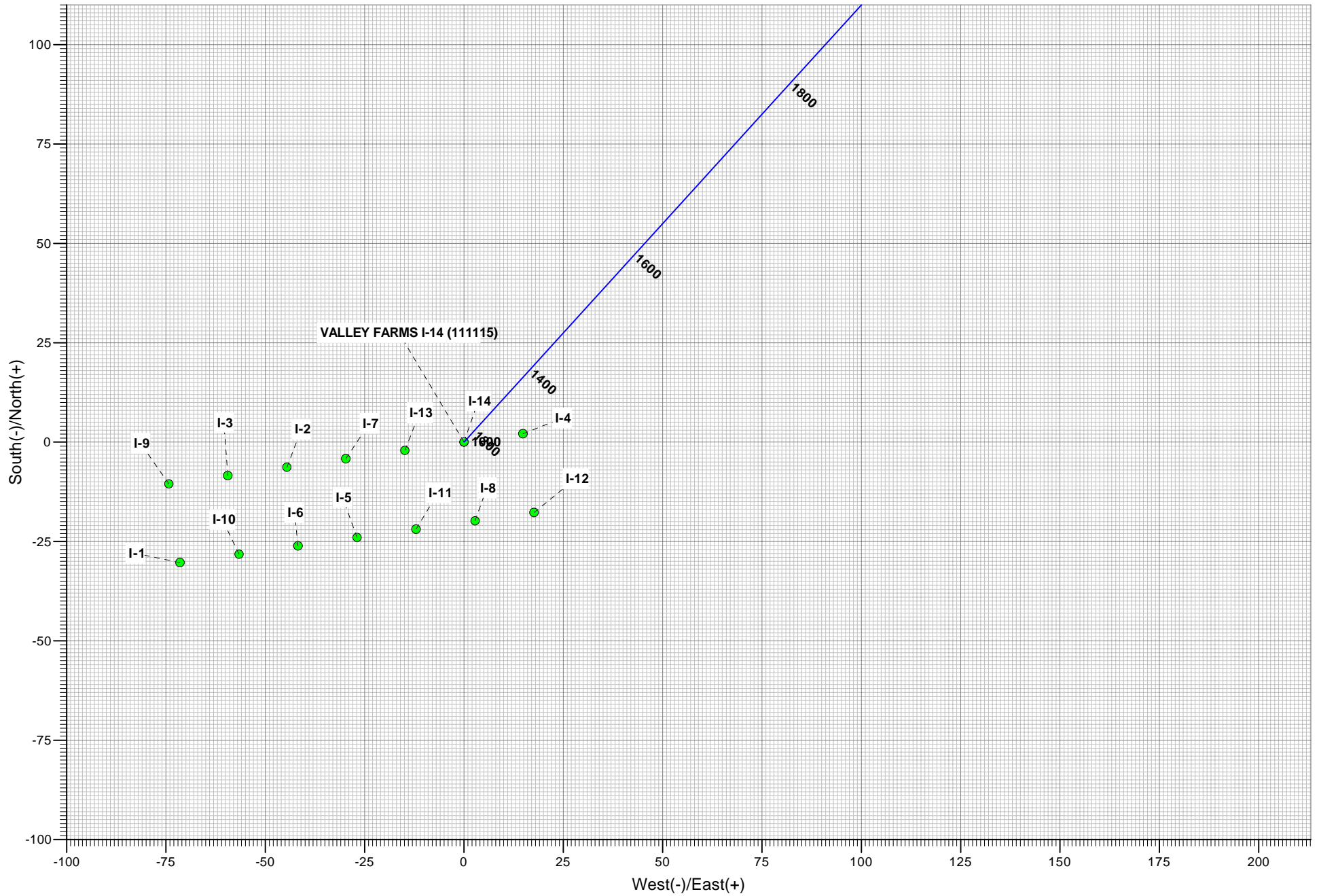
Co-ordinate (N/E) Reference: VALLEY FARMS I-14, Grid North
Vertical (TVD) Reference: RKB @ 5674.00ft (RKB)
Section (VS) Reference: Slot - I-14(0.00N, 0.00E)
Measured Depth Reference: RKB @ 5674.00ft (RKB)
Calculation Method: Minimum Curvature



ANTERO VALLEY FARMS I-14



SPIDER PLOT



ANTERO RESOURCES

**VALLEY FARMS I-PAD PROJECT
FRONTIER 12**

Plan: ANTERO VALLEY FARMS I-14 P01

Standard Planning Report - Geographic

26 January, 2010

Ark Directional Services

Planning Report - Geographic

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well VALLEY FARMS I-14 (111115) - Slot I-14
Company:	ANTERO RESOURCES	TVD Reference:	RKB @ 5674.00ft (RKB)
Project:	VALLEY FARMS I-PAD PROJECT	MD Reference:	RKB @ 5674.00ft (RKB)
Site:	FRONTIER 12	North Reference:	Grid
Well:	VALLEY FARMS I-14 (111115)	Survey Calculation Method:	Minimum Curvature
Wellbore:	ANTERO VALLEY FARMS I-14		
Design:	ANTERO VALLEY FARMS I-14 P01		

Project	VALLEY FARMS I-PAD PROJECT		
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		FRONTIER 12				
Site Position:		Northing:	14,365,113.22 usft	Latitude:	39° 31' 35.888 N	
From:	Lat/Long	Easting:	901,976.81 usft	Longitude:	107° 37' 7.093 W	
Position Uncertainty:		0.00 ft	Slot Radius:	13.20 in	Grid Convergence:	-1.67 °

Well	VALLEY FARMS I-14 (111115) - Slot I-14					
Well Position	+N/-S	0.00 ft	Northing:	14,365,137.22 usft	Latitude:	39° 31' 36.132 N
	+E/-W	0.00 ft	Easting:	902,003.72 usft	Longitude:	107° 37' 6.759 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,650.00 ft

Wellbore	ANTERO VALLEY FARMS I-14				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2010/01/07	10.37	65.87	52,464

Design	ANTERO VALLEY FARMS I-14 P01			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	42.28

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,060.00	0.00	0.00	1,060.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,066.00	25.15	42.28	2,034.00	160.76	146.16	2.50	2.50	0.00	42.28	
3,409.99	25.15	42.28	3,250.58	583.37	530.41	0.00	0.00	0.00	0.00	
4,415.99	0.00	0.00	4,224.59	744.13	676.57	2.50	-2.50	0.00	180.00	
7,266.40	0.00	0.00	7,075.00	744.13	676.57	0.00	0.00	0.00	0.00	TD I-14

Ark Directional Services

Planning Report - Geographic

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well VALLEY FARMS I-14 (111115) - Slot I-14
Company:	ANTERO RESOURCES	TVD Reference:	RKB @ 5674.00ft (RKB)
Project:	VALLEY FARMS I-PAD PROJECT	MD Reference:	RKB @ 5674.00ft (RKB)
Site:	FRONTIER 12	North Reference:	Grid
Well:	VALLEY FARMS I-14 (111115)	Survey Calculation Method:	Minimum Curvature
Wellbore:	ANTERO VALLEY FARMS I-14		
Design:	ANTERO VALLEY FARMS I-14 P01		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.00	0.00	0.00	0.00	0.00	0.00	14,365,137.22	902,003.72	39° 31' 36.132 N	107° 37' 6.759 W	
100.00	0.00	0.00	100.00	0.00	0.00	14,365,137.22	902,003.72	39° 31' 36.132 N	107° 37' 6.759 W	
200.00	0.00	0.00	200.00	0.00	0.00	14,365,137.22	902,003.72	39° 31' 36.132 N	107° 37' 6.759 W	
300.00	0.00	0.00	300.00	0.00	0.00	14,365,137.22	902,003.72	39° 31' 36.132 N	107° 37' 6.759 W	
400.00	0.00	0.00	400.00	0.00	0.00	14,365,137.22	902,003.72	39° 31' 36.132 N	107° 37' 6.759 W	
500.00	0.00	0.00	500.00	0.00	0.00	14,365,137.22	902,003.72	39° 31' 36.132 N	107° 37' 6.759 W	
600.00	0.00	0.00	600.00	0.00	0.00	14,365,137.22	902,003.72	39° 31' 36.132 N	107° 37' 6.759 W	
700.00	0.00	0.00	700.00	0.00	0.00	14,365,137.22	902,003.72	39° 31' 36.132 N	107° 37' 6.759 W	
800.00	0.00	0.00	800.00	0.00	0.00	14,365,137.22	902,003.72	39° 31' 36.132 N	107° 37' 6.759 W	
900.00	0.00	0.00	900.00	0.00	0.00	14,365,137.22	902,003.72	39° 31' 36.132 N	107° 37' 6.759 W	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,365,137.22	902,003.72	39° 31' 36.132 N	107° 37' 6.759 W	
CASING @ 1000' TVD										
1,060.00	0.00	0.00	1,060.00	0.00	0.00	14,365,137.22	902,003.72	39° 31' 36.132 N	107° 37' 6.759 W	
KOP @ 1060' (2.5 DEG/100')										
1,100.00	1.00	42.28	1,100.00	0.26	0.23	14,365,137.48	902,003.96	39° 31' 36.135 N	107° 37' 6.756 W	
1,200.00	3.50	42.28	1,199.91	3.16	2.88	14,365,140.38	902,006.60	39° 31' 36.164 N	107° 37' 6.724 W	
1,300.00	6.00	42.28	1,299.56	9.29	8.45	14,365,146.51	902,012.17	39° 31' 36.227 N	107° 37' 6.655 W	
1,400.00	8.50	42.28	1,398.75	18.63	16.93	14,365,155.85	902,020.66	39° 31' 36.321 N	107° 37' 6.550 W	
1,500.00	11.00	42.28	1,497.30	31.16	28.33	14,365,168.38	902,032.05	39° 31' 36.448 N	107° 37' 6.409 W	
1,600.00	13.50	42.28	1,595.02	46.85	42.60	14,365,184.07	902,046.32	39° 31' 36.607 N	107° 37' 6.233 W	
1,700.00	16.00	42.28	1,691.71	65.69	59.73	14,365,202.91	902,063.45	39° 31' 36.798 N	107° 37' 6.022 W	
1,800.00	18.50	42.28	1,787.21	87.63	79.67	14,365,224.85	902,083.39	39° 31' 37.021 N	107° 37' 5.776 W	
1,900.00	21.00	42.28	1,881.32	112.63	102.40	14,365,249.85	902,106.12	39° 31' 37.274 N	107° 37' 5.495 W	
2,000.00	23.50	42.28	1,973.87	140.64	127.87	14,365,277.86	902,131.59	39° 31' 37.558 N	107° 37' 5.180 W	
2,066.00	25.15	42.28	2,034.00	160.76	146.16	14,365,297.98	902,149.88	39° 31' 37.762 N	107° 37' 4.955 W	
END OF BUILD @ 2066' MD (2034' TVD) (25.15 DEG INC)										
2,100.00	25.15	42.28	2,064.78	171.45	155.88	14,365,308.67	902,159.60	39° 31' 37.871 N	107° 37' 4.835 W	
2,200.00	25.15	42.28	2,155.30	202.89	184.47	14,365,340.11	902,188.19	39° 31' 38.189 N	107° 37' 4.482 W	
2,300.00	25.15	42.28	2,245.82	234.34	213.06	14,365,371.56	902,216.78	39° 31' 38.508 N	107° 37' 4.129 W	
2,400.00	25.15	42.28	2,336.34	265.78	241.65	14,365,403.00	902,245.37	39° 31' 38.827 N	107° 37' 3.776 W	
2,500.00	25.15	42.28	2,426.86	297.23	270.24	14,365,434.45	902,273.96	39° 31' 39.146 N	107° 37' 3.423 W	
2,600.00	25.15	42.28	2,517.38	328.67	298.83	14,365,465.89	902,302.55	39° 31' 39.465 N	107° 37' 3.070 W	
2,700.00	25.15	42.28	2,607.90	360.12	327.42	14,365,497.34	902,331.14	39° 31' 39.783 N	107° 37' 2.717 W	
2,800.00	25.15	42.28	2,698.42	391.56	356.01	14,365,528.78	902,359.73	39° 31' 40.102 N	107° 37' 2.364 W	
2,900.00	25.15	42.28	2,788.94	423.01	384.60	14,365,560.23	902,388.32	39° 31' 40.421 N	107° 37' 2.011 W	
3,000.00	25.15	42.28	2,879.46	454.45	413.19	14,365,591.67	902,416.91	39° 31' 40.740 N	107° 37' 1.658 W	
3,100.00	25.15	42.28	2,969.98	485.90	441.78	14,365,623.12	902,445.50	39° 31' 41.058 N	107° 37' 1.305 W	
3,200.00	25.15	42.28	3,060.50	517.34	470.37	14,365,654.56	902,474.09	39° 31' 41.377 N	107° 37' 0.952 W	
3,300.00	25.15	42.28	3,151.02	548.79	498.96	14,365,686.01	902,502.68	39° 31' 41.696 N	107° 37' 0.599 W	
3,409.99	25.15	42.28	3,250.58	583.37	530.41	14,365,720.59	902,534.13	39° 31' 42.047 N	107° 37' 0.211 W	
START DROP @ 3410' MD (3251' TVD) (2.5 DEG/100')										
3,500.00	22.90	42.28	3,332.79	610.48	555.06	14,365,747.70	902,558.78	39° 31' 42.322 N	107° 36' 59.907 W	
3,599.22	20.42	42.28	3,425.00	637.58	579.69	14,365,774.80	902,583.41	39° 31' 42.596 N	107° 36' 59.602 W	
MESAVERDE										
3,600.00	20.40	42.28	3,425.73	637.78	579.88	14,365,775.00	902,583.59	39° 31' 42.598 N	107° 36' 59.600 W	
3,700.00	17.90	42.28	3,520.19	662.05	601.94	14,365,799.27	902,605.66	39° 31' 42.844 N	107° 36' 59.328 W	
3,800.00	15.40	42.28	3,615.99	683.25	621.21	14,365,820.47	902,624.93	39° 31' 43.059 N	107° 36' 59.090 W	
3,900.00	12.90	42.28	3,712.94	701.33	637.66	14,365,838.55	902,641.38	39° 31' 43.243 N	107° 36' 58.887 W	
4,000.00	10.40	42.28	3,810.88	716.27	651.24	14,365,853.49	902,654.96	39° 31' 43.394 N	107° 36' 58.719 W	
4,100.00	7.90	42.28	3,909.60	728.04	661.94	14,365,865.26	902,665.66	39° 31' 43.513 N	107° 36' 58.587 W	
4,200.00	5.40	42.28	4,008.92	736.60	669.73	14,365,873.82	902,673.45	39° 31' 43.600 N	107° 36' 58.491 W	
4,300.00	2.90	42.28	4,108.65	741.96	674.60	14,365,879.18	902,678.31	39° 31' 43.654 N	107° 36' 58.431 W	
4,400.00	0.40	42.28	4,208.60	744.09	676.53	14,365,881.31	902,680.25	39° 31' 43.676 N	107° 36' 58.407 W	

Ark Directional Services

Planning Report - Geographic

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well VALLEY FARMS I-14 (111115) - Slot I-14
Company:	ANTERO RESOURCES	TVD Reference:	RKB @ 5674.00ft (RKB)
Project:	VALLEY FARMS I-PAD PROJECT	MD Reference:	RKB @ 5674.00ft (RKB)
Site:	FRONTIER 12	North Reference:	Grid
Well:	VALLEY FARMS I-14 (111115)	Survey Calculation Method:	Minimum Curvature
Wellbore:	ANTERO VALLEY FARMS I-14		
Design:	ANTERO VALLEY FARMS I-14 P01		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,415.99	0.00	0.00	4,224.59	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
END OF DROP @ 4416' MD (4225' TVD)									
4,416.40	0.00	0.00	4,225.00	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
PRICE COAL									
4,500.00	0.00	0.00	4,308.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
4,600.00	0.00	0.00	4,408.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
4,700.00	0.00	0.00	4,508.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
4,800.00	0.00	0.00	4,608.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
4,900.00	0.00	0.00	4,708.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
5,000.00	0.00	0.00	4,808.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
5,100.00	0.00	0.00	4,908.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
5,116.40	0.00	0.00	4,925.00	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
TOP GAS - TOP GAS I-14									
5,200.00	0.00	0.00	5,008.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
5,300.00	0.00	0.00	5,108.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
5,400.00	0.00	0.00	5,208.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
5,500.00	0.00	0.00	5,308.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
5,600.00	0.00	0.00	5,408.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
5,700.00	0.00	0.00	5,508.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
5,800.00	0.00	0.00	5,608.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
5,900.00	0.00	0.00	5,708.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
6,000.00	0.00	0.00	5,808.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
6,016.40	0.00	0.00	5,825.00	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
CAMEO									
6,100.00	0.00	0.00	5,908.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
6,200.00	0.00	0.00	6,008.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
6,300.00	0.00	0.00	6,108.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
6,400.00	0.00	0.00	6,208.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
6,500.00	0.00	0.00	6,308.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
6,600.00	0.00	0.00	6,408.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
6,700.00	0.00	0.00	6,508.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
6,800.00	0.00	0.00	6,608.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
6,900.00	0.00	0.00	6,708.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
7,000.00	0.00	0.00	6,808.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
7,100.00	0.00	0.00	6,908.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
7,116.40	0.00	0.00	6,925.00	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
ROLLINS									
7,200.00	0.00	0.00	7,008.60	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
7,266.38	0.00	0.00	7,074.98	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
PROPOSED TD @ 7266' MD (7075' TVD)									
7,266.40	0.00	0.00	7,075.00	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
TD I-14									

Ark Directional Services

Planning Report - Geographic

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well VALLEY FARMS I-14 (111115) - Slot I-14
Company:	ANTERO RESOURCES	TVD Reference:	RKB @ 5674.00ft (RKB)
Project:	VALLEY FARMS I-PAD PROJECT	MD Reference:	RKB @ 5674.00ft (RKB)
Site:	FRONTIER 12	North Reference:	Grid
Well:	VALLEY FARMS I-14 (111115)	Survey Calculation Method:	Minimum Curvature
Wellbore:	ANTERO VALLEY FARMS I-14		
Design:	ANTERO VALLEY FARMS I-14 P01		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
TOP GAS I-14 - plan hits target center - Circle (radius 25.00)	0.00	0.00	4,925.00	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W
TD I-14 - plan hits target center - Circle (radius 25.00)	0.00	360.00	7,075.00	744.13	676.57	14,365,881.35	902,680.29	39° 31' 43.676 N	107° 36' 58.406 W

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
1,000.00	1,000.00	CASING @ 1000' TVD	9.62	12.25

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,599.22	3,425.00	MESAVERDE		0.00	
4,416.40	4,225.00	PRICE COAL		0.00	
5,116.40	4,925.00	TOP GAS		0.00	
6,016.40	5,825.00	CAMEO		0.00	
7,116.40	6,925.00	ROLLINS		0.00	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,060.00	1,060.00	0.00	0.00	KOP @ 1060' (2.5 DEG/100')
2,066.00	2,034.00	160.76	146.16	END OF BUILD @ 2066' MD (2034' TVD) (25.15 DEG INC)
3,409.99	3,250.58	583.37	530.41	START DROP @ 3410' MD (3251' TVD) (2.5 DEG/100')
4,415.99	4,224.59	744.13	676.57	END OF DROP @ 4416' MD (4225' TVD)
7,266.38	7,074.98	744.13	676.57	PROPOSED TD @ 7266' MD (7075' TVD)