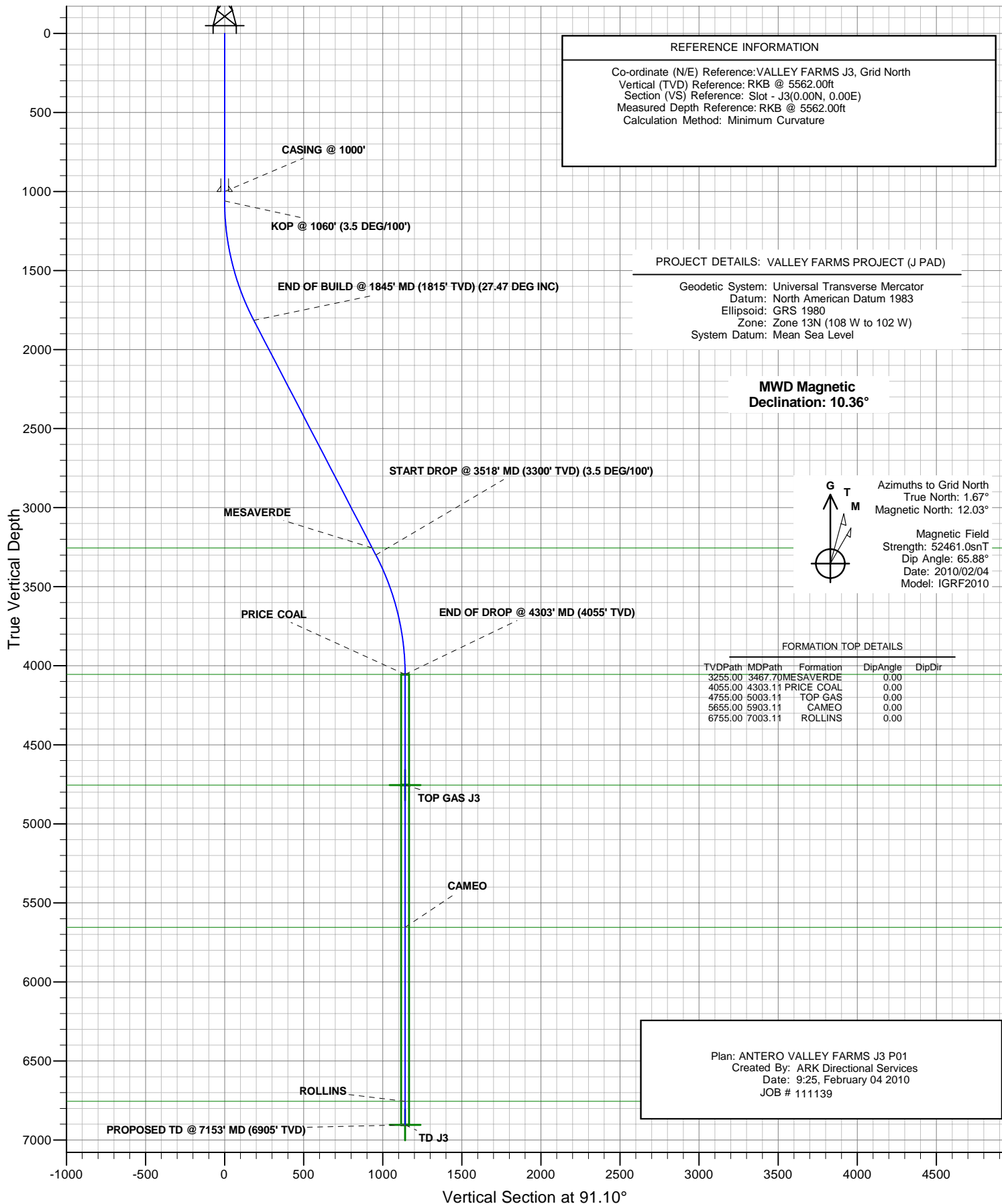




ANTERO RESOURCES

ANTERO VALLEY FARMS J3



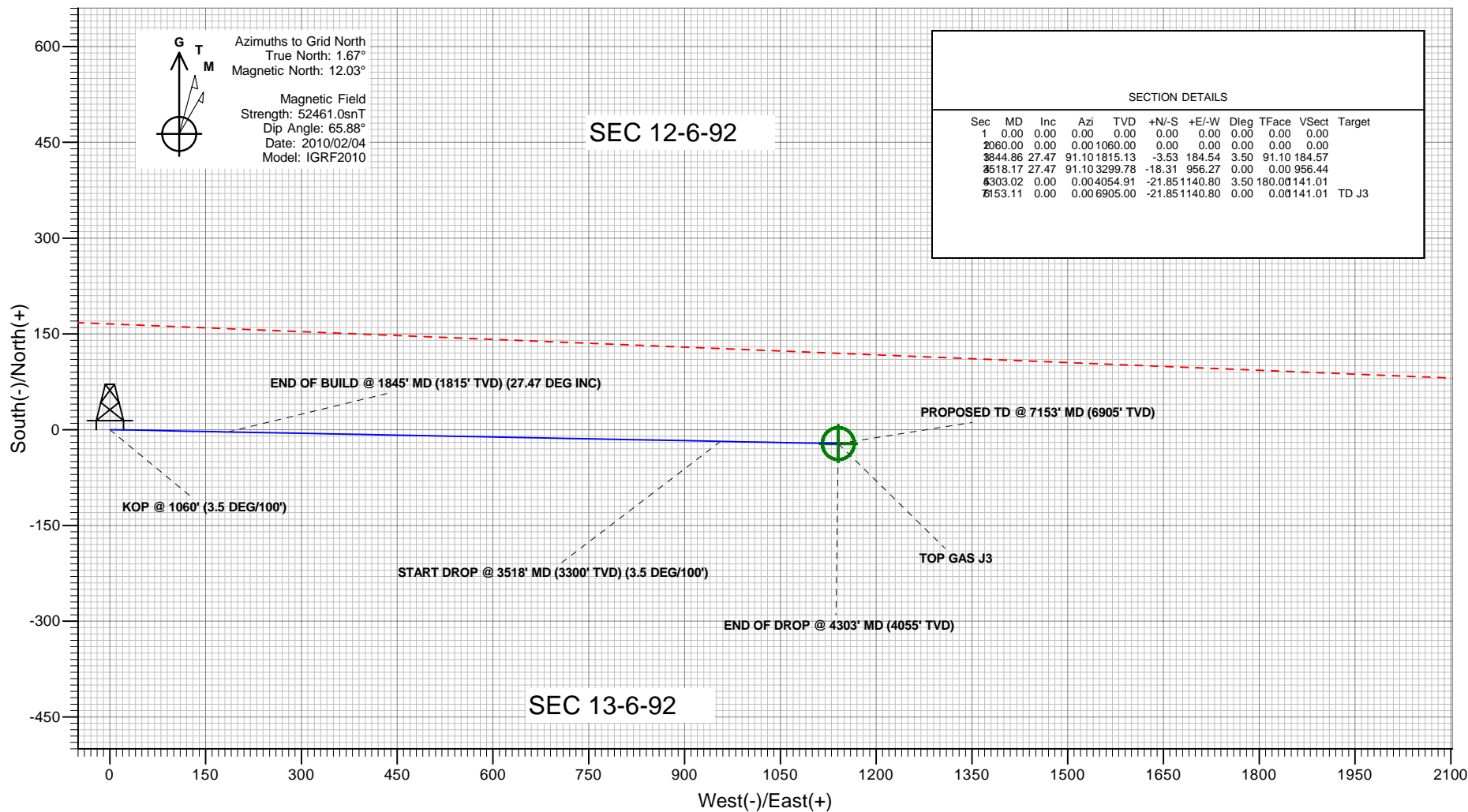


ANTERO RESOURCES



PLAN VIEW

Project: VALLEY FARMS PROJECT (J PAD)
Site: FRONTIER 12
Well: VALLEY FARMS J3 (111139)
Wellbore: ANTERO VALLEY FARMS J3
Design: ANTERO VALLEY FARMS J3 P01
JOB # 111139



Plan: ANTERO VALLEY FARMS J3 P01
Created By: ARK Directional Services
Date: 9:27, February 04 2010

PROJECT DETAILS: VALLEY FARMS PROJECT (J PAD)

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

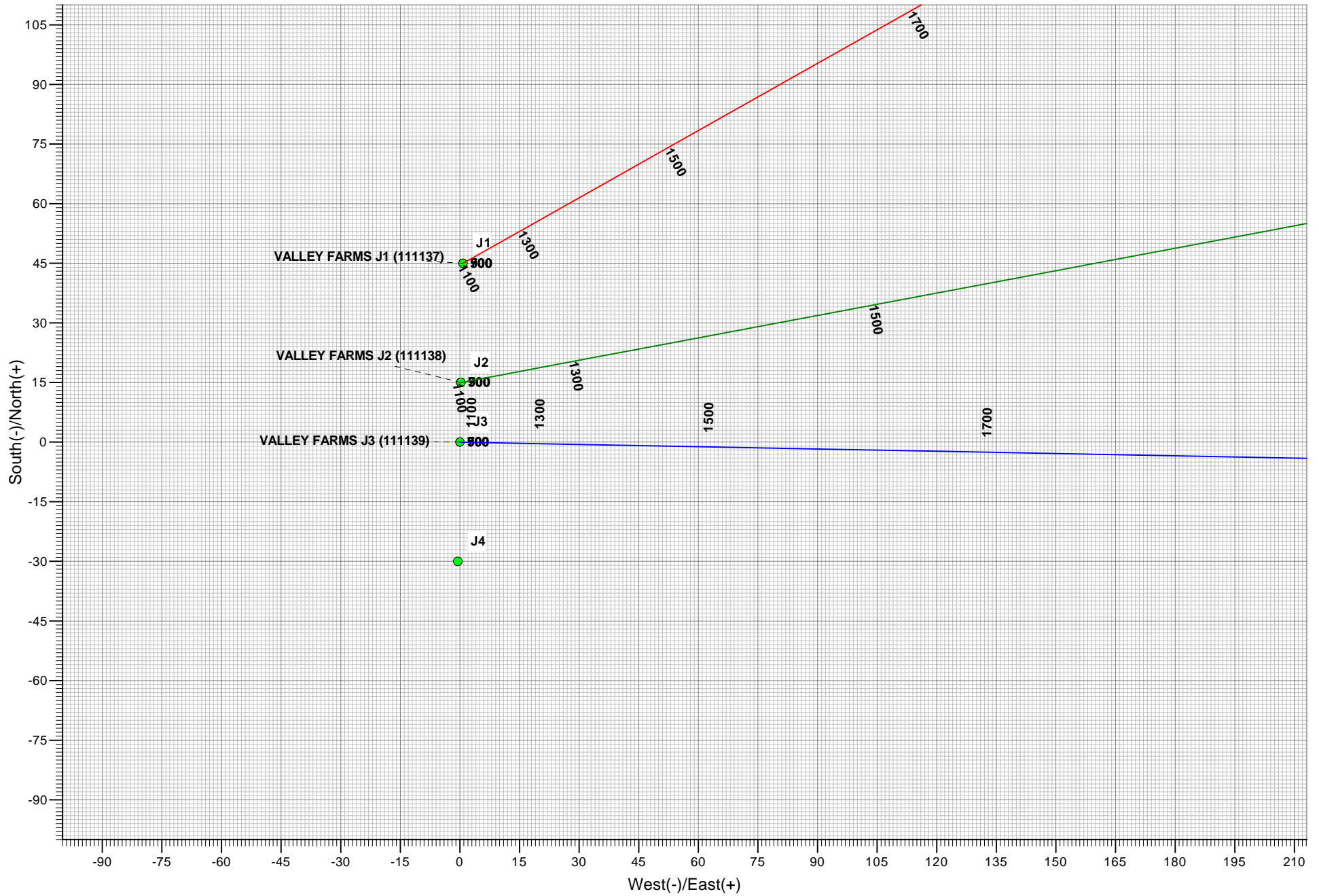
Co-ordinate (N/E) Reference: VALLEY FARMS J3, Grid North
Vertical (TVD) Reference: RKB @ 5562.00ft
Section (VS) Reference: Slot - J3(0.00N, 0.00E)
Measured Depth Reference: RKB @ 5562.00ft
Calculation Method: Minimum Curvature



ANTERO VALLEY FARMS J3



SPIDER PLOT



ANTERO RESOURCES

**VALLEY FARMS PROJECT (J PAD)
FRONTIER 12**

Plan: ANTERO VALLEY FARMS J3 P01

Standard Planning Report - Geographic

04 February, 2010

Ark Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well VALLEY FARMS J3 (111139) - Slot J3
Company:	ANTERO RESOURCES	TVD Reference:	RKB @ 5562.00ft
Project:	VALLEY FARMS PROJECT (J PAD)	MD Reference:	RKB @ 5562.00ft
Site:	FRONTIER 12	North Reference:	Grid
Well:	VALLEY FARMS J3 (111139)	Survey Calculation Method:	Minimum Curvature
Wellbore:	ANTERO VALLEY FARMS J3		
Design:	ANTERO VALLEY FARMS J3 P01		

Project	VALLEY FARMS PROJECT (J PAD)		
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:	14,367,770.23 usft	Latitude:	39° 32' 1.995 N
From:	Lat/Long	Easting:	901,508.18 usft	Longitude:	107° 37' 14.057 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in	Grid Convergence:	-1.67 °

Well	VALLEY FARMS J3 (111139) - Slot J3					
Well Position	+N/-S	0.00 ft	Northing:	14,367,725.24 usft	Latitude:	39° 32' 1.551 N
	+E/-W	0.00 ft	Easting:	901,507.42 usft	Longitude:	107° 37' 14.050 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,538.00 ft

Wellbore	ANTERO VALLEY FARMS J3				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2010/02/04	10.36	65.88	52,461

Design	ANTERO VALLEY FARMS J3 P01				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	91.10	

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	
1,844.86	27.47	91.10	1,815.13	-3.53	184.54	3.50	3.50	0.00	91.10	
3,518.17	27.47	91.10	3,299.78	-18.31	956.27	0.00	0.00	0.00	0.00	
4,303.02	0.00	0.00	4,054.91	-21.85	1,140.80	3.50	-3.50	0.00	180.00	
7,153.11	0.00	0.00	6,905.00	-21.85	1,140.80	0.00	0.00	0.00	0.00	TD J3

Ark Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well VALLEY FARMS J3 (111139) - Slot J3
Company:	ANTERO RESOURCES	TVD Reference:	RKB @ 5562.00ft
Project:	VALLEY FARMS PROJECT (J PAD)	MD Reference:	RKB @ 5562.00ft
Site:	FRONTIER 12	North Reference:	Grid
Well:	VALLEY FARMS J3 (111139)	Survey Calculation Method:	Minimum Curvature
Wellbore:	ANTERO VALLEY FARMS J3		
Design:	ANTERO VALLEY FARMS J3 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	14,367,725.24	901,507.42	39° 32' 1.551 N	107° 37' 14.050 W
100.00	0.00	0.00	100.00	0.00	0.00	14,367,725.24	901,507.42	39° 32' 1.551 N	107° 37' 14.050 W
200.00	0.00	0.00	200.00	0.00	0.00	14,367,725.24	901,507.42	39° 32' 1.551 N	107° 37' 14.050 W
300.00	0.00	0.00	300.00	0.00	0.00	14,367,725.24	901,507.42	39° 32' 1.551 N	107° 37' 14.050 W
400.00	0.00	0.00	400.00	0.00	0.00	14,367,725.24	901,507.42	39° 32' 1.551 N	107° 37' 14.050 W
500.00	0.00	0.00	500.00	0.00	0.00	14,367,725.24	901,507.42	39° 32' 1.551 N	107° 37' 14.050 W
600.00	0.00	0.00	600.00	0.00	0.00	14,367,725.24	901,507.42	39° 32' 1.551 N	107° 37' 14.050 W
700.00	0.00	0.00	700.00	0.00	0.00	14,367,725.24	901,507.42	39° 32' 1.551 N	107° 37' 14.050 W
800.00	0.00	0.00	800.00	0.00	0.00	14,367,725.24	901,507.42	39° 32' 1.551 N	107° 37' 14.050 W
900.00	0.00	0.00	900.00	0.00	0.00	14,367,725.24	901,507.42	39° 32' 1.551 N	107° 37' 14.050 W
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,367,725.24	901,507.42	39° 32' 1.551 N	107° 37' 14.050 W
CASING @ 1000'									
1,060.00	0.00	0.00	1,060.00	0.00	0.00	14,367,725.24	901,507.42	39° 32' 1.551 N	107° 37' 14.050 W
KOP @ 1060' (3.5 DEG/100')									
1,100.00	1.40	91.10	1,100.00	-0.01	0.49	14,367,725.23	901,507.91	39° 32' 1.551 N	107° 37' 14.044 W
1,200.00	4.90	91.10	1,199.83	-0.11	5.98	14,367,725.13	901,513.40	39° 32' 1.551 N	107° 37' 13.974 W
1,300.00	8.40	91.10	1,299.14	-0.34	17.56	14,367,724.90	901,524.98	39° 32' 1.553 N	107° 37' 13.826 W
1,400.00	11.90	91.10	1,397.56	-0.67	35.17	14,367,724.57	901,542.59	39° 32' 1.554 N	107° 37' 13.601 W
1,500.00	15.40	91.10	1,494.72	-1.13	58.77	14,367,724.12	901,566.19	39° 32' 1.557 N	107° 37' 13.300 W
1,600.00	18.90	91.10	1,590.26	-1.69	88.24	14,367,723.55	901,595.66	39° 32' 1.560 N	107° 37' 12.924 W
1,700.00	22.40	91.10	1,683.82	-2.37	123.50	14,367,722.88	901,630.92	39° 32' 1.563 N	107° 37' 12.474 W
1,800.00	25.90	91.10	1,775.05	-3.15	164.40	14,367,722.09	901,671.82	39° 32' 1.567 N	107° 37' 11.952 W
1,844.86	27.47	91.10	1,815.13	-3.53	184.54	14,367,721.71	901,691.96	39° 32' 1.569 N	107° 37' 11.695 W
END OF BUILD @ 1845' MD (1815' TVD) (27.47 DEG INC)									
1,900.00	27.47	91.10	1,864.06	-4.02	209.97	14,367,721.22	901,717.39	39° 32' 1.572 N	107° 37' 11.371 W
2,000.00	27.47	91.10	1,952.78	-4.90	256.09	14,367,720.34	901,763.51	39° 32' 1.576 N	107° 37' 10.782 W
2,100.00	27.47	91.10	2,041.51	-5.79	302.21	14,367,719.45	901,809.63	39° 32' 1.581 N	107° 37' 10.194 W
2,200.00	27.47	91.10	2,130.23	-6.67	348.33	14,367,718.57	901,855.75	39° 32' 1.585 N	107° 37' 9.605 W
2,300.00	27.47	91.10	2,218.96	-7.55	394.45	14,367,717.69	901,901.87	39° 32' 1.590 N	107° 37' 9.016 W
2,400.00	27.47	91.10	2,307.68	-8.44	440.57	14,367,716.80	901,947.99	39° 32' 1.594 N	107° 37' 8.428 W
2,500.00	27.47	91.10	2,396.41	-9.32	486.69	14,367,715.92	901,994.11	39° 32' 1.599 N	107° 37' 7.839 W
2,600.00	27.47	91.10	2,485.13	-10.20	532.81	14,367,715.04	902,040.23	39° 32' 1.603 N	107° 37' 7.251 W
2,700.00	27.47	91.10	2,573.86	-11.09	578.93	14,367,714.15	902,086.35	39° 32' 1.608 N	107° 37' 6.662 W
2,800.00	27.47	91.10	2,662.59	-11.97	625.05	14,367,713.27	902,132.47	39° 32' 1.612 N	107° 37' 6.073 W
2,900.00	27.47	91.10	2,751.31	-12.85	671.17	14,367,712.39	902,178.59	39° 32' 1.617 N	107° 37' 5.485 W
3,000.00	27.47	91.10	2,840.04	-13.74	717.29	14,367,711.50	902,224.71	39° 32' 1.621 N	107° 37' 4.896 W
3,100.00	27.47	91.10	2,928.76	-14.62	763.41	14,367,710.62	902,270.83	39° 32' 1.626 N	107° 37' 4.308 W
3,200.00	27.47	91.10	3,017.49	-15.50	809.53	14,367,709.74	902,316.95	39° 32' 1.631 N	107° 37' 3.719 W
3,300.00	27.47	91.10	3,106.21	-16.39	855.65	14,367,708.85	902,363.07	39° 32' 1.635 N	107° 37' 3.130 W
3,400.00	27.47	91.10	3,194.94	-17.27	901.77	14,367,707.97	902,409.19	39° 32' 1.640 N	107° 37' 2.542 W
3,467.70	27.47	91.10	3,255.00	-17.87	932.99	14,367,707.37	902,440.41	39° 32' 1.643 N	107° 37' 2.143 W
MESAVERDE									
3,500.00	27.47	91.10	3,283.66	-18.15	947.89	14,367,707.09	902,455.31	39° 32' 1.644 N	107° 37' 1.953 W
3,518.17	27.47	91.10	3,299.78	-18.31	956.27	14,367,706.93	902,463.69	39° 32' 1.645 N	107° 37' 1.846 W
START DROP @ 3518' MD (3300' TVD) (3.5 DEG/100')									
3,600.00	24.61	91.10	3,373.30	-19.00	992.18	14,367,706.24	902,499.60	39° 32' 1.648 N	107° 37' 1.388 W
3,700.00	21.11	91.10	3,465.43	-19.75	1,031.01	14,367,705.50	902,538.42	39° 32' 1.652 N	107° 37' 0.893 W
3,800.00	17.61	91.10	3,559.77	-20.38	1,064.14	14,367,704.86	902,571.56	39° 32' 1.656 N	107° 37' 0.470 W
3,900.00	14.11	91.10	3,655.95	-20.90	1,091.45	14,367,704.34	902,598.87	39° 32' 1.658 N	107° 37' 0.121 W
4,000.00	10.61	91.10	3,753.62	-21.31	1,112.84	14,367,703.93	902,620.26	39° 32' 1.660 N	107° 36' 59.848 W
4,100.00	7.11	91.10	3,852.41	-21.61	1,128.23	14,367,703.63	902,635.65	39° 32' 1.662 N	107° 36' 59.652 W
4,200.00	3.61	91.10	3,951.96	-21.79	1,137.56	14,367,703.45	902,644.98	39° 32' 1.663 N	107° 36' 59.533 W
4,303.02	0.00	91.10	4,054.91	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
END OF DROP @ 4303' MD (4055' TVD)									

Ark Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well VALLEY FARMS J3 (111139) - Slot J3
Company:	ANTERO RESOURCES	TVD Reference:	RKB @ 5562.00ft
Project:	VALLEY FARMS PROJECT (J PAD)	MD Reference:	RKB @ 5562.00ft
Site:	FRONTIER 12	North Reference:	Grid
Well:	VALLEY FARMS J3 (111139)	Survey Calculation Method:	Minimum Curvature
Wellbore:	ANTERO VALLEY FARMS J3		
Design:	ANTERO VALLEY FARMS J3 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
4,303.11	0.00	0.00	4,055.00	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
PRICE COAL									
4,400.00	0.00	0.00	4,151.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
4,500.00	0.00	0.00	4,251.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
4,600.00	0.00	0.00	4,351.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
4,700.00	0.00	0.00	4,451.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
4,800.00	0.00	0.00	4,551.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
4,900.00	0.00	0.00	4,651.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
5,000.00	0.00	0.00	4,751.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
5,003.11	0.00	0.00	4,755.00	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
TOP GAS - TOP GAS J3									
5,100.00	0.00	0.00	4,851.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
5,200.00	0.00	0.00	4,951.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
5,300.00	0.00	0.00	5,051.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
5,400.00	0.00	0.00	5,151.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
5,500.00	0.00	0.00	5,251.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
5,600.00	0.00	0.00	5,351.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
5,700.00	0.00	0.00	5,451.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
5,800.00	0.00	0.00	5,551.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
5,900.00	0.00	0.00	5,651.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
5,903.11	0.00	0.00	5,655.00	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
CAMEO									
6,000.00	0.00	0.00	5,751.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
6,100.00	0.00	0.00	5,851.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
6,200.00	0.00	0.00	5,951.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
6,300.00	0.00	0.00	6,051.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
6,400.00	0.00	0.00	6,151.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
6,500.00	0.00	0.00	6,251.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
6,600.00	0.00	0.00	6,351.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
6,700.00	0.00	0.00	6,451.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
6,800.00	0.00	0.00	6,551.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
6,900.00	0.00	0.00	6,651.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
7,000.00	0.00	0.00	6,751.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
7,003.11	0.00	0.00	6,755.00	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
ROLLINS									
7,100.00	0.00	0.00	6,851.89	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
7,153.08	0.00	0.00	6,904.97	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
PROPOSED TD @ 7153' MD (6905' TVD)									
7,153.11	0.00	0.00	6,905.00	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
TD J3									

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 J3 - plan hits target center - Circle (radius 25.00)	0.00	360.00	4,755.00	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W
TD J3 - plan hits target center - Circle (radius 25.00)	0.00	0.00	6,905.00	-21.85	1,140.80	14,367,703.39	902,648.22	39° 32' 1.663 N	107° 36' 59.491 W

Ark Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well VALLEY FARMS J3 (111139) - Slot J3
Company:	ANTERO RESOURCES	TVD Reference:	RKB @ 5562.00ft
Project:	VALLEY FARMS PROJECT (J PAD)	MD Reference:	RKB @ 5562.00ft
Site:	FRONTIER 12	North Reference:	Grid
Well:	VALLEY FARMS J3 (111139)	Survey Calculation Method:	Minimum Curvature
Wellbore:	ANTERO VALLEY FARMS J3		
Design:	ANTERO VALLEY FARMS J3 P01		

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

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,467.70	3,255.00	MESAVERDE		0.00	
4,303.11	4,055.00	PRICE COAL		0.00	
5,003.11	4,755.00	TOP GAS		0.00	
5,903.11	5,655.00	CAMEO		0.00	
7,003.11	6,755.00	ROLLINS		0.00	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,060.00	1,060.00	0.00	0.00	KOP @ 1060' (3.5 DEG/100')	
1,844.86	1,815.13	-3.53	184.54	END OF BUILD @ 1845' MD (1815' TVD) (27.47 DEG INC)	
3,518.17	3,299.78	-18.31	956.27	START DROP @ 3518' MD (3300' TVD) (3.5 DEG/100')	
4,303.02	4,054.91	-21.85	1,140.80	END OF DROP @ 4303' MD (4055' TVD)	
7,153.08	6,904.97	-21.85	1,140.80	PROPOSED TD @ 7153' MD (6905' TVD)	