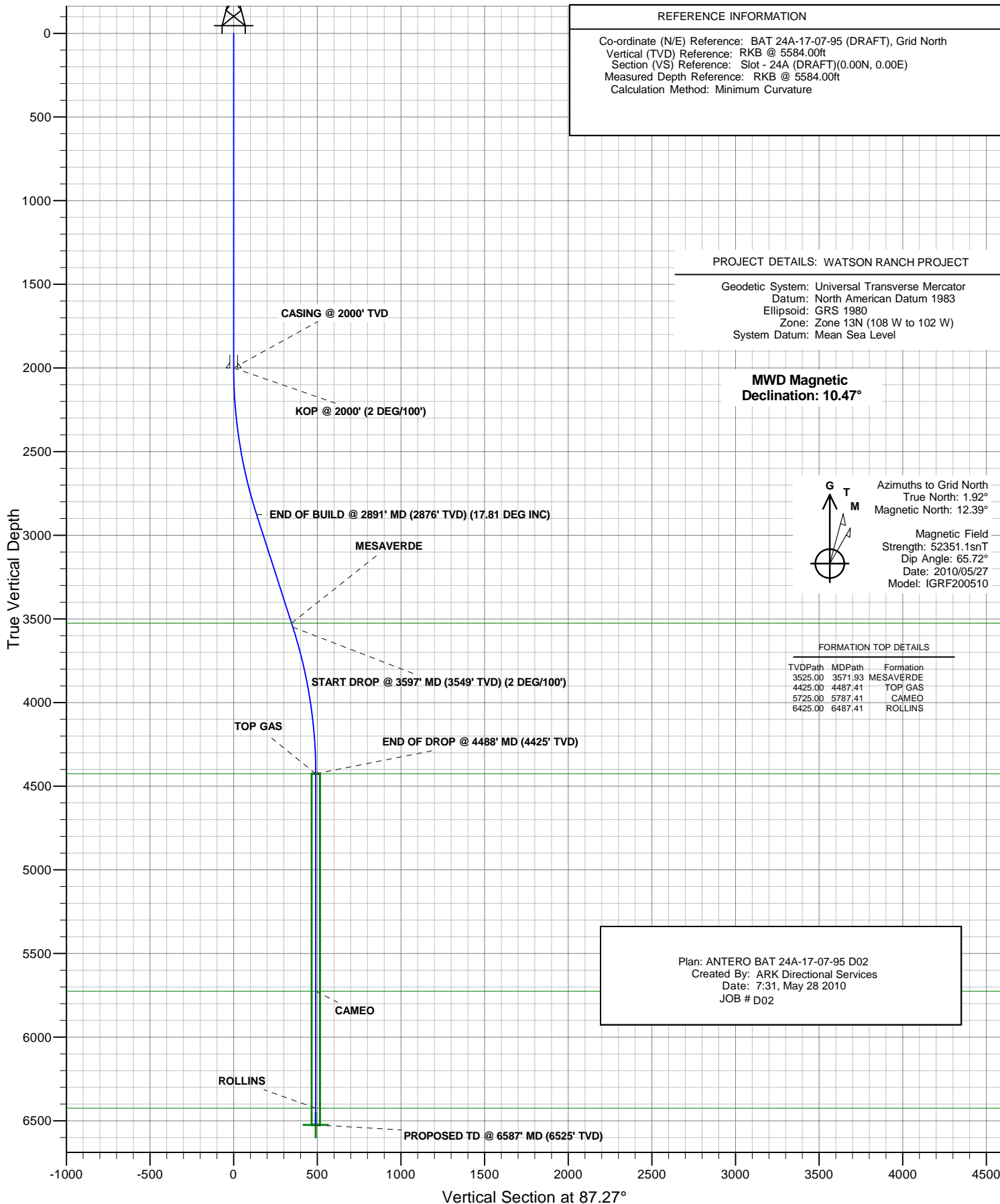




ANTERO RESOURCES

ANTERO BAT 24A-17-07-95



REFERENCE INFORMATION

Co-ordinate (N/E) Reference: BAT 24A-17-07-95 (DRAFT), Grid North
Vertical (TVD) Reference: RKB @ 5584.00ft
Section (VS) Reference: Slot - 24A (DRAFT)(0.00N, 0.00E)
Measured Depth Reference: RKB @ 5584.00ft
Calculation Method: Minimum Curvature

PROJECT DETAILS: WATSON RANCH 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

**MWD Magnetic
Declination: 10.47°**



Azimuths to Grid North
True North: 1.92°
Magnetic North: 12.39°

Magnetic Field
Strength: 52351.1snT
Dip Angle: 65.72°
Date: 2010/05/27
Model: IGRF200510

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3525.00	3571.93	MESAVERDE
4425.00	4487.41	TOP GAS
5725.00	5787.41	CAMEO
6425.00	6487.41	ROLLINS

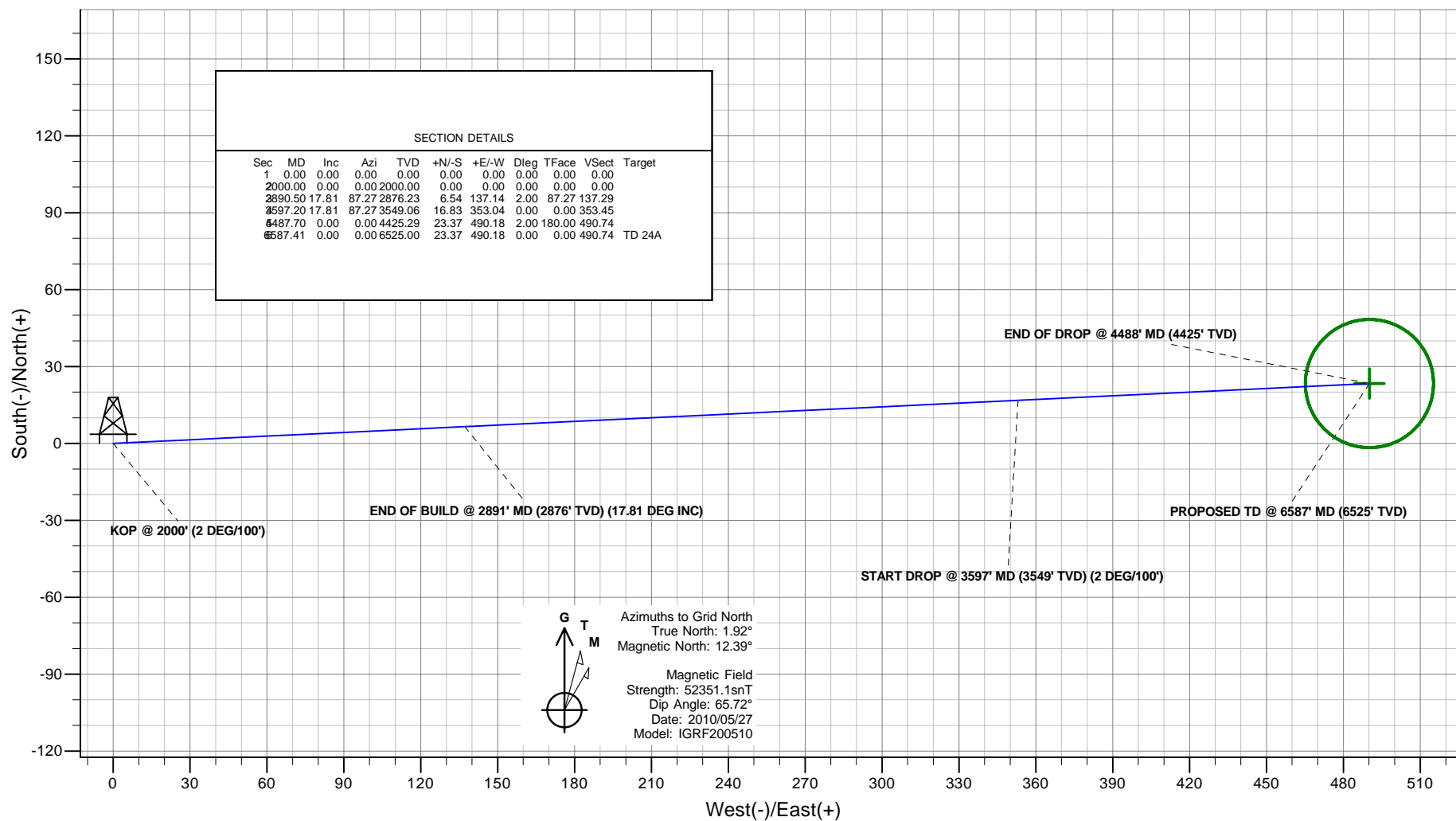
Plan: ANTERO BAT 24A-17-07-95 D02
Created By: ARK Directional Services
Date: 7:31, May 28 2010
JOB # D02



PLAN VIEW

ANTERO RESOURCES

Project: WATSON RANCH PROJECT
Site: FRONTIER 12
Well: BAT 24A-17-07-95 (DRAFT)
Wellbore: ANTERO BAT 24A-17-07-95
Design: ANTERO BAT 24A-17-07-95 D02
JOB # D02



Plan: ANTERO BAT 24A-17-07-95 D02
Created By: ARK Directional Services
Date: 7:47, May 28 2010

PROJECT DETAILS: WATSON RANCH 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: BAT 24A-17-07-95 (DRAFT), Grid North
Vertical (TVD) Reference: RKB @ 5584.00ft
Section (VS) Reference: Slot - 24A (DRAFT)(0.00N, 0.00E)
Measured Depth Reference: RKB @ 5584.00ft
Calculation Method: Minimum Curvature

ANTERO RESOURCES

WATSON RANCH PROJECT

FRONTIER 12

BAT 24A-17-07-95 (DRAFT) - Slot 24A (DRAFT)

ANTERO BAT 24A-17-07-95

Plan: ANTERO BAT 24A-17-07-95 D02

Standard Planning Report - Geographic

28 May, 2010

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 24A-17-07-95 (DRAFT) - Slot 24A (DRAFT)
Company:	ANTERO RESOURCES	TVD Reference:	RKB @ 5584.00ft
Project:	WATSON RANCH PROJECT	MD Reference:	RKB @ 5584.00ft
Site:	FRONTIER 12	North Reference:	Grid
Well:	BAT 24A-17-07-95 (DRAFT)	Survey Calculation Method:	Minimum Curvature
Wellbore:	ANTERO BAT 24A-17-07-95		
Design:	ANTERO BAT 24A-17-07-95 D02		

Project	WATSON RANCH 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:	14,334,677.51 usft
From:	Map	Easting:	786,189.73 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in
		Latitude:	39° 25' 59.496 N
		Longitude:	108° 1' 30.417 W
		Grid Convergence:	-1.92 °

Well	BAT 24A-17-07-95 (DRAFT) - Slot 24A (DRAFT)		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft		Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	ANTERO BAT 24A-17-07-95				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	2010/05/27	10.47	65.72	52,351

Design	ANTERO BAT 24A-17-07-95 D02			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	87.27

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	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,890.50	17.81	87.27	2,876.23	6.54	137.14	2.00	2.00	0.00	87.27	
3,597.20	17.81	87.27	3,549.06	16.83	353.04	0.00	0.00	0.00	0.00	
4,487.70	0.00	0.00	4,425.29	23.37	490.18	2.00	-2.00	0.00	180.00	
6,587.41	0.00	0.00	6,525.00	23.37	490.18	0.00	0.00	0.00	0.00	TD 24A

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 24A-17-07-95 (DRAFT) - Slot 24A (DRAFT)
Company:	ANTERO RESOURCES	TVD Reference:	RKB @ 5584.00ft
Project:	WATSON RANCH PROJECT	MD Reference:	RKB @ 5584.00ft
Site:	FRONTIER 12	North Reference:	Grid
Well:	BAT 24A-17-07-95 (DRAFT)	Survey Calculation Method:	Minimum Curvature
Wellbore:	ANTERO BAT 24A-17-07-95		
Design:	ANTERO BAT 24A-17-07-95 D02		

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	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
100.00	0.00	0.00	100.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
200.00	0.00	0.00	200.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
300.00	0.00	0.00	300.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
400.00	0.00	0.00	400.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
500.00	0.00	0.00	500.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
600.00	0.00	0.00	600.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
700.00	0.00	0.00	700.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
800.00	0.00	0.00	800.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
900.00	0.00	0.00	900.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
1,200.00	0.00	0.00	1,200.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
1,400.00	0.00	0.00	1,400.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
1,600.00	0.00	0.00	1,600.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
1,700.00	0.00	0.00	1,700.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
1,800.00	0.00	0.00	1,800.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
1,900.00	0.00	0.00	1,900.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	14,334,699.82	786,200.14	39° 25' 59.720 N	108° 1' 30.293 W	
KOP @ 2000' (2 DEG/100') - CASING @ 2000' TVD										
2,100.00	2.00	87.27	2,099.98	0.08	1.74	14,334,699.90	786,201.88	39° 25' 59.721 N	108° 1' 30.271 W	
2,200.00	4.00	87.27	2,199.84	0.33	6.97	14,334,700.15	786,207.11	39° 25' 59.725 N	108° 1' 30.205 W	
2,300.00	6.00	87.27	2,299.45	0.75	15.68	14,334,700.57	786,215.81	39° 25' 59.732 N	108° 1' 30.094 W	
2,400.00	8.00	87.27	2,398.70	1.33	27.85	14,334,701.15	786,227.99	39° 25' 59.742 N	108° 1' 29.939 W	
2,500.00	10.00	87.27	2,497.47	2.07	43.47	14,334,701.89	786,243.61	39° 25' 59.754 N	108° 1' 29.741 W	
2,600.00	12.00	87.27	2,595.62	2.98	62.53	14,334,702.80	786,262.67	39° 25' 59.770 N	108° 1' 29.499 W	
2,700.00	14.00	87.27	2,693.06	4.05	85.00	14,334,703.87	786,285.14	39° 25' 59.788 N	108° 1' 29.213 W	
2,800.00	16.00	87.27	2,789.64	5.28	110.85	14,334,705.10	786,310.99	39° 25' 59.808 N	108° 1' 28.884 W	
2,890.50	17.81	87.27	2,876.23	6.54	137.14	14,334,706.36	786,337.27	39° 25' 59.830 N	108° 1' 28.550 W	
END OF BUILD @ 2891' MD (2876' TVD) (17.81 DEG INC)										
2,900.00	17.81	87.27	2,885.27	6.68	140.04	14,334,706.50	786,340.18	39° 25' 59.832 N	108° 1' 28.513 W	
3,000.00	17.81	87.27	2,980.48	8.13	170.59	14,334,707.95	786,370.73	39° 25' 59.856 N	108° 1' 28.125 W	
3,100.00	17.81	87.27	3,075.69	9.59	201.14	14,334,709.41	786,401.28	39° 25' 59.881 N	108° 1' 27.737 W	
3,200.00	17.81	87.27	3,170.90	11.04	231.69	14,334,710.86	786,431.83	39° 25' 59.905 N	108° 1' 27.348 W	
3,300.00	17.81	87.27	3,266.10	12.50	262.24	14,334,712.32	786,462.38	39° 25' 59.930 N	108° 1' 26.960 W	
3,400.00	17.81	87.27	3,361.31	13.96	292.80	14,334,713.78	786,492.93	39° 25' 59.954 N	108° 1' 26.572 W	
3,500.00	17.81	87.27	3,456.52	15.41	323.35	14,334,715.23	786,523.48	39° 25' 59.979 N	108° 1' 26.183 W	
3,571.93	17.81	87.27	3,525.00	16.46	345.32	14,334,716.28	786,545.46	39° 25' 59.996 N	108° 1' 25.904 W	
MESAVERDE										
3,597.20	17.81	87.27	3,549.06	16.83	353.04	14,334,716.65	786,553.18	39° 26' 0.003 N	108° 1' 25.806 W	
START DROP @ 3597' MD (3549' TVD) (2 DEG/100')										
3,600.00	17.75	87.27	3,551.73	16.87	353.90	14,334,716.69	786,554.03	39° 26' 0.003 N	108° 1' 25.795 W	
3,700.00	15.75	87.27	3,647.48	18.24	382.69	14,334,718.06	786,582.83	39° 26' 0.026 N	108° 1' 25.429 W	
3,800.00	13.75	87.27	3,744.18	19.45	408.13	14,334,719.27	786,608.26	39° 26' 0.047 N	108° 1' 25.105 W	
3,900.00	11.75	87.27	3,841.70	20.51	430.18	14,334,720.33	786,630.31	39° 26' 0.065 N	108° 1' 24.825 W	
4,000.00	9.75	87.27	3,939.94	21.39	448.81	14,334,721.21	786,648.95	39° 26' 0.079 N	108° 1' 24.588 W	
4,100.00	7.75	87.27	4,038.77	22.12	464.02	14,334,721.94	786,664.15	39° 26' 0.092 N	108° 1' 24.395 W	
4,200.00	5.75	87.27	4,138.07	22.68	475.76	14,334,722.50	786,675.90	39° 26' 0.101 N	108° 1' 24.246 W	
4,300.00	3.75	87.27	4,237.72	23.07	484.04	14,334,722.89	786,684.18	39° 26' 0.108 N	108° 1' 24.140 W	
4,400.00	1.75	87.27	4,337.60	23.30	488.84	14,334,723.12	786,688.98	39° 26' 0.112 N	108° 1' 24.079 W	

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 24A-17-07-95 (DRAFT) - Slot 24A (DRAFT)
Company:	ANTERO RESOURCES	TVD Reference:	RKB @ 5584.00ft
Project:	WATSON RANCH PROJECT	MD Reference:	RKB @ 5584.00ft
Site:	FRONTIER 12	North Reference:	Grid
Well:	BAT 24A-17-07-95 (DRAFT)	Survey Calculation Method:	Minimum Curvature
Wellbore:	ANTERO BAT 24A-17-07-95		
Design:	ANTERO BAT 24A-17-07-95 D02		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,487.41	0.01	87.27	4,425.00	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
TOP GAS									
4,487.70	0.00	0.00	4,425.29	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
END OF DROP @ 4488' MD (4425' TVD)									
4,500.00	0.00	0.00	4,437.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
4,600.00	0.00	0.00	4,537.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
4,700.00	0.00	0.00	4,637.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
4,800.00	0.00	0.00	4,737.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
4,900.00	0.00	0.00	4,837.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
5,000.00	0.00	0.00	4,937.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
5,100.00	0.00	0.00	5,037.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
5,200.00	0.00	0.00	5,137.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
5,300.00	0.00	0.00	5,237.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
5,400.00	0.00	0.00	5,337.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
5,500.00	0.00	0.00	5,437.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
5,600.00	0.00	0.00	5,537.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
5,700.00	0.00	0.00	5,637.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
5,787.41	0.00	0.00	5,725.00	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
CAMEO									
5,800.00	0.00	0.00	5,737.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
5,900.00	0.00	0.00	5,837.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
6,000.00	0.00	0.00	5,937.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
6,100.00	0.00	0.00	6,037.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
6,200.00	0.00	0.00	6,137.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
6,300.00	0.00	0.00	6,237.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
6,400.00	0.00	0.00	6,337.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
6,487.41	0.00	0.00	6,425.00	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
ROLLINS									
6,500.00	0.00	0.00	6,437.59	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
6,587.38	0.00	0.00	6,524.97	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
PROPOSED TD @ 6587' MD (6525' TVD)									
6,587.41	0.00	0.00	6,525.00	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W
TD 24A									

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
TD 24A - plan hits target center - Circle (radius 25.00)	0.00	360.00	6,525.00	23.37	490.18	14,334,723.19	786,690.32	39° 26' 0.113 N	108° 1' 24.062 W

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
2,000.00	2,000.00	CASING @ 2000' TVD	9.62	12.25	

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 24A-17-07-95 (DRAFT) - Slot 24A (DRAFT)
Company:	ANTERO RESOURCES	TVD Reference:	RKB @ 5584.00ft
Project:	WATSON RANCH PROJECT	MD Reference:	RKB @ 5584.00ft
Site:	FRONTIER 12	North Reference:	Grid
Well:	BAT 24A-17-07-95 (DRAFT)	Survey Calculation Method:	Minimum Curvature
Wellbore:	ANTERO BAT 24A-17-07-95		
Design:	ANTERO BAT 24A-17-07-95 D02		

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,571.93	3,525.00	MESAVERDE		0.00	
4,487.41	4,425.00	TOP GAS		0.00	
5,787.41	5,725.00	CAMEO		0.00	
6,487.41	6,425.00	ROLLINS		0.00	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
2,000.00	2,000.00	0.00	0.00	KOP @ 2000' (2 DEG/100')	
2,890.50	2,876.23	6.54	137.14	END OF BUILD @ 2891' MD (2876' TVD) (17.81 DEG INC)	
3,597.20	3,549.06	16.83	353.04	START DROP @ 3597' MD (3549' TVD) (2 DEG/100')	
4,487.70	4,425.29	23.37	490.18	END OF DROP @ 4488' MD (4425' TVD)	
6,587.38	6,524.97	23.37	490.18	PROPOSED TD @ 6587' MD (6525' TVD)	