



Cimarex Energy Co., Inc.

Lea County (NAD 83)

Antero '12' Fee #3H

Antero '12' Fee #3H

Lateral #1

Plan: Plan #1

Standard Survey Report

23 August, 2007





Black Viper Energy Survey Report



Company: Cimarex Energy Co., Inc.
Project: Lea County (NAD 83)
Site: Antero '12' Fee #3H
Well: Antero '12' Fee #3H
Wellbore: Lateral #1
Design: Plan #1

Local Co-ordinate Reference: Site Antero '12' Fee #3H
TVD Reference: WELL @ 3786 00ft (Original Well Elev)
MD Reference: WELL @ 3786 00ft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 2003 14.1 0 Server DB

Project: Lea County (NAD 83)

Map System: US State Plane 1983
Geo Datum: North American Datum 1983
Map Zone: New Mexico Eastern Zone

System Datum: Ground Level

Site: Antero '12' Fee #3H

Site Position: Northing: 741,463 21 ft Latitude: 33° 1' 57 759 N
From: Map Easting: 902,444 28 ft Longitude: 103° 9' 18 252 W
Position Uncertainty: 0 00 ft Slot Radius: " Grid Convergence: 0 64 °

Well: Antero '12' Fee #3H

Well Position: +N/-S 0 00 ft Northing: 741,463 21 ft Latitude: 33° 1' 57 759 N
+E/-W 0 00 ft Easting: 902,444 28 ft Longitude: 103° 9' 18 252 W
Position Uncertainty: 0 00 ft Wellhead Elevation: ft Ground Level: 0 00 ft

Wellbore: Lateral #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	8/23/2007	7 90	61 12	49,526

Design: Plan #1

Audit Notes:

Version: Phase: PROTOTYPE Tie On Depth: 9,190 00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0 00	0 00	0 00	0 00

Survey Tool Program Date 8/23/2007

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
9,190 00	11,280 45	Plan #1 (Lateral #1)		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,190 00	0 00	0 00	9,190 00	0 00	0 00	0 00	0 00	0 00	0 00
9,191 00	0 00	0 00	9,191 00	0 00	0 00	0 00	0 00	0 00	0 00
KOP - Build 30.16° / 100									
9,200 00	2 71	0 00	9,200 00	0 21	0 00	0 21	30 16	30 16	0 00
9,210 00	5 73	0 00	9,209 97	0 95	0 00	0 95	30 16	30 16	0 00
9,220 00	8 75	0 00	9,219 89	2 21	0 00	2 21	30 16	30 16	0 00
9,230 00	11 76	0 00	9,229 73	3 99	0 00	3 99	30 16	30 16	0 00
9,240 00	14 78	0 00	9,239 46	6 28	0 00	6 28	30 16	30 16	0 00
9,250 00	17 79	0 00	9,249 06	9 09	0 00	9 09	30 16	30 16	0 00
9,260 00	20 81	0 00	9,258 49	12 39	0 00	12 39	30 16	30 16	0 00
9,270 00	23 82	0 00	9,267 74	16 19	0 00	16 19	30 16	30 16	0 00
9,280 00	26 84	0 00	9,276 78	20 47	0 00	20 47	30 16	30 16	0 00
9,290 00	29 85	0 00	9,285 58	25 21	0 00	25 21	30 16	30 16	0 00



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Wellbore: Lateral #1
Design: Plan #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Site Antero '12' Fee #3H
WELL @ 3786 00ft (Original Well Elev)
WELL @ 3786 00ft (Original Well Elev)
Grd
Minimum Curvature
EDM 2003 14 1.0 Server DB

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,300 00	32 87	0 00	9,294 12	30 42	0 00	30 42	30 16	30 16	0 00
9,310 00	35 89	0 00	9,302 37	36 06	0 00	36 06	30 16	30 16	0 00
9,320 00	38 90	0 00	9,310 32	42 14	0 00	42 14	30 16	30 16	0 00
9,330 00	41 92	0 00	9,317 93	48 62	0 00	48 62	30 16	30 16	0 00
9,340 00	44 93	0 00	9,325 19	55 49	0 00	55 49	30 16	30 16	0 00
9,346 92	47 02	0 00	9,330 00	60 47	0 00	60 47	30 16	30 16	0 00
Wolfcamp									
9,350 00	47 95	0 00	9,332 08	62 74	0 00	62 74	30 16	30 16	0 00
9,360 00	50 96	0 00	9,338 58	70 33	0 00	70 33	30 16	30 16	0 00
9,370 00	53 98	0 00	9,344 67	78 26	0 00	78 26	30 16	30 16	0 00
9,380 00	56 99	0 00	9,350 34	86 50	0 00	86 50	30 16	30 16	0 00
9,390 00	60 01	0 00	9,355 56	95 03	0 00	95 03	30 16	30 16	0 00
9,400 00	63 03	0 00	9,360 33	103 82	0 00	103 82	30 16	30 16	0 00
9,410 00	66 04	0 00	9,364 63	112 84	0 00	112 84	30 16	30 16	0 00
9,420 00	69 06	0 00	9,368 45	122 09	0 00	122 09	30 16	30 16	0 00
9,430 00	72 07	0 00	9,371 77	131 51	0 00	131 51	30 16	30 16	0 00
9,440 00	75 09	0 00	9,374 60	141 11	0 00	141 11	30 16	30 16	0 00
9,450 00	78 10	0 00	9,376 92	150 83	0 00	150 83	30 16	30 16	0 00
9,460 00	81 12	0 00	9,378 72	160 67	0 00	160 67	30 16	30 16	0 00
9,470 00	84 13	0 00	9,380 01	170 58	0 00	170 58	30 16	30 16	0 00
9,480 00	87 15	0 00	9,380 76	180 55	0 00	180 55	30 16	30 16	0 00
9,489 45	90 00	0 00	9,381 00	190 00	0 00	190 00	30 16	30 16	0 00
EOC - Hold 90.0° Inc. :: 360.0° Azi.									
9,500 00	90 00	0 00	9,380 00	199 55	0 00	199 55	0 00	0 00	0 00
9,600 00	90 00	0 00	9,380 00	299 55	0 00	299 55	0 00	0 00	0 00
9,700 00	90 00	0 00	9,380 00	399 55	0 00	399 55	0 00	0 00	0 00
9,800 00	90 00	0 00	9,380 00	499 55	0 00	499 55	0 00	0 00	0 00
9,900 00	90 00	0 00	9,380 00	599 55	0 00	599 55	0 00	0 00	0 00
10,000 00	90 00	0 00	9,380 00	699 55	0 00	699 55	0 00	0 00	0 00
10,100 00	90 00	0 00	9,380 00	799 55	0 00	799 55	0 00	0 00	0 00
10,200 00	90 00	0 00	9,380 00	899 55	0 00	899 55	0 00	0 00	0 00
10,300 00	90 00	0 00	9,380 00	999 55	0 00	999 55	0 00	0 00	0 00
10,400 00	90 00	0 00	9,380 00	1,099 55	0 00	1,099 55	0 00	0 00	0 00
10,500 00	90 00	0 00	9,380 00	1,199 55	0 00	1,199 55	0 00	0 00	0 00
10,600 00	90 00	0 00	9,380 00	1,299 55	0 00	1,299 55	0 00	0 00	0 00
10,700 00	90 00	0 00	9,380 00	1,399 55	0 00	1,399 55	0 00	0 00	0 00
10,800 00	90 00	0 00	9,380 00	1,499 55	0 00	1,499 55	0 00	0 00	0 00
10,900 00	90 00	0 00	9,380 00	1,599 55	0 00	1,599 55	0 00	0 00	0 00
11,000 00	90 00	0 00	9,380 00	1,699 55	0 00	1,699 55	0 00	0 00	0 00
11,100 00	90 00	0 00	9,380 00	1,799 55	0 00	1,799 55	0 00	0 00	0 00
11,200 00	90 00	0 00	9,380 00	1,899 55	0 00	1,899 55	0 00	0 00	0 00
11,280 45	90 00	0 00	9,380 00	1,980 00	0 00	1,980 00	0 00	0 00	0 00

PBHL#1[A12Fee#3H]



Black Viper Energy
Survey Report



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Project: Lea County (NAD 83)
Site: Antero '12' Fee #3H
Well: Antero '12' Fee #3H
Wellbore: Lateral #1
Design: Plan #1

Local Co-ordinate Reference: Site Antero '12' Fee #3H
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MD Reference: WELL @ 3786 00ft (Original Well Elev)
North Reference: Gnd
Survey Calculation Method: Minimum Curvature
Database: EDM 2003 14 1 0 Server DB

Targets

Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
PBHL#1[A12Fee#3H]	0 00	0 00	9,380 00	1,980 00	0 00	743,443 21	902,444 28	33° 2' 17 346 N	103° 9' 17.991 W
- plan hits target									
- Point									

Formations

Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
9,346 92	9,330 00	Wolfcamp		0 00	0 00
	9,593 00	Wolfcamp 'B'		0 00	0 00

Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
9,191 00	9,191 00	0 00	0 00	KOP - Build 30 16° / 100
9,489 45	9,380 00	0 00	0 00	EOC - Hold 90 0° Inc 360 0° Azi

Checked By: _____ Approved By: _____ Date: _____

Antero '12' Fee #3H Lateral Plan #1 Report 8-23-07.txt

Cimarex Energy Co., Inc.
Antero '12' Fee #3H - Plan #1

Lea County (NAD 83)
Antero '12' Fee #3H
Your Ref:

Measured Dogleg Depth Rate (ft) (°/100ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)
9190.00	0.000	0.000	9190.00	0.00 N	0.00 E	0.00
0.00						
9200.00	2.714	0.000	9200.00	0.21 N	0.00 E	0.21
27.14						
9210.00	5.730	0.000	9209.97	0.95 N	0.00 E	0.95
30.16						
9220.00	8.745	0.000	9219.89	2.21 N	0.00 E	2.21
30.16						
9230.00	11.761	0.000	9229.73	3.99 N	0.00 E	3.99
30.16						
9240.00	14.776	0.000	9239.46	6.28 N	0.00 E	6.28
30.16						
9250.00	17.792	0.000	9249.06	9.09 N	0.00 E	9.09
30.16						
9260.00	20.807	0.000	9258.49	12.39 N	0.00 E	12.39
30.16						
9270.00	23.823	0.000	9267.74	16.19 N	0.00 E	16.19
30.16						
9280.00	26.839	0.000	9276.78	20.47 N	0.00 E	20.47
30.16						
9290.00	29.854	0.000	9285.58	25.21 N	0.00 E	25.21
30.16						
9300.00	32.870	0.000	9294.12	30.42 N	0.00 E	30.42
30.16						
9310.00	35.885	0.000	9302.37	36.06 N	0.00 E	36.06
30.16						
9320.00	38.901	0.000	9310.32	42.14 N	0.00 E	42.14
30.16						
9330.00	41.916	0.000	9317.93	48.62 N	0.00 E	48.62
30.16						
9340.00	44.932	0.000	9325.19	55.49 N	0.00 E	55.49
30.16						
9350.00	47.948	0.000	9332.08	62.74 N	0.00 E	62.74
30.16						
9360.00	50.963	0.000	9338.58	70.33 N	0.00 E	70.33
30.16						
9370.00	53.979	0.000	9344.67	78.26 N	0.00 E	78.26
30.16						
9380.00	56.994	0.000	9350.34	86.50 N	0.00 E	86.50
30.16						
9390.00	60.010	0.000	9355.56	95.03 N	0.00 E	95.03
30.16						
9400.00	63.025	0.000	9360.33	103.82 N	0.00 E	103.82
30.16						
9410.00	66.041	0.000	9364.63	112.84 N	0.00 E	112.84

Antero '12' Fee #3H Lateral Plan #1 Report 8-23-07.txt

30.16							
9420.00	69.056	0.000	9368.45	122.09 N	0.00 E	122.09	
30.16							
9430.00	72.072	0.000	9371.77	131.51 N	0.00 E	131.51	
30.16							
9440.00	75.088	0.000	9374.60	141.11 N	0.00 E	141.11	
30.16							
9450.00	78.103	0.000	9376.92	150.83 N	0.00 E	150.83	
30.16							
9460.00	81.119	0.000	9378.72	160.67 N	0.00 E	160.67	
30.16							
9470.00	84.134	0.000	9380.01	170.58 N	0.00 E	170.58	
30.16							
9480.00	87.150	0.000	9380.76	180.55 N	0.00 E	180.55	
30.16							
9490.00	90.000	0.000	9380.00	189.55 N	0.00 E	189.55	
28.50							
9500.00	90.000	0.000	9380.00	199.55 N	0.00 E	199.55	
0.00							
9510.00	90.000	0.000	9380.00	209.55 N	0.00 E	209.55	
0.00							
9520.00	90.000	0.000	9380.00	219.55 N	0.00 E	219.55	
0.00							
9530.00	90.000	0.000	9380.00	229.55 N	0.00 E	229.55	
0.00							
9540.00	90.000	0.000	9380.00	239.55 N	0.00 E	239.55	
0.00							
9550.00	90.000	0.000	9380.00	249.55 N	0.00 E	249.55	
0.00							
9560.00	90.000	0.000	9380.00	259.55 N	0.00 E	259.55	
0.00							
9570.00	90.000	0.000	9380.00	269.55 N	0.00 E	269.55	
0.00							
9580.00	90.000	0.000	9380.00	279.55 N	0.00 E	279.55	
0.00							
9590.00	90.000	0.000	9380.00	289.55 N	0.00 E	289.55	
0.00							
9600.00	90.000	0.000	9380.00	299.55 N	0.00 E	299.55	
0.00							
9610.00	90.000	0.000	9380.00	309.55 N	0.00 E	309.55	
0.00							
9620.00	90.000	0.000	9380.00	319.55 N	0.00 E	319.55	
0.00							
9630.00	90.000	0.000	9380.00	329.55 N	0.00 E	329.55	
0.00							
9640.00	90.000	0.000	9380.00	339.55 N	0.00 E	339.55	
0.00							
9650.00	90.000	0.000	9380.00	349.55 N	0.00 E	349.55	
0.00							
9660.00	90.000	0.000	9380.00	359.55 N	0.00 E	359.55	
0.00							
9670.00	90.000	0.000	9380.00	369.55 N	0.00 E	369.55	
0.00							
9680.00	90.000	0.000	9380.00	379.55 N	0.00 E	379.55	
0.00							
9690.00	90.000	0.000	9380.00	389.55 N	0.00 E	389.55	
0.00							
9700.00	90.000	0.000	9380.00	399.55 N	0.00 E	399.55	
0.00							
9710.00	90.000	0.000	9380.00	409.55 N	0.00 E	409.55	
0.00							
9720.00	90.000	0.000	9380.00	419.55 N	0.00 E	419.55	
0.00							

	Antero	'12'	Fee	#3H Lateral	Plan #1	Report	8-23-07.txt	
9730.00	90.000	0.000	9380.00	429.55	N	0.00	E	429.55
0.00								
9740.00	90.000	0.000	9380.00	439.55	N	0.00	E	439.55
0.00								
9750.00	90.000	0.000	9380.00	449.55	N	0.00	E	449.55
0.00								
9760.00	90.000	0.000	9380.00	459.55	N	0.00	E	459.55
0.00								
9770.00	90.000	0.000	9380.00	469.55	N	0.00	E	469.55
0.00								
9780.00	90.000	0.000	9380.00	479.55	N	0.00	E	479.55
0.00								
9790.00	90.000	0.000	9380.00	489.55	N	0.00	E	489.55
0.00								
9800.00	90.000	0.000	9380.00	499.55	N	0.00	E	499.55
0.00								
9810.00	90.000	0.000	9380.00	509.55	N	0.00	E	509.55
0.00								
9820.00	90.000	0.000	9380.00	519.55	N	0.00	E	519.55
0.00								
9830.00	90.000	0.000	9380.00	529.55	N	0.00	E	529.55
0.00								
9840.00	90.000	0.000	9380.00	539.55	N	0.00	E	539.55
0.00								
9850.00	90.000	0.000	9380.00	549.55	N	0.00	E	549.55
0.00								
9860.00	90.000	0.000	9380.00	559.55	N	0.00	E	559.55
0.00								
9870.00	90.000	0.000	9380.00	569.55	N	0.00	E	569.55
0.00								
9880.00	90.000	0.000	9380.00	579.55	N	0.00	E	579.55
0.00								
9890.00	90.000	0.000	9380.00	589.55	N	0.00	E	589.55
0.00								
9900.00	90.000	0.000	9380.00	599.55	N	0.00	E	599.55
0.00								
9910.00	90.000	0.000	9380.00	609.55	N	0.00	E	609.55
0.00								
9920.00	90.000	0.000	9380.00	619.55	N	0.00	E	619.55
0.00								
9930.00	90.000	0.000	9380.00	629.55	N	0.00	E	629.55
0.00								
9940.00	90.000	0.000	9380.00	639.55	N	0.00	E	639.55
0.00								
9950.00	90.000	0.000	9380.00	649.55	N	0.00	E	649.55
0.00								
9960.00	90.000	0.000	9380.00	659.55	N	0.00	E	659.55
0.00								
9970.00	90.000	0.000	9380.00	669.55	N	0.00	E	669.55
0.00								
9980.00	90.000	0.000	9380.00	679.55	N	0.00	E	679.55
0.00								
9990.00	90.000	0.000	9380.00	689.55	N	0.00	E	689.55
0.00								
10000.00	90.000	0.000	9380.00	699.55	N	0.00	E	699.55
0.00								
10010.00	90.000	0.000	9380.00	709.55	N	0.00	E	709.55
0.00								
10020.00	90.000	0.000	9380.00	719.55	N	0.00	E	719.55
0.00								
10030.00	90.000	0.000	9380.00	729.55	N	0.00	E	729.55
0.00								
10040.00	90.000	0.000	9380.00	739.55	N	0.00	E	739.55

Antero '12' Fee #3H Lateral Plan #1 Report 8-23-07.txt

0.00							
10050.00	90.000	0.000	9380.00	749.55 N	0.00 E	749.55	
0.00							
10060.00	90.000	0.000	9380.00	759.55 N	0.00 E	759.55	
0.00							
10070.00	90.000	0.000	9380.00	769.55 N	0.00 E	769.55	
0.00							
10080.00	90.000	0.000	9380.00	779.55 N	0.00 E	779.55	
0.00							
10090.00	90.000	0.000	9380.00	789.55 N	0.00 E	789.55	
0.00							
10100.00	90.000	0.000	9380.00	799.55 N	0.00 E	799.55	
0.00							
10110.00	90.000	0.000	9380.00	809.55 N	0.00 E	809.55	
0.00							
10120.00	90.000	0.000	9380.00	819.55 N	0.00 E	819.55	
0.00							
10130.00	90.000	0.000	9380.00	829.55 N	0.00 E	829.55	
0.00							
10140.00	90.000	0.000	9380.00	839.55 N	0.00 E	839.55	
0.00							
10150.00	90.000	0.000	9380.00	849.55 N	0.00 E	849.55	
0.00							
10160.00	90.000	0.000	9380.00	859.55 N	0.00 E	859.55	
0.00							
10170.00	90.000	0.000	9380.00	869.55 N	0.00 E	869.55	
0.00							
10180.00	90.000	0.000	9380.00	879.55 N	0.00 E	879.55	
0.00							
10190.00	90.000	0.000	9380.00	889.55 N	0.00 E	889.55	
0.00							
10200.00	90.000	0.000	9380.00	899.55 N	0.00 E	899.55	
0.00							
10210.00	90.000	0.000	9380.00	909.55 N	0.00 E	909.55	
0.00							
10220.00	90.000	0.000	9380.00	919.55 N	0.00 E	919.55	
0.00							
10230.00	90.000	0.000	9380.00	929.55 N	0.00 E	929.55	
0.00							
10240.00	90.000	0.000	9380.00	939.55 N	0.00 E	939.55	
0.00							
10250.00	90.000	0.000	9380.00	949.55 N	0.00 E	949.55	
0.00							
10260.00	90.000	0.000	9380.00	959.55 N	0.00 E	959.55	
0.00							
10270.00	90.000	0.000	9380.00	969.55 N	0.00 E	969.55	
0.00							
10280.00	90.000	0.000	9380.00	979.55 N	0.00 E	979.55	
0.00							
10290.00	90.000	0.000	9380.00	989.55 N	0.00 E	989.55	
0.00							
10300.00	90.000	0.000	9380.00	999.55 N	0.00 E	999.55	
0.00							
10310.00	90.000	0.000	9380.00	1009.55 N	0.00 E	1009.55	
0.00							
10320.00	90.000	0.000	9380.00	1019.55 N	0.00 E	1019.55	
0.00							
10330.00	90.000	0.000	9380.00	1029.55 N	0.00 E	1029.55	
0.00							
10340.00	90.000	0.000	9380.00	1039.55 N	0.00 E	1039.55	
0.00							
10350.00	90.000	0.000	9380.00	1049.55 N	0.00 E	1049.55	
0.00							

	Antero	'12'	Fee	#3H Lateral	Plan #1	Report	8-23-07.txt	
10360.00	90.000	0.000	9380.00	1059.55	N	0.00	E	1059.55
0.00								
10370.00	90.000	0.000	9380.00	1069.55	N	0.00	E	1069.55
0.00								
10380.00	90.000	0.000	9380.00	1079.55	N	0.00	E	1079.55
0.00								
10390.00	90.000	0.000	9380.00	1089.55	N	0.00	E	1089.55
0.00								
10400.00	90.000	0.000	9380.00	1099.55	N	0.00	E	1099.55
0.00								
10410.00	90.000	0.000	9380.00	1109.55	N	0.00	E	1109.55
0.00								
10420.00	90.000	0.000	9380.00	1119.55	N	0.00	E	1119.55
0.00								
10430.00	90.000	0.000	9380.00	1129.55	N	0.00	E	1129.55
0.00								
10440.00	90.000	0.000	9380.00	1139.55	N	0.00	E	1139.55
0.00								
10450.00	90.000	0.000	9380.00	1149.55	N	0.00	E	1149.55
0.00								
10460.00	90.000	0.000	9380.00	1159.55	N	0.00	E	1159.55
0.00								
10470.00	90.000	0.000	9380.00	1169.55	N	0.00	E	1169.55
0.00								
10480.00	90.000	0.000	9380.00	1179.55	N	0.00	E	1179.55
0.00								
10490.00	90.000	0.000	9380.00	1189.55	N	0.00	E	1189.55
0.00								
10500.00	90.000	0.000	9380.00	1199.55	N	0.00	E	1199.55
0.00								
10510.00	90.000	0.000	9380.00	1209.55	N	0.00	E	1209.55
0.00								
10520.00	90.000	0.000	9380.00	1219.55	N	0.00	E	1219.55
0.00								
10530.00	90.000	0.000	9380.00	1229.55	N	0.00	E	1229.55
0.00								
10540.00	90.000	0.000	9380.00	1239.55	N	0.00	E	1239.55
0.00								
10550.00	90.000	0.000	9380.00	1249.55	N	0.00	E	1249.55
0.00								
10560.00	90.000	0.000	9380.00	1259.55	N	0.00	E	1259.55
0.00								
10570.00	90.000	0.000	9380.00	1269.55	N	0.00	E	1269.55
0.00								
10580.00	90.000	0.000	9380.00	1279.55	N	0.00	E	1279.55
0.00								
10590.00	90.000	0.000	9380.00	1289.55	N	0.00	E	1289.55
0.00								
10600.00	90.000	0.000	9380.00	1299.55	N	0.00	E	1299.55
0.00								
10610.00	90.000	0.000	9380.00	1309.55	N	0.00	E	1309.55
0.00								
10620.00	90.000	0.000	9380.00	1319.55	N	0.00	E	1319.55
0.00								
10630.00	90.000	0.000	9380.00	1329.55	N	0.00	E	1329.55
0.00								
10640.00	90.000	0.000	9380.00	1339.55	N	0.00	E	1339.55
0.00								
10650.00	90.000	0.000	9380.00	1349.55	N	0.00	E	1349.55
0.00								
10660.00	90.000	0.000	9380.00	1359.55	N	0.00	E	1359.55
0.00								
10670.00	90.000	0.000	9380.00	1369.55	N	0.00	E	1369.55

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0.00							
10680.00	90.000	0.000	9380.00	1379.55	N	0.00	E 1379.55
0.00							
10690.00	90.000	0.000	9380.00	1389.55	N	0.00	E 1389.55
0.00							
10700.00	90.000	0.000	9380.00	1399.55	N	0.00	E 1399.55
0.00							
10710.00	90.000	0.000	9380.00	1409.55	N	0.00	E 1409.55
0.00							
10720.00	90.000	0.000	9380.00	1419.55	N	0.00	E 1419.55
0.00							
10730.00	90.000	0.000	9380.00	1429.55	N	0.00	E 1429.55
0.00							
10740.00	90.000	0.000	9380.00	1439.55	N	0.00	E 1439.55
0.00							
10750.00	90.000	0.000	9380.00	1449.55	N	0.00	E 1449.55
0.00							
10760.00	90.000	0.000	9380.00	1459.55	N	0.00	E 1459.55
0.00							
10770.00	90.000	0.000	9380.00	1469.55	N	0.00	E 1469.55
0.00							
10780.00	90.000	0.000	9380.00	1479.55	N	0.00	E 1479.55
0.00							
10790.00	90.000	0.000	9380.00	1489.55	N	0.00	E 1489.55
0.00							
10800.00	90.000	0.000	9380.00	1499.55	N	0.00	E 1499.55
0.00							
10810.00	90.000	0.000	9380.00	1509.55	N	0.00	E 1509.55
0.00							
10820.00	90.000	0.000	9380.00	1519.55	N	0.00	E 1519.55
0.00							
10830.00	90.000	0.000	9380.00	1529.55	N	0.00	E 1529.55
0.00							
10840.00	90.000	0.000	9380.00	1539.55	N	0.00	E 1539.55
0.00							
10850.00	90.000	0.000	9380.00	1549.55	N	0.00	E 1549.55
0.00							
10860.00	90.000	0.000	9380.00	1559.55	N	0.00	E 1559.55
0.00							
10870.00	90.000	0.000	9380.00	1569.55	N	0.00	E 1569.55
0.00							
10880.00	90.000	0.000	9380.00	1579.55	N	0.00	E 1579.55
0.00							
10890.00	90.000	0.000	9380.00	1589.55	N	0.00	E 1589.55
0.00							
10900.00	90.000	0.000	9380.00	1599.55	N	0.00	E 1599.55
0.00							
10910.00	90.000	0.000	9380.00	1609.55	N	0.00	E 1609.55
0.00							
10920.00	90.000	0.000	9380.00	1619.55	N	0.00	E 1619.55
0.00							
10930.00	90.000	0.000	9380.00	1629.55	N	0.00	E 1629.55
0.00							
10940.00	90.000	0.000	9380.00	1639.55	N	0.00	E 1639.55
0.00							
10950.00	90.000	0.000	9380.00	1649.55	N	0.00	E 1649.55
0.00							
10960.00	90.000	0.000	9380.00	1659.55	N	0.00	E 1659.55
0.00							
10970.00	90.000	0.000	9380.00	1669.55	N	0.00	E 1669.55
0.00							
10980.00	90.000	0.000	9380.00	1679.55	N	0.00	E 1679.55
0.00							

	Antero	'12'	Fee	#3H Lateral	Plan #1	Report	8-23-07.txt	
10990.00	90.000	0.000	9380.00	1689.55	N	0.00	E	1689.55
0.00								
11000.00	90.000	0.000	9380.00	1699.55	N	0.00	E	1699.55
0.00								
11010.00	90.000	0.000	9380.00	1709.55	N	0.00	E	1709.55
0.00								
11020.00	90.000	0.000	9380.00	1719.55	N	0.00	E	1719.55
0.00								
11030.00	90.000	0.000	9380.00	1729.55	N	0.00	E	1729.55
0.00								
11040.00	90.000	0.000	9380.00	1739.55	N	0.00	E	1739.55
0.00								
11050.00	90.000	0.000	9380.00	1749.55	N	0.00	E	1749.55
0.00								
11060.00	90.000	0.000	9380.00	1759.55	N	0.00	E	1759.55
0.00								
11070.00	90.000	0.000	9380.00	1769.55	N	0.00	E	1769.55
0.00								
11080.00	90.000	0.000	9380.00	1779.55	N	0.00	E	1779.55
0.00								
11090.00	90.000	0.000	9380.00	1789.55	N	0.00	E	1789.55
0.00								
11100.00	90.000	0.000	9380.00	1799.55	N	0.00	E	1799.55
0.00								
11110.00	90.000	0.000	9380.00	1809.55	N	0.00	E	1809.55
0.00								
11120.00	90.000	0.000	9380.00	1819.55	N	0.00	E	1819.55
0.00								
11130.00	90.000	0.000	9380.00	1829.55	N	0.00	E	1829.55
0.00								
11140.00	90.000	0.000	9380.00	1839.55	N	0.00	E	1839.55
0.00								
11150.00	90.000	0.000	9380.00	1849.55	N	0.00	E	1849.55
0.00								
11160.00	90.000	0.000	9380.00	1859.55	N	0.00	E	1859.55
0.00								
11170.00	90.000	0.000	9380.00	1869.55	N	0.00	E	1869.55
0.00								
11180.00	90.000	0.000	9380.00	1879.55	N	0.00	E	1879.55
0.00								
11190.00	90.000	0.000	9380.00	1889.55	N	0.00	E	1889.55
0.00								
11200.00	90.000	0.000	9380.00	1899.55	N	0.00	E	1899.55
0.00								
11210.00	90.000	0.000	9380.00	1909.55	N	0.00	E	1909.55
0.00								
11220.00	90.000	0.000	9380.00	1919.55	N	0.00	E	1919.55
0.00								
11230.00	90.000	0.000	9380.00	1929.55	N	0.00	E	1929.55
0.00								
11240.00	90.000	0.000	9380.00	1939.55	N	0.00	E	1939.55
0.00								
11250.00	90.000	0.000	9380.00	1949.55	N	0.00	E	1949.55
0.00								
11260.00	90.000	0.000	9380.00	1959.55	N	0.00	E	1959.55
0.00								
11270.00	90.000	0.000	9380.00	1969.55	N	0.00	E	1969.55
0.00								
11280.00	90.000	0.000	9380.00	1979.55	N	0.00	E	1979.55
0.00								
11280.45	90.000	0.000	9380.00	1980.00	N	0.00	E	1980.00
0.00								

Antero '12' Fee #3H Lateral Plan #1 Report 8-23-07.txt

All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to WELL. Northings and Eastings are relative to well.

The Dogleg Severity is in Degrees per 100 feet.
Vertical Section is from Site and calculated along an Azimuth of 0.000° (Grid).

Coordinate System is North American Datum 1983 US State Plane 1983, New Mexico Eastern Zone.

Central meridian is -104.333°.

Grid Convergence at Surface is 0.642°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 11280.45ft., the Bottom Hole Displacement is 1980.00ft., in the Direction of 0.000° (Grid).